EQUIPMENT
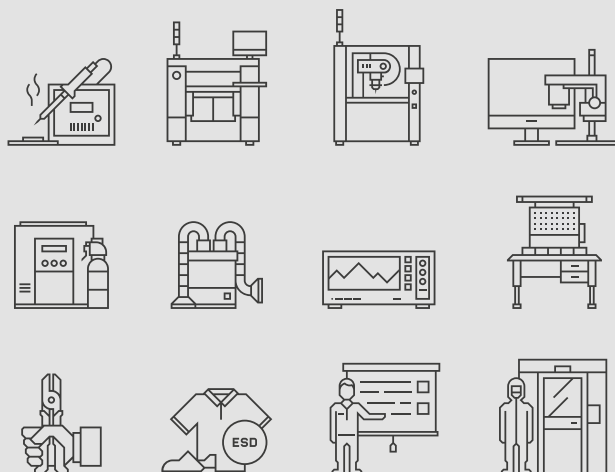# AND TRAINING
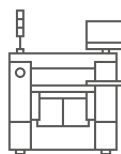# FOR ELECTRONICS

PRODUCT CATALOGUE
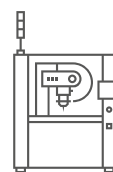
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7

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57
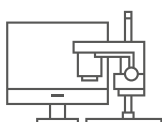
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111

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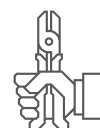
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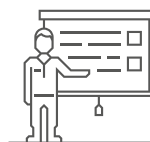INDUSTRIAL
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CLEANROOM
FACILITIES

COMPREHENSIVE SUPPORT FOR THE ELECTRONICS INDUSTRY

RENEX is a company with 30 years of experience in the industry. It is one of the largest and longest operating Polish companies providing the latest technologies in manufacturing and servicing of electronic devices. The RENEX group consists of the following branches:

Distributor of specialized equipment and machines

RENEX.PL

Authorized Training Center
IPC | ESA | PACE

RENEXEEC**.COM**

Demo-Room, production lines, implementation of technological processes

RENEXLINE**.PL**

Official distributor of YAMAHA industrial robots

RENEXROBOTICS**.COM**

Manufacturer of ESD furniture, ESD clothing, industrial equipment and robots

REECO.INFO

Design, construction and equipment of Cleanroom areas

CLEANROOM.COM.PL

TECHNOLOGY CENTER / DEMO ROOM

Our demo room contains fully equipped production and repair lines. We provide the opportunity to see the equipment in operation and to carry out tests and sample batches.

LOGISTICS AND WAREHOUSING CENTER

With more than 2500 m² of warehouse space, we guarantee the availability of products from stock. We ensure continuity of supply to our customers while maintaining a constant, highest quality of service.

TECHNICAL ADVICE

RENEX technical and sales advisors provide professional assistance throughout the country, both at the customer's location and at the RENEX Technology Center.

WARRANTY SERVICE

We provide warranty and post-warranty service. We offer the possibility of extending the warranty for products up to 7 years.
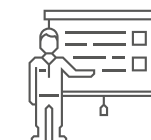
TRAININGS

We provide training and consulting services for engineers, operators and technologists.

20 000
TYPES OF PRODUCTS
AVAILABLE IN THE OFFER

99%
OF CATALOGUE OFFER
ALWAYS IN STOCK

150
QUALIFIED
EMPLOYEES

12 000
REGULAR
CUSTOMERS

6
BRANCHES
IN EUROPE

30 000
TRAINED SPECIALISTS
IN POLAND AND EUROPE
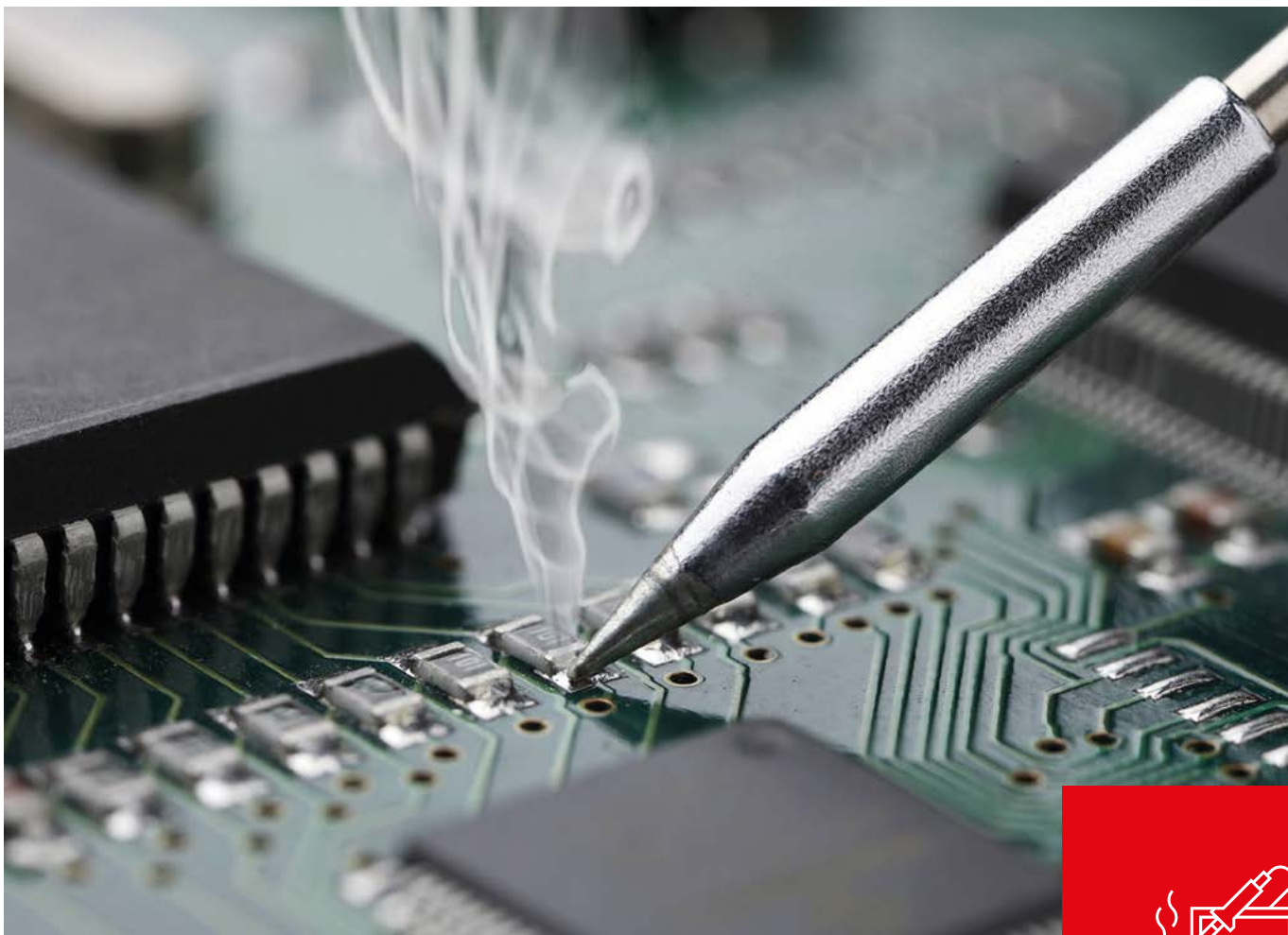
YAMAHA ROBOTICS

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Reeco

Panasonic

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TAGARNO

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TWS AUTOMATION

MicroCare

BAHCO

NeoDen

solderstar*

Vision ENGINEERING

EBSO

SOLDERING EQUIPMENT

7

PACE ST-25 SOLDERING STATION

DESCRIPTION

- Precisely controlled and stabilized temperature
- Temperature adjustment lockout
- More than 90 tips and soldering nozzles available
- Heating element of high thermal capacity
- Target temperature signalling
- Completely ESD/EOS safe
- Good price–performance and quality ratio

STANDARD EQUIPMENT

- ST-25 power supply
- PS-90 soldering iron
- Tip & Tool stand
- Sponge and brass wool tip cleaner

PC-80070510

POWER SUPPLY	230 V 50/60 Hz
POWER CONSUMPTION	Max. 80 W
DIMENSIONS	104 x 130 x 152 mm
WEIGHT	2,3 kg
TEMPERATURE RANGE	176°C - 482°C
TEMPERATURE STABILITY	+/- 1,1°C
OPERATION INDICATOR	Color-coded LED

PACE ST-30 SOLDERING STATION

DESCRIPTION

- Precisely controlled and stabilized temperature
- Maximum time to reach target temperature: about 7 sec.
- Target temperature signalling
- 'Hot-swapable' tip-heater cartridges
- Ergonomic soldering iron
- Temperature adjustment lockout
- Completely ESD/EOS safe
- Auto-Off safety system

STANDARD EQUIPMENT

- ST-30 power supply
- TD-100 soldering iron
- Tip & Tool stand
- Sponge and brass wool tip cleaner

PC-80070512

POWER SUPPLY	230 V 50/60 Hz
POWER CONSUMPTION	Max. 90 W
DIMENSIONS	104 x 130 x 152 mm
WEIGHT	2,3 kg
TEMPERATURE RANGE	205°C - 454°C
TEMPERATURE STABILITY	+/- 1,1°C
OPERATION INDICATOR	Color-coded LED

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PACE ST-50 SOLDERING STATION WITH PS-90 IRON

PC-80070533

DESCRIPTION

- Fully programmable, digital processor, LED display with soft-keys
- Password Lockout
- Tip-heater cartridges (tip integrated with heating element) for TD-100 soldering iron
- Ergonomic soldering iron
- Temp Setback and Auto-Off helps maximize tip life and saves on power costs
- Optional Instant Setback cubby available for extending tip life
- Completely ESD/EOS safe

PACE ST-50 SOLDERING STATION WITH TD-100 IRON

PC-80070514

STANDARD EQUIPMENT

- ST-50 power supply
- PS-90 or TD-100 soldering iron
- Tip & Tool stand
- Sponge and brass wool tip cleaner

POWER SUPPLY	230 V 50/60 Hz
POWER CONSUMPTION	Max. 90 W
DIMENSIONS	104 x 130 x 152 mm
WEIGHT	2,3 kg
TEMPERATURE RANGE	176 - 482°C (PS-90)
	205 - 454°C (TD-100)
TEMPERATURE STABILITY	+/- 1,1°C
SYSTEM CAN BE CALIBRATED	Yes

INTELLIHEAT ™ CONTROL SYSTEM

INTELLIHEAT

IntelliHeat® is the only thermal control system capable of managing multiple types of heating technologies within a single Power Source.

There is no longer a need to have multiple Power Sources on your work bench or to force operators to use only one heating technology.

Simply plug in any compatible handpiece and IntelliHeat® does the rest.

The IntelliHeat® Control System allows either SensaTemp® or Tip-Heater Cartridge based technology handpieces to be plugged into a single Power Source.

PACE ST-70 SOLDERING STATION

PC-80070518

DESCRIPTION

- Control of temperature settings by use of power modules
- 1 operator + 1 power module = 100% precise temperature control
- IntelliHeat Control Technology
- Microprocessor controlled heat level
- Optional Instant Setback cubby available for extending tip life

STANDARD EQUIPMENT

- ST-70 power supply
- TD-100 soldering iron
- Tip & Tool stand
- Sponge and brass wool tip cleaner
- 6.5, 7 and 7.5 power modules (5 other power module heat levels optionally available)

POWER SUPPLY	230 V 50/60 Hz
POWER CONSUMPTION	Max. 90 W
DIMENSIONS	104 x 130 x 152 mm
WEIGHT	2,3 kg
TEMPERATURE RANGE	205 - 454°C (TD-100)
	176 - 482°C (PS-90)
TEMPERATURE STABILITY	+/- 1,1°C
SYSTEM CAN BE CALIBRATED	Yes

ST-70 POWER MODULES

The ST-70 regulates temperature via the use of 8 different Power Modules™ and is extremely easy to operate. Simply select the performance / heat level you desire, plug in the appropriate color-coded power module into the front panel, and the system takes care of the rest. Each color indicates different range of operation temperature. Use of Power Module eliminates risk of working with too high temperature settings.

1 OPERATOR + 1 POWER MODULE = 100% PRECISE TEMPERATURE CONTROL

ST-70 POWER MODULES			
CAT. NO.	COLOR	POWER MODULE	TEMPERATURE SETTING
PC-1207044601	Green	5	260°C
PC-1207044602	Blue	5,5	288°C
PC-1207044603	Orange	6	316°C
PC-1207044604	Gold	6,5	343°C
PC-1207044605	Red	7	371°C
PC-1207044606	Purple	7,5	399°C
PC-1207044607	Black	8	427°C
PC-1207044608	Silver	8,5	454°C

PACE WJS-100 SOLDERING STATION

PC-80070561

DESCRIPTION

- PACE's Exclusive IntelliHeat™ Control Technology
- Fully programmable
- Microprocessor controlled
- LED display and keypad
- Password lockout guarantees your process integrity
- Temp Setback and Auto-Off helps to maximize tip life and saves on power costs
- Definable operating temperature range via „Hi" and „Low" settings
- Nearly twice the maximum power output (120W) increases productivity at safer, lower temperatures - even on the heaviest loads
- Low operating costs

STANDARD EQUIPMENT

- WJS-100 power supply
- TD-100 soldering iron
- Tip & Tool stand
- Sponge and brass wool tip cleaner

POWER SUPPLY	230 V 50/60 Hz
POWER CONSUMPTION	Max. 120 W
DIMENSIONS	104 x 130 x 152 mm
TEMPERATURE RANGE	205°C - 454°C
TEMPERATURE STABILITY	+/- 1,1°C
SYSTEM CAN BE CALIBRATED	Yes
DISPLAY	LED
SYSTEM COMPLIES WITH EU ROHS DIRECTIVE	Yes
CONTROL TECHNOLOGY	IntelliHeat™
TIPS	1128 gold series tip heater cartridges
HANDPIECE	Commemorative 50th Anniversary TD-100
TIP AND TOOL STAND	Optional Instant Set-Back cubby

TIPS FOR PACE WJS 100 STATION- 1128 SERIES

CAT. NO.		CAT. NO.		CAT. NO.	
PC-11280001	12,75 mm / 0,8128 mm	PC-11280012	9,017 mm / 0,8128 mm	PC-11280051	9,0 mm / 3,2 mm
PC-11280002	9,144 mm / 0,4064 mm	PC-11280013	9,017 mm / 2,3876 mm	PC-11280052	9,017 mm / 1,6 mm
PC-11280003	9,144 mm / 0,4064 mm	PC-11280019	9,017 mm / 1,5748 mm	PC-11280053	9,017 mm / 3,175 mm
PC-11280008	9,906 mm / 1,1938 mm	PC-11280032	8,255 mm / 2,794 mm	PC-11280054	9,017 mm / 4,775 mm
PC-11280010	7,62 mm / 5,1562 mm	PC-11280037	12,446 mm / 6,35 mm	PC-11280055	9,017 mm / 6,35 mm

SOLDERING EQUIPMENT

PACE ADS200 SOLDERING STATION

| ADS200 station with Instant SetBack tool stand | PC-80070581 |
| ADS200 station with standard tool stand | PC-80070580 |

DESCRIPTION

- Optional Instant SetBack (ISB) tool stand automatically lowers temperature when iron is in the stand to extend tip life and save energy
- Housing, tool stand and TD-200 iron endure extreme, multi-shift production use
- Wide-angled design of tool stand allows easy insertion and removal of the TD-200 Iron, yet holds it securely
- Meets ANSI/ESD S13.1-2015 and S20.20 specifications
- AccuDrive™ absolute temperature accuracy eliminates the need for routine, costly calibration
- Digital LED display viewable at all angles

STANDARD EQUIPMENT

- ADS power supply
- TD-200 soldering iron

POWER SUPPLY	230 V 50/60 Hz
POWER CONSUMPTION	Max. 120 W
DIMENSIONS	104 x 130 x 152 mm
WEIGHT	2,3 kg
TEMPERATURE RANGE	193°C - 454°C
TEMPERATURE STABILITY	+/- 1,1°C

ACCUDRIVE™ CONTROL TECHNOLOGY

HOW IT WORKS?

At the heart of the ADS200 lies PACE's new AccuDrive™ Technology. AccuDrive™ allows you to set honest, highly-accurate temperatures, without the need to change cartridges or calibrate.

It's advanced electronics provide instantaneous load sensing and on-demand power to quickly reflow solder joints at safe, low temperatures, regardless of the mass of the application.

UNBEATABLE RESULTS

AccuDrive™ delivers consistent, repeatable results in both light and heavy-use environments and provides the operator with the flexibility that is essential in today's demanding production operations.

Regardless of your application, AccuDrive™ delivers unsurpassed thermal performance, productivity and bottom-line cost savings!

PACE ST-100 DUAL CHANNEL SYSTEM WITH TWO TD-100 IRONS

DESCRIPTION

- Two channels power two separate handpieces simultaneously, at different temperatures
- Crystal clear digital LCD screen displays the temperatures of both handpiece channels, in real time
- Fully programmable, digital processor
- Password lock
- Temp Setback and Auto-Off helps maximize tip life and saves on power costs
- Can accept 2 optional Instant Setback Cubbys for extending tip life
- Durable aluminum extrusion housing
- Compatible with both tip-heater and SensaTemp handpieces

STANDARD EQUIPMENT

- ST-100 power supply
- Two TD-100 soldering irons
- Two Tip and Tool stands with sponge & Stay-Moist Well, non-abrasive brass wool to clean oxidation from tip

PC-80070527

POWER SUPPLY	230 VAC, 50 Hz
POWER CONSUMPTION	Max. 150 W
DIMENSIONS	135 x 165 x 260 mm
WEIGHT	7,5 kg
CONTROL TECHNOLOGY	IntelliHeat™
TEMPERATURE RANGE	205 - 454°C (TD-100)
	176 - 482°C (PS-90)
TEMPERATURE STABILITY	+/- 1,1°C
SYSTEM CAN BE CALIBRATED	Yes

INSTANT-SETBACK CUBBY

The optional Instant-Setback Cubby is a unique Tip & Tool Stand for use with PACE IntelliHeat units including Models ST 30, ST 50, ST 65, ST 70, ST 75, ST 115, WJS 100, MBT 301 & MBT 350.

When connected, it automatically puts the system into Setback Mode when the TD-100 Iron has been in the cubby for 45 seconds.

Setback Mode means that the temperature is reduced to just below solder melt temperature (176°C/350°F) so the corrosive action of the leaded or Lead-Free solder is stopped, maximizing the life of your tips!

The system returns to normal operation within seconds when the iron is removed from the cubby.

PC-60190084

PACE ST-65 DESOLDERING SYSTEM WITH SX-100 HANDPIECE

PC-80070516

DESCRIPTION

- Incorporates multistage venturi powered by compressed/shop air source, producing ultra-fast rise vacuum that eliminates clogging issues
- Password lockout
- Auto-Off safety system
- Completely ESD/EOS safe
- Durable, ESD-safe aluminum extrusion housing
- Compatible with other optional IntelliHeat handpieces
- Patented Snap-Vac technology

STANDARD EQUIPMENT

- ST-65 power supply
- SX-100 Sodr-X-Tractor with Tip & Tool stand
- SX-100 Glass Flux/Sodr trap kit (contains 2 glass chambers, 2 „Z" baffles, and 4 felt filters)

POWER SUPPLY | POWER CONSUMPTION	197-253 VAC, 50/60 Hz | Max. 90 W
DIMENSIONS	104 x 130 x 152 mm
WEIGHT	2,3 kg
CONTROL TECHNOLOGY	IntelliHeat™
TEMPERATURE RANGE	205ºC – 454ºC (Tip heater compatible handpieces) 176ºC – 482ºC (SensaTemp compatible handpieces)
TEMPERATURE STABILITY	+/- 1,1°C
VACUUM (NOMINAL)	510 mm Hg
CALIBRATION	Yes
AIR FLOW (NOMINAL)	Max. 8 slpm

PACE ST-75 DESOLDERING SYSTEM WITH SX-100 HANDPIECE

PC-80070520

DESCRIPTION

- Dual Purpose Vacuum/Pressure Pump includes patented Snap-Vac technology
- Quiet operation
- Stackable
- Completely ESD/EOS safe
- Durable aluminum extrusion housing

STANDARD EQUIPMENT

- ST-75 power supply
- SX-100 handpiece
- Tip & Tool stand

POWER SUPPLY | POWER CONSUMPTION	230 V, 50 Hz | Max. 120 W
DIMENSIONS	88 x 171 x 254 mm
WEIGHT	4 kg
TEMPERATURE RANGE	205°C – 454°C (Tip heater compatible handpieces) 176°C – 482°C (SensaTemp compatible handpieces)
TEMPERATURE STABILITY	+/- 1,1°C
VACUUM (NOMINAL)	510 mm Hg
PRESSURE (NOMINAL)	1,24 bar
AIR FLOW (NOMINAL)	Max. 8 slpm

PACE ST-115 SINGLE CHANNEL DESOLDERING STATION WITH SX-100 HANDPIECE

PC-80070522

DESCRIPTION

- Digital processor, LED Display with soft-keys
- Dual purpose vacuum / pressure pump
- Quiet operation
- Patented Snap-Vac technology
- Stackable
- Completely ESD/EOS safe
- Durable aluminum extrusion housing

STANDARD EQUIPMENT

- ST-115 power supply
- SX-100 handpiece
- Tip & Tool stands

POWER SUPPLY	230 V, 50Hz
POWER CONSUMPTION	Max. 120 W
DIMENSIONS	88 x 171 x 254 mm
WEIGHT	4 kg
TEMPERATURE RANGE	205°C - 454°C (Tip heater compatible handpieces) 176° to 482°C (SensaTemp compatible handpieces)
TEMPERATURE STABILITY	+/- 1,1°C
VACUUM (NOMINAL)	510 mm Hg
PRESSURE (NOMINAL)	1,24 bar
AIR FLOW (NOMINAL)	Max. 8 slpm

PACE MBT-301 TWO CHANNEL REWORK STATION

PC-80070479

DESCRIPTION

- Two individually powered and controlled handpiece channels
- Microprocessor controlled
- Quiet operation
- Patented Snap-Vac technology
- Completely ESD/EOS safe
- Wide range of standard, precision, long-reach desoldering tips, nozzles and optional handpieces
- Easy programming of Auto-Off, SetBack, password, temperature range setting and other features

STANDARD EQUIPMENT

- MBT-301 power supply
- TD-100 soldering iron and SX-100 handpiece along with Tip & Tool stands

POWER SUPPLY	230 V 50 Hz
POWER CONSUMPTION	Max. 240 W
DIMENSIONS	135 x 165 x 260 mm
WEIGHT	5 kg
TEMPERATURE RANGE	205° to 454°C (Tip heater compatible handpieces) 176° to 482°C (SensaTemp compatible handpieces
TEMPERATURE STABILITY	+/- 1,1°C
VACUUM (NOMINAL)	510 mm Hg
PRESSURE (NOMINAL)	1,24 bar
AIR FLOW (NOMINAL)	Max. 8 slpm

PACE MBT-350 THREE CHANNELS REWORK STATION

PC-80070455

DESCRIPTION

- Three individually powered and controlled handpiece channels
- Dual purpose vacuum / pressure pump
- Microprocessor controlled
- Quiet operation
- Patented Snap-Vac technology
- Stackable
- Completely ESD/EOS safe
- Durable aluminum extrusion housing
- Wide range of standard, precision, long-reach desoldering tips, nozzles and optional handpieces
- Easy programming of Auto-Off, SetBack, password, temperature range setting and other features

STANDARD EQUIPMENT

- MBT-350 power supply
- TD-100 soldering iron, SX-100 and MT-100 handpieces
- Tip & Tool stands

POWER SUPPLY	230 V, 50Hz
POWER CONSUMPTION	Max. 240 W
DIMENSIONS	135 x 165 x 260 mm
WEIGHT	5 kg
TEMPERATURE RANGE	205° to 454°C (Tip heater compatible handpieces) 176° to 482°C (SensaTemp compatible handpieces)
TEMPERATURE STABILITY	+/- 1,1°C
VACUUM (NOMINAL)	510 mm Hg
PRESSURE (NOMINAL)	1,24 bar
AIR FLOW (NOMINAL)	Max. 8 slpm

SNAP-VAC TECHNOLOGY

Patented by PACE Snap-Vac technology extends vacuum time by 1.2 sec.

It is the optimal time to ensure that all of the molten solder is pulled from the joint and is pulled back into the collection chamber before itsolidifies to prevent tip clogging and pad damaging.

Snap-Vac technology significantly extends life of tips as well as the device itself.

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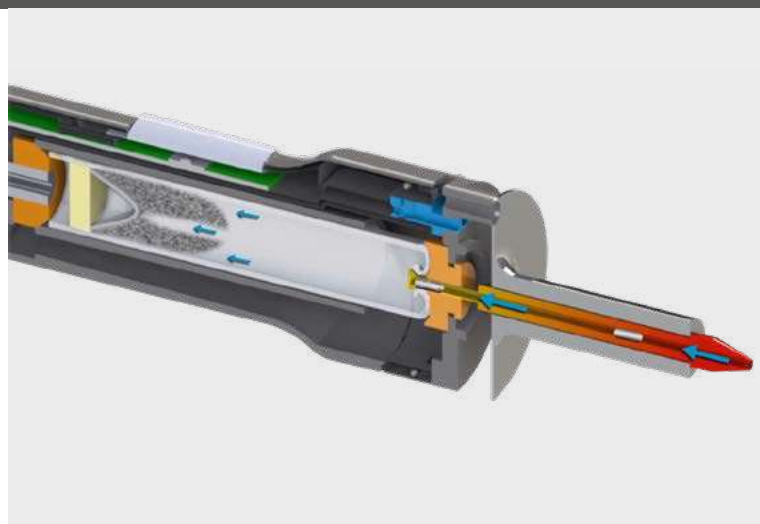
PACE PRC-2000 MULTI CHANNELS REWORK STATION

PC-80070133

DESCRIPTION

- Self-contained with three separate pumps:
  - for desoldering, hot air jet and thermal pick handpieces
  - for solder paste/liquid flux dispensing
  - for Pik-Vac Component Handling Wand
- Nine optionally available handpieces
- Five handpieces can be used simultaneously
- Continuous automatic calibration, temperature setback/auto-off safety system, constant memory
- Password protection
- Programmable temperature offset between tip and sensor
- Three additional power receptacles on the rear side

STANDARD EQUIPMENT

- PRC-2000 power supply
- SX-100 Sodr-X-Tractor desoldering handpiece
- PS-90 universal soldering iron
- SX-100 / PS-90 Tip & Tool stand
- TT-65 ThermoTweez handpiece
- TP-65 ThermoPik handpiece
- TT-65 / TP-65 Tip & Tool stand
- TJ-70 ThermoJet Convection/Hot Air handpiece
- TJ-70 Tip & Tool stand

- LF-15 LapFlo/ThermoPart handpiece
- TW-15 ResisTweez resistance soldering tweezer
- Tip maintanance station
- Solder paste dyspenser
- MC-65 MicroChine Miniature Machining handpiece
- MC-65 drill set
- PV-65 Pik-Vac Vacuum Wand
- PV-65 needles and vacuum cups
- Foot pedal

POWER SUPPLY	195 - 264 V, 50/60 Hz
POWER CONSUMPTION	365 W
DIMENSIONS	175 x 350 x 230 mm
WEIGHT	13 kg
TEMPERATURE RANGE	38°C to 482°C (nominal)
TEMPERATURE STABILITY	+/- 1,1°C
VACUUM (NOMINAL)	510 mm Hg
PRESSURE (NOMINAL)	0,48 bar
AIR FLOW (NOMINAL)	Max. 13 slpm
DIGITAL READOUT	+/- 1°C
VACUUM RISE TIME	150 ms

PS-90 SOLDERING IRON

SensaTemp® Kit (handpiece with Tip & Tool stand)	PC-69930199
IntelliHeat® Kit (handpiece with Tip & Tool stand)	PC-69930267

PS-90 SINGLE POINT SOLDERING TIPS

CAT. NO.	
PC-11210335	1/16 " (1.6 mm) .025"
PC-11210336	1/32 " (.80 mm) .031"
PC-11210337	1/8 " (3.2 mm) .025"
PC-11210349	1/16 " (1.6 mm) .025"
PC-11210359	1/32 " (.80 mm) .031"
PC-11210360	3/32 " (2.4 mm) .094"
PC-11210361	37° 1/32" (.80 mm)
PC-11210406	0.13 " (3.3 mm)
PC-11210414	1/16 " (1.6 mm) .025"
PC-11210490 MiniWave	0.13 " (3.3 mm)
PC-11210499	1/16 " (1.6 mm)
PC-11210500	1/16" (1.6 mm) 30°
PC-11210533	1/16 " (1.6 mm)
PC-11210610	0/09 " (2.4 mm)
PC-11210830	0/016" (0.4mm)

DESCRIPTION

- Universal soldering iron ideal for most soldering applications and SMT rework operations
- Completely ESD/EOS safe
- Heat resistant, elastic power cord
- Wide range of SMD and Thru-Hole installation and removal capability as well as unsurpassed thermal performance on heavy, multilayer Thru-Hole assemblies
- 'Hot-swapable' tip-heater cartridges
- Heating element of high thermal capacity

STANDARD SOLDERING IRON OF

- ST-25
- PRC-2000

OPTIONAL SOLDERING IRON OF

- ST-30
- ST-50
- ST-70
- MBT-301
- MBT-350

PS-90 SURFACE MOUNT REMOVAL TIPS
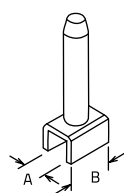
TYPE	A (mm)	B (mm)	PART NO.
SOIC – 8 (JEDEC)	5,05	5,08	PC-11210390
SOIC – 14 (JEDEC)	5,05	8,99	PC-11210391
SOIC – 16 (JEDEC)	5,05	10,2	PC-11210392
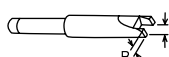
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COMPONENT	3,56	2,03	PC-11210303
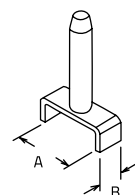
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TSOP	19,33	8,1	PC-11210403
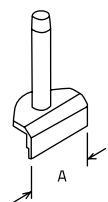
TYPE	A (mm)	PART NO.
SOIC CONNECTORS	7,6	PC-11210512*
	10,2	PC-11210514*
	12,7	PC-11210473*
	17,8	PC-11210416*
	20,3	PC-11210497*
	25,4	PC-11210448*
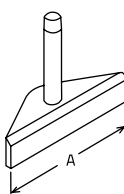
TD-100 SOLDERING IRON

PC-60100147

DESCRIPTION

- Most ergonomic, powerful, easy to use and inexpensive iron
- Handpiece uses a patented Tip-Heater Cartridge which can be changed in seconds without tools
- Handle stays cool and comfortable even during extended production use
- Perfect for the most demanding Lead-Free or multilayer soldering
- Crafted by a team of surgical instrument engineers to eliminate fatigue, improve control and enhance productivity
- Completely ESD/EOS safe

STANDARD SOLDERING IRON

- ST-30/50/70
- MBT-301/350

i The key advantage of Tip-Heater Cartridge based technology is that its advanced electronics provide instantaneous load sensing and on-demand power to quickly reflow solder joints, regardless of the mass of the application. Further, the position of the control sensor is as far forward as possible to immediately respond to the thermal demand of the work. The tip and heater are permanently coupled, ensuring all the heat generated by the heater is available for use by the tip. For applications where the work cycle is high and for micro-miniature applications the direct power approach is ideal as the thermal demand is continuously monitored and the heater responds immediately by providing adequate power to meet the demand from the work, without overshoot

TD-100 STANDARD SOLDERING TIPS

CAT. NO.			CAT. NO.		
PC-11240001	13.4mm / 0.80mm	⦿	PC-11240014	4.70 mm / 2.00 mm	◑
PC-11240002	7.8mm / 0.40mm	⦿	PC-11240015	15.1 mm / 0.4 mm	⦿
PC-11240003	7.8mm / 0.40mm	⦿	PC-11240016	11.7 mm / 1.2 mm	◑
PC-11240004	13.5 mm / 0.40 mm	⦿	PC-11240017	15.8 mm / 1.6 mm	◑
PC-11240005	4.7 mm / 0.80 mm	⦿	PC-11240018	16.7 mm / 0.80 mm	⦿
PC-11240006	4.6 mm / 0.58 mm	⦿	PC-11240019	9.9 mm / 1.60 mm	◑
PC-11240007	10.9 mm / 2.03 mm	◑	PC-11240020	4.8 mm / 3.20 mm	◑
PC-11240008	9.7 mm / 1.20 mm	◑	PC-11240021	14.4 mm / 0.58 mm	⦿
PC-11240009	3.6 mm / 1.20 mm	⊖	PC-11240022	9.9 mm / 1.60 mm	⦿
PC-11240010	7.62 mm / 5.15 mm	◑	PC-11240023	8.6 mm / 3.20 mm	◑
PC-11240011	14.7 mm / 0.40 mm	⦿	PC-11240024	9.9 mm / 1.60 mm	⊖
PC-11240012	9.1 mm / 0.80 mm	◑	DEC-11240025	12.1 mm / 1.60 mm	⦿
PC-11240013	9.9 mm / 2.40 mm	◑	PC-11240026	9.7mm / 1.60 mm	◑

CAT. NO.

CAT. NO.		Type
PC-11240027	15.2 mm / 0.58 mm	conical
PC-11240028	15.2 mm / 0.91 mm	chisel
PC-11240029	9.1 mm / 1.91 mm	chisel
PC-11240030	9.9 mm / 0.80 mm	conical
PC-11240031	10.0 mm / 4.04 mm	round
PC-11240032 MiniWave	13.4 mm / 6.35 mm (3.05 mm)	
PC-11240033 MiniWave	13.4 mm / 6.35 mm / 22° (3.05 mm)	
PC-11240034	13.4 mm / 3.05 mm	bevel
PC-11240035 MiniWave	13.4 mm / 22° / 3.0 mm (2.11 mm)	
PC-11240036	13.4 mm / 0.2 mm	conical
PC-11240037	13.4 mm / 4.57 mm	chisel
PC-11240038	17.90 mm / 1.5 mm	conical
PC-11240039	13.7 mm / 1.6 mm	conical
PC-11240040	10.0 mm / 0.9 mm	conical
PC-11240041	17.7 mm / 1.1 mm	conical
PC-11240042	13.0 mm / 0.25 mm	conical
PC-11240043	18.0 mm / 0.76 mm	conical
PC-11240044	15.0 mm / 0.5 mm	chisel
PC-11240045	12.0 mm / 1.1 mm	conical
PC-11240046	12.7 mm / 1.1 mm	conical

Legend:
- ⊙ conical
- ● round
- ◒ bevel
- ◑ chisel
- MiniWave

TD-100 DIAMOND SERIES - EXTENDED LIFE SOLDERING TIPS
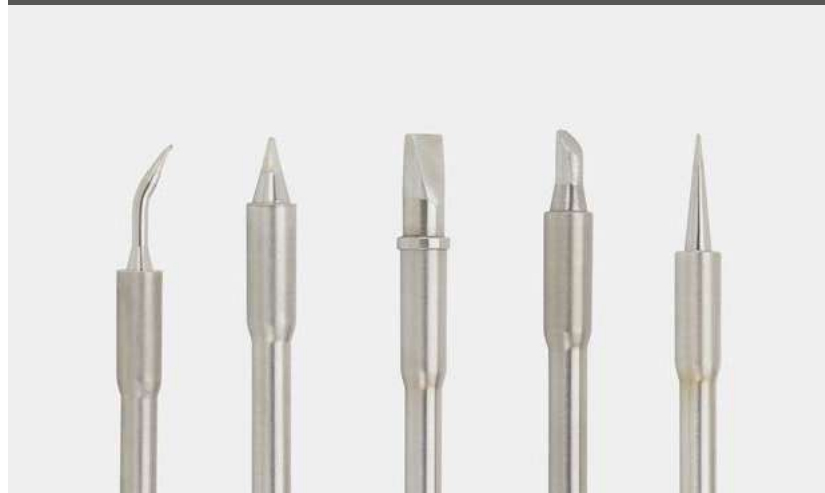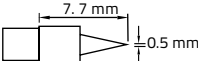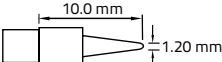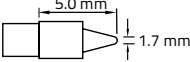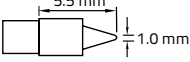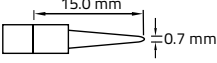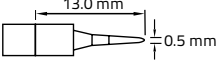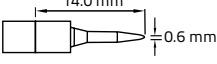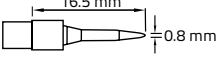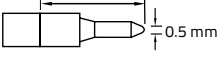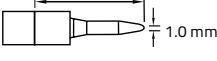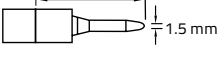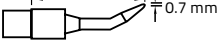
Patented Diamond/Iron plating process using real diamonds that provides improved thermal performance and long life when working with Lead Free solder.

CAT. NO.

CAT. NO.		Type
PC-11260601	7.7 mm / 0.5 mm	conical
PC-11260602	10.0 mm / 1.20 mm	conical
PC-11260603	5.0 mm / 1.7 mm	conical
PC-11260604	5.5 mm / 1.0 mm	conical
PC-11260605	15.0 mm / 0.7 mm	conical
PC-11260606	13.0 mm / 0.5 mm	conical
PC-11260607	14.0 mm / 0.6 mm	conical
PC-11260608	16.5 mm / 0.8 mm	conical
PC-11260609	10.0 mm / 0.5 mm	conical
PC-11260610	14 mm / 1.0 mm	conical
PC-11260611	13 mm / 1.5 mm	conical
PC-11260612	16 mm / 0.7 mm	conical

CAT. NO.		
PC-11260613	10 mm / 0.7 mm	
PC-11260614	11.0 mm / 3.1 mm	
PC-11260615	15.0 mm / 0.5 mm	
PC-11260616	10.0 mm / 4.0 mm	
PC-11260617	18.5 mm / 2.0 mm	
PC-11260618	20.0 mm / 3.2 mm	
PC-11260619	10.0 mm / 5.0 mm	
PC-11260620	12.0 mm / 1.2 mm	
PC-11260621	11.5 mm / 1.3 mm	
PC-11260622	11.5 mm / 2.20 mm	
PC-11260623	9.8 mm / 3.3 mm	
PC-11260624	11.6 mm / 1.2 mm	
PC-11260625	15.0 mm / 1.6 mm	
PC-11260626	16.7 mm / 1.6 mm	
PC-11260627	9.3 mm / 3.0 mm	
PC-11260628	17.5 mm / 3.0 mm	
PC-11260629	11.0 mm / 2.0 mm	
PC-11260630	13.7 mm / 0.5 mm	

CAT. NO.		
PC-11260631	9.0 mm / 0.8 mm	
PC-11260632	10.0 mm / 1.4 mm	
PC-11260633	10.1 mm / 1.6 mm	
PC-11260634	10.0 mm / 2.5 mm	
PC-11260635	6.5 mm / 4.0 mm	
PC-11260636	8.3 mm / 5.4 mm	
PC-11260637	21.0 mm / 4.2 mm	
PC-11260638	13.0 mm / 5.5 mm	
PC-11260639	5.2 mm / 2.0 mm	
PC-11260640	5.0 mm / 3.30 mm	
PC-11260641	13.0 mm / 1.6 mm	
PC-11260642	10.0 mm / 0.9 mm 1.7 mm	
PC-11260643	22.0 mm / 1.6 mm	
PC-11260644	14.0 mm / 4.7 mm	
PC-11260645	16.0 mm / 4.7 mm	
PC-11260646	10.0 mm / 4.7 mm	
PC-11260647	11.0 mm / 3.1 mm	
PC-11260648	17.0 mm / 1.7 mm	

TD-100 SURFACE MOUNT REMOVAL TIPS

CAT. NO.	TYPE	A (mm)	
PC-11240518	CHIP 0402	1,0	
PC-11240533	CHIP 0201 Angle	0,5	
PC-11240520	CHIP 1808	5,0	
PC-11240521	CHIP 0402	1,0	
PC-11240534	CHIP 0201	0,5	
PC-11240522	SOT 23	1,8	
PC-11240523	SOT 89	2,8	
PC-11240524	SOT 1206	3,6	
PC-11240525	SOT 0805	2,4	

TD-100 SOIC/SOP REMOVAL TIPS
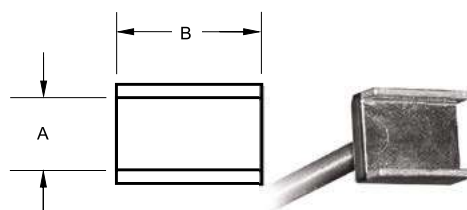
TYPE	A (mm)	B (mm)	CAT. NO.
SOIC 14/16	5,2	10,5	PC-11240504
SOIC 20	9,6	13,6	PC-11240505
SOP 28	10,8	18,6	PC-11240506
SOP 40	11,9	25,7	PC-11240507
SOP 44	13,1	28,4	PC-11240508
TSOP 56	18,8	14,1	PC-11240509
TSOP 28	12,0	8,5	PC-11240510
SOIC 8	5,1	4,65	PC-11240519
TSOP 40	18,8	10,4	PC-11240526

TD-100 QFP/PLCC REMOVAL TIPS

TYPE	A (mm)	B (mm)	CAT. NO.
PLCC 28 SOCKET	9,3	9,3	PC-11240511
PLCC 32	14,2	11,7	PC-11240512
PLCC 44	16,8	16,8	PC-11240513
QFP 144	20,6	20,6	PC-11240514
PLCC 28	11,8	11,8	PC-11240515
QFP 100/128	22,0	16,0	PC-11240516
PLCC 18	7,6	12,8	PC-11240528
TQFP 80	12,5	12,5	PC-11240529
PLCC 52	19,4	19,4	PC-11240530
QFP 100	26,6	26,6	PC-11240531
VQFP 100	15,5	15,5	PC-11240535
TQFP 64	15,3	15,3	PC-11240537
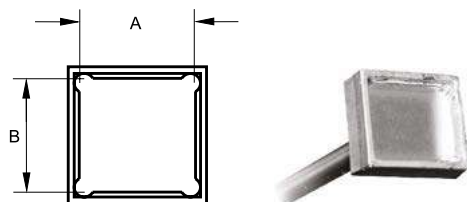
TD-100 PAD CLEANING TIPS
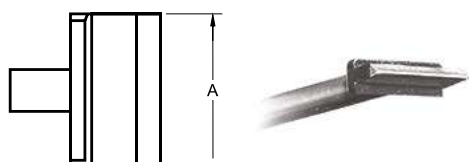
A (mm)	CAT. NO.
6,0	PC-11240536
10,8	PC-11240501
6,0	PC-11240502
21,2	PC-11240503
25,0	PC-11240532

TD-200 TIP-HEATER CARTRIDGE SOLDERING IRON

DESCRIPTION

- AccuDrive™ Blue Series Tip-Heater cartrdiges provide instantaneous load sensing and on-demand power to quickly reflow solder joints at the lowest, safest temperature required, regardless of the mass of the application
- Sleek and ergonomic aluminum handle designed to stay cool and comfortable during continuous production soldering
- Capable of delivering instant heat-up/recovery, whether it's a high thermal mass
- Applications (D-Paks) or delicate micro-soldering application (0201's)
- Burn-resistant, ESD-safe cord is soft and flexible, withstanding direct contact with hot tips
- Ultra short tip-to-grip – 48mm (1.9") for precision operator dexterity under magnifier or microscope
- From tip to the end of the cord, the TD-200 protects your ESD-sensitive devices

PC-60100166

TD-200 ACCUDRIVE™ BLUE SERIES TIP-HEATER CARTRIDGES — STANDARD

CAT. NO.	DESCRIPTION		CAT. NO.	DESCRIPTION	
PC-11300001	1/32" Conical Sharp Extended (0,80 mm)		PC-11300019	1/16" 30° Chisel (1,59 mm)	
PC-11300002	1/64" Conical Sharp (0,40 mm)		PC-11300020	1/8" 90° Chisel (3,18 mm)	
PC-11300003	1/64" Conical Sharp Bent 30° (0,40 mm)		PC-11300026	1/16" 30° Bent Chisel (1,59 mm)	
PC-11300004	1/64" Conical Sharp Extended (0,40 mm)		PC-11300032	MiniWave® (3,05 mm)	
PC-11300008	3/64" 30° Chisel (1,20 mm)		PC-11300033	Angled MiniWave® (3,05 mm)	
PC-11300010	13/64" Extra Large Chisel (5,15 mm)		PC-11300035	Angled MiniWave® (2,11 mm)	
PC-11300011	1/64" 60° Bevel (0,40 mm)		PC-11300036	1/128" Conical (0,20 mm)	
PC-11300012	1/32" 30° Chisel (0,80 mm)		PC-11300037	1/4" Flat Blade (6,35 mm)	
PC-11300013	3/32" 30° Chisel (2,38 mm)		PC-11300050	1/128" Conical, Special (0,20 mm)	
PC-11300016	3/64" 30° Bent Chisel (1,20 mm)		PC-11300051	1/8" 30° Chisel (3,18 mm)	

MT-100 MINITWEEZ SURFACE MOUNT REWORK TWEEZER HANDPIECE

DESCRIPTION

- Most versatile surface mount component removal tweezers

- Designed for reworking of miniature sized chip components as small as 0201, 0402 and 0603, MT-100 can also handle larger SOT and SOIC components

- Tip & Tool stand

	A	B	C
	a b	a b	a b

PC-69930264
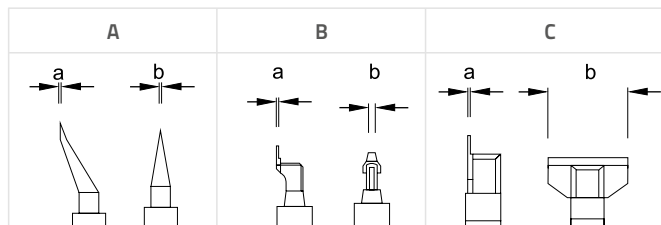
TYPE	A	B	CAT. NO.
CHIP (A)	0,2 mm (.008")	0,2 mm (.008")	PC-11241001
CHIP, SOT (B)	0,7 mm (.03")	0,5 mm (.03")	PC-11241002
	0,7 mm (.03")	1 mm (.04")	PC-11241003
	0,7 mm (.0.3")	2 mm (.0.8")	PC-11241004
SOIC, SOT, TSOPS (C)	0,7 mm (.03")	6 mm (.24")	PC-11241005
	0,7 mm (.03")	8 mm (.31")	PC-11241006
	0,7 mm (.0.3")	10 mm (.39")	PC-11241007
	0,7 mm (.03")	13 mm (.51")	PC-11241008
	0,7 mm (.03")	18 mm (.74")	PC-11241009
	0,7 mm (.0.3")	28 mm (1.09")	PC-11241010

TP-100 THERMO-PIK HANDPIECE

DESCRIPTION

- TP-100 is designed to reflow and remove QFP's LQFP's, TQFP's

- Patented Tip-Heater technology

- Integrated vacuum pik lifts component from the PCB upon reflow

- Adjustable vacuum pik allows removal of components as high as 3.4 mm

- Ergonomic design, based on our unique MT-100 handpiece

- Burn-resistant, ESD-safe cord

PC-69930280

TYPE	LEAD COUNT	A	B	HEIGHT	FOOTPRINT	CAT. NO.
LQFP/TQFP	80	12 mm	12 mm	1,4 mm	2,0 mm	PC-11242001
	64, 80, 100, 120, 128, 168	14 mm	14 mm	1,4 mm	2,0 mm	PC-11242002
	128, 144, 160, 176	20 mm	20 mm	1,4 mm	2,0 mm	PC-11242003
	176, 216	24 mm	24 mm	1,4 mm	2,0 mm	PC-11242004
	208, 256	28 mm	28 mm	1,4 mm	2,0 mm	PC-11242005
QFP	52, 64, 80, 100	14 mm	14 mm	2,7 mm	3,2 mm	PC-11242006
	52, 64, 80, 100	14 mm	14 mm	2,7 mm	3,9 mm	PC-11242007
	64, 80, 100, 128	14 mm	20 mm	2,7 mm	3,2 mm	PC-11242008
	64, 80, 100, 128	14 mm	20 mm	2,7 mm	3,9 mm	PC-11242009
	120, 128, 144, 160, 208	28 mm	28 mm	3,4 mm	2,6 – 3,2 mm	PC-11242010
	160	28 mm	28 mm	3,4 mm	3,9 mm	PC-11242011

SX-100 SODR-X-TRACTOR DESOLDERING HANDPIECE

DESCRIPTION

- New 2 and 4-sided Pik-Tips allow safe, rapid reflow and removal of a wide variety of TSOP's, QFP's and Flatpacks
- Flo-D-Sodr desoldering tips available for safe removal of excess surface solders, excellent for BGA pad clean-up
- ESD-safe, rugged and durable construction
- Burn-resistant, ESD-safe cord
- Modular heater has been re-engineered to transfer heat better through the length of new SX-100 tips

SensaTemp® Kit (includes Handpiece with Tip & Tool stand)	**PC-69930213**
IntelliHeat® Kit (includes Handpiece with Tip & Tool stand)	**PC-69930266**

SX-100 SURFACE MOUNT REMOVAL PIK-TIPS
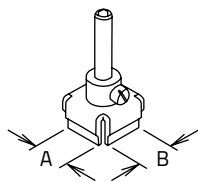
TQFP
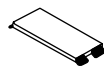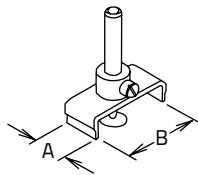
TSOP

A (mm)	B (mm)	TYPE	CAT. NO.
8,1	12,7	TSOP-32	PC-11210566
8,1	19,3	TSOP-28	PC-11210567
9,9	19,3	TSOP-40	PC-11210568
14,2	19,3	TSOP-56	PC-11210569
8,2	8,23	TQFP-28	PC-11210571
8,7	8,7	TQFP-32	PC-11210572
12	12	TQFP-52	PC-11210573
12	12	TQFP-40	PC-11210574
13,2	13,2	TQFP-80	PC-11210575
15,3	15,3	TQFP-80/100	PC-11210576
16,8	22,9	PQFP-80/100	PC-11210603
21,6	21,6	TQFP-144	PC-11210604
22,1	22,3	TQFP-112	PC-11210605

SX-100 DESOLDERING TIPS

A	B
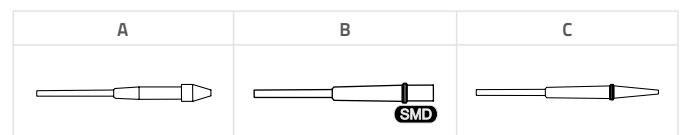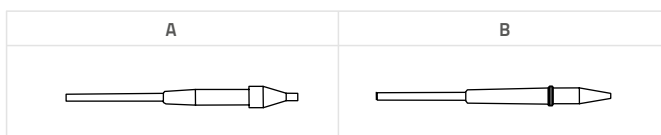
Tips	OUTER DIAMETER (mm)	INNER DIAMETER (mm)	CAT. NO. FOR SX-70	CAT. NO. FOR SX-80/90/100
A	2,29	0,76	PC-11210628	PC-11210935
	2,54	1,02	PC-11210629	PC-11210936
	3,05	1,52	PC-11210630	PC-11210937
	1,91	0,76	PC-11210882	PC-11210938
	2,20	1,02	PC-11210883	PC-11210939
	2,69	1,52	PC-11210884	PC-11210940
B	1,79	0,50	PC-11210680	PC-11210941
	2,03	0,76	PC-11210678	PC-11210942
	2,29	1,02	PC-11210679	PC-11210943
	2,79	1,52	PC-11210690	PC-11210944
	1,39	0,635	Niedostępna	PC-11210949
	1,14	0,635	Niedostępna	PC-11210950

A	B	C
	SMD	

Tips	OUTER DIAMETER (mm)	INNER DIAMETER (mm)	CAT. NO. FOR SX-70/SX-80	CAT. NO. FOR SX-100
A	2,03	0,76	PC-11210625	PC-11210930
	2,29	1,02	PC-11210624	PC-11210931
	3,05	1,52	PC-11210626	PC-11210932
	5,10	2,29	PC-11210627	PC-11210933
	5,10	4,00	Niedostępna	PC-11210951
B	4,78	1,52	PC-11210631	PC-11210945
C	1,78	0,50	PC-11210681	PC-11210946
	2,03	0,76	PC-11210682	PC-11210947
	2,29	1,02	PC-11210683	PC-11210948

TT-65 THERMOTWEEZ THERMAL TWEEZER HANDPIECE

PC-70250001

DESCRIPTION

- TT-65 ThermoTweez provides safe, one-handed reflow and removal of 2-sided chip components, SIT's, SOIC's, SOJ's and is the only Thermal Tweezer that can handle large PLCC's, QFP's and other four sided components

- High thermal capacity and targeted heat removes large SMDs in just seconds without damage to the board of the risk of adjacent components reflow even on heavy assemblies

TIP TYPE	SIZE (mm)	CAT. NO.
Standard wall (thickness 1.3 mm) / PLCC / PQFP	PLCC-20 6,86 x 6,86	PC-11210316
	PLCC-28 9,4 x 9,4	PC-11210317
	PLCC-32 12,4 x 9,65	PC-11210352
	PLCC44 / PQFP84 14,5 x 14,5	PC-11210318
	PLCC52 / PQFP100 17,0 x 17,0	PC-11210319
	PLCC68 / PQFP132 21,9 x 21,9	PC-11210320
	PLCC84 / PQFP160 26,9 x 26,9	PC-11210321

TIP TYPE	DESCRIPTION	SIZE (mm)	CAT. NO.
Standard wall (thickness 1.3 mm)	SOIC, SOJ, SIMMs	A=10,2	PC-11210514
	SOIC, SOJ, SIMMs	A=12,7	PC-11210473
	CHIP	A=0,76	PC-11210398
	CHIP	A=2,0	PC-11210313
	CHIP	A=4,1	PC-11210399
	CHIP, Small SOIC	A=6,4	PC-11210401
Thin-Wall (thickness 0.43 mm)	Thin-Walled Chip Component (vertical)	A=0,76	PC-11210520
		A=2,0	PC-11210521
		A=0,43	PC-11210517
	SOIC, SOJ, SIMMs Component	A=17,8	PC-11210416
		A=20,3	PC-112110497
		A=25,4	PC-11210448

TP-65 THERMOPIK HANDIECE

PC-70240001

DESCRIPTION

- TP-65 ThermoPik handpiece provides safe, one-handed reflow and removal of a wide variety of QFPs and flatpacks

TIP TYPE	SIZE (mm)	CAT. NO.
	15,5 x 21,6	PC-11210322001
	16,8 x 22,9	PC-11210322002
	PQFP-64/80; 15,7 x 15,7 mm	PC-11210484
	PQFP-84; 18,3 x 18,3	PC-11210324
	PQFP-100; 20,8 x 20,8	PC-11210325

TIP TYPE	SIZE (mm)	CAT. NO.
PQFP	PQFP-132 25,9 x 25,9	PC-11210326
	PQFP-144 29,2 x 29,2	PC-11210456
	PQFP-208; 30,0 x 30,0	PC-11210544
	PQFP-160/208; 31,0 x 31,0	PC-11210351
	PQFP-196; 36,3 x 36,3	PC-11210483

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TJ-70 THERMOJET HOT AIR/CONVECTIVE HANDPIECE

PC-70230002

DESCRIPTION

- TJ-70 Mini ThermoJet provides safe, rapid installation or removal of chip components, SOT's, SOIC's, PLCC's, QFP's and other surface mounted devices via controlled convective/hot air
- Ideal for the precise application of hot air for 0201s
- ESD-safe, rugged and durable construction
- Burn-resistant, ESD-safe cord

STANDARD EQUIPMENT

- TJ-70 ThermoJet handpiece
- Tip & Tool stand

TJ-70- THERMOJET HANDPIECE TIPS					
CAT. NO.	DESCRIPTION		CAT. NO.	DESCRIPTION	
PC-11210330	SOIC A=4,32 mm		PC-11210366	Small, Straight, Single Jet Tip	
PC-11210338	Small, Curved, Single Jet Tip		PC-11210371	A=6,1 mm B=1,88 mm	
PC-11210365	A=7,11 mm B=1,88 mm				

TJ-85 THERMOJET HOT AIR PENCIL

PC-69930270

DESCRIPTION

- TJ-85 ThermoJet Slim-Line Hot Air Pencil is ideal for delivering convective heat for the installation and removal of chip components, SOTs, and SOICs
- Handpiece's slim line, pencil grip design maximizes operator comfort and control
- Multiple quick-change nozzle sizes are available
- TJ-85's airflow is actuated with a foot pedal (provided) and provides safe, „instant use" capability without constant running of an air pump
- Ideal for the precise application of hot air for 0201s
- Useful for conformal coating removal via spot heating of coating which softens adhesives, urethanes and epoxies
- ESD-safe, rugged and durable construction
- Burn-resistant, ESD-safe cord

TJ-85 THERMOJET HANDPIECE TIPS		
A	B	C

TYPE	DESCRIPTION	TIP SIZE	CAT. NO.
A	Flat Nozzle	6,1 x 1,9 mm	PC-12590131
B	Curved Nozzle	1,5 mm	PC-12590130
C	Straight Nozzle	1,5 mm	PC-12590129

PACE HANDPIECE & POWER SOURCE CHARTS

HANDPIECE	DESCRIPTION	CAT. NO. OF HANDLES WITH BASE	CAT. NO. OF STAND	HANDLE CAT.NO.
TD-100 (IntelliHeat)	The most responsive soldering iron available. Uses tip-heater cartridges.	PC-69930263	PC-60190079	PC-60100147
TD-200 (IntelliHeat)	Suitable for most precision work, the tip is integrated in the heating element.	PC-69930317	PC-60190089	PC-60100166
MT-100 (IntelliHeat)	Tip-heater cartridge based tweezer for 2 sided SMD removal.	PC-69930264	PC-60190080	PC-60100148
TP-100 (IntelliHeat)	QFP removal tool with integrated component vacuum pick to lift reflowed component.	PC-69930280	PC-60190080	PC-60100158
TJ-70 (SensaTemp)	Provides focused hot air for component installation and SMT land preparation.	PC-69930206	PC-60190082	PC-70230002
TJ-70 (IntelliHeat)		PC-69930292		PC-70230003
TJ-85 (IntelliHeat)	A foot-pedal activated precision air pencil for the installation or removal of SMDs.	PC-69930270	PC-60190081	PC-60100153
TJ-85 (SensaTemp)		PC-69930247		PC-60100142
PS-90 (IntelliHeat)	High Capacity Soldering Iron for the most demanding applications.	PC-69930267	PC-60190081	PC-60100150
PS-90 (SensaTemp)		PC-69930199		PC-60100131
SX-100 (SensaTemp)	The latest innovation in desoldering. Features disposable or reuseable solder traps.	PC-69930213	PC-60190082	PC-60100106
SX-100 (IntelliHeat)		PC-69930266		PC-60100149
TT-65 (IntelliHeat)	High capacity tweezer for large or small SMDs.	PC-69930268	PC-60190083	PC-60100151
TT-65 (SensaTemp)		PC-69930207		PC-70250001
TP-65 (SensaTemp)	Handle with integrated vacuum gripper. For disassembly: QFP, LQFP, TQFP.	PC-69930205	PC-60190082	PC-70240001

	TIP-HEATER CARTRDIGE TECHNOLOGY HANDPIECES				SENSATEMP™ TECHNOLOGY HANPDIECES					
	TD-100	TD-200	MT-100	TP-100	PS-90	SX-100	TT-65	TP-65	TJ-70	TJ-85
Standard Soldering	•	•			•					
High Mass Soldering					•					
Micro Soldering	•	•								
Chip Installation	•	•	•		•		•		•	•
Solder Wicking	•	•			•				•	•
Thru-Hole Desoldering						•				
SMT Land Preparation	•	•			•	•			•	•
Solder Removal from Lands						•				
Large SMD Removal				•			•	•		
Standard SMD Removal	•	•	•	•	•		•	•		
Micro SMD Removal	•	•	•		•		•		•	•
Large, standard and micro component installations	•	•			•				•	•

POWER SOURCE OPTIONS – ST AND MBT SYSTEMS											
Tip-Heater Cartrdige Technology Handpieces	ADS200	ST-25	ST-30	ST-50	ST-70	WJS-100	ST-100	ST-65	ST-75	ST-115	MBT-301	MBT-350
TD-100			•	•	•	•	•	◊	◊	◊	•	•
TD-200	•											
MT-100			◊	◊	◊	◊	◊	◊	◊	◊	◊	•
TP-100								◊	◊	◊	◊	◊
SensaTemp™ Technology Hanpdieces	ADS200	ST-25	ST-30	ST-50	ST-70	WJS-100	ST-100	ST-65	ST-75	ST-115	MBT-301	MBT-350
PS-90		•	◊	•	◊	◊	◊	◊	◊	◊	◊	◊
SX-100								•	•	•	•	•
TT-65		◊	◊	◊	◊	◊	◊	◊	◊	◊	◊	◊
TJ-85									◊	◊	◊	◊

◊ - Optional Handpiece | • - Standard Hanpiece

GOOT BATTERY-POWERED SOLDERING IRON MSD-20

GO-MSD20

DESCRIPTION

- 350ºC in 15 seconds
- Ergonomic handle construction
- Safety cap
- Operating time: alkaline batteries - 40 min / Ni-MH approx. 60 min

TIPS FOR MSD-20 SOLDERING IRON	
CAT.NO.	
GO-MSD-20HRT-B	
GO-MSD-20HRT-D	

GOOT SOLDERING IRON PX-201

GO-PX201-CE

DESCRIPTION

- Wide-range iron with temperature adjuster
- Ergonomic grip
- Safety cap
- Wide range of tips

STANDARD EQUIPMENT

- Soldering iron
- GO-PX2RTSB tip

TIPS FOR PX-201 SOLDERING IRON					
CAT. NO.	**DIAMETER**		**CAT. NO.**	**DIAMETER**	
GO-PX2RT16D	1,6 mm		GO-PX2RT5C	5 mm	
GO-PX2RT24D	2,4 mm		GO-PX2RT5K	5 mm	
GO-PX2RT2C	2,1 mm		GO-PX2RT8S	8 mm	
GO-PX2RT32D	3,2 mm		GO-PX2RTB	0,5 mm	
GO-PX2RT3C	3 mm		GO-PX2RTBC	1 mm	
GO-PX2RT4D	4 mm		GO-PX2RTSB	0,3 mm	

TECHNICAL SPECIFICATION		
MODEL	**MSD-20**	**PX-201**
POWER SUPPLY	4,5 V (3 bateries AA type)	220 - 240 V, 50/60 Hz
POWER CONSUMPTION	6 W	70 W
TEMP. SETTING RANGE	Over 450°C	250°C - 450°C
LENGTH	180 mm	210 mm
WEIGHT	52 g	Approx. 90 g

GOOT SOLDERING STATION RX-802AS

GO-RX802AS

DESCRIPTION

- Fastest in its class - reaches set temperature in just 6 seconds after turning power on
- Microprocessor station at a very attractive price
- Ergonomic grip
- Tip replacement without tools - easy and quick
- Safety cover to prevent accidental change of settings

STANDARD ACCESORIES

- RX-802AS soldering station
- Soldering station iron stand

POWER SUPPLY	220 - 240 V, 50/60 Hz	
POWER CONSUMPTION	80 W	
TEMP. SETTING RANGE	50°C - 450°C	
INSULATION RESISTANCE	100 MΩ	
DIMENSIONS	Control unit: 146 x 115 x 98 mm	Iron unit: 158 mm
WEIGHT	Control unit: 1,8 kg	Iron unit: 28 g
LEAK VOLTAGE	< 2 mV	
GROUND RESISTANCE	< 2 Ω	
CORD LENGTH	1,2 m/1,2 m	

TIPS FOR GOOT RX-802AS SOLDERING STATIONS			
CAT.NO.		**CAT.NO.**	
GO-RX80HRT05C		GO-RX80HRT4C	
GO-RX80HRT1BC		GO-RX80HRTB	
GO-RX80HRT1C		GO-RX80HRTBM	
GO-RX80HRT2C		GO-RX80HRTLB	
GO-RX80HRT2CD		GO-RX80HRTSB	
GO-RX80HRT3C		GO-RX80HRT08D	
GO-RX80HRT3CD		GO-RX80HRT12D	
GO-RX80HRT16D		GO-RX80HRT45K	
GO-RX80HRT24D		GO-RX80HRT47C	
GO-RX80HRT32D		GO-RX80HRT54D	
GO-RX80HRTLBJ			

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GOOT SOLDERING STATION RX-852AS

GO-RX852AS-CE

DESCRIPTION

- Ideal for high-power work
- Large thermal capacity
- Fastest in its Class
- Easy tip raplacement
- Thick tip coating for lead-free soldering
- Key lock

STANDARD EQUIPMENT

- RX-852AS soldering station
- Soldering iron stand

POWER SUPPLY	220 – 240 V, 50/60 Hz	
POWER CONSUMPTION	145 – 170 W	
TEMP. SETTING RANGE	50°C – 450°C	
INSULATION RESISTANCE	100 MΩ	
DIMENSIONS	Control unit: 194 x 116 x 105 mm	Iron unit: 174 mm
WEIGHT	Control unit: 4,8 kg	Iron unit: 39 g
LEAK VOLTAGE	< 2 mV	
GROUND RESISTANCE	< 2 Ω	
CORD LENGTH	1,5 m / 1,5 m	

TIPS FOR GOOT RX-852AS		
CAT.NO.		**CAT.NO.**
GO-RX85HRT2BC		GO-RX85HRT5D
GO-RX85HRT3BC		GO-RX85HRT7D
GO-RX85HRT5BC		GO-RX85HRT6K
GO-RX85HRT7BC		GO-RX85HRTB
GO-RX85HRT3D		

DEN-ON SC-7000Z DESOLERING TOOL

DL-SC-7000Z

DESCRIPTION

- Target temperature signalling
- Protection against ESD
- Pump built-in structure with a temperature control circuit
- Direct connection between the diaphragm pump and the tip can provide high vacuum efficiency which can accommodate for 8-12 layered PCB
- Removal of SMD components can be easily done by a flick of the selector lever and by replacing the tip with the hot blow nozzle
- Patented, multi-use filter cartridge will last long life
- Combination of a 100W ceramic heater with sensor feedback temperature control circuit and high vacuum capacity can provide best work efficiency with no faillure
- Three-core, silicon, heat resistant power cord

STANDARD EQUIPMENT

- SC-7000Z Desoldering Tool
- Desoldering Tip of 1mm (standard)
- Filter Cartridge (2 pieces)
- Cleaning pin (set)

POWER SUPPLY	230 V, 50 Hz
POWER CONSUMPTION	Max. 120 W
HEATER	100W (Ceramic)
MOTOR OUTPUT	12 W
TEMPERATURE RANGE	350°C - 500°C
VACUUM ATTAINED	650 mm Hg
TIME REQUIRED MAX VACUUM	0,2 s
PUMP	Diaphragm Tip
AIR FLOW RATE	15 l/min
TEMPERATURE STABILIZATION SYSTEM	Heater resistance measurement
WEIGHT	420 g

SC-7000Z OPTIONAL TIPS
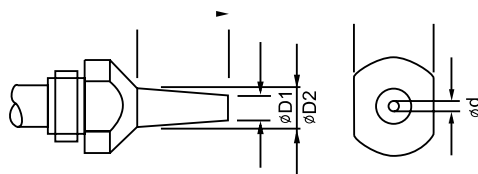
CAT. NO.	SPECIFICATION	MARKING	Ø d	Ø D1	Ø D2	L (mm)
DL-50-01-11	0,8 Std	0,8	0,8	2,5	7,0	12,5
DL-50-01-12	0,8 SLIM	0,8S	0,8	2,0	6,0	14,0
DL-50-01-13	0,8 U.SLIM	S,8	0,8	1,5	5,0	11,5
DL-50-01-14	1,0 Std	1,0	1,0	2,5	7,0	12,5
DL-50-01-15	1,5 Std	1,5	1,5	3,0	7,0	12,5
DL-50-01-16	1,0 SLIM	1,0S	1,0	2,0	6,0	14,0
DL-50-01-17	1,5 SLIM	1,5S	1,5	2,2	6,0	14,0
DL-50-01-18	2,1 mm	1,2S	1,2	5	7	12,0

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SC-7000Z OPTIONAL NOZZLES

NOZZLE TYPES	DESCRIPTION		CAT. NO.
	Vacuum cup		DC-71-03-00
	Vacuum cup end		DL-71-11-00
	TYPE	**DIMENSIONS A x B**	**CAT. NO.**
	PQFP	23 x 17 mm	DL-71-01-01
	PQFP-160/208	30 x 30 mm	DL-71-01-02
	PQFP-68	15,5 x 15,5 mm	DL-71-01-03
	PQFP-44/56	12,5 x 12,5 mm	DL-71-01-04
	PQFP-100BP	20 x 20 mm	DL-71-01-05
	PQFP-64/68	16,5 x 16,5 mm	DL-71-01-06
	PQFP	22 x 16 mm	DL-71-01-07
	PLCC-44 PQFP-84	14,5 x 14,5 mm	DL-71-01-08
	PLCC-52 PQFP-100	17,5 x 17,5 mm	DL-71-01-09
	PQFP-84	18,5 x 18,5 mm	DL-71-01-10
	PQFP-100	21 x 21 mm	DL-71-01-11
	PLCC-68 PQFP-132	22 x 22 mm	DL-71-01-12
	PQFP-132BP	25 x 25 mm	DL-71-01-13
	PQFP-132	26 x 26 mm	DL-71-01-14
	PLCC-84 PQFP-160	28 x 28 mm	DL-71-01-15
	PQFP-144	29 x 29 mm	DL-71-01-16
	PLCC-100	34 x 34 mm	DL-71-01-17
	PQFP-196	36 x 36 mm	DL-71-01-18

REMOVAL OF SURFACE MOUNTED DEVICES SMD

The unique design of the SC-7000Z desoldering tool allows for the quick conversion from a solder suction tool to a hot blower. By using the hot blower with the SMD kit (DL-72-78-00), the SMD will be easily removed from PCB's. The change to hot blower requires:

a) Remove the Suction tip and replace with hot Blow nozzle by a wrench
b) Replace the original cartridge with the hot blow filter pipe
c) Set the lever to hot blow position.
   The air flow of the hot-blow can be adjusted with the lever.
d) Depending on the nature of the suction work and the size of the component, the temperature control knob should be set at the appropriate level (450°C-500°C)
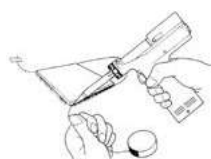
REMOVAL OF PLCC
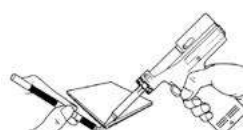
REMOVAL OF QFP, PQFP OR SOP

SMD kit includes:

A – Hot-blow filter pipe
B – Stainless wire and blade
C – Holder
D – Hot-blow nozzle

PORTASOL SUPER PRO 125 SOLDERING IRON

PO-SUPER-PRO

DESCRIPTION

- Adjustable temperature
- Piezo self-ignition
- Possibility of every plain work
- Heated up to 350°C temperature in 20 seconds
- When protective hood is placed on iron, automatically butane gas is cut off
- Built-in gas container, possibility of multi refill (10 seconds refill time)
- Open flame work possibility (blow torch function)

STANDARD EQUIPMENT

- Comes with a 2.4 mm DF tip attached and protective hood

POWER CONSUMPTION		Max. 125 W	
LENGTH		233 mm	
WEIGHT		165 g	
RUN TIME		Approx. 90 min.	
MAX. TIP TEMPERATURE	BLOW-OUT AIR	580°C	650°C
REFILL TIME		10 sec.	

PORTASOL SUPER PRO 125 SOLDERING IRON KIT

PO-SP-ZESTAW

STANDARD EQUIPMENT

- SUPER PRO 125 gas iron with a standard tip PO-SP-6
- Protective hood
- Tip PO-SP-8
- Hot air blow-out nozzle
- Hot knife tip
- Hot air deflector enables tubing heat shrinking
- Plastic case with room for additional three tips
- Sponge for tips cleaning

SUPER PRO 125 TIPS					
CAT.NO.	SIZE/TYPE		CAT.NO.	SIZE/TYPE	
PO-SP-1	1 mm		PO-SP-7	3,2 mm	
PO-SP-2	2,4 mm		PO-SP-8	4,8 mm	
PO-SP-3	3,2 mm		PO-SP-9	Hot Air	
PO-SP-4	4,8 mm		PO-SP-10	Hot Air	
PO-SP-5	1 mm		PO-SP-12	Deflector	
PO-SP-6	2,4 mm				

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PORTASOL PROFFESIONAL SOLDERING IRON

PO-PROFESSIONAL

DESCRIPTION

- Wireless gas soldering iron
- Power adjustment from 10 to 60 W
- Built-in lighter into protective hood
- Possibility of every plain work
- Heats up to 350°C temperature in 20 seconds
- 7 kinds of tips
- When protective hood is placed on iron automatically butane gas is cut off
- Built-in gas container, possibility of multi refill (10 seconds refill time)
- Open flame work possibility (blow torch function)

STANDARD EQUIPMENT

- PROFFESIONAL soldering iron
- PO-SP-6 tip
- Protective cover with ignition

POWER SUPPLY	Butane lighter gas
POWER CONSUMPTION	60 W
LENGTH	177 mm
WEIGHT	60 g
RUN TIME	Approx. 60 min.
MAX. TIP TEMPERATURE	400°C
GAS REFILL TIME	10 sec.

PORTASOL PROFESSIONAL KIT

PO-P-ZESTAW

STANDARD EQUIPMENT

- PROFESSIONAL solder iron with a standard tip PO-P-2
- Hot Air blow-out nozzle
- Hot knife tip
- Precise flame
- Sponge for tips cleaning
- Plastic case
- Built-in lighter into protective hood

PROFFESIONAL TIPS					
CAT. NO.	SIZE		CAT. NO.	TYPE	
PO-P-1	1,0 mm		PO-P-5	Precise flame	
PO-P-2	2,4 mm		PO-P-6	Hot-air blow--out	
PO-P-3	3,2 mm		PO-P-7	Hot knife	
PO-P-4	4,8 mm				

PORTASOL 50 SOLDERING IRON

DESCRIPTION

- Wireless gas soldering iron
- Possibility of every plain work
- Heats up in 10 seconds
- 4 kinds of tips
- Built-in gas container, possibility of multi refill
- Open flame work possibility (blow torch function)

STANDARD EQUIPMENT

- PORTASOL 50 solder iron
- Standard tip

PO-50

POWER CONSUMPTION	50 W
LENGTH	196 mm
WEIGHT	60 g
HEATING TIME	40 sec.
APPROX. RUN TIME	40 min
MAX. TIP TEMPERATURE	400°C
GAS REFILL TIME	10 sec.

PORTASOL 50 KIT

STANDARD EQUIPMENT

- PORTASOL 50 KIT
- 2.4 mm chisel tiplet
- 4.8 mm df tiplet
- Knife tiplet and fine solder tiplet
- Cleaning sponge
- Safety cap with built-in ignitor

PO-50-ZESTAW

PORTASOL 50 TIPS		
CAT.NO.	DIMENSIONS/TYPE	
PO-P50T-2	Fine tip	
PO-P50T-3	2.4 mm	
PO-P50T-4	4.8 mm	

PORTASOL 50 TIPS		
CAT.NO.	TYPE	
PO-P50T-6	Knife	
PO-P50T-1	Heater	

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PORTASOL GAS BURNERS TORCH 220/820

DESCRIPTION

- Compact lightweight (7oz) medium power Torch for hard to reach areas
- Designed for:
  - Melting and forming of plastics
  - Paint stripping (burning)
  - Repair of jewellery
- The gas burner is used wherever the user cares about:
  - Mobile operation, without the need of power supply - field service (e.g.: automotive, telecommunication)
  - Making permanent connections
  - Work in hard-to-reach places
- Adjustable flame length up to 90mm (31/2 inches)
- All-in-one on/off ignition switch
- Safety button

CAT. NO.	PO-GT220	PO-HP820
POWER SUPPLY	Butane lighter gas	
POWER CONSUMPTION	From 50 to 220 W	From 50 to 820 W
MAX. FLAME LENGTH	9 cm	12 cm
AVERAGE RUN TIME	60 minutes	45 minutes
GAS FILLING TIME	10 s	
MAX. TEMPERATURE	1350°C	
WEIGHT	133 g	166 g

PACE ST-300 CONVECTIVE HOT AIR REFLOW SYSTEM

DESCRIPTION

- Self-contained system for the manual installation and removal of SMD's
- Unit offers a non-contact heating method for the manual installation and removal of virtually any standard surface mount component including BGAs, QFNs, SOICs and many other SMDs
- Easy to operate
- Hi-Flo Vacuum Pump for holding component securely
- Quiet-Flo turbine blower reduces operating noise
- ST 300 comes with the Lo-Flo pump and the vacuum wand (PV-65 Pik-Vac Wand) for manipulating components manually
- Capabilities of ST 300 can be greatly enhanced when coupled with optional accessories (PACE preheaters and Z-Axis platforms)
- Lockable temperature and airflow adjustment knobs

STANDARD EQUIPMENT

- ST-300 power supply with powerful handpiece
- PV-65 Pik-Vac vacuum wand

PC-80070428

POWER SUPPLY	197 - 253 V, 50 Hz, Max. 575 W
TEMPERATURE RANGE	176 - 482°C nominal
AIRFLOW	5 - 22 slpm
TEMPERATURE STABILITY	+/- 9°C at idle tip temp.
DIMENSIONS	134 x 245 x 264 mm
WEIGHT	4,5 kg

PACE ST-325 DIGITAL, PROGRAMMABLE HOT AIR REFLOW SYSTEM

DESCRIPTION

- ST-325 allows the create 'Profiles" that consist of time, temperature and airflow parameters to ensure process control and repeatability
- Unit offers a non-contact heating method for the manual installation and removal of virtually any standard surface mount component including BGAs, QFNs, SOICs and many other SMDs
- Fully Programmable via user-friendly front panel interface
- Microprocessor controlled, easy programming and profile development
- Capabilities of ST 300 can be greatly enhanced when coupled with optional accessories (PACE preheaters and Z-Axis platforms)
- Optional PC software is available for additional profile development capability
- Quiet-Flo internal turbine blower for silent operation
- Single Jet, Box, BGA and Pattern Nozzles are available for a wide variety of surface mount components

STANDARD EQUIPMENT

- ST-325 power supply
- ST 325's powerful handpiece
- PV-65 Pik-Vac component handling wand

PC-80070432

POWER SUPPLY	197 - 264 V, 50 Hz, Max. 575 W
TEMPERATURE RANGE	176° to 482°C nominal
AIRFLOW	5 - 22 slpm
TEMPERATURE STABILITY	+/- 9°C at idle tip temp.
DIMENSIONS	133 x 260 x 248 mm
WEIGHT	4,5 kg

RA-150E HOT AIR NON-CONTACT SMD REWORK STATION

RE-RA150E

DESCRIPTION

- High heating element power and stabile air flow – work with: CHIP, SO, QFP, PLCC, BGA components
- Precise, microprocessor stabilized temperature and air flow
- Large and readable display
- Extended heating element life time
- Wide range of acid-proof steel nozzles
- Fast nozzle replacement
- Unique heating element cool down feature right after power switch off

STANDARD EQUIPMENT

- RA-150 station
- RE-PN50 nozzle

POWER SUPPLY	230 V AC, 50-60 Hz
POWER CONSUMPTION	Max. 600 W
AIR FLOW CONTROL RANGE	2-20 l/min. +/- 10%
TEMPERATURE CONTROL RANGE	150°C – 475°C
TEMPERATURE STABILIZATION	+/- 2°C
DIMENSIONS	240 x 190 x 125 mm
WEIGHT	3 kg

RA-250E HOT AIR NON-CONTACT SMD REWORK STATION

RE-RA250E

DESCRIPTION

- Optimized heating element power and intelligent hot air temperature control - work with almost all SMD components
- Wide range of air flow, starting from soldering with no risk of blowing off the components and solder paste to large components (also on multilayer PSBs)
- Build-in vacuum tweezer, started manually or automatically - safe handling of sensitive components
- Programming enables to build a professional SMD rework station based on RA-250E
- Large, contrast display increases comfort of work and keeps the operator updated about current state of all important parameters

STANDARD EQUIPMENT

- RA-250E with vacuum tweezer and 3 vacuum rubber cups
- Thermocouple
- RE-PN50 nozzle

POWER SUPPLY	230 V AC
POWER CONSUMPTION	Max. 650 W
AIR FLOW CONTROL RANGE	2-20 l/min. +/- 10%
TEMPERATURE CONTROL RANGE	100°C – 450°C
VACUUM TWEEZER	>= 0,2 bar
TEMPERATURE STABILIZATION	+/- 4°C
DIMENSIONS	200 x 230 x 150 mm
WEIGHT	4,4 kg

PACE KIT: ST-350 CONVECTIVE REWORK CENTER

PC-80070438

DESCRIPTION

- Completely self-contained, programmable and capable of installing virtually any type of surface mount component.

  The system is ideal for service centers, prototyping shops, low volume production or remanufacturing centers.

- ST 350 has all of the process control built into the unit and boasts digital controls for temperature, time, and airflow. The electronic controls are fully integrated and are simple to use and program to meet your needs, unlike the 'off the shelf PID control modules" used on competitive equipment.

  This means that you can 'set it and forget it" instead of being tied to the unit to perform tasks during the process which can be more than 6 minutes long! Your time can be better spent preparing for the next operation than waiting to activate non-intergrated control modules.

- System can be used in either manual or 'timed" modes. Manual mode means that the system generates airflow when the cycle button is pressed the fi rst time. When pressed a second time, the system shuts off. 'Timed" modes allow the operator to set up 'Profiles" that consist of time and temperature parameters to ensure process control and repeatability.

  All of the interface controls for the ST 350 are also located in a remote control box that can be placed on either side of the unit for maximum convenience.

POWER SUPPLY	197 - 230 V, 50 Hz. Max 575 W
TEMPERATURE CONTROL	Closed loop, digital temperature control
TEMPERATURE STABILITY	+/- 9ºC at idle tip temp.
TEMPERATURE RANGE	176° to 482°C nominal
AIRFLOW	5 - 22 slpm
DIMENSIONS	578 x 930 x 665 mm
WEIGHT	26,4 kg

PACE KIT: ST-925 SMT REWORK SYSTEM

PC-80070577

DESCRIPTION

- ST 925 combines three PACE products together into one convenient, low-cost SMT Rework System. The system is comprised of:

  - ST-325 Programmable Convective/Hot Air Rework Station - description on page 38
  - PH-100 Low Profile Infrared Preheater - description on page 45
  - ST-500A Z-Axis Platform - description on page 48

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REECO KIT: RA-300 FOR SMD/BGA REWORKS

SET CONTAINS

- Microprocessor controlled station REECO RA-250 - description on page 39
- Preheater QPH-A3 - description on page 44
- Stand providing stabile PCB fixing and precise positioning of component
- Software for RE-RA250E station – management of set, programming, process control and archiving

RE-RA300

REECO KIT: RS-300Q FOR SMD/BGA REWORKS

DESCRIPTION

- Integrated device: HOT-AIR station, quartz preheater and control computer
- 3 zone quartz, A3 size preheater
- Preheater power: lower 3.4kW / upper 500W
- Smooth temperature adjustment of lower preheater and air flow
- 3 external thermocouple socket
- Stabile stand with adjustable XYZ axis
- Large, 7-inch colour touch screen
- Editing process parameters in real time
- Extended heating element life time
- Wide range of acid-proof steel nozzles
- One round nozzle and mounting adapter as standard
- Fast nozzle replacement
- Heating element cool down feature right after power switch off

STANDARD EQUIPMENT

- RS-300Q station
- RE-PN50 nozzle with adapter
- XYZ stand

RE-RS300Q

|	
POWER SUPPLY	230 V AC, 50 - 60 Hz
POWER CONSUMPTION	3,4 kW
AIR FLOW	35 L/min.
TEMPERATURE CONTROL RANGE - LOWER PREHEATER	100ºC - 350ºC
TEMPERATURE CONTROL RANGE - UPPER PREHEATER	100ºC - 450ºC
DIMESIONS	480 x 460 x 190 mm
WEIGHT	20 kg

NOZZLES FOR REECO RA-250 AND RA-150 STATIONS

DESCRIPTION

- Nozzles, labelled RE-BNxx have a square cross-section and are mainly recommended for BGA components. These open-type heads, namely that hot air flows out through special channels, so the head during operation can adhere closely to the surface of the printed circuit board, accurately hitting the air stream throughout the BGA

- Heads marked – RE-PNxx (Pin Nozzle) are universal stream heads
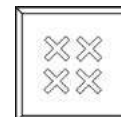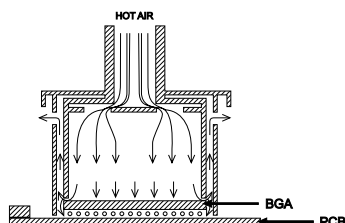
CAT. NO.	DESCRIPTION	SCHEMATIC	CAT. NO.	DESCRIPTION	SCHEMATIC	CAT. NO.	DESCRIPTION	SCHEMATIC
RE-BN5	For BGA components and similar (eg TQFP) dimensions 3,50 x 8,30 mm	8,30 / 3,50	RE-BN21	For BGA components and similar (eg TQFP) dimensions 19,5 x 24,1 mm	24,10 / 19,50	RE-BN35	For BGA components and similar (eg TQFP) dimensions 33,3 x 38,2 mm	38,20 / 33,30
RE-BN7	For BGA components and similar (eg TQFP) dimensions 5,65 x 10,40 mm	10,40 / 5,65	RE-BN23	For BGA components and similar (eg TQFP) dimensions 21,40 x 26,50 mm	26,50 / 21,40	RE-BN37	For BGA components and similar (eg TQFP) dimensions 36,5 x 41,5 mm	41,50 / 36,50
RE-BN9	For BGA components and similar (eg TQFP) dimensions 7,65 x 12,40 mm	12,40 / 7,65	RE-BN25	For BGA components and similar (eg TQFP) dimensions 23,10 x 28,10 mm	28,10 / 23,10	RE-BN39	For BGA components and similar (eg TQFP) dimensions 37,6 x 42,5 mm	42,50 / 37,60
RE-BN11	For BGA components and similar (eg TQFP) dimensions 9,10 x 14,10 mm	14,10 / 9,10	RE-BN27	For BGA components and similar (eg TQFP) dimensions 25,10 x 30,50 mm	30,50 / 25,10	RE-BN41	For BGA components and similar (eg TQFP) dimensions 39,5 x 44,6 mm	44,60 / 39,50
RE-BN13	For BGA components and similar (eg TQFP) dimensions 11 x 16,10 mm	16,10 / 11	RE-BN29	For BGA components and similar (eg TQFP) dimensions 27,5 x 32,5 mm	32,50 / 27,50	RE-BN43	For BGA components and similar (eg TQFP) dimensions 41,5 x 46,6 mm	46,60 / 41,50
RE-BN15	For BGA components and similar (eg TQFP) dimensions 13,20 x 18,20 mm	18,20 / 13,20	RE-BN31	For BGA components and similar (eg TQFP) dimensions 29 x 34 mm	34 / 29	RE-BN45	For BGA components and similar (eg TQFP) dimensions 43,5 x 48,8 mm	48,80 / 43,50
RE-BN19	For BGA components and similar (eg TQFP) dimensions 17,20 x 22,10 mm	22,10 / 17,20	RE-BN33	For BGA components and similar (eg TQFP) dimensions 31,5 x 36,6 mm	36,60 / 31,50	RE-BN47	For BGA components and similar (eg TQFP) dimensions 45,5 x 50,7 mm	50,70 / 45,50
RE-PN30	Universal head diameter: 3 mm	3mm	RE-PN50	Universal head diameter: 5 mm	5mm	RE-PN80	Universal head diameter: 8 mm	8mm

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DEN-ON RD-500V / RD-500SV REWORK SYSTEM

DESCRIPTION

- All-in-one advanced technoloy SMT rework stations compatible for the rework of all different types of SMT components
- Wide support to industrial large-scale and small-scale circuit boards, including 01005 components
- Improved sampling (0,1 sec intervals) allows a very accurate temperature control
- Equipped with powerful 1000W heaters on both the top and bottom, and the area heater has six 600W IR heaters, which build up heat very quickly
- Temperature can be controlled form the basic 5 zones up to a maximum of 30 zones. In addition to this temperature management, the equipment's mechanical operations per zone (i.e. heater, pick-up tube height settings, audible alarms, etc.) can be easily edited
- Enclosed solder printing tool allows solder paste application directly into any device's solder balls

CAT. NO.	DL-RD-500V	DL-RD-500SV
MAX. PCB SIZE	500 x 700 mm	400 x 420 mm
POSITIONING ACCURACY	+/- 0,015 mm	
COMPONENT SIZE	01005 (0402 mm) or more	
BOTTOM HOT AIR HEATER	1000 W	
TOP HOT AIR HEATER	1000 W	
AREA HEATER	600 W x 6 IR 3600 W	500 W x 4 IR 2000 W
TEMPERATURE SETTING RANGE	0 ~ 650°C	

PACE TF-1800 BGA AND SMD REWORK SYSTEM

DESCRIPTION

- Groundbreaking, patented Inductive-Convection Heating Technology, the TF 1800's top-side heater reaches the target temperature in just seconds for safe, rapid solder joint reflow in virtually any installation or removal application of BGA, QFN, CSP, CGA, PoP, Flip Chip, 0201 and other bottom terminated components
- Automated Vision Overlay System uses a beam-splitting prism for simultaneous view of PCB pads and balls, high intensity LEDs for shadow-free lighting, and new high definition 1080p camera to easily align any component
- TF 1800's revolutionary inductive-convection heating technology provides ultimate thermal performance by its ability to instantly heat up and cool down the temperature of the air it delivers to the work
- Maximum PCB size: 305mm x 305mm (12" x 12")

PC-80070574

POWER SUPPLY	230V, 50-60Hz, 1600W
TOP-SIDE HEATER	Patented Inductive-Convection Heater, 300 Watts
BOTTOM SIDE HEATER	Medium/Long wave IR, 1000 Watts; 220 mm (8.6") x 155 mm (6.1")
HIGH SENSITIVITY VACUUM PICK	Counterweight balanced with an optical sensor and precision high temperature linear ball bearings (includes 7 picks)
PRECISION PLACEMENT CAPABILITY	Placement system utilizes a stepper motor and position encoding for precise movement
PLACEMENT ACCURACY	28μm (.0011") accuracy
MAX COMPONENT SIZE	65 mm (2.5") x 65 mm (2.5")
DIMENSIONS	737 x 686 x 737 mm
WEIGHT (WITHOUT COMPUTER)	45 kg

REECO QPH-A3 QUARTZ PREHEATER

RE-QPHA3

DESCRIPTION

- 3 independent heating zones ensuring an even temperature distribution on PCB
- Heating by quartz heating elements
- Intelligent thermocouple function from any TC receptacle
- Steel safety net
- Large thermal efficiency and effective heat transfer
- Temperature measurements by three independent external thermocouples
- Programmatically controlled increase of temperature
- Large, easy to read display informing about all parameters:
  - set temperatures on each of three heating zones
  - real temperature on each of three heating zones
  - real temperature on each of three thermocouples

POWER SUPPLY	230 V, 50 - 60 Hz
POWER CONSUMPTION	Max. 3 kW
WORKING FIELD	270 x 365 mm
HEATING ELEMENTS	Quartz
TEMPERATURE STABILIZATION	+/- 5°C
TEMPERATURE RANGE	100°C – 375°C
DIMENSIONS	430 x 420 x 140 mm
WEIGHT	12 kg

REECO PH-A3 PREHEATER

RE-PHA3

DESCRIPTION

- 3 independent heating zones ensuring an even temperature distribution on PCB
- Convective heating through the high thermal capacity heating plate + blow by large number of holes in the heating plate
- 14 mm thick heating plate, made of special aluminium alloy integrated with heating elements
- High heating performance and efficient transfer of heat through the air, makes heating zone similar to those in reflow ovens
- Protection against heat tensions
- Temperature measurements by three independent external thermocouples
- Programmatically controlled increase of temperature
- Large, easy to read display informing about all parameters:
  - set temperatures on each of three heating zones
  - real temperature on each of three heating zones
  - given flow of hot air on each of three zones

POWER SUPPLY	230 V, 50 - 60 Hz
POWER CONSUMPTION	Max. 3,4 kW
WORKING FIELD	290 x 430 mm
TEMPERATURE STABILIZATION	+/- 5°C
TEMPERATURE RANGE	100°C - 350°C
DIMENSIONS	480 x 140 x 430 mm
WEIGHT	16 kg

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PACE PH-100 PREHEATER

PC-80070573

DESCRIPTION

- Promotes rapid solder reflow while preventing heat damage and thermal stress or shock
- Ensures homogenous temperatures across package/PCB
- Decreases warping & maintains planarity of the rework site
- Reduces top-side temperature and dwell-time requirements
- Increases soldering iron tip-life by allowing lower tip temperatures

POWER SUPPLY	230 V, 50 - 60 Hz
HEATING AREA	300 x 300 mm
HEATING ELEMENTS	4 x 400 Watt, Medium Wave IR Emitters (250 mm x 60 mm / 9.8" x 2.4" ea.)
TEMPERATURE RANGE	20°C - 200°C
DIMENSIONS	355 x 430 x 60 mm
BOARD SIZE CAPACITY	Handles large 295 mm (11.625") x unlimited PCB's
THERMOCOUPLE INPUTS	Two (2) K-Type Thermocouple Inputs (Topside and Bottom-side PCB)
WEIGHT	8 kg

REECO RE-IR-860 PREHEATER

RE-IR-860

DESCRIPTION

- Accurate, microprocessor control and temperature measure
- Two displays:
  - Real time
  - Temperature form thermocouple
- Uniform heating throughout surface
- Protection against overheating
- Two switches: power and heating/cooling
- Steel protection mesh
- Temperature measurement by external thermocouple type K

POWER SUPPLY	230 V AC
POWER CONSUMPTION	Max. 400 W
PLATE AREA	130 x 130 mm
TEMPERATURE RANGE	50°C - 350°C
TEMPERATURE STABILIZATION	+/- 1°C
DIMENSIONS	255 x 200 x 63 mm
WEIGHT	2,5 kg

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REECO HP-580 PREHEATER

RE-HP580

DESCRIPTION

- Aluminium hot plate assures excellent energy transfer to preheated application
- Automatic process control and fault signalling (only 1 message S-E)
- Precise, digital control and temperature measurement
- Three-position display
- Even, heating of whole hot plate area

POWER SUPPLY	230 V AC
POWER CONSUMPTION	Max. 1100 W
TEMPERATURE RANGE	50 - 350°C
DIMENSIONS	200 x 146 x 200 mm
WEIGHT	4,75 kg

PACE ST-400 RADIANT/IR PREHEATER

PC-80070436

DESCRIPTION

- Preheating allows for the use of significantly lower and safer temperatures when conductive or convective tools are used for component installation or removals
- Recommended when installing area array components and large leaded devices
- Heat from the bottom side of the PCB keeps the PCB from twisting or warping
- Homogenous temperatures across the package and PCB

POWER SUPPLY	197 - 264 V, 50/60 Hz
POWER CONSUMPTION	Max. 425 W
TEMPERATURE RANGE	37 - 205°C
TEMPERATURE STABILITY	3°C at idle temp.
DIMENSIONS	105 x 178 x 318 mm
WEIGHT	2.2 kg

PACE ST-450 CONVECTIVE PRE-HEATER

PC-80070434

DESCRIPTION

- Analog, closed loop, temperature controlled convective 1500 W preheater
- ST-450 is completely self-contained and when in cooling mode, the airflow is increased to 50 cfm
- It can be used as is, or one of 3"air wash" nozzles can be attached to focus the heat where it is needed
- Pre-heater can be used as a stand-alone unit with either the ST-525/ST-550 PCB holder or can be used with the ST-300, ST-325, or ST-350. When used with the ST-325/ST-350 the heater activity of the ST 450 can be controlled through the ST-325 or ST-350

POWER SUPPLY	197 - 264 V, 50/60 Hz
POWER CONSUMPTION	425 Watts max.
TEMPERATURE RANGE	37 - 205°C
TEMPERATURE STABILITY	3°C at idle temp.
DIMENSIONS	178 x 104 x 318 mm
AIRFLOW	990L (35 cfm) heating / 1415L (50 cfm) cooling
WEIGHT	2.4 kg

HOT PLATE FOR REBALLING AND SMD/BGA REPAIRS

FO-928S

DESCRIPTION

- Even heating on the whole plate
- The heating plate made of aluminium alloy provides excellent energy conduction for heated application.
- Two-line display:
    - Display for temperature set by the operator
    - Display for current temperature
- Duration of the process adjustable by potentiometer
- Built-in advanced radiant heating elements
- Thermal insulation prevents the chassis from heating up

POWER CONSUMPTION	Max. 1000 W
TEMPERATURE	0 - 400°C
TEMPERATURE PRECISION	+/- 1°C
PLATE DIMENSIONS	150 x 200 x 13 mm
DIMENSIONS	280 x 240 x 170 mm
HEAT-UP TIME TO 200 °C	6 min
WEIGHT	7.5 kg

SMD/BGA REWORK STATION FOR REBALLING AND REPAIRS

FO-936UA

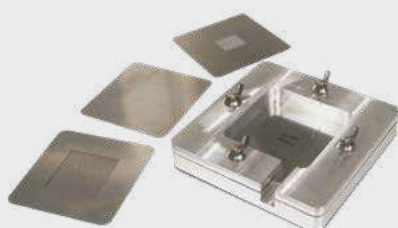### DESCRIPTION

- Equipped with a thin heating element with 1000 W hot air injection and ultra-high IR heating system
- Adjustable hot air guideway
- Large bottom heating area 360 x 260 mm, can be divided into 3 zones for different PCB sizes
- Equipped with universal terminal for various PCBs from mobile phones to server boards, as well as for irregularly shaped PCBs
- Color differentiation system especially dedicated to CSP (µBGA, Tiny BGA), fine pitch BGA and LLP
- High-performance cooling system
- 6 built-in sensors allow direct temperature measurement of BGA enclosures and PCBs

POWER CONSUMPTION	Max. 6100 W
TEMPERATURE	50ºC - 399ºC
PCB SIZE	600 x 460 mm (capacity: 600 x 680 mm)
IMAGE MAGNIFICATION	Standard: up to 20x | Option: 40x
DIMENSIONS	620 x 620 x 700 mm
WEIGHT	98 kg

BGA REGENERATION KIT WITH STENCILS

RE-RKIT+SCR

DESCRIPTION

- Used in BGA and µBGA reballing
- Soldering balls:
    - Ball diameter tolerance +/- 0.02 mm
    - Wide range of sizes and types
    - Highest quality
    - Available ball sizes:
      0,35 ; 0,40 ; 0,45 ; 0,50 ; 0,55 ; 0,60 ; 0,65 ; 0,76 mm
- The set consists of a frame and one stencil made to customers order

PACE ST-500 ADJUSTABLE Z-AXIS PLATFORM

DESCRIPTION

- ST-500A is an adjustable Z-Axis platform/stand that allows ST500A hands-free operation of the handpiece heater, providing access to the entire work area, and giving you the capability to perform repetitive removals and installations

- Platform accepts the handpieces from either the ST-300 or ST-325

- Heat guard on the ST handpiece is replaced with a „swivel ring" which is placed on the ST-500. The swivel ring allows the handpiece to be adjusted for planarity to the PCB being worked on

- ST-500 features a sturdy, extruded base that will accommodate either the PH-100, ST-400, ST-450 preheaters and can also be used with either of the ST-525 or ST-550 PCB holders

PC-69930258

PACE ST-525 / ST-550 PC HOLDER

DESCRIPTION

- Both holders feature spring loaded rails with cocking mechanism for easy PCB removal and insertion

- Flexible systems can be created by combining the ST-500 with either PCB holder and the ST-300 and ST-325 Hot Air Rework Systems as well as the ST-400, ST-450 and PH-100 preheaters
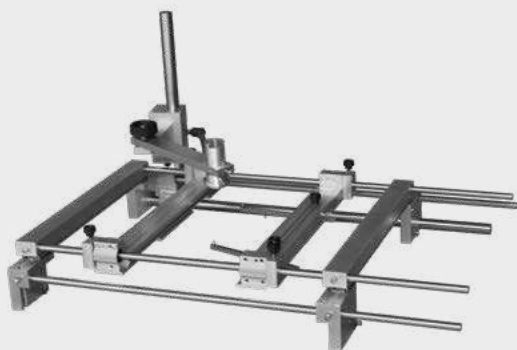
ST-525 PCB holder: 30,5 x 30,5 cm (max PCB size)	PC-69930253
ST-550 PCB holder: 46 x 46 cm (max PCB size)	PC-69930254

REECO X-Y-Z STAND

DESCRIPTION

- Connected with for assembly/disassembly hot air station RE-RA250 and RE-PH-A3 or RE-QPH-A3 preheater, makes an advanced rework station for work with demanding BGA applications

- Allows precise positioning of component on PCB

- Required in situations, where accuracy exceeding possibilities of manual positioning

- Installation of PCBs with maximum dimensions 390 x 320 mm

RE-STATYW-XYZ

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REECO RE-30B SOLDER POT

DESCRIPTION

- Free temperature control from 150°C to 500°C
- Long, trouble-free operation
- Titanium Alloy solder pot
- Easy to use, good thermal properties

SOLDER POT DIMENSIONS (Ø)	36 mm
WEIGHT	860 g
POWER CONSUMPTION	200 W
TEMPERATURE	500°C
DIMENSIONS	91 x 150 x 75 mm

RE-30B

REECO RE-50B SOLDER POT

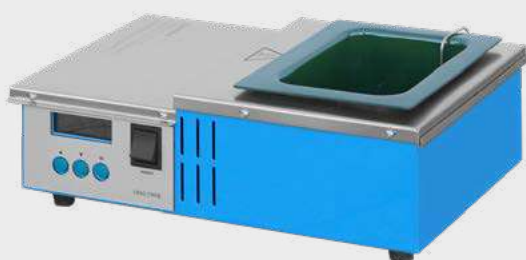### DESCRIPTION

- Easy temperature setting - electronic controller
- Durable and solid construction - stainless steel solder pot, sheet housings
- Exceptionally low price for a device of this class

SOLDER POT DIMENSIONS (Ø)	50 mm
WEIGHT	To 500 g
POWER CONSUMPTION	Max 160 W
TEMPERATURE	430°C

RE-50B

REECO RE-60B SOLDER POT

DESCRIPTION

- Precise temperature stabilization and regulation - electronic controller, temperature stabilizing thermostat
- Solid construction

SOLDER POT DIMENSIONS (Ø)	98 x 121 mm
WEIGHT	To 5500 g
POWER CONSUMPTION	Max 600 W
TEMPERATURE	100°C - 450°C
DIMENSIONS	58 mm

RE-600B

REECO RE-1900 GLUE/PASTE DISPENSER

RE-1900

DESCRIPTION

- Application control with specification of many parameters
- Allows dispensing of different types of liquids and pastes such as: adhesives, solder pastes, resins, silicones, varnishes etc..
- Solenoid valve provides a constant, even flow
- Foot control
- Special adapter applied on the syringe for easy dosing

A FULL RANGE OF DOSING ACCESSORIES CAN BE FOUND ON OUR WEBSITE: WWW.RENEX.PL

STANDARD EQUIPMENT

- Control unit
- 30 ml needle cylinder
- Pressure hose
- Set of needles
- Power supply
- Dispenser stand
- Pneumatic hose
- Cylinder adapter
- Gasket
- Manual

POWER SUPPLY	24 V DC	
DOSING METHODS	Automatic, manual	
DOSING TIME	0,01 - 99,99 sec. adjustable	
TIME INTERVALS	0,1 - 9,9 sec. adjustable	
REPEATABILITY	+/- 0,05 %	
DIMENSIONS	238 x 150 x 60 mm	
WEIGHT	1.7 kg	
AIR PRESSURE INPUT/OUTPUT	35 - 100 Psi (2,5 - 7 Bar)	1 - 100 Psi (0,1 - 7 Bar)

REECO TD-1 SOLDER WIRE FEEDER

RE-TD1

DESCRIPTION

- Work status - LED
- Allows fast and reliable work
- Light feeding tip
- ESD-safe grounding socket
- Works control switch placed on the handpiece or on the foot pedal
- Durable metal drive
- Spool is laid on the base with bearing

STANDARD EQUIPMENT

- Solder wire feeder
- Adapter for any solder handpiece
- The standard feeder allows feeding wire with a diameter of 1 mm
- AC adapter

POWER SUPPLY	12 V/300 mA AC
CORD LENGTH	1020 mm
DIMENSIONS	180 x 82 x 150 mm
SPOOLS WITH SOLDER	0,25 ; 0,5 kg

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PIERGIACOMI SOLDER DISPENSER WITH TOOL SET

DESCRIPTION

- Solder dispenser with guiding tube that keeps the working area tidy and reduces solder waste.
- Strong, solid and stable construction
- It is possible to add a second reel

TOOLS INCLUDED

- Solder dispenser
- Piergiacomi cutters TRE 03 NB
- Piergiacomi pliers PN2005
- Piergiacomi desoldering pump
- Piergiacomi tweezers 0SA
- Piergiacomi precision screwdriver PG2-1

PG-DS2500K

DIMENSIONS	190 x 150 x 150 mm
WEIGHT	1.4 kg
LENGTH	10 cm
HOLE Ø	15 mm
SUITABLE FOR ALL GAUGES UP TO	2500 g

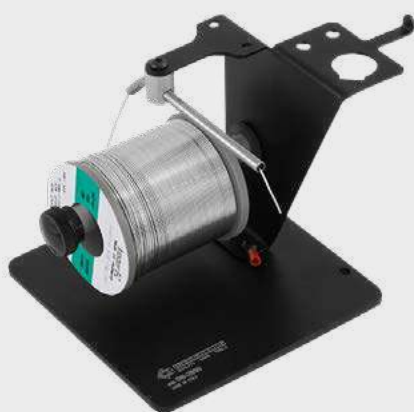## PIERGIACOMI SOLDER DISPENSER WITH TOOL HOLDER

DESCRIPTION

- Solder dispenser with guiding tube that keeps the working area tidy and reduces solder waste.
- Strong, solid and stable construction
- It is possible to add a second reel

PG-DS2500

DIMENSIONS	190 x 150 x 150 mm
WEIGHT	1.4 kg
LENGTH	10 cm
HOLE Ø	15 mm
SUITABLE FOR ALL GAUGES UP TO	2500 g

PIERGIACOMI DOUBLE SOLDER DISPENSER WITH TOOLHOLDER

DESCRIPTION

- Solder dispenser with guiding tube that keeps the working area tidy and reduces solder waste.
- Strong, solid and stable construction
- It is possible to add a third reel
- More space for tools

PG-DS25002B

DIMENSIONS	190 x 150 x 150 mm
WEIGHT	1.4 kg
LENGTH	10 cm
HOLE Ø	15 mm
SUITABLE FOR ALL GAUGES UP TO	2500 g

PIERGIACOMI EXTENSION BRACKET

DESCRIPTION

- Device that allows to add a second or third reel to PG-2500 and PG-DS25002B dispenser
- Strong, solid and stable construction

PG-DS2500AB

PACE TIP TEMPERATURE MONITOR

DESCRIPTION

- Tip temperature monitor ensures that soldering equipment is operating within specification and also provides reassurance that your process is intact
- The monitor features a temperature sensor for measuring the surface temperature of soldering tips and an external K-type temperature probe that can be used to monitor the temperature of solder pots and for other applications
- Tip temperature monitor is quickly and easily calibrated using an internal precision resistor
- Included with the unit are ten replacement temperature sensors (PC-12850046), one K-Type probe and one 9v battery

PC-80010087

DISPLAY RESOLUTION	1°C
TEMPERATURE RANGE	1°C - 600°C
SENSOR TYPE	K
ACCURACY	+/- 3°C
POWER SUPPLY	9V Battery (included)
WEIGHT	200 g
OPERATING TEMPERATURE RANGE	0°C - 40°C

KESTER SOLDER WIRE

LEAD-FREE SOLDE WIRE - Sn96,5Ag3,0Cu0,5 (SAC305)		
CAT. NO.	**WEIGHT**	**DIAMETER**
KE-275/58-04-025	0,25 kg	0,4 mm
KE-275/58-06-500	0,5 kg	0,6 mm
KE-275/58-08-500	0,5 kg	0,8 mm
KE-275/58-10-500	0,5 kg	1,0 mm
KE-275/58-12-500	0,5 kg	1,2 mm
KE-275/58-15-500	0,5 kg	1,5 mm

LEAD-FREE SOLDE WIRE – K100LD		
CAT. NO.	**WEIGHT**	**DIAMETER**
KE-275/66-04	0,25 kg	0,4 mm
KE-275/66-06	0,45 kg	0,6 mm
KE-275/66-08	0,45 kg	0,8 mm
KE-275/66-10	0,45 kg	1,0 mm
KE-275/66-12	0,45 kg	1,2 mm
KE-275-66-15	1,0 kg	1,5 mm

LEADED SOLDER WIRE – Sn63Pb37		
CAT. NO.	**WEIGHT**	**DIAMETER**
KE-245/58-04-025	0,25 kg	0,4 mm
KE-245/58-06-500	0,5 kg	0,6 mm
KE-245/58-08-500	0,5 kg	0,8 mm
KE-245/58-10-500	0,5 kg	1,0 mm
KE-245/58-12-500	0,5 kg	1,2 mm
KE-245/58-15-500	0,5 kg	1,5 mm

KESTER FLUX

TACKY SOLDERING FLUX		
CAT. NO.	**WEIGHT**	**ACTIVATION TEMPERATURE**
KE-TSF6502-10CC	10 g	130°C - 185°C
KE-TSF6592-10CC	10 g	150°C - 217°C

KESTER LIQUID FLUX		
CAT. NO.	**SIZE (LITERS)**	**PERCENT SOLIDS**
KE-SLCT10	1L	10 %
KE-SLCT3.9	1L	3,9 %
KE-NF372-TB	1L	3,9 %
KE-985M	1L	3,6 %
KE-952-S	1L	2,0 %
KE-959T	1L	2,9 %
KE-950E	1L	2,0 %

KESTER FLUX PEN	
CAT. NO.	**ACTIVATION TEMPERATURE**
KE-952-D6	80°C

KESTER SOLDER PASTE

DESCRIPTION

- No-clean solder paste formula - residue remaining after soldering is non-conductive and non-corrosive
- Reliable residues in harsh modified SIR testing with forced condensation points
- Reflowable in air and nitrogen
- Excellent solderability across wide variety of profiles
- Compatible with most conformal coating materials
- Packaging; 500g jar or 35g cylinder of 10CC

JAR, ALLOY: SN63PB37			JAR, ALLOY: SN96,5AG3,0CU0,5			LEAD-FREE SOLDER PASTE IN CYLINDER	
CAT. NO.	POWDER MESH SIZE	CLASSIFICATION	CAT. NO.	POWDER MESH SIZE	CLASSIFICATION	CAT. NO.	POWDER MESH SIZE
KE-EP256-3	25 - 45µm (type 3)	ROL0	KE-NP505-HR-3	25 - 45µm (type 3)	ROL0	KE-R276LF-3	25 - 45µm (type 3)
KE-EP256-4	20 - 38µm (type 4)	ROL0	KE-NP505-HR-4	20 - 38µm (type 4)	ROL0	KE-R276LF-4	20 - 38µm (type 3)
KE-FL250-3	25 - 45µm (type 3)	-	KE-NP545-3	25 - 45µm (type 3)	ROL0	KE-R276L-3	25 - 45µm (type 3)
KE-NP545-4	20 - 38µm (type 4)	ROL0	KE-NXG-3	25 - 45µm (type 3)	ROL1	KE-R276L-4	20 - 38µm (type 4)

BGA SOLDER BALLS

DESCRIPTION

- Lead-free balls:
  - Ball sizes: 0.20 - 0.76 mm
  - Ball diameter tolerance: +/- 0.02 mm
- Lead balls:
  - Ball sizes: 0,20 - 0,76 mm
  - Ball diameter tolerance: +/- 0,02 mm

LEAD-FREE BALLS		LEAD BALLS	
CAT. NO.	DIAMETER	CAT. NO.	DIAMETER
FO-BGA 030 PB FREE	0,30 mm	FO-BGA 030	0,30 mm
FO-BGA 035 PB FREE	0,35 mm	FO-BGA 035	0,35 mm
FO-BGA 040 PB FREE	0,4 mm	FO-BGA 045	0,45 mm
FO-BGA 045 PB FREE	0,45 mm	FO-BGA 050	0,5 mm
FO-BGA 050 PB FREE	0,5 mm	FO-BGA 055	0,55 mm
FO-BGA 055 PB FREE	0,55 mm	FO-BGA 060	0,6 mm
FO-BGA 060 PB FREE	0,6 mm	FO-BGA 064	0,64 mm
FO-BGA 065 PB FREE	0,65 mm	FO-BGA 065	0,65 mm
FO-BGA 076 PB FREE	0,76 mm	FO-BGA 076	0,76 mm

SOLDERMASK

DESCRIPTION

- It is a good quality latex compound, ESD safe, designed to protect parts of the PC boards during the soldering production processes (Sn/Pb & Lead-free)
- Curing at normal temperature : 40 to 120 min
- Curing at 80 °C: 10 to 20 min
- Recommended thickness: 1 mm max
- Resistance Rs &Rv: <10^{10} Ω
- Color: white
- Smell: light ammonia
- Weight: 250 g

IT-7805915

KESTER BAR SOLDER

DESCRIPTION

- Lead-bearing and Lead-free
- Recommended for soldering applications which require maximum reliability of solder joints
- Solder bars meet or exceed the requirements of current industry standards for allowable impurity equirements
- Weight: 750 g

CAT. NO.	ALLOY	MELTING POINT
KE-B-SAC305-750	SN96,5AG3,0CU0,5	217°C - 220°C
KE-B-K100LD-750	SN99,3CU0,7	227°C
KE-B-ULD-750	SN63PB37	183°C

GOOT DESOLDERING WICKS

DESOLDERING WICKS		
CAT. NO.	WIDTH	LENGTH
GO-CP1515	1.5 mm	1.5 m
GO-CP2015	2.0 mm	1.5 m
GO-CP2515	2.5 mm	1.5 m
GO-CP3015	3.0 mm	1.5 m
GO-CP3515	3.5 mm	1.5 m
GO-CP15B	1.5 mm	30 m
GO-CP20B	2.0 mm	30 m
GO-CP25B	2.5 mm	20 m
GO-CP30B	3.0 mm	20 m
GO-CP35B	3.5 mm	15 m

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PACE REDI-RAK TIP & TOOL STAND

PC-60210008

PACE SPONGE CLEANING TOOL FOR SURFACE MOUNT TIPS

PC-11000233

PACE N2 REGULATOR ASSEMBLY

PC-69930271

PACE TIP MAINTENANCE STATION

PC-69930138

PACE DESOLDERING TIP CLEANING TOOL
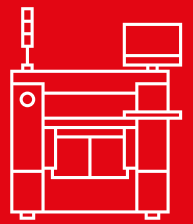
PC-69930200

PACE HANDPIECES — SPARE PARTS

CAT. NO.	DESCRIPTION
PC-13090028	Replaceable VisiFilter
PC-13090027	Replaceable VisiFilter element
PC-13090018	Sodr-X-Tractor filter (SX-80, SX-90, SX-100)
PC-13090054	Flux/SODR trap for: SX-80, SX-90, SX-100
PC-60100163	Heater assembly for SX-100 and SX-90 Sodr-X-Tractors
PC-40210008	Replacement sponges for Tip and Tool stand
PC-60100095	PS-90 Heater assembly
PC-30080131	TD-100 Handpiece cord assembly
PC-60100107	SX-90 & SX-80 Heater assembly

REECO HDPE DISPENSERS

SPECIFICATION

CAT. NO.	CAPACITY	DOSING TYPE
RE-HM-1401-200	200 ml	ESD dispenser
RE-HM-1401-250	250 ml	ESD dispenser
RE-HM-001	60 ml	Bottle for flux with dispenser and needle

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AUTOMATIC ASSEMBLY MACHINES

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COMPREHENSIVE SUPPORT IN AUTHORIZATION OF PRODUCTION PROCESSES

Renex Line is a branch of Renex that supplies and installs complete production lines. The department is staffed with highly specialized team of engineers, constructors and programmers.

We automate production lines and integrate robots into production lines. We ensure the highest standard of technological solutions in machines and equipment we supply.

Detailed offer and more information about the company can be found on our website:

RENEXLINE.**PL**

MANUFACTURING EQUIPMENT

The RENEX offer includes equipment for component assembly in SMT and THT technologies. Lines are supplemented with inspection equipment and top quality accessories and supplies.

TECHNOLOGY CENTER / DEMO ROOM

Our demo room contains fully equipped manufacturing and repair lines. We provide the opportunity to see the equipment in operation, simulate the process and carry out tests and sample batches.
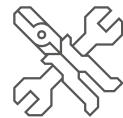
TECHNICAL ADVISORS

Comprehensive support in the implementation of manufacturing processes.
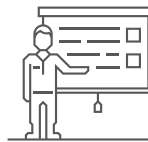
TRAININGS

We offer trainings on component assembly in compliance with IPC | PACE | ESA standards.

WARRANTY SERVICE

We provide maintenance services during and after the warranty period.

OUR TEAM

The Renex Line team has many years of experience and a team of qualified engineers who effectively take care of the technical state of the machines installed by us.

BUSINESS INFORMATION
T: + 48 785 900 000

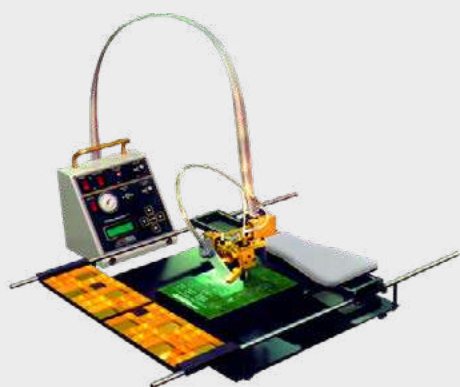TECHNICAL INFORMATION
T: + 48 725 333 350

DELIVERY AND INSTALLATION
OF COMPLETE
MANUFACTURING LINES

**DEVELOPMENT OF
TECHNOLOGICAL PROCESSES**
FOR ELECTRONICS ASSEMBLY

OPTIMISATION
OF MANUFACTURING
PROCESSES

DDM NOVASTAR MANUAL SMD PICK & PLACE MPP-10 & 11

AP-MPP-10-11

DESCRIPTION

- The ergonomic solution to manual SMD pick & place
- Innovative, movable padded hand rest design to alleviate operator fatigue and discomfort
- Quick changeover for left/right handed operators
- Optional tape and stick feeders with feeder rack for more efficient component handling
- Model MPP-10 includes the complete pick & place function
- Model MPP-11 includes both the pick & place and the four mode programmable dyspenser

STANDARD EQUIPMENT

- MPP system with complete pick & place function (MPP-10 model)
- Four-mode programmable dispenser (MPP-11 model)

MAX. PCB SIZE	305 x 356 mm	
LEFT/RIGHT HANDED PICK & PLACE HEAD	Yes	
4-MODE DIGITAL FLUID DISPENSING FOR SOLDER PASTE, ADHESIVES OR POTTING COMPOUNDS	Yes (MPP-11 model)	
TAPE AND STICK FEEDERS	Tape feeders (8,12,16, 24 mm)	Stick feeders (8,10, 14 mm)
ESD SAFE CONDUCTIVE BINS	2,5 x 2,5 cm: max. 64	5 x 5 cm: max. 16
STAND OPTION	No	
VIDEO DISPLAY SYSTEM	Option	
DIMENSIONS	600 x 762 x 230 mm (benchtop)	

DDM NOVASTAR MANUAL SMD PICK & PLACE MPP-20 & 21

AP-MPP-20-21

DESCRIPTION

- The ergonomic solution to manual SMD pick & place
- Innovative, movable padded hand rest design to alleviate operator fatigue and discomfort
- Quick changeover for left/right handed operators
- Optional tape and stick feeders with feeder rack for more efficient component handling
- Model MPP-20 includes the complete pick & place function
- Model MPP-21 includes both the pick & place and the four mode programmable dyspenser

STANDARD EQUIPMENT

- MPP system with complete pick & place function (MPP-20 model)
- Four-mode programmable dispenser (MPP-21 model)

MAX. PCB SIZE	406 x 610 mm	
LEFT/RIGHT HANDED PICK & PLACE HEAD	Yes	
4-MODE DIGITAL FLUID DISPENSING FOR SOLDER PASTE, ADHESIVES OR POTTING COMPOUNDS	Yes (MPP-21 model)	
TAPE AND STICK FEEDERS	Tape feeders (8,12,16, 24 mm)	Stick feeders (8,10, 14 mm)
ESD SAFE CONDUCTIVE BINS	2,5 x 2,5 cm: max. 64	5 x 5 cm: max. 16
STAND OPTION	Option	
VIDEO DISPLAY SYSTEM	Option	
DIMENSIONS	635 x 724 x 178 mm (Height with stand: 889 mm)	

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NEODEN 4 SMD PICK & PLACE MACHINE

ND-NEODEN4

NEODEN 4C SMD PICK & PLACE MACHINE
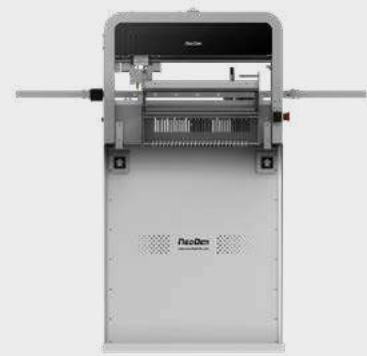
ND-NEODEN4C

PLACEMENT HEADS	4	
PLACEMENT SPEED	Max. 5 000 cph (vision enabled)	Max. 10 000 cph (without vision)
TAPE FEEDER	48 x 8 mm	
VIBRATION STICK FEEDER	5 positions (2xSOP8, 1xSOP14, 2xSOP16)	
JEDEC TRAY	Max. 1	
COMPONENT SIZES	0201 up to TQFP240 (35x35 mm), max. height 5 mm	
RESOLUTION	XY-axis 0,01 mm, Z-axis 0,1 mm	
ROTATION	+/-180° (360°)	
POSITIONING ACCURACY	+/- 0,02 mm	
XY-REPEATABILITY	+/- 0,02 mm	
MAX. PCB SIZE	350 x 400 mm (standard pcb support)	310 x 1500 mm (with optional conveyor)
MAX. PLACEMENT AREA	310 x 1500 mm (without JEDEC tray)	140 x 1500 mm (with JEDEC tray)
POWER SUPPLY	230 V/180 W	
DIMENSIONS	870 x 680 x 480 mm (packaging dimensions 940 x 740 x 600 mm)	
WEIGHT	60 kg	

QUADRA DVC EVO SMD PICK & PLACE MACHINE

TWS-DVC-EVO

DESCRIPTION

- Two-nozzle optical centering head which can handle components with a max size of approximately 13 mm (on-fly centering system)

- Productivity up to 4400 cph

- Max 120 feeders of 8 mm (15 bank feeders of 8 mm)

- Pick and place able to handle sizes from 0201 to 50 x 50 mm

- Optional dispensers available upon request (T/P, volumetric, double dispensing head with antidrops)

COMPONENTS SIZE	From 0201 do 50 x 50 mm (BGA)
PLACEMENT AREA	440 x 360 mm, 550 x 480 mm (with vacuum plate), 1200 x 280 mm (with conveyor system)
RESOLUTION X/Y	0,01mm
POWER SUPPLY	230 V - 50/60 Hz
DIMENSIONS	950 x 1080 x 1500 mm
WEIGHT	215 kg

DDM NOVASTAR CS40 PICK AND PLACE MACHINE

AP-CS40

DESCRIPTION

- Benchtop model with advanced, low cost solutions for low volume SMT placement applications
- Placement rates up to 2100 cph
- Up to 64 tape feeders, 96 8mm tape feeders with 12 lane bank feeders
- Precision placement head design
- Easy to set up, easy to use friendly Windows®-based software
- Solder paste dispenser option with rates up to 10 000 dots / hour

DDM NOVASTAR LE40 PICK AND PLACE MACHINE

AP-LE40

DESCRIPTION

- Benchtop model of pick and place machine offers technologically advanced, low cost solutions for low to medium volume SMT placement applications
- Placement rates up to 3000 cph
- Up to 64 tape feeders, 96 (8 mm) tape positions with bank feeders
- Best GUI (graphical user interface) in its class using Windows® -based software allows programming in minutes
- Self contained no shop air required
- Solder paste dispenser option with rates up to 10 000 dots / hour

DDM NOVASTAR LE40V PICK AND PLACE MACHINE

AP-LE40V

DESCRIPTION

- Benchtop pick and place model with Vision equipment offers technologically advanced, low cost solutions for low to medium volume SMT placement applications
- Placement rates up to 3000 cph
- Up to 56 tape feeders, up to 84 tape positions with bank feeders
- Accurately places a wide range of components including 0201s, LED's, BGAs, 15 mil pitch QFPs, SMT Connectors and many others
- Self contained no shop air required
- Solder paste dispenser option with rates up to 10 000 dots / hour
- Integrated on-the-fly component centering using Mechanical fingers, Vision (Cognex®), or Laser Technology (Cyberoptics®) (Optional)

DDM NOVASTAR L-SF40 SMALL BENCHTOP PICK & PLACE MACHINE

AP-L-SF40

DESCRIPTION

- New, entry-level, complete, low-cost turnkey automatic pick and place system that can be put in production right out of the box
- Provides the most economical solution in a fully automated pick and place bench-top system
- Capable of placing a wide range of components from 0402 discretes and SOICs to PLCCs and 20 mil QFPs
- Tape strips can be set up easily using the unique PIK-strip™ feeders
- 8,12,16,24,32 & 44 mm PIK-strip™ feeders available
- Capable of handling cut tape, stick/tube and loose components

MAX. PCB SIZE	343 x 560 mm
SMALLEST COMPONENT CAPABILITY	0201 standard
LARGEST COMPONENT SIZE	35 mm
TYPICAL VERIFIABLE PLACEMENT RATE	Up to 1200-1800 cph
VISION SYSTEM	CCD camera
DISPENSER OPTION	Time & pressure, clean dry air of 80 psi required

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DDM NOVASTAR L SERIES AUTOMATED PICK & PLACE

AUTOMATED PICK & PLACE SYSTEMS OF LS SERIES OFFER HIGH ACCURACY AND PLACMENT RATES UP TO 4 800 CPH.

The latest pentium PCs are included with these machines and the software is Windows™ based to allow easy straightfor-ward teach-in, requiring minimal operator training. Friendly and easy to use interface includes software for panelized boards, self diagnostics, error recognition, fault monitoring and more. The vision system allows accurate placement of 0201s, ultra micro BGAs, CSPs, QFPs and a wide range of virtually all SMT componets. Accessible, unobstracted work station together with heavy, welded steel frame construction make the machines ideal for use in multi-shift work systems.

L SERIES AUTOMATED PICK & PLACE SPECIFICATIONS				
MODEL	LS-40V	LS-40	LS-60V	LS-60
MAX. PCB SIZE	343 x 560 mm	343 x 560 mm	343 x 813 mm	343 x 813 mm
LARGEST COMPONENT SIZE	50,8 mm	35 x 35 mm	50,8 mm	35 x 35 mm
SYSTEM DIMENSIONS	1016 x 1067 x 1336,2 mm	1016 x 1067 x 1346,2 mm	1016 x 1321 x 1346,2 mm	1016 x 1321 x 1346,2 mm
MAX. TRAVEL AREA	560 x 560 mm	560 x 560 mm	560 x 813 mm	560 x 813 mm
MAX. NO. OF FEEDERS (8MM TAPE)	56	64	88	96
MAX. NO. OF FEEDERS WITH BANK FEEDERS	84	96	132	144
VISTION SYSTEM	Cognex® Vision	Color CCD card camera	Cognex® Vision	Color CCD card camera

LS-40 / LS-40V SMD PICK AND PLACE MACHINES

AP-LS40 / AP-LS40V

LS-60 / LS-60V SMD PICK AND PLACE MACHINES


AP-LS60 / AP-LS60V

DESCRIPTION

- A wide range of compoents can be placed including 0201s, 0402s, 0603s, 0805s, 1206s, melfs, SO-28 to SO-8s, SOTs, SOICs, (fine pitch) QFPs, BGAs, large PLCCs, sockets and many others

- Placement rates up to 4 800 cph

- On-the-fly component centering with placement accuracty of 0,0254 mm

- Automatic 4-positon nozzle changer

- Fiducial correction

- The teach-in camera magnifies the positions onto a dual use color monitor

- Feeder positions are pre-programmed for quick set-up

- Multiple (panelized) boards can be prorammed using the quick step-and-repeat feature

- Positional resolution of 2 microns with closed loop micro servo driven motion control and digital encoders

- Easy to change SmartCount™ electro-optical feeders available for tape, tube, bulk or matrix tray components

- Unique SuperStrip™ feeders are a convenient way to use short tape strips

- Bank feeders (12-positon 8 mm lanes) offer a lower per lane cost and increase capactiy by 50%

- Optional computer controlled fluid dispenser with rates up to 10 000 dots per hour

ACCESSORIES AND OPTIONS

A wide variety of accessories and options (e.g. touchless Cyberoptics® laser centering system, universal CAD transfer software, fully computerized fluid dispensing system, bank feeders and many more) help configure the best machine for users' individual needs.

Bank feeders:

- Bank feeders (12-position 8mm lanes) offer a lower per lane cost and higher feeder capacity
- The L40 has a feeder capacity of 64, and the L60 has a feeder capacity of 96 positions. With the optional 12 position 8 mm bank feeders, capacity can increase by 50%, i.e. the model L60 would increase to a capacity of 144 8 mm tape feeders
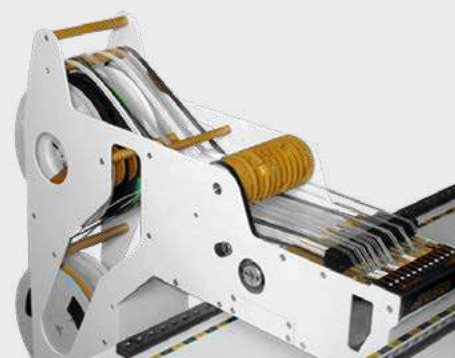
YAMAHA I-PULSE M20 HYBRID SMT ASSEMBLY SYSTEM

YA-M20

DESCRIPTION

- Modular, cost effective and flexible platform
- True 3D MID (3D Molded Interconnect Device) hybrid suruface mounting machine with the ability to dispense and mount componets
- High versatile mounting options from ultra-small chips to large components
- Excellent setup capabilty suitable for prototype, low to medium volument customers
- Large feeder capacity, up to 180 feeder postions
- New Multi-Conveyor System providing the highest large board handling capability
- Board flow direction: left to right (Std)
- Applicable components: 0201 mm – 120 x 90 mm

PCB SIZE	Min. 50 x 30 mm I Max. 1800 x 510 mm
PCB THICKNESS	0,4 - 4,8 mm
TRANSFER SPEED	Max. 900 mm/s
PLACEMENT SPEED	Up to 23 000 cph (IPC9850)
COMPONENT HEIGHT	Max. 30 mm
DIMENSIONS	1750 x 1750 x 1420 mm
WEIGHT	Approx. 1450 kg
POWER SUPPLY	3-phase 200/208/220/240/380/400/416/440V +/-10% (Transformer included), 50/60Hz
MAX. CONSUMPTION / CAPACITY	1,1 kW, 5,9 kVA
AIR PRESSURE / CONSUMPTION	0.45Mpa, 50(4 heads) or 75(6 heads) L/min A.N.R.

YAMAHA I-PULSE S10 / S20 HYBRID SMT ASSEMBLY SYSTEMS

DESCRIPTION

- Modular, cost effective and utimately flexible to realize 3D MID placement
- True 3D MID (3D Molded Interconnect Device) hybrid suruface mounting machine with the ability to dispense and mount componets on conventional PCBA's but also sloped and curved surfaces bringing enhanced expandibilty to suit all types of produciton
- Excellent setup capabilty suitable for users looking to achieve higher production rates
- Wide ranging component handling capability and high feeder capacity
- Large board handling capability
- Board flow direction: left to right (Std)
- Applicable components: 0201 mm – 120 x 90 mm

MODEL	S10	S20
CAT. NO.	YA-S10	YA-S20
PCB SIZE	50 x 30 mm - max. 1330 x 510 mm	50 x 30 mm - max. 1830 x 510 mm
PCB THICKNESS	0,4 - 5,0 mm	
TRANSFER SPEED	Max. 900 mm/s	
PLACEMENT SPEED	45 000 cph	
COMPONENT HEIGHT	Max. 30 mm	
DIMENSIONS	1250 x 1750 x 1420 mm	1750 x 1770 x 1420 mm
WEIGHT	Approx. 1150 kg	Approx. 1450 kg
POWER SUPPLY	3-phase 200/208/220/240/380/400/416/440V +/-10% (Transformer included), 50/60Hz	

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YAMAHA YSM10 MODULAR SMT ASSEMBLY SYSTEM

YA-YSM10

YAMAHA YSM20 MODULAR SMT ASSEMBLY SYSTEM

YA-YSM20

DESCRIPTION

- Compact, high-speed, modular platform
- 46,000 cph World Leading 1-Beam/1-Head Class, Entry Model Surface Mounter
- HM head adopted with new scan camera for broader range of component size compatibility
- Scalability for flexibly adjust to production site requirements
- Enhanced functionality to provide for table production

DESCRIPTION

- High-efficiency modular platform
- Caters effectively to a wide range of production processes – it is also the world's fastest in its class
- The '1 head solution" aims to deliver an ideal mounter that provides both high speed and versatility
- Wide support capability turns the concept of 'limitless expansion" into a reality
- Numerous functions to support high-quality mounting are included as standard features
- Feeders and supply devices offering a high degree of freedom

MODEL	YSM10	YSM20
PCB SIZE	510 x 460 mm - 50 x 50 mm (available in lengths up to 610 mm as an option)	- Dual stage (ony for 2-beam systems): 810 x 490mm – 50 x 50 mm - Dual stage max. PCB size: 380 x 490 mm - Single lane: 810 x 490 mm – 50 x 50 mm - Dual lane 810 x 230 mm – 50 x 50 mm
MOUNTING CAPABILITY	– HM head (10-nozzle) specification: 46 000 / 30 000 cph (IPC9850) – HM head (5-nozzle) specifiation: 31 00 / 20 000 cph (IPC9850)	– 2-beam system with 2 x HM head: 90 000 / 63 500 cph (IPC9850) – 2-beam system with 2 x FM head: 34 500 / 27 000 cph (IPC9850) – 1-beam system with 1 x HM head: 38 000 / 27 000 cph (IPC9850) – 1-beam system with 1 x FM head: 16 000 / 12 500 cph (IPC9850)
MOUNTING ACCURACY	±0.035 mm (±0.025 mm) Cpk >= 1,0 (3σ)	Cpk 1.0 ± 0,035 mm; 3 ± 0.025 mm
NUMBER OF FEEDER POSITIONS	Setting Plate : Max 96 types (8 mm width tape feeder conversion) Tray : 15 types (sATS 15 equipment, Max, JEDEC)	Fixed plate : Max. 140 types (conversion for 8 mm tape feeder) Feeder carriage exchange : Max. 128 types (conversion for 8 mm tape feeder) Trays for 30 types (Fixed type : max., when fitted with sATS30) and 10 types (Carriage type : max., when fitted with cATS10)
DIMENSIONS	1,254 x 1,440 x 1,445 mm	1,374 x 1,857 x 1,445 mm
WEIGHT	Approx. 1270 kg	Approx. 2050 kg

YAMAHA YSM40 HIGH-DENSITY MODULAR SMT ASSEMBLY SYSTEM

YA-YSM40R

DESCRIPTION

- High-speed, revolutionary productivity moutner for high mix – high volume production
- Combines both high speed & flexibility into one compact unit
- 100 000 cph (IPC9850) super high-speed productivity
- Available in 3-head variations
- Dual-lane conveyor
- Machine width: 1 m

PCB SIZE	700 × 460 mm to 50 × 50 mm
MOUNTING CAPABILITY	High-Speed Head: 100 000 cph (IPC9850) at 4-beam configuration Multi-Head: 80 000 cph (IPC9850) at 4-beam operation
MOUNTING ACCURACY	(3σ): QFP +/- 30µm; CHIP +/- 50µm
HEAD / APPLICABLE COMPONENTS	- HighSpeed Head: 01005 do 4532, max. height 3mm, odd-shaped available - Multi-Head: 01005 s do 45 x 100 mm, max. height 15 mm, odd-shaped available - Flexible Head: 01005 s do 45 x 100 mm, max. height 25,5 mm, odd-shaped available
NUMBER OF FEEDERS	2-beam: max. 92 feeders (8 mm width) 4-beam: max. 88 feeders (8 mm width)
POWER SUPPLY	3-Phase AC 200/208/220/240/380/400/416V +/-10%
AIR SUPPLY SOURCE	0.45MPa or more, in clean, dry state
DIMENSION	1 000 × 2 100 × 1 550 mm (excluding projections)
WEIGHT	2100 kg

HIGH END FUNCTIONS

ZS FEEDER

- Thin, lightweight, compact, singlelane type motorized inteligent feeders. ZS-feeders can be exchanged during production with the non-stop replacement function

NOZZLE CLEANING STATION

- Automatic cleaning function, passing high-pressure air through spline and nozzle, keeps nozzles clean for extended period

FEEDER CARRIAGE EXCHANGE

- External setup-changeover feeder: one-step replacement carriage

TRAY SUPPLY SYSTEM

- Selectable per machine 'sATS30" is the auto replacement 30-stage xed tray type or 'cATS10" which is the 10-stage carriage tray type which is changeable with a feeder carriage system

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DDM NOVASTAR GF-C2-HT BATCH REFLOW OVEN

AP-GF-C2

DESCRIPTION

- Small reflow oven providing a versatile heating system for lead-free preheating, curing, reflow, rework, and thermal cycling applications especially in prototype or batch applications
- Heavy-duty construction and stainless steel chamber
- Combination forced air convection/conduction heating system for consistent process control
- 19 mm thick aluminum heat plate
- Digital temperature controller precisely and automatically regulates temperatures
- Programmable digital timer with alarm

POWER SUPPLY	220 V - 240 V, 10 A
POWER CONSUMPTION	1800 W
MAX. PCB WIDTH	330 mm
DIMENSIONS	740 x 420 x 305 mm
MAX. TEMPERATURE	315°C
APPROXIMATE WEIGHT	25 kg

DDM NOVASTAR GF-B-HT MINI REFLOW OVEN

AP-GF-B

DESCRIPTION

- Low-cost reflow oven best for small batch runs and prototypes
- 100% Cyclonic™ forced air Convection
- Independent time and temperature microprocessor controls with membrane keypad make set-up easy
- Dual cooling stations
- Unique PCB shuttle system enables a higher throughput than standard batch ovens. While one board is being processed, another board can be cooled and off-loaded, then a third board can be loaded and shuttled into the chamber for reflow

POWER SUPPLY | POWER CONSUMPTION	230 V	2,7 kW
MAX. TEMPERATURE	315°C	
MAX. PCB WIDTH	305 x 305 mm	

DDM NOVASTAR GF-12HT BENCHTOP REFLOW OVEN

AP-GF-12

DESCRIPTION

- Real time graphic temperature profiler to assist in profiling of board
- 100 menu profile storage
- Nitrogen gas inerting option available
- Isolated chamber design (recirculation of atmosphere within three reflow zones) low oxygen levels are maintained while conserving nitrogen consumption. The advatages are:
  - Decreases wetting angle
  - Increases flux efficiency
  - Enhances fine pitch solder fillets
  - Improves surface finish of solder joints

POWER SUPPLY | POWER CONSUMPTION	220 VAC, 50/60 Hz	5.5 kW
MAX. PCB WIDTH	305 mm	
HEAT TUNNEL LENGTH	660 mm	
HEATING ZONES	3 top, 3 bottom	
MAX. TEMPERATURE	350°C	
DIMENSIONS	990 x 813 x 483 mm	

TWS 850 REFLOW OVEN

TWS-850

DESCRIPTION

- Powerful and compact convection oven with one heating zone ideal to perform soldering operations from small to prototype size SMT manufacturing, to cure adhesive and paste, and to remove humidity from fine pitch parts prior to reflow using Hot Bake function

- Oven's main parameters are constantly monitored by the touch screen LCD display, always indicating the instrucito for the operator, the temperature set-point as well as the actual temperature for each heating phase

- Forced convection of air is on horizontal line due to a fan that blows the air from the inside to the surroundings. The air flux is calculated not to shift compnents from thier original positions

- Actual temperature of the heater is monitored by computer and a built-in K-type thermocouple

- Electronic control system designed to minimise power consumption

- Great variety of thermal profiles so as to fulfil the moste demanding requests

POWER SUPPLY | POWER CONSUMPTION	220 V	4,5 kW
PCB SIZE	330 x 240 mm	
HEATING ZONES	1	
CLEARANCE	120 mm	
MAX. REFLOW TEMPERATURE	350°C	
DIMENSIONS	710 x 640 x 410 mm	
WEIGHT	25 kg	

TWS 1150 EVO MULTI ZONE REFLOW OVEN

TWS-1150

TWS 1385 EVO MULTI ZONE REFLOW OVEN

TWS-1385EVO

MODEL	1150 EVO	1385 EVO
POWER SUPPLY | POWER CONSUMPTION	380 V | 9 kW	380 V | 12 kW
HEATING ZONES (HEATING + COOLING)	2 + 1	4 + 1
CONVEYOR TYPE	Mesh	Mesh or Mesh + chainpin
CONVEYOR WIDTH MIN. – MAX.	400 mm	110 - 305 mm
CONVEYOR SPEED MIN. – MAX. (mm/min.)	100 - 500	100 - 500
CLEARANCE ABOVE CONVEYOR	28 mm	19 mm
MAX. TEMPERATURE SETTINGS (°C)	300 (1) - 350 (2)	300 (1, 2, 3) - 350 (4)

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DDM NOVASTAR 1800HT CONVEYOR REFLOW OVEN

DESCRIPTION

- Reflow oven with four heating zones, cooling zone and 457 mm wide conveyor for low to medium volume soldering production runs

- 1800HT solder reflow oven utilizes our patented Horizontal Convection® heating technology for extremely uniform temperature profiling across the board for enhanced reflow surface-mount process control

- Microprocessor controlled with all parameters are set and displayed in real time

- Intuitive programming and truly user-friendly operation

- PC interface optionally available

- Easy lift clamshell hood design with gas strut assist

- Edge rail conveyor option available

- Real time graphic temperature profiler to assist in profiling of board

- Nitrogen gas (N2) inerting option available

AP-1800

MODEL	1800HC	1800HT
POWER SUPPLY	220 VAC, 50/60 Hz 3Ø, 70A	
STANDARD HEATING ZONES	4 Top, 4 Bottom	
CYCLONICS™ (FORCED AIR)	2	
COOLING FANS	2 Top	
HEAT TUNNEL LENGTH	1270 mm	
PEAK POWER	23,2 kW	
MAX. TEMPERATURE	250ºC	400ºC
WEIGHT	463 kg	476 kg

DDM NOVASTAR 2000HT CONVEYOR REFLOW OVEN

DESCRIPTION

- Higher throughput SMT reflow oven with 6 vertical heating zones, cooling zone and 508 mm wide conveyor for production runs

- 2000HT hot-air reflow system utilizes our patented Horizontal Convection Heating technology with digital temperature controls for extremely uniform air circulation and temperature profiling across the board – providing enhanced process control

- Microprocessor controlled with all parameters are set and displayed in real time

- Intuitive programming and very user-friendly operation

- PC interface optionally available

- Easy lift clamshell hood design with gas strut assist

- Edge rail conveyor option available

- Real time graphic temperature profiler to assist in profiling of board

- Nitrogen gas (N2) inerting option available

AP-2000

POWER SUPPLY	220 VAC, 50/60 Hz 3Ø, 100A
STANDARD HEATING ZONES	6 Top, 6 Bottom
CYCLONICS™ (FORCED AIR)	12
COOLING FANS	4
HEAT TUNNEL LENGTH	1829 mm
PEAK POWER	34,8 kW
MAX. TEMPERATURE	400°C
WEIGHT	748 kg

HELLER MARK III REFLOW OVENS

- **New Frame**
  More than simply beautiful, this new frame utilizes twice the insulation.
  This modification alone, reduces heat loss and saves up to 40% on electricity costs!

- **Enhanced Heater Modules**
  Enhanced heater modules 'blanket" the PCB with heat for the lowest ΔTs on the toughest boards!
  Additionally, the Uniform Gas Management system eliminates 'net flow" which results in nitrogen consumption reductions of up to 40%!

- **Heater modules for Heller ovens**
  Heller's 10" (250mm) long heater modules are 2" (50mm) narrower than our competitors so we can provide more modules
  than anyone in the industry! More modules means more process control and a 17% lower liquid time for the tightest tolerances of all!

- **Fastest Cooling rates**
  The new blow thru cooling module provides cool rates of >3°C/Sec — even on LGA 775!
  That rate meets even the most demanding Lead-Free Profile requirements!

- **Ultra-Parallel Conveyor System**
  Four (4) lead screws ensures the tightest tolerances and parallelism — even on boards with 3mm clearance at the edges!

- **New 'Cool Pipe" Flux System Virtually eliminates Maintenance**
  Our new 'Cool Pipe" flux collection system traps the flux in collection jars that can easily be removed and replaced while the oven is running—thus saving time consuming P.M. Additionally, our proprietary 'Flux Free Grill System" limits flux residue on the cooling grills—the result is not only reduced maintenance time, but recaptured production time—thus giving the Heller system the highest production yields of any oven!

- **Process Control**
  Powered by ECD, this innovative software package provides three levels of process control from Oven CpK, to Process CpK and Product Traceability, this software ensures that all parameters are optimized and SPC reporting is fast and easy

HELLER 1707 MARK III SERIES REFLOW OVEN

HE-1707MKIII

BUILD SCHEMATICS

Heater module   Cooling module
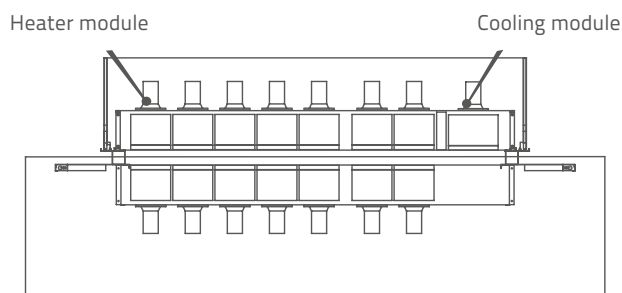
POWER SUPPLY	208/240/380/400/415 V AC 50/60 Hz
DIMENSIONS	3400 x 1420 x 1600 mm
WEIGHT	1610 kg
HEATED TUNNEL LENGTH	1790 mm
NUMBER OF HEATING ZONES	7 (top / bottom)
NUMBER OF COOLING ZONES	1
TEMPERATURE RANGE	60 - 350°C
TEMPERATURE ACCURACY	± 1°C
MESH BELT CONVEYOR SYSTEM	Width 460 mm (option 560 mm)
EDGE HOLD CONVEYOR SYSTEM (OPTION)	50 - 460 mm
CONVEYOR SPEED	1880 mm/min. max.

**i**   All models in the series are also available with an optional nitrogen installation

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## HELLER 1809 MARK III SERIES REFLOW OVEN

BUILD SCHEMATICS

Optional cooling module

HE-1809MKIII
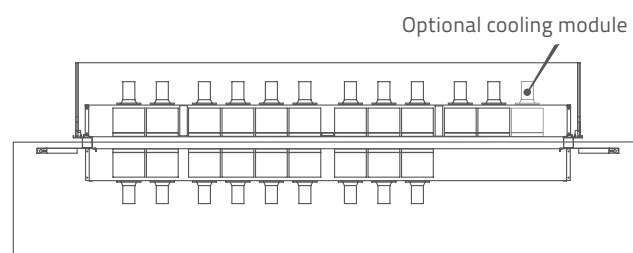
POWER SUPPLY	208/240/380/400/415 VAC 50/60 Hz
DIMENSIONS	4650 x 1420 x 1600 mm
WEIGHT	1970 kg
HEATED TUNNEL LENGTH	2540 mm
NUMBER OF HEATING ZONES	9 (top / bottom)
NUMBER OF COOLING ZONES	2
TEMPERATURE RANGE	60 - 350°C
TEMPERATURE ACCURACY	± 1°C
MESH BELT CONVEYOR SYSTEM	Width 460 mm (option 560 mm)
EDGE HOLD CONVEYOR SYSTEM (OPTION)	50 - 460 mm
CONVEYOR SPEED	1880 mm/min. max.

HELLER 1913 MARK III SERIES REFLOW OVEN

BUILD SCHEMATICS

Optional bottom cooling module

HE-1913MKIII
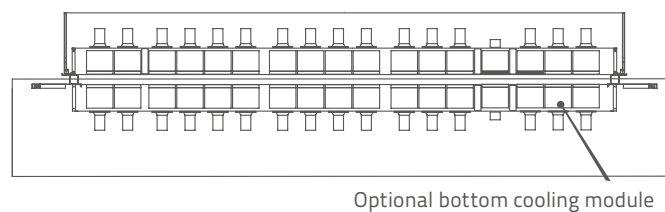
POWER SUPPLY	208/240/380/400/415 VAC 50/60 Hz
DIMENSIONS	5890 x 1420 x 1600 mm
WEIGHT	2900 kg
HEATED TUNNEL LENGTH	3430 mm
NUMBER OF HEATING ZONES	13 (top / bottom)
NUMBER OF COOLING ZONES	3
TEMPERATURE RANGE	65 - 350°C
TEMPERATURE ACCURACY	± 1°C
MESH BELT CONVEYOR SYSTEM	Width 250 mm, 380 mm, 460 mm, 500 mm (option 560 - 610 mm)
EDGE HOLD CONVEYOR SYSTEM (OPTION)	50 – 610 mm
CONVEYOR SPEED	1880 mm/min. max.

HELLER MARK 5 REFLOW OVENS

- **Enhanced Heater Modules**
  Enhanced flow heater modules with 40% larger impeller, blanket the PCB with heat for the lowest delta Ts on the toughest boards!
  Additionally, the Uniform Gas Management system eliminates net flow which results in nitrogen consumption reductions of up to 40%!

- **Fastest Cooling Rates**
  The new Blow Thru Cooling module provides cool rates of >3°C/sec. even on LGA 775!
  That rate meets even the most demanding lead-free profile requirements!

- **New Cool Pipe Flux System Virtually Eliminates Maintenance**
  Our new Cool Pipe flux collection system traps the flux in collection jars that can easily be removed and replaced while the oven is running thus saving time consuming P.M. Additionally, our proprietary Flux-Free Grill System limits flux residue on the cooling grills the result is not only reduced maintenance time, but recaptured production time giving the Heller system the highest production yields of any oven!

- **Process Control**
  Powered by ECD, this innovative software package provides three levels of process control from Oven CpK, to Process CpK and Product Traceability, this software ensures that all parameters are optimized and SPC reporting is fast and easy.

- **One-Step Profiling**
  Developed in partnership with KIC, you can now have instant profile settings by simply entering the length, width and weight of your PCB.
  An extensive profile and paste library with dynamic structure does the rest of the work for you!

- **Energy Management Software**
  Proprietary software allows you to program exhaust draw to optimize energy consumption during the various production times heavy, light or idle.

HELLER 1826 MARK 5 SERIES REFLOW OVEN

HE-1826MK5

BUILD SCHEMATICS
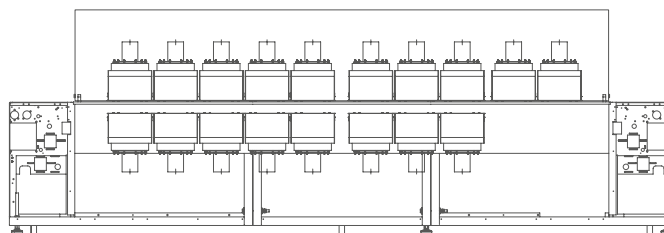
POWER SUPPLY	208/240/380/400/415 VAC 50/60 Hz
DIMENSIONS	4650 x 1570 x 1600 mm
WEIGHT	2060 kg
HEATED TUNNEL LENGTH	2540 mm
NUMBER OF HEATING ZONES	8 (top / bottom)
NUMBER OF COOLING ZONES	2
TEMPERATURE RANGE	60 - 350°C
TEMPERATURE ACCURACY	± 1°C
MESH BELT CONVEYOR SYSTEM	560 mm
EDGE HOLD CONVEYOR SYSTEM (OPTION)	50 – 560 mm
CONVEYOR SPEED	1880 mm/min. max.

i All models in the series are also available with an optional nitrogen installation

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HELLER 1936 MARK 5 SERIES REFLOW OVEN

BUILD SCHEMATICS

HE-1936MK5
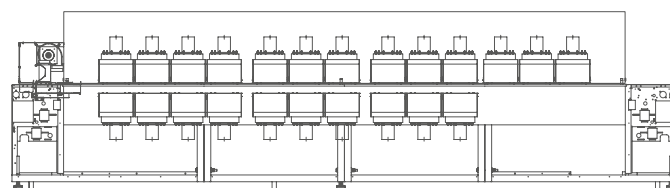
POWER SUPPLY	208/240/380/400/415 VAC 50/60 Hz
DIMENSIONS	5900 x 1520 x 1600 mm
WEIGHT	2900 kg
HEATED TUNNEL LENGTH	3430 mm
NUMBER OF HEATING ZONES	10 (top / bottom)
NUMBER OF COOLING ZONES	3
TEMPERATURE RANGE	60 - 350°C
TEMPERATURE ACCURACY	± 1°C
MESH BELT CONVEYOR SYSTEM	560 mm
EDGE HOLD CONVEYOR SYSTEM (OPTION)	50 – 560 mm
CONVEYOR SPEED	1880 mm/min. max.

HELLER 2043 MARK 5 SERIES REFLOW OVEN

BUILD SCHEMATICS

HE-2043MK5
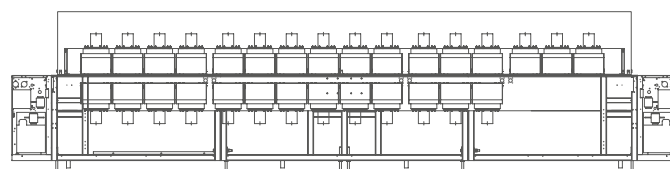
POWER SUPPLY	208/240/380/400/415 VAC 50/60 Hz
DIMENSIONS	6800 x 1500 x 1600 mm
WEIGHT	3400 kg
HEATED TUNNEL LENGTH	4300 mm
NUMBER OF HEATING ZONES	13 (top / bottom)
NUMBER OF COOLING ZONES	3
TEMPERATURE RANGE	65 - 350°C
TEMPERATURE ACCURACY	± 1°C
MESH BELT CONVEYOR SYSTEM	250 mm, 380 mm, 460 mm, 500 mm, 560 mm (option 660 – 710 mm)
EDGE HOLD CONVEYOR SYSTEM (OPTION)	50 – 560 mm (option 50 – 710 mm)
CONVEYOR SPEED	1880 mm/min. max.

VACUUM

HELLER Industries has developed a vacuum module that inserts directly in its reflow oven line to meet new rising demand of high volume, void-free, automated inline soldering.

Vacuum module can be inserted in zone directly after reflow peak (liquidus) has occured or an IR Panel can be added to the chamber to reach reflow peak under vacuum.

Convection reflow with vacuum module is continuous and allows thermal profiles to be directly ported from non-vacuum reflow applications to achieve low COO and high UPH.

- HELLER Industries utilizes advanced pumping package with high capacity for fast pump down time.

Pumpdown Time

- HELLER Industries provides optmized cycle (average 30s~60s) to achieve super high UPH.

Full Vacuum System Cycle Timing (in Seconds)

■ Transport into Vacuum Chamber   ■ Doors Close   ■ Pump Down
■ Dwell @ Vacuum   ■ Repressurize   ■ Doors Open
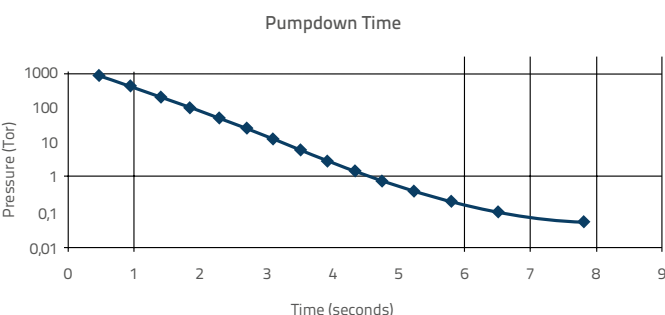
- Reflow time under vacuum of 15 seconds was able to achieve <1% total void area spec.
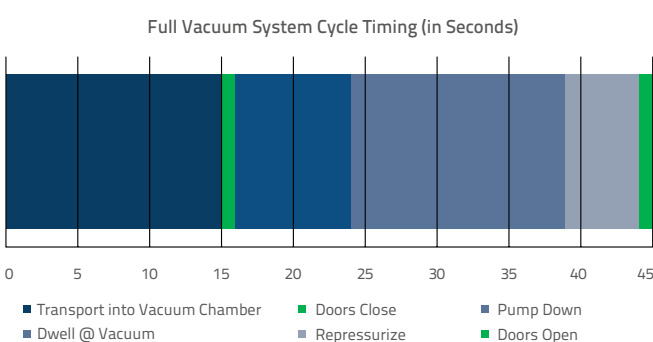
- Heller vacuum assisted reflow applies multi-zones to meet various thermal profile requirements.

- Heller adopts high efficient flux collection system to collect the flux and keep tunnel clea. On-the-fly maintenance is available.

- Chamber exhaust foreline, ball valve, buterfly valve and dry vacuum pump are heated to 150°C to eliminate flux condensation.

No Vacuum

With 5 Torr for 30s

MODEL	1826MK5	1936MK5
DIMENSIONS	4650 x 1500 x 1640 mm	5890 x 1500 x 1640 mm
POWER SUPPLY	380 VAC Option: 208/240/400/415/480 VAC	380 VAC Option: 208/240/400/415/480 VAC
PROCESS GASSES	N2 Option: Formic Acid	N2 Option: Formic Acid
HEATING ZONES	Convection Heating Top 8 + Bottom 6	Convection Heating Top 10 + Bottom 8
COOLING ZONES	2 Option: Bottom	3 Option: Bottom
MIN. VACUUM LEVEL	Standard: < 10 Torr Option: 1 Torr	Standard: < 10 Torr Option: 1 Torr
MAX. WORKING TEMPERATURE	Standard: 350°C Option: 400°C/450°C	Standard: 350°C Option: 400°C/450°C
MAX. PRODUCT HEIGHT	35 mm Option: 60 mm	35 mm Option: 60 mm

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SOLDERSTAR PRO
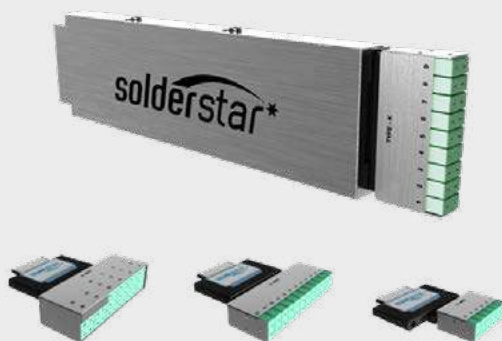
4-Channel Version	SS-R-0425
6-Channel Version	SS-R-0625P
9-Channel Version	SS-R-0925P
12-Channel Version	SS-R-1225P
16-Channel Version	SS-R-1625P

OPTIONAL REFLOW EQUIPMENT

- AUTOSeeker Profiler Optimisation software
- 2,4 Ghz Wireless Telemetry
- Deltaprobe Oven Verification fixture
- Adjustable Reflow Carrier

DESCRIPTION

- Thermocouple Adapters available in 4, 6, 9, 12 or 16 versions
- The package includes an ultra compact datalogger featuring the unique 'SmartLink' connector system, combined with a heatshield and thermocouple adapter to provide the number of measurement channels required
- Future upgrading or servicing is a simple and cost effective procedure, with only the Thermocouple Adapter needing to be changed to allow 6 ,9, 12 or 16 Type-K measurement versions
- The 'SmartLink' concept allows high measurement channel configurations, while maintaining a small footprint and quick connection to a range of accessories for capture of profile and SPC information from reflow, wave/selective and vapour phase soldering processes
- A comprehensive suite of software includes profile analysis, data management, profile simulations and integrated SPC charting tools. This easy to use system is ideal for manufacturers and EMS providers who require rapid profile setup followed by periodic measurements to control their solder process quality

STANDARD EQUIPMENT

- SolderStar PRO datalogger
- Thermocouple Adapter
- 25mm Lead Free capable heatshield
- Type K thermocouples
- PC Analysis software
- Hard copy manual + 1 Year calibration certificate
- Equipment case

DIMENSIONS	125 x 52 x 9 mm
WEIGHT	110 g
CHANNELS	4, 6, 9, 12 or 16 Channel Versions Available
MEMORY	120,000 Memory Points
SAMPLING	0,1s to 10 Minutes
MEASUREMENT RANGE	-150 to 600°C
ACCURACY	±0,5°C
RESOLUTION	±0,02°C
MAX. INTERNAL TEMPERATURE	+85°C (Auto Shutdown on over temp.)
POWER SUPPLY	Rechargeable High Temperature Nimh
COMMUNICATIONS	USB (Type A - Mini B) or 2.4Ghz Wireless
THERMOCOUPLES	Typ K, EN 05842:1993 | Class 1 / ANSI MC 96.1

HEATSHIELD

- Material: Stainless Steel
- Dimensions (LxWxH):

   4/6/9 Channel Version: 310 x 80 x 25 mm
   12 Channel Version: 310 x 104 x 25 mm
   16 Channel Version: 330 x 146 x 25 mm

OTHER HEATSHIELD SIZES ARE AVAILABLE ON REQUEST

Thermal Protection Duration

Survival Time - Minutes

SOLDERSTAR DELTAPROBE

SS-R-1004

DESCRIPTION

- The SolderStar DeltaProbe removes the need to use fragile test boards for periodic profiling required for ongoing control of the reflow process

- With fixed sensors and no test card or long trailing wires, the DeltaProbe is a fixed, robust and convenient platform for generating highly repeatable results

- Although process setup requires a temperature profile captured from a real test PCB, ongoing process monitoring can be achieved by measuring the difference from an established process baseline

- Periodically the DeltaProbe is passed through the process toallow rapid checks against the baseline profile and SPC data to be captured. Process change, due to variations in convection levels, conveyor speed or zone setpoints,is instantly and accurately detected and the operator is notified visually

- Advanced SPC tools allow the operator to produce process control charts for ongoing process control measurement, evaluation and corrective action

A 'GOLDEN PROFILE' FOR EACH PROCESS IS ESTABLISHED IN 3 EASY STEPS

- The optimum oven settings are first established by product profile capture and simulation

- The DeltaProbe is then passed through the reflow oven to capture a 'golden process profile'

- Tolerance limits can now be set around temperature traces and process parameters

STANDARD EQUIPMENT

- 25 mm heatshield
- Adjustable Carrier
- 3 x DeltaProbe Sensors
- Tolerance band software

ERROR CONDITIONS DETECTED

- Incorrect oven profile loading
- Unauthorised change of oven profile settings
- Conveyor speed errors
- Setpoint & convection level errors

OPTIONAL EQUIPMENT

- 2,4 Ghz Wireless Telemetry

HEATSHIELD + THERMOCOUPLE ADAPTER

- Material: Stainless Steel
- Dimensions(LxWxH): (L) 330 mm x (H) 25 mm (W) 120 mm up to 450 mm

OTHER HEATSHIELD SIZES ARE AVAILABLE ON REQUEST

Thermal Protection Duration

Temperature	Survival Time – Minutes
100ºC	25
150ºC	19
200ºC	15
250ºC	10
300ºC	8

Survival Time – Minutes
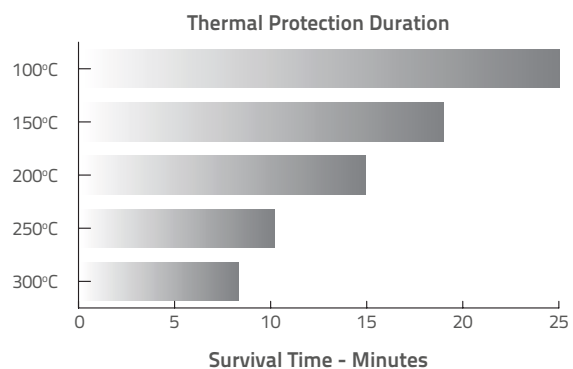
SOLDERSTAR PRO - VP

SS-VP-0640P-V

DESCRIPTION

- The SolderStar PRO - VP system allows users of batch and in-line vapour phase soldering machines to fully profile their products in the same way as a conventional reflow oven

- The system includes the SolderStar PRO data-logger combined with a sealed light-weight heat shield capable of operating in the preheat, vapour reflow and vacuum stages of the machine

- Data can be passed to a nearby PC via wireless telemetry allowing the profile to be viewed in real-time by the user

- Once data capture is complete the heat shield can be opened and the datalogger removed,allowing rapid cool down cycles and minimising the risk of overheating the profiling unit

- Extendable for control of wave / selective or reflow soldering

- Unique SmartLink connection system provides quick datalogger connection to a range of products and accessories

- Low mass thermal shield provides minimal impact to process

- Extendable Wireless range > 100 Metres from machine

STANDARD EQUIPMENT

- 6 Channel Vapour Phase Barrier

- 6 Type K thermocouples

- Equipment case

OPTIONAL EQUIPMENT

- 12 Channel Barrier

- 2.4Ghz Wireless Telemetry

- USB powered Wireless range extender

DIMENSIONS	125 x 52 x 9 mm
WEIGHT	110 g
CHANNELS	Upto 16 Channel Versions Available
MEMORY	120,000 Memory Points
SAMPLING	0,1 s - 10 min.
MEASUREMENT RANGE	-150 to 600°C
ACCURACY	±0,5°C
RESOLUTION	±0,02°C
MAX. INTERNAL TEMP ERATURE	+85°C (Auto Shutdown on over temp.)
POWER	Rechargeable High Temperature Nimh
COMMUNICATIONS	USB (Type A - Mini B) or 2.4Ghz Wireless
THERMOCOUPLES	Type K, EN 05842:1993	Class 1 / ANSI MC 96.1

HEATSHIELD

- Supplied Model: HS-VP006-01

- Material: Aluminium - PTFE Coated

- Weight: 620 g (6 Channel Version)

Thermal Protection Duration

Survival Time - Minutes

OTHER HEATSHIELD SIZES ARE AVAILABLE ON REQUEST

WAVE SHUTTLE PRO

DESCRIPTION

- The WaveShuttle Pro is an intelligent fixture that measures all key parameters from a single pass through the wave soldering machine

- Thermocouples are combined with titanium contact sensors, allowing manufacturers to gain a true performance measurement of the wave soldering process

- High quality 10 mm fixture provides a robust platform for initial process set up, plus periodic checking and comparison

- Underside titanium contact sensors give highest measurement accuracy on Wave Height, Main and Chip wave parameters

- Custom widths and sensor positions available for fixed width production lines or special applications

- Connectivity via standard USB cables or 2,4 Ghz Wireless Telemetry

- Dedicated Wave Central PC analysis software with integrated SPC charting package

SS-W-1004

STANDARD EQUIPMENT

- 250 mm Width Pallet
- PC Software on CDROM
- Equipment Case

OPTIONAL EQUIPMENT

- 2,4 Ghz Wireless Telemetry

CUSTOM SIZE PALLETS ARE AVAILABLE TO SPECIAL ORDER WHERE SPECIFIC SIZES ARE REQUIRED TO MEET THE NEEDS OF YOUR PRODUCTION LINES

Chip wave contact area   Main wave contact area
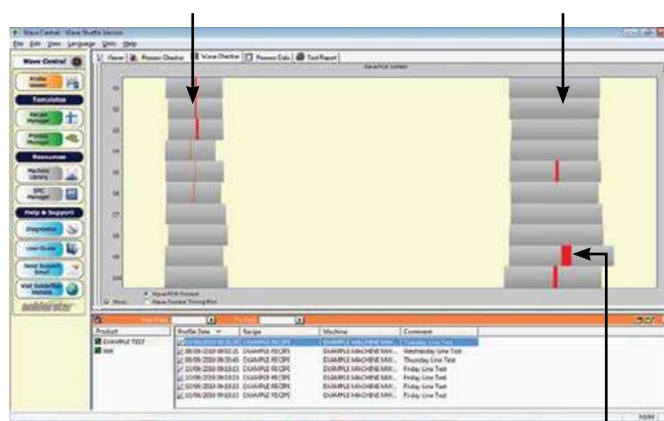
Void/skip area

PARAMETERS MEASURED

- Main Wave and Chip Wave dwell/contact time
- Wave Height / Immersion Depth
- Conveyor speed
- Top side PCB temperature (Left & Right)
- Solder Pot temperature

- Delta T at Wave
- PCB/Wave Contact Area
- PCB to Conveyor Parallelism
- Real component temperatures (via spare channels & user test PCB)
- Component Heating Rates

CONSTRUCTION	CDM Anti Static 10 mm
DIMENSIONS	250 x 350 x 30 mm
DWELL CONTACTS	11 positions measured by on-pallet system
CONTACT SAMP LING	All contacts 100 times per second
TIMING ACCURACY	+/- 0,01 seconds
WAVE HEIGHT ARRAY	0,2 - 2,4 mm
TEMPERATURE	Type K 2 x PCB top side (Left and Right) 1 x Solder Pot 2 x User PCB/Auxiliary TYPE K
TEMPERATURE ACCURACY	+/- 1°C
TEMPERATURE RESOLUTION	0,02°C (0,1°C displayed on graph)

SOLDERSTAR - MULTIWAVE PRO

DESCRIPTION

- The MultiWave PRO is a compact and flexible instrument allowing dedicated test fixtures to be produced quickly and cost effectively for multi-wave soldering machines
- Measurement sensors are fitted to customer specific locations which correspond to the soldering areas within the multi-wave solder pot tooling, this technique provides contact time and difference data to quickly allow engineers to identify any problem areas within the tool design
- 24 x Titanium contact sensors and interface looms available for custom measurement fixtures to be manuafctured quickly and cost effectively
- 8 x Type K measurement channels
- Connectivity via standard USB cables or 2.4Ghz Wireless Telemetry
- Dedicated analysis software with product database and integrated
- SPC charting package

SS-MW-1001-0

STANDARD EQUIPMENT

- Multi-Wave Interface Box
- 1 x 24 Way Interface Loom
- 24 x Titanium Contact Sensors
- 1 x Pre-heat PCB / Sensor
- 1 x Solder Pot Probe

OPTIONAL EQUIPMENT

- 2,4 Ghz Wireless Telemetry

Instant good/bad analysis of process

Accurate measurement of nozzle/PCB contact

Data management tools

Example of titanium contact sensors fitted to match custom nozzle positions
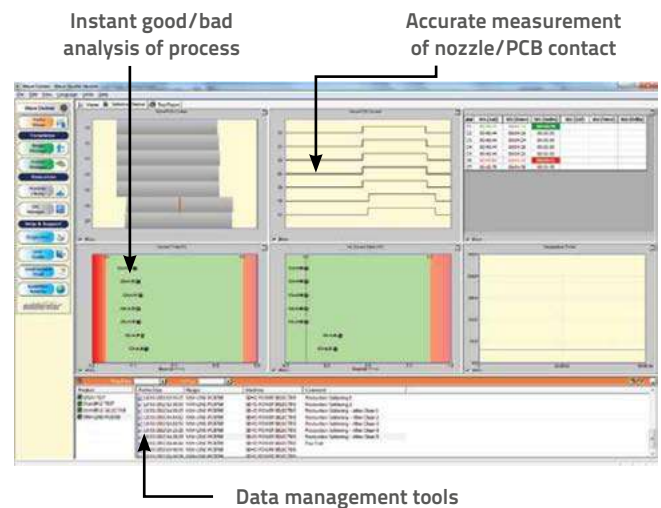
PARAMETERS MEASURED

- Solder Nozzle / PCB Contact Time and first contact difference
- Solder Pot temperature
- Peak PCB Topside Temperature
- Heating Rates

CONSTRUCTION	CDM Anti Static / Aluminium
DWELL CONTACTS	24
CONTACT SAMPLING	All contacts 100 times per second
TIMING ACCURACY	+/- 0,01 seconds
TEMPERATURE	8 channels
TEMPERATURE ACCURACY	+/- 1°C
TEMPERATURE RESOLUTION	0,02°C (0,1°C displayed on graph)

2.4GHZ WIRELESS TELEMETRY KIT

SS-AC-RFMOD

DESCRIPTION

- The Wireless Telemetry option all connectionless datalogger setup and viewing of profiles live to the computer as they happen
- Downloading of data stored in memory is also possible
- Live battery status and internal datalogger temperatures are fed to the computer while the datalogger passes through the machine allowing costly machine jams to be quickly detected
- The system uses an innovative self-healing Zigbee network, with this approach transmitted data is never lost and long transmission ranges can be achieved with additional repeaters

DELTAPROBE REFLOW OVEN PERFORMANCE FIXTURE

SS-AC-DP-001

DESCRIPTION

- Deltaprobe is compatible with R-0625P, R-0925P, R-1225P, R-1625P
- The datalogger from the reflow system is connected to the Deltaprobe to provide a convenient fixture to test the repeatability of the reflow oven
- A „golden" process profile is captured by the sensors, this can then be used to perform „capture and compare" measurement periodically without the need for fragile test boards

ADJUSTABLE REFLOW CARRIER

SS-AC-RC-001

DESCRIPTION

- The carrier is used to safely transport your profiling system through the reflow process on the conveyor
- Adjustment from 120 mm - 450 mm is possible, the system is manufactured from stainless steel and compatible with all Solderstar Heatshield types
- Height adjustment on the side rails is also possible allowing use of the system on very low height tunnels

WAVESHUTTLE PRO

SS-AC-WSPRO

DESCRIPTION

- WaveShuttle PRO High Performance Wave Solder Analyser extends the use of a SolderStar PRO Reflow system for use on the wave solder machine
- It is compatible with R-0625P , R-0925P , R-1225P and R-1625P
- The datalogger from the reflow system is connected to the pallet to measure all key parameters including wave height in a single pass

VAPOUR PHASE PACK

DESCRIPTION

- Compatible with R-0625P , R-0925P , R-1225P and R-1625P

- The datalogger from the reflow system is connected to the Vapour Phase barrier to provide sealed and high thermal performance barrier

- This can be passed into the process along with the PCB to capture thermal profiles at component level

SS-AC-VPPACK-V

AUTOSEEKER PROFILE OPTIMISATION SOFWARE
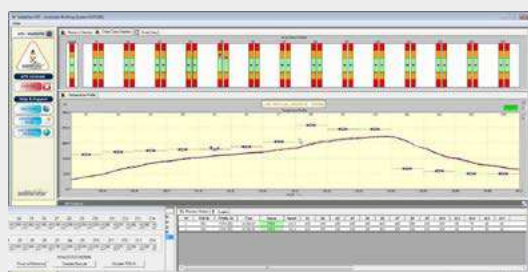
DESCRIPTION

- Software module allows profiles to be optimised automatically

- A profile is first captured from a test PCB, the Autoseeker can searches for the optimal set points for the oven

- Profiles can be solved to give the absolute optimum, faster through put or use less energy

MEASUREMENT RANGE	-150 to 500ºC
ACCURACY	+/- 1ºC
MAXIMUM SAMPLING FREQUENCY	1 per second
COMMUNICATIONS/POWER	USB
CONVEYOR SPEED	+/- 1%

SS-AC-SWAUTO

TWS AUTOMATION RT-04 TEMPERATURE PROFILER

DESCRIPTION

- RT04 is a 4-channel temperature recorder

- A must-have accessory for fine-tuning the SMT soldering proces

- It enables the user to improve the setting of the oven parameters, to optimise production and to check the soldering process quality, by just looking at the temperature vs. time graph

- The device uses four K-type Ni-Cr-Ni micro thermocouples to obtain accurate measurements and high-speed responses

- It is packed in an hard-box including all the necessary to start recording operation

BOX INCLUDES

- 8 type K thermocouples (4 pcs. 0,5 m length, 4 pcs. 3 m length)
- USB cable
- USB pen
- Kapton tape
- Protective shield
- Heat transfer silicone compound

TWS-URT04

PROFILER	4-channel
WORKING RANGE	0 - 500ºC
INPUT	4 type K thermocouples
RESOLUTION	0,1ºC
DIMENSIONS	120 x 83 x 13 mm
WEIGHT	350 g

REECO MV-35 WAVE SOLDERING MACHINE

RE-MV-35

DESCRIPTION

- Benchtop solder aggregate in a small form factor
- Cost-effective and efficient solution
- Built-in control computer
- Recommended for small and medium scale production
- Easy to use
- Fluxer type: foam
- Warm up time: 60 minutes
- Capacity: 37 kg

MAX. WAVE HEIGHT	5 - 12 mm
MAX. PCB SIZE	200 x 270 mm
TEMPERATURE RANGE	200 - 300ºC
PREHEAT TEMPERATURE	70 - 90ºC
HEATER POWER	3 kW
CONVEYOR SPEED	0,5 - 3 m/min.
DIMENSIONS	850 x 600 x 330 mm
POWER SUPPLY	230 VAC, 50 Hz

DDM NOVASTAR SPARTAN 8 WAVE SOLDERING MACHINE

AP-SPARTAN8

DDM NOVASTAR SPARTAN 12 WAVE SOLDERING MACHINE

AP-SPARTAN12

MODEL	SPARTAN 8	SPARTAN 12
FOAM FLUXER TANK	2 liters	3 liters
MAX. WAVE HEIGHT	0 - 10 mm	
WAVE WIDTH	203 mm	300 mm
MAX. PREHEAT TEMP.	Preheat 1 Power: 2.25 kW / 4.0kW	Preheat 2 Power: 1.5 kW / 2.0 kW
MOC PIERWSZEJ I DRUGIEJ STREFY PODGRZEWACZA	2,25/1,5 kW	4/2 kW
MAX. SOLDER POT TEMP.	350°C	
APPROX. WARM-UP TIME	60 minutes(Lead Solder)	120 minutes (Lead-free Solder)
CONVEYOR SPEED	2 m/min	
PALLET	200 x 290 mm	300 x 400 mm
POWER SUPPLY	Spartan 8S - 3x 400 V, 6,3 kW Spartan 8D - 3 x 400 V, 7 kW	Spartan 12S - 3x 400 V, 9,6 kW Spartan 12D - 3x 400 V, 11,2 kW
WAVE	Spartan 8S - single Spartan 8D - dual	Spartan 12S - single Spartan 12D - dual
SOLDER POT CAPACITY	Spartan 8S - 57 kg Spartan 8D - 90 kg	Spartan 12S - 90 kg Spartan 12D - 170 kg

DDM NOVASTAR 18 WAVE SOLDER MACHINE

DDM NOVASTAR 14 WAVE SOLDER MACHINE

MODEL	14	18
POWER SUPPLY	220 VAC, 60 Hz 30 A	220 VAC, 60 Hz 50 A
FOAM FLUXER TANK	4 liters	6 liters
SOLDER POT CAPACITY	225 kg	450 kg
MAX. WAVE HEIGHT	0 - 10 mm	
WAVE WIDTH	350 mm	460 mm
MIN. PCB WIDTH	50 mm	
MAX. PREHEAT TEMP.	365°F / 180°C	
PREHEAT 1 POWER	4,8 kW	
PREHEAT 2 POWER	N/A	
PREHEAT 3 POWER	2,0 kW	
TOTAL PREHEAT POWER	6,8 kW	
MAX. SOLDER POT TEMP.	300°C	
MAX. SOLDER POT TEMP. PB-FREE	350°C	
SOLDER POT POWER	4,5 kW	7,5 kW
APPROX WARM-UP TIME	100 minutes	120 minutes
MAX. CONVEYOR SPEED	2,5 m/min	
COMPRESSED AIR	10 CFM @ 60 PSI (17 m³ / 4 bar)	
EXHAUST REQUIREMENTS	Two 150 mm diameter headers 500 m³/hr each (1000 m³/hr total)	
CONVEYOR	6 degree incline, left to right operation, front fixed rail – rear moveable rail (motorized)	

DDM NOVASTAR SPR-25 STENCIL PRINTER

AP-SPR-25

DESCRIPTION

- Benchtop, manual stencil printer is designed for low to medium volume surface mount assembly runs
- Fine X,Y, Z, and theta adjustments for exact stencil-to-board alignment result in precise, fine pitch printing of solder paste
- Linear ball bearing guide assures smooth squeegee stroke with its unique adjustable angle-of-attack for precise single or dual direction printing
- Easy lift frame with gas strut assists
- Squeegee accepts polyurethane or metal blades
- PCB vacuum hold-down option

STANDARD EQUIPMENT

- Dual squeegee for clean and convenient application of solder paste
- Adjustable frame holder compatible with any tubular or cast framed stencils up to 584 mm x 584 mm outside diameter
- Lexan® fixture for easy registration set-up

X & Y ADJUSTMENT	+/- 12,7 mm
THETA ADJUSTMENT	+/- 5°
Z AXIS ADJUSTMENT	Self leveling (0-16 mm)
ADJUSTS TO VARIOUS SIZE FRAMES	Up to 584 mm x 584 mm
MAX. PRINT AREA	406 x 457 mm
DIMENSIONS	711 x 838 x 355 mm
WEIGHT	53 kg

DDM NOVASTAR SPR-20 STENCIL PRINTER

AP-SPR-20

DESCRIPTION

- Benchtop, manual stencil printer is designed for low to medium volume assembly runs
- Precise X,Y, Z, and theta axis controls allow for accurate, consistent deposition of solder paste or masking material for SMT. This durable, easy-to-use system provides repeatable and reliable results
- True theta adjustment (from exact center point) to enhance alignment ease
- Independent 4 point Z axis leveling

STANDARD EQUIPMENT

- Polyurethane squeegee & holder, one tubular frame
- Lexan® fixture for easy registration set-up

X & Y ADJUSTMENT	+/- 12,7 mm
THETA ADJUSTMENT	+/- 3°
Z AXIS ADJUSTMENT	4 point leveling (0-19 mm)
ADJUSTS TO VARIOUS SIZE FRAMES	Up to 584 mm x 584 mm
MAX. PRINT AREA	305 x 380 mm
DIMENSIONS	533 x 711 x 280 mm
WEIGHT	23 kg

DDM NOVASTAR SPR-40 SEMI-AUTOMATIC STENCIL PRINTER

AP-SPR-40

DESCRIPTION

- Semi-automatic stencil printer designed for medium volume surface mount assembly
- Dual squeegee with individual pressure control makes solder paste deposition accurate and repeatable
- Fine X, Y, Z and Ø adjustments for exact stencil-to-board alignment
- Single knob Z axis self leveling adjustment
- Nesting kit option (DNK) for easy handling of double sided boards

DDM NOVASTAR SPR-45 SEMI-AUTOMATIC STENCIL PRINTER
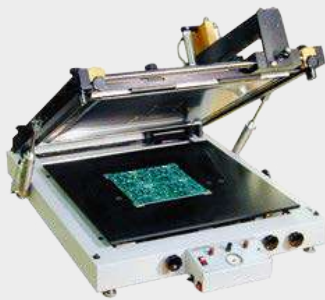
AP-SPR-45

DESCRIPTION

- Automate Stencil Printing using the SPR-45 with power sweep squeegee and power frame lift for higher volume and semi-automatic production with fine pitch applications
- Adjustable frame holder compatible with any tubular or cast framed stencils up to 23" x 23" (584 mm x 584 mm) outside diameter
- Power frame lift
- Single knob Z axis self leveling adjustment
- Nesting kit option (DNK) for easy handling of double sided boards
- PCB vacuum hold-down option
- Ability to print flex circuits with vacuum option

DDM NOVASTAR SPR-45VA SEMI-AUTOMATIC STENCIL PRINTER
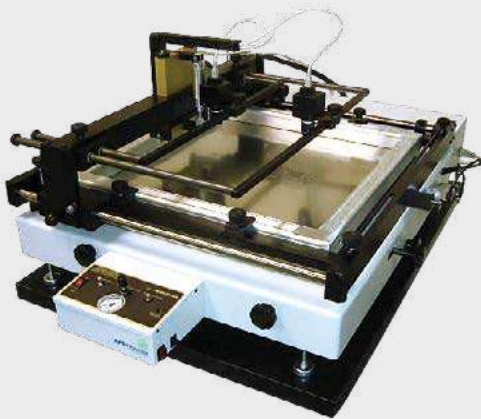
AP-SPR-45VA

DESCRIPTION

- SMTrue™ Vision Assist with single or dual cameras and 10x magnification enabling axial alignment of stencil to board down to 12 mil ultra fine pitch
- Pneumatic adjustable power sweep squeegee for automatic printing with single or dual stroke
- Power frame lift for higher volume production
- Fine X, Y, and Theta adjustments for exact, repeatable stencil to board print alignment
- Spring loaded Double Nesting Kit option for quick board changes and printing of single and double sided PCB boards
- PCB vacuum hold down (optional)
- Ability to print flex circuits with vacuum option
- Adjustable frame holder compatible with any tubular or cast framed stencils up to 584 mm x 584 mm outside diameter
- Adjustable, reproducible angle-of-attack squeegee adjustment
- Dual squeegee holder with independent print force adjustment for clean, convenient application of solder paste

MODEL	SPR-40	SPR-45	SPR-45VA
MAX. PRINT AREA	406 x 457mm (16" x 18")		
MAX. FRAME DIMENSIONS	Up to 584 x 584 mm (23" x 23")		
ADJUSTABLE DUAL SQUEEGEE PRESSURE / SPEED	Pneumatic / Manual		
VACUUM HOLD-DOWN OPTION	Yes		
LINEAR SQUEEGEE GUIDE	Yes	Automatic	
ADJUSTABLE ANGLE OF ATTACK	No		Yes

TWS SR-2700 SEMI-AUTOMATIC STENCIL PRINTER
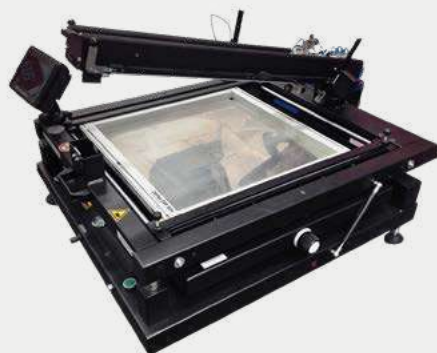
TWS-SR-2700

DESCRIPTION

- Touch screen display
- Two independent, self levelling, pressure controlled, electro-actuated squeegees
- Motorized Y movement
- Motorized snap-off with programmable speed
- Two cameras, manually moveable
- Printing area: 480 x 420 mm
- PCB fixing system with pins and vacuum

MAX. PCB THICKNESS	6 mm
MAX. FRAME DIMENSIONS	675 x 585 mm
PRINTING PRESSURE	0 - 15 kg
POWER SUPPLY	230V +/- 10%, 50/60 Hz
POWER CONSUMPTION	350W
DIMENSIONS	880 x 900 x 500 mm
WEIGHT	100 kg
PRESSURIZED AIR POWER	5-6 bar (adjustable from outside)

TWS SR-2720 SEMI-AUTOMATIC STENCIL PRINTER FOR BIG PCBS

TWS-SR-2720

DESCRIPTION

- Touch screen display
- Printing area: 850 x 420 mm
- Built-in self tensioned frame for stencils
- Two independent, self levelling, pressure controlled, electro-actuated squeegees
- Motor assisted squeegees & plate movements
- Programmable speed
- Two cameras for manual vision alignments
- PCB fixing system with pins and vacuum

MAX. PCB THICKNESS	6 mm
PRINTING PRESSURE	0 - 15 kg
POWER SUPPLY	230V +/- 10%, 50/60 Hz
POWER CONSUMPTION	350W
DIMENSIONS	1450 x 700 x 450 mm
WEIGHT	125 kg
PRESSURIZED AIR POWER	7-8 bar (adjustable from outside)

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YAMAHA YCP10 HIGH-PERFORMANCE COMPACT PRINTER

DESCRIPTION

- 3S head (3S : Swing Single Squeegee)
- Double squeegee head (option)
- 2D Printing inpection funcion (option)
- Automatically adjustable squeegee angle and speed
- Positioning repeatability (6σ) : +/- 0.010 mm
- Printing accuracy (6σ) : +/- 0.025 mm
- Printing line tact: 8 sec.
- PCB size: 510 x 460 mm
- Air supply source: 0.45MPa or more, in clean, dry state
- Dimensions: 1130 mm x 1760 mm x 1370 mm

YA-YCP10

APPLICABLE STENCIL SIZE	750 x 750 mm, 736 x 736 mm, 750 x 650 mm
	650 x 550 mm, 600 x 550 mm (Option)
	550 x 650 mm (Option), 584 x 584 mm (Option)
POWER SUPPLY	Single-phase AC 200/208/220/230V +/- 20V 50/60Hz
WEIGHT	1100 kg

YAMAHA YSP UNIVERSAL HIGH-END PRINTER

YA-YSP

YAMAHA YSP20 UNIVERSAL HIGH-END PRINTER

YA-YSP20

DESCRIPTION

- PSC system (PSC : Print Stability Control)
- Positioning accuracy (3σ): +/-0.005 mm
- 2D Printing inspection funcion (option)

- Air supply source: 0.45MPa or more, in clean, dry state
- Accuracy for repeated alignment (3σ): +/-0.005 mm

MODEL	YSP	YSP20
PCB SIZE	510 x 460 mm to 50 x 50 mm	Optional 600 mm upon request	
PRINTER HEAD	3S head (swing single squeegee)	
	Squeegee speed: 2 - 200 mm/s	Squeegee printing pressure: 5 - 200N +/- 2N	Squeegee attack angle:: 45° - 65°	
PRINTING LINE TACT	Approx. 9.5 sec (standard printing: under optimum condition)	Approx. 5 sec (standard printing: under optimum condition)
STENCIL SIZE	750 x 750 mm	736 x 736 mm	750 x 650 mm 650 x 550 mm	600 x 550 mm	550 x 650 mm	750 x 750 mm	736 x 736 mm 750 x 650 mm	650 x 550 mm
MAX. PCB SIZE	510 x 460 mm	510 x 460 mm	510 x 350 mm 330 x 250 mm	330 x 250 mm	330 x 250 mm*	510 x 460 mm	510 x 460 mm 510 x 350 mm	420 x 250 mm
POWER SUPPLY	3-phase AC 200/208/220/240/380/400/416 V +/- 10%	
DIMENSIONS	1640 x 1640 x 1400 mm (normal conveyor) 1973 x 1640 x 1400 mm (exit extension conveyor)	1775 x 2410 x 1520 mm
WEIGHT	1500 kg	2900 kg

* Option

YAMAHA YSI-V 3D INSPECTION SYSTEM AOI

DESCRIPTION

- Unique features ensure accurate inspection results and hig
- 2D High-speed, high-resolution 2-dimensional inspections
- 3D Height, and sloped surface 3-dimensional inspections (option)
- Optimal inspection technique selectable from 5 different methods: brightness, color, shape, infrared, laser
- 2D and 3D inspection of leaded packages and chip components
- 4-Direction angular camera (option) for eliminating additional proces steps
- Quality Assistance, using mobile Pass/Fail judgement (option)
- Productivity-boosting dual system (option)

YA-YSI-V

	HYBRID OPTICAL INSPECTION SYSTEM (AOI)			
MODEL	YSi-V 5M 2D	YSi-V 12M 2D	YSi-V 5M 3D	YSi-V 12M 3D
CATALOGUE NUMBER	YA-YSIV-5S2L	YA-YSIV-S24ZL	YA-YSIV-5S234	YA-YSIV-S234Z
PCB SIZE	610 x 560 mm			
MAX. COMPONENT HEIGHT	70 mm	40 mm	50 mm	40 mm
INSPECTION CAMERA	5 Mpix (red, green, blue, IR)	12 Mpix (red, green, blue, IR)	5 Mpix (red, green, blue, IR)	12 Mpix (red, green, blue, IR)
RESOLUTION	18µm	12µm	18µm	12µm
DIMENSIONS	1252 x 1497 x 1550 mm			
WEIGHT	1300 kg			

YAMAHA YSI-SP 3D SOLDER PASTE INSPECTION MACHINE

DESCRIPTION

- 12Mpix inspection camera
- '1-head solution" to perform various inspections with a single head
- Achieves high-accuracy high-speed inspections using 3D+2D inspection, image resolution switch-over and more
- A thorough and extensive machine-to-machine (M2M) solution
- Statistical Process Control (SPC) for diverse statistical processing
- Optional features to enable handling various products

YA-YSI-SP

PCB SIZE	510 × 460 mm	50 × 50 mm
HORIZONTAL RESOLUTION (FOV)	25µm / 12,5µm (50 × 50 mm) 20µm / 10µm (40 × 40 mm) 15µm / 7,5µm (30 × 30 mm)
HEIGHT RESOLUTION	1µm
INSPECTION ITEMS	Solder paste printing quality (volume, height, area and misalignment)
POWER SUPPLY	AC 200 V – 230 V ±10%
DIMENSIONS	904 × 1080 × 1478 mm
WEIGHT	550 kg

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YAMAHA 3D X-RAY HYBRID INSPECTION SYSTEM YSI-X

YA-YSI-X

DESCRIPTION

- Ideal for 100% inspection of onboard automotive products and many other items by 3D X-rays acquire layered of target
- Switchable tube voltage: 130 KV (onboard vehicle use), 110 KV (household use), 70 KV (device use)
- X-ray, optical, infrared, and laser height measurement as standard equipment; hybrid and high reliability with multiple inspection modes

POWER SUPPLY	3-phase AC 200/208/220/240/380/400/416V ±10% 50/60 Hz
X-RAY SOURCE	Micro-focus sealed type X-ray tube (max. 130KV)
RESOLUTION	19μm
PCB SIZE	100 × 50 to 560 × 460 mm
MOUNTED COMPONENTS	40 mm on upper surface; 80 mm on bottom (40mm for in-line use)
DIMENSIONS	1720 × 1883 × 1705 mm
WEIGHT	2900 kg

SEC PRACTICAL X-RAY INSPECTION SYSTEM X-EYE 5100

SX-5100F

DESCRIPTION

- Non-destructive analysis of semiconductor, SMT, and electron/electric components
- Various convenient functions – Easy of use

X-RAY TUBE	100 kV / 200 μA (option 130 kV / 200 μA)
MIN. RESOLUTION	5 μm
TABLE SIZE	460 x 340 mm (option 550 X 550 mm)
AXIS	X, Y, Z, Tilt (±50°)
DETECTOR	2.5 inch FPXD or 5 inch FPXD
DIMENSIONS	1270 x 1025 x 1460 mm
WEIGHT	720 kg

SEC BEST PERFORMANCE X-RAY INSPECTION SYSTEM X-EYE SF160

SX-160NCT

DESCRIPTION

- Non-destructive analysis of semiconductor, SMT, and electron/electric components
- 2D & 3D Micro CT System
- High-quality CT image and high speed scan
- Optional Dual CT

X-RAY TUBE	160 kV / 200 μA (option 160 kV / 500 μA)
MIN. RESOLUTION	0.9 μm
TABLE SIZE	460 x 510 mm (option 550 X 650 mm)
AXIS	X, Y, Z, Tilt (70°), R, Y-aft, Cone beam R
DETECTOR	5 inch Pixel FPD
CT SCAN METHOD	Oblique CT / Cone beam CT
DIMENSIONS	1340 x 1460 x 1670 mm
WEIGHT	2000 kg

SINGLE MAGAZINE LOADER

DESCRIPTION

- FUJI button, or touch screen operation options available
- Four pitch selections 10, 20, 30, 40 mm (FUJI Button operation), multiple pitch selectable (touch screen operation)
- Direction from left to right, or right to left
- Possibility of loading 1 rack magazine, discharge from the rear of machine
- SMEMA compliant

CAT. NO.	RE-CM-ML-250A-ST/B	RE-CM-ML-330A-ST/B	RE-CM-ML-390A-ST/B	RE-CM-ML-460A-ST/B
POWER SUPPLY	230 VAC, 50/60 Hz			
AIR PRESSURE	6 bar			
PCB SIZE	350 x (50 - 250) mm	460 x (50 - 330) mm	535 x (50 - 390) mm	535 x (50 - 460) mm
TRANSFER HEIGHT	900 ± 20 mm or specify			
PCB DIRECTION	Option for left to right or right to left			
MAGAZINE RACK SIZE	350 x 320 x 563 mm	460 x 400 x 563 mm	535 x 460 x 570 mm	535 x 530 x 570 mm
PITCH	10, 20, 30, 40 mm or specify			
DIMENSIONS	1145 x 1030 x 1200 mm	1355 x 1120 x 1200 mm	1505 x 1310 x 1200 mm	1505 x 1450 x 1200 mm
CONTROL PANEL	Touch screen / FUJI button			

SINGLE MAGAZINE UNLOADER - DESCRIPTION

DESCRIPTION

- FUJI button, or touch screen operation options available
- Four pitch selections 10, 20, 30, 40 mm (FUJI Button operation), multiple pitch selectable (touch screen operation)
- Direction from left to right, or right to left
- Possibility of loading 1 rack magazine, discharge from the rear of machine
- SMEMA compliant

CAT. NO.	RE-CM-MU-250A-ST/B	RE-CM-MU-330A-ST/B	RE-CM-MU-390A-ST/B	RE-CM-MU-460A-ST/B
POWER SUPPLY	230 VAC, 50/60 Hz			
AIR PRESSURE	6 bar			
PCB SIZE	350 x (50 - 250) mm	460 x (50 - 330) mm	535 x (50 - 390) mm	535 x (50 - 460) mm
TRANSFER HEIGHT	900 ± 20 mm or specify			
PCB DIRECTION	Option for left to right or right to left			
MAGAZINE RACK SIZE	350 x 320 x 563 mm	460 x 400 x 563 mm	535 x 460 x 570 mm	535 x 530 x 570 mm
PITCH	10, 20, 30, 40 mm or specify			
DIMENSIONS	1120 x 1030 x 1200 mm	1305 x 1120 x 1200 mm	1480 x 1310 x 1200 mm	1480 x 1450 x 1200 mm
CONTROL PANEL	Touch screen / FUJI button			

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MULTI MAGAZINE LOADER

DESCRIPTION

- FUJI button, or touch screen operation options available
- Four pitch selections 10, 20, 30, 40 mm (FUJI Button operation), multiple pitch selectable (touch screen operation)
- Direction from left to right, or right to left
- 3 magazine loading capacity
- SMEMA compliant

CAT. NO.	RE-CM-ML-250A-CT/B	RE-CM-ML-330A-CT/B	RE-CM-ML-390A-CT/B	RE-CM-ML-460A-CT/B
POWER SUPPLY	230 VAC, 50/60 Hz			
AIR PRESSURE	6 bar			
PCB SIZE	350 x (50 - 250) mm	460 x (50 - 330) mm	535 x (50 - 390) mm	535 x (50 - 460) mm
TRANSFER HEIGHT	900 ± 20 mm or specify			
PCB DIRECTION	Option for left to right or right to left			
MAGAZINE RACK SIZE	350 x 320 x 563 mm	460 x 400 x 563 mm	535 x 460 x 570 mm	535 x 530 x 570 mm
PITCH	10, 20, 30, 40 mm or specify			
DIMENSIONS	1365 x 745 x 1200 mm	1650 x 820 x 1200 mm	1825 x 880 x 1200 mm	1825 x 950 x 1200 mm
CONTROL PANEL	Touch screen / FUJI button			

MULTI MAGAZINE UNLOADER

DESCRIPTION

- FUJI button, or touch screen operation options available
- Four pitch selections 10, 20, 30, 40 mm (FUJI Button operation), multiple pitch selectable (touch screen operation)
- Direction from left to right, or right to left
- 3 magazine loading capacity
- SMEMA compliant

CAT. NO.	RE-CM-MU-250A-CT/B	RE-CM-MU-330A-CT/B	RE-CM-MU-390A-CT/B	RE-CM-MU-460A-CT/B
POWER SUPPLY	230 VAC, 50/60 Hz			
AIR PRESSURE	6 bar			
PCB SIZE	350 x (50 - 250) mm	460 x (50 - 330) mm	535 x (50 - 390) mm	535 x (50 - 460) mm
TRANSFER HEIGHT	900 ± 20 mm or specify			
PCB DIRECTION	Option for left to right or right to left			
MAGAZINE RACK SIZE	350 x 320 x 563 mm	460 x 400 x 563 mm	535 x 460 x 570 mm	535 x 530 x 570 mm
PITCH	10, 20, 30, 40 mm or specify			
DIMENSIONS	1685 x 745 x 1200 mm	1920 x 820 x 1200 mm	2165 x 880 x 1200 mm	2165 x 950 x 1200 mm
CONTROL PANEL	Touch screen / FUJI button			

PCB CONVEYOR

DESCRIPTION

- Metal frame
- Manual width adjusting system
- Electrical width adjustment optional
- Variable speed control
- Inspection and pass mode selectable
- Muti-section vesion available on request. (two-three sections)
- SMEMA compliant

CAT. NO.	RE-CM-C-60LD-M/L	RE-CM-C-100LD-M/L	RE-CM-C-100LJ-M/L
CONVEYOR LENGTH	600 mm	1000 mm	1000 mm
POWER SUPPLY	230 VAC, 50/60 Hz		
PCB WIDTH	50 - 350 mm (-M), 50 - 460 mm (-L)		
TRANSFER SPEED	1 - 12 m/min regulated		
TRANSFER HEIGHT	900 ± 20 mm		
PCB DIRECTION	Option for left to right or right to left		
WORKING LIGHT	NONE	NONE	YES
DIMENSIONS	600 x 650 x 900 mm	1000 x 650 x 900 mm	1000 x 650 x 900 mm

AOI REWORK CONVEYOR

DESCRIPTION

- Manual width adjusting system
- Electrical width adjustment optional
- Three belt segments, providing possibility to buffer one failed PCB
- SMEMA compliant

CAT. NO.	RE-CM-C-150LR/3-M	RE-CM-C-150LR/3-L
POWER SUPPLY	230 VAC, 50/60 Hz	
AIR PRESSURE	6 bar	
PCB WIDTH	50 - 350 mm	50 - 460 mm
TRANSFER HEIGHT	900 ± 20 mm	
PCB DIRECTION	Option for left to right or right to left	
DIMENSIONS	1500 x 760 x 1100 mm	1500 x 860 x 1100 mm

PCB NG/OK UNLOADER

DESCRIPTION

- Unloader with PCB sorting options
- Easily operated touchscreen controls
- Good and bad PCB's can be separated automatically to different magazine racks
- Multiple pitch selectable
- Direction from left to right, or right to left
- Loading capacity of 3 magazines per good and bad PCB's
- SMEMA compliant

CAT. NO.	RE-CM-UNG-250A-CT	RE-CM-UNG-330A-CT	RE-CM-UNG-390A-CT	RE-CM-UNG-460A-CT
POWER SUPPLY	230 VAC, 50/60 Hz			
AIR PRESSURE	6 bar			
PCB SIZE	350 x (50 - 250) mm	460 x (50 - 330) mm	535 x (50 - 390) mm	535 x (50 - 460) mm
TRANSFER HEIGHT	900 ± 20 mm or specify			
PCB DIRECTION	Option for left to right or right to left			
MAGAZINE RACK SIZE	350 x 320 x 563 mm	460 x 400 x 563 mm	535 x 460 x 570 mm	535 x 530 x 570 mm
PITCH	Multiple			
DIMENSIONS	1510 x 1460 x 1200 mm	1910 x 1630 x 1200 mm	2160 x 1760 x 1200 mm	2160 x 1900 x 1200 mm

MULTIFUNCTION PCB BUFFER

DESCRIPTION

- 3 operating modes:

  - FIFO (First In First Out),
  - LIFO (Last In First Out),
  - „Pass - through"

- 24 PCB's storage capacity
- Electrical width adjustment
- Direction from left to right or right to left
- SMEMA compliant

CAT. NO.	RE-CM-BL-350A-CT	RE-CM-BL-400A-CT	RE-CM-BL-460A-CT
POWER SUPPLY	230 VAC, 50/60 Hz		
AIR PRESSURE	6 bar		
PCB SIZE	400 x (50 - 350) mm	460 x (50 - 400) mm	535 x (50 - 460) mm
BUFFER CAPACITY	Max. 24 PCBs at pitch 1		
TRANSFER HEIGHT	900 ± 20 mm		
PCB DIRECTION	Option for left to right or right to left		
DIMENSIONS	500 x 885 x 1650 mm	610 x 935 x 1650 mm	610 x 995 x 1650 mm

PCB DESTACKER

DESCRIPTION

- Loader with single board feed from a stack
- Easy operation via a touch screen
- Pass mode selectable
- Automatic electrical width adjustment
- SMEMA compliant

CAT. NO.	RE-CM-DU-350A-CT	RE-CM-DU-400A-CT	RE-CM-DU-460A-CT
POWER SUPPLY	230 VAC, 50/60 Hz		
AIR PRESSURE	6 bar		
PCB SIZE	460 x (50 - 350) mm	460 x (50 - 400) mm	535 x (50 - 460) mm
TRANSFER HEIGHT	900 ± 20 mm		
PCB DIRECTION	Option for left to right or right to left		
DIMENSIONS	630 x 850 x 1250 mm	630 x 900 x 1250 mm	630 x 950 x 1250 mm

PCB PUSH-UP-STACKER

DESCRIPTION

- Unloader with PCB stacking feature
- Easy operation via a touch screen
- Pass mode selectable
- Automatic electrical width adjustment
- SMEMA compliant

CAT. NO.	RE-CM-SU-350A-CT	RE-CM-SU-400A-CT	RE-CM-SU-460A-CT
POWER SUPPLY	230 VAC, 50/60 Hz		
AIR PRESSURE	6 bar		
PCB SIZE	460 x (50 - 350) mm	460 x (50 - 400) mm	535 x (50 - 460) mm
TRANSFER HEIGHT	900 ± 20 mm		
PCB DIRECTION	Option for left to right or right to left		
DIMENSIONS	630 x 850 x 1250 mm	630 x 900 x 1250 mm	630 x 950 x 1250 mm

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VACUUM BARE BOARD LOADER

DESCRIPTION

- FUJI button, or touch screen operation options available
- Pass mode selectable
- Precise vacuum PCB pick-up system
- Flexible suction design, position adjustable
- Manual width adjusting system
- Electrical width adjustment available on request
- SMEMA compliant

CAT. NO.	RE-CM-SL-350A-CT/B	RE-CM-SL-400A-CT/B	RE-CM-SL-460A-CT/B
POWER SUPPLY	230 VAC, 50/60 Hz		
AIR PRESSURE	6 bar		
PCB SIZE	460 x (50 - 350) mm	460 x (50 - 400) mm	535 x (50 - 460) mm
TRANSFER HEIGHT	900 ± 20 mm		
PCB DIRECTION	Option for left to right or right to left		
DIMENSIONS	700 x 735 x 1250 mm	750 x 785 x 1250 mm	800 x 835 x 1250 mm
CONTROL PANEL	1. Touch screen, 2. FUJI button		

PCB TURN CONVEYOR

DESCRIPTION

- FUJI button, or touch screen operation options available
- Manual width adjusting system
- Electrical width adjustment available on request
- Controlled with a motor, rotates smoothly and accurately
- 90° turning option
- SMEMA compliant

CAT. NO.	RE-CM-TC-350A-CT/B	RE-CM-TC-400A-CT/B	RE-CM-TC-460A-CT/B
POWER SUPPLY	230 VAC, 50/60 Hz		
AIR PRESSURE	6 bar		
PCB SIZE	400 x (50 - 350) mm	460 x (50 - 400) mm	535 x (50 - 460) mm
TRANSFER HEIGHT	900 ± 20 mm		
PCB DIRECTION	Option for left to right or right to left		
TURN DIRECTION	90° clockwise or counterclockwise		
DIMENSIONS	700 x 700 x 1200 mm	750 x 750 x 1200 mm	800 x 800 x 1200 mm
CONTROL PANEL	1. Touch screen, 2. FUJI button		

AUTOMATIC ASSEMBLY MACHINES

PCB INVERTER

DESCRIPTION

- FUJI button, or touch screen operation options available
- Pass mode selectable
- Manual width adjusting system
- PCB inverting function
- Electrical width adjustment available on request
- SMEMA compliant

CAT. NO.	RE-CM-IC-350A-CT/B	RE-CM-IC-400A-CT/B	RE-CM-IC-460A-CT/B
POWER SUPPLY	230 VAC, 50/60 Hz		
AIR PRESSURE	6 bar		
PCB SIZE	400 x (50 - 350) mm	460 x (50 - 400) mm	535 x (50 - 460) mm
TRANSFER HEIGHT	900 ± 20 mm		
PCB DIRECTION	Option for left to right or right to left		
DIMENSIONS	500 x 800 x 1250 mm	550 x 850 x 1250 mm	600 x 900 x 1300 mm
CONTROL PANEL	1. Touch screen, 2. FUJI button		

TELESCOPIC GATE CONVEYOR

DESCRIPTION

- Conveyor with a telescopic gate passthrough
- FUJI button, or touch screen operation options available
- Electrical width adjustment available on request
- SMEMA compliant

CAT. NO.	RE-CM-TG-350A-CT/B	RE-CM-TG-400A-CT/B	RE-CM-TG-460A-CT/B
POWER SUPPLY	230 VAC, 50/60 Hz		
AIR PRESSURE	6 bar		
PCB SIZE	400 x (50 - 350) mm	460 x (50 - 400) mm	535 x (50 - 460) mm
PASSAGE WIDTH	Max. 900 mm adjusted		
TRANSFER HEIGHT	900 ± 20 mm		
PCB DIRECTION	Option for left to right or right to left		
DIMENSIONS	(750 - 1700) x 740 x 1100 mm	(750 - 1700) x 790 x 1100 mm	(750 - 1700) x 840 x 1100 mm
CONTROL PANEL	1. Touch screen, 2. FUJI button		

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MANUAL LIFT GATE CONVEYOR

DESCRIPTION

- Actuator-assisted lifting
- Manual width adjusting system
- SMEMA compliant

CAT. NO.	RE-CM-GC-350A-CB	RE-CM-GC-460A-CB
POWER SUPPLY	230 VAC, 50/60 Hz	
AIR PRESSURE	6 bar	
PCB SIZE	460 x (50 - 350) mm	500 x (50 - 460) mm
PASSAGE WIDTH	600 mm	
TRANSFER HEIGHT	900 ± 20 mm	
PCB DIRECTION	Option for left to right or right to left	
DIMENSIONS	1000 x 650 x 1100 mm	1000 x 750 x 1100 mm

LOWERING GATE CONVEYOR

DESCRIPTION

- Actuator-assisted lifting and lowering (button controlled)
- Manual width adjusting system
- Electrical width adjustment available on request
- SMEMA compliant

CAT. NO.	RE-CM-GC-350L-CB	RE-CM-GC-460L-CB
POWER SUPPLY	230 VAC, 50/60 Hz	
AIR PRESSURE	6 bar	
PCB SIZE	460 x (50 - 350) mm	500 x (50 - 460) mm
PASSAGE WIDTH	500 mm	
TRANSFER HEIGHT	900 ± 20 mm	
PCB DIRECTION	Option for left to right or right to left	
DIMENSIONS	1300 x 550 x 1200 mm	1300 x 650 x 1200 mm

PCB TRAVERSER

DESCRIPTION

- Manual width adjusting system
- Electrical width adjustment available on request
- Pass mode selectable
- SMEMA compliant

CAT. NO.	RE-CM-SC-350A-CT	RE-CM-SC-460A-CT
POWER SUPPLY	230 VAC, 50/60 Hz	
AIR PRESSURE	6 bar	
PCB WIDTH	50 - 350 mm	50 - 460 mm
TRAVERSING LENGTH	Specified	
TRANSFER HEIGHT	900 ± 20 mm	
PCB DIRECTION	Option for left to right or right to left	
DIMENSIONS	According to traversing length	

ADJUSTABLE MULTI MAGAZINE LOADER

DESCRIPTION

- FUJI button, or touch screen operation options available
- Four pitch selections 10, 20, 30, 40 mm (FUJI Button operation), multiple pitch selectable (touch screen operation)
- Direction from left to right, or right to left
- 3 magazines loading capacity
- SMEMA compliant

CAT. NO.	RE-CM-ML-460AC-CT/B
POWER SUPPLY	230 VAC, 50/60 Hz
AIR PRESSURE	6 bar
PCB SIZE	Min: 50 x 50 mm, max.: 535 x 460 mm
TRANSFER HEIGHT	900 ± 20 mm or specify
PCB DIRECTION	Option for left to right or right to left
MAGAZINE RACK SIZE	355 x 320 x 563 mm, 460 x 400 x 563 mm, 535 x 460 x 570 mm, 535 x 530 x 570 mm
PITCH	10, 20, 30, 40 mm or specify
DIMENSIONS	1750 x 1100 x 1190 mm
CONTROL PANEL	1. Touch screen, 2. FUJI button

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ADJUSTABLE MULTI MAGAZINE UNLOADER

DESCRIPTION

- Unloader with width adjustment function
- FUJI button, or touch screen operation options available
- Four pitch selections 10, 20, 30, 40 mm (FUJI Button operation), multiple pitch selectable (touch screen operation)
- Direction from left to right, or right to left
- 3 magazines loading capacity
- SMEMA compliant

CAT. NO.	RE-CM-MU-460AC-CT/B
POWER SUPPLY	230 VAC, 50/60 Hz
AIR PRESSURE	6 bar
PCB SIZE	Min: 50 x 50 mm, max.: 535 x 460 mm
TRANSFER HEIGHT	900 ± 20 mm lub or specify
PCB DIRECTION	Option for left to right or right to left
MAGAZINE RACK SIZE	355 x 320 x 563 mm, 460 x 400 x 563 mm, 535 x 460 x 570 mm, 535 x 530 x 570 mm
PITCH	10, 20, 30, 40 mm or specify
DIMENSIONS	2500 x 1100 x 1150 mm
CONTROL PANEL	1. Touch screen, 2. FUJI button

FLAT BELT CONVEYOR

DESCRIPTION

- Optional control sensors
- Heat-resistant, ESD belt with non-slip surface
- Customizable length and width

CAT. NO.	RE-CM-C
POWER SUPPLY	230 VAC, 50/60 Hz
PCB WIDTH	Customized
PCB DIRECTION	Option for left to right or right to left
TRANSFER HEIGHT	900 ± 20 mm

OUTFEED CONVEYOR

DESCRIPTION

- Conveyor handles PCBs going out from a wave soldering machine, with height adjustment
- Angle adjustment at PCB input and output
- Heavy-duty aluminum construction
- Optional fan attachment for extra cooling capacity

CAT. NO.	RE-CM-C-120LW
POWER SUPPLY	230 VAC, 50/60 Hz
PCB WIDTH	50 - 450 mm
PCB DIRECTION	Option for left to right or right to left
DIMENSIONS	1200 x 500 x (750 - 1200) mm

RACK MAGAZINE BS-5

DESCRIPTION

- Metal construction
- Made out of conductive polypropylene
- Dimensions: 535 x 530 x 570 mm
- PCB width: 40 - 460 mm
- Distance between slots: 10 mm | Number of slots: 50
- Slots dimensions: depth: 3.5 mm, width: 5 mm
- Resistance: $10^4 - 10^6$ Ω
- Max. operating temperature: 120°C
- Variable width adjustment
- ESD version

RE-BS-5

RACK MAGAZINE HM-6310

DESCRIPTION

- Semi-metal construction
- Made out of conductive polypropylene
- Dimensions: 355 x 315 x 575 mm
- PCB width: 350 x 80 - 250 mm
- Distance between slots: 10 mm
- Slots dimensions: depth: 3.5 mm, width: 8 mm
- Resistance: $10^4 - 10^6$ Ω
- Number of slots: 50
- Adjustable width
- ESD version

RE-HM-6310

PCB TRANSPORT TROLLEY

DESCRIPTION

- Magazine made out of conductive polypropylene
- Stainless steel construction
- Adjustable magazine width
- Slots dimensions: depth: 4.5 mm, width: 4.5 mm
- Distance between slots: 10 mm
- Resistance: $10^6 \sim 10^9$ Ω
- Number of slots: 300
- Dimensions: 900 x 550 x 1380 mm
- Convenient transport handles

RE-BS-I-26

REECO DRY CABINETS

DESCRIPTION

- Cabinets are perfectly suited for ensuring low-humidity levels - essential when storing MSD components (moisture-sensitive devices)

- Items inside the cabinets are stored safely in accordance with IPC / JEDEC J-STD -033B.1 norm.
  They are also protected against static electricity

- Easy to use - simply plug in the power source and the cabinet is ready to use, no need to make any adjustments

- Moisture range: 1 - 10% RH

- All doors are lockable individually

- Average power consumption: 47W

- Max. power consumption: 370W

CAT. NO.	CAPACITY	DIMENSIONS	SHELVES	DOORS
RE-TR-FCDE-160(A)	160 L	450 x 450 x 1030 mm	3	1
RE-TR-FCDE-240(A)	240 L	600 x 400 x 1265 mm	3	2
RE-TR-FCDE-320(A)	320 L	900 x 450 x 1030 mm	3	2
RE-TR-FCDE-435(A)	435 L	900 x 600 x 1030 mm	3	2
RE-TR-FCDE-540(A)	540 L	600 x 750 x 1500 mm	3	2
RE-TR-FCDE-728-2(A)	728 L	600 x 710 x 1920 mm	5	2
RE-TR-FCDE-728-3(A)	728 L	600 x 710 x 1920 mm	5	3
RE-TR-FCDE-870(A)	870 L	900 x 600 x 1880 mm	5	4
RE-TR-FCDE-1428-4(A)	1428 L	1200 x 710 x 1920 mm	5	4
RE-TR-FCDE-1428-6(A)	1428 L	1200 x 710 x 1920 mm	5	6

SAHARA BAKING OVENS

DESCRIPTION

- Many sizes (from 40 to 700 liter) and power to satisfy all different applications

- The ovens are controlled by a digital controller that is easy to set. This digital controller is a smart PID thermo regulator with integrated datalogger and multifunction timer

- Professional forced ventilation oven ideal for:

  - Drying the MSD components to reset the floor life clock
  - Drying the PCBs (Printed Circuit Boards) before the assembly
  - Drying the PBAs (Printed Boards Assembled) before the rework or repair
  - Pre-heating of the PCBs / PBAs to reduce the Δ T °C before rework or repair

CAT. NO.	CAPACITY	DIMENSIONS	SHELVES (INCLUDED/MAX)	POWER SUPPLY
IT-8107103	40 l	686 x 515 x 575 mm	1/7	800W / 230 V
IT-8107105	60 l	746 x 570 x 605 mm	2/7	1200W / 230 V
IT-8107107	80 l	796 x 570 x 680 mm	2/7	1200W / 230 V
IT-8107109	120 l	836 x 680 x 720 mm	2/9	1600W / 230 V
IT-8107111	250 l	956 x 730 x 1025 mm	2/11	2500W / 230 V
IT-8107113	400 l	901 x 815 x 1487 mm	2/11	3200W / 230 V

AUTOMATIC ASSEMBLY MACHINES

STRATEGIC STORAGE SOLUTION

IE-14GP20000

DESCRIPTION

- Not only a cabinet – more than a software
- Based on hardware of intelligent automatic and static warehouse integrated with a software platform
- Main activities:
    - Receipt parts
    - Approval control
    - Labelling
    - Entrance warehouse
    - Panning
    - Picking
    - Set-up SMT line
    - Material consumption
    - Return parts to warehouse
    - Traceability
- FLEXIBILITY TO ADAPT and tailor the system to fit a company's particular production process
- Internal shelves can be moved in any combination permitted by the total given dimension of the cabinet
- Expandable stocking capacity
- Possible insertion of different sizes of reels (7" / 13" – 15")
- Fast loading and unloading
- Optional humidity control system

REELS CAPACITY (NO EXTENSION)			
CONFIGURATION	7"	13" – 15"	TOTAL
LZERO3 SMALL	1500	-	**1500**
LZERO3 STANDARD	900	200	**1100**
LZERO3 MIXED	635	265	**900**
LZERO3 WIDE (8-12-16 MM)	-	700	**700**
LZERO3 WIDE (24-32 MM)	-	400	**400**

EXPANSION

Stocking capacity can be expanded continuously by combining automatic storage cabinets, extenstion storage modules and static warehouse units.

STORAGE CAPACITY	Up to 2088 SMD reels
REELS SIZE	From 7" to 13" – 15"
REELS HEIGHT	8 mm - 12/16 mm - 24 mm - 32 mm - 44 mm - 56 mm - >56 mm - to 88 mm
AVERAGE LOADING / UNLOADING TIME	22 seconds
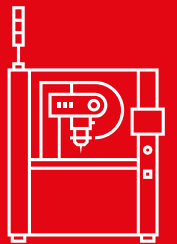
INDUSTRIAL ROBOTS

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MANUFACTURING AND DISTRIBUTION OF INDUSTRIAL ROBOTS

We create modern applications and solutions, which we successfully offer and deliver to manufacturing facilities.

Since 2017 the RENEX ROBOTICS department has been distributing Yamaha robots in Central and Eastern Europe. We offer a wide range of industrial robots that meet the requirements and expectations of each industry sector.

Detailed offer and more information about the company can be found on our website:

RENEXROBOTICS.**PL**

YAMAHA ROBOTICS DISTRIBUTOR

YAMAHA Robots are used in several countries on manufacturing lines in various industries such as the electronic components assembly, large LCD panels manufacturing, pharmaceutical, medical and automotive industries.

ROBOT MANUFACTURER

The offer includes robots for selective soldering of through-hole elements using SCARA robots and robots for dosing and potting. The machines are equipped with edge transport and SMEMA interface, compliant with IPC guidelines.
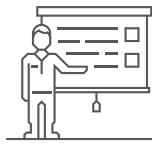
TRAININGS

We provide training and consulting services for engineers, operators, technologists and maintenance personnel.

TECHNICAL SUPPORT

We provide professional support throughout the country, both at the customer's premises and at the Renex Technology Center.
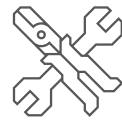
WARRANTY SERVICE

We provide warranty and post-warranty service. We offer an extension of the warranty period.

ARE YOU AN INTEGRATOR?

We are eager to establish cooperation in the area of supply and training in the field of process automation in various branches of industry.

For more information, please contact us.

BUSINESS INFORMATION
T: + 48 601 592 555

TECHNICAL INFORMATION
T: + 48 603 505 950

WIDE RANGE
OF INDUSTRIAL ROBOTS

EFFECTIVE AUTOMATION
OF MANUFACTURING PROCESSES

THE HIGHEST QUALITY
OF OFFERED PRODUCTS

YAMAHA INDUSTRIAL ROBOTS SCARA TYPE

DESCRIPTION

- Industry-leading working speed, accuracy and precision
- Arm length: from 120 mm to 1200 mm
- Maximum load: 1 kg – 50 kg

YJ-YK-X

YAMAHA INDUSTRIAL ROBOTS SCARA ORBIT TYPE

DESCRIPTION

- The working area is a rectangular plan
- Arm length: 350 mm and 500 mm
- Maximum load: 4 kg – 5 kg

YJ-YK-TW

YAMAHA INDUSTRIAL ROBOTS CARTESIAN TYPE

DESCRIPTION

- Wide range of possible configurations in terms of load capacity, dimensions and transmission methods
- Yamaha controllers support up to 16 axes in one system
- XY-X axis length: 150 mm – 2050 mm
- Maximum load: 4.5 kg – 40 kg

YJ-XY-X

YAMAHA TRANSPORT LINES LCM 100

DESCRIPTION

- Drive type: moving magnet type, linear motor with flat core
- Repeat positioning accuracy: +/- 0.015 mm (single slider) width 0.1 mm (mutual difference among all sliders)
- Scale: Electromagnetic type / resolution 5 µm
- Maximum speed: 3000 mm/sec
- Maximum acceleration: 2 G
- Maximum load: 15 kg

YJ-LCM-100

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YAMAHA INDUSTRIAL CLEANROOM ROBOTS

YJ-YK-X-CR

DESCRIPTION

- Robots designed for cleanroom environments
- Sealed robot design prevents dust emission and ensures a high degree of cleanliness
- Arm length: from 120 mm to 1200 mm
- Maximum load: 1 kg – 50 kg

YAMAHA PRECISE ELECTRIC GRIPPERS

YJ-GR

DESCRIPTION

- Wide range of available models
- Vertical and horizontal versions
- Controls integrated with the robot

YAMAHA VISION SYSTEMS

YJ-IVY2

DESCRIPTION

- Easy plug-and-play installation
- Works with mobile transport systems
- Cameras with resolutions from 0.3 Mpx to 5 Mpx
- Integrated lighting control

YAMAHA SINGLE AXIS GX ROBOT

YJ-GX

DESCRIPTION

- Ground ball screws as a standard feature
- All models comply with JIS Standard accuracy class C5
- Positioning accuracy repeatability: ±5µm
- Stroke range: 50 mm to 1.450 mm
- Maximum carrying capacity: 160 kg

REECO RE-2100 SOLDERING ROBOT (PREMIUM HOUSING)

**ROBOT AVAILABLE IN CLASSIC
AND PREMIUM HOUSING OPTIONS**

DESCRIPTION

- Automatic positioning of the formats/PCB
- Control over all process parameters
- Soldering wire sensor and wire jam detection sensor
- Soldering wire feeder for different wire thickness: 0.8 mm, 1.0 mm and 1.2 mm
- Precise stabilization and temperature control of the soldering tip +/- 2°C
- More than 45 types of soldering handle tips
- Inductively heated tip provides a much faster transfer of heat energy
- Automatic tip cleaning system during operation
- Allows for soldering of components to paths connected to large mass fields
- Professional soldering station that allows for 24/7 operation.
- Control of the entire device via Siemens PLC
- Modular, durable housing on a solid metal frame, compliant with the new EU directives
- Device equipped with edge transport built in compliance with IPC SMEMA guidelines and capable of communicating with other machines

OPTIONS

- Soldering with nitrogen shielding
- Camera for verifying reference points
- Color sensor for detection of lead/lead free spool
- Automatic optical inspection system

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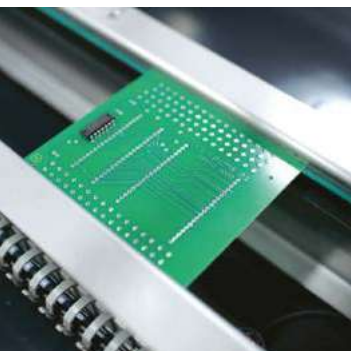
REECO RE-1200 DOSING ROBOT (CLASSIC HOUSING)

ROBOT AVAILABLE IN CLASSIC AND PREMIUM HOUSING OPTIONS

DESCRIPTION

- Automatic positioning of the formats/PCB
- Programmable mixture/liquid dosing cycle
- Programmable pressure and arm movement speed parameters
- Compatible with different types of dosing valves

OPTIONS

- Dosage of mixtures of different densities through the use of optional dedicated valves
- Can be equipped with a 6-axis robot
- Camera for verifying reference points on PCB or format
- Video system for automatic optical inspection
- Possibility of equipping the unit with a cassette vapour filtration system

The only machine on the market equipped with edge transportation system

(Both soldering and dosing robot)

PRODUCT CONFIGURABLE ON INDIVIDUAL REQUEST

For more information and answers to any questions you may have, please contact our Technical and Sales Advisors.

Contact us:

T: + 48 601 592 555
E: office@renexrobotics.pl

ROBOT SPECIFICATIONS			
WIDTH OF SUPPORTED APPLICATIONS	350 mm		
LENGTH OF SUPPORTED APPLICATIONS	420 mm		
WEIGHT	300 kg		
	Width (mm)	Height (mm)	Depth (mm)
DIMENSIONS	1200	1830 / 2390	945
ROBOT ARM SPECIFICATION			
	X axis	Y axis	Z axis	R axis
ARM LENGTH	350 mm	250 mm	150 mm	150 mm
AVAILABLE ANGLE OF ROTATION	+/-140º	+/-144º	-	+/-360º
SERVO POWER	200 W	150 W	50 W	100 W
TRANSMISSION TYPE	Strain wave	Strain wave	Strain wave	Strain wave
REPEATABILITY*	+/-0,01 mm	+/-0,01 mm	+/-0,01 mm	+/-0,004 º
MAX. SPEED	4,9 m/sec	4,9 m/sec	1,1 m/sec	1020 º/sec
MAX. LOAD	5 kg			
WEIGHT	22 kg			

HOUSING OPTION

Light curtains are an additional option for the Reeco robot housing configuration.

Safety light curtains ensure a safe work environment in potentially high-risk areas.

Invisible safety field ensures protection in potentially hazardous areas. Disruption of the light beams results in immediate execution of a safe emergency stop.

Thanks to its slim design, the light curtains provide an ergonomic working environment for space-saving applications.

The curtains are integrated into the robot, which in case of human interference during robot work, leads to immediate shutdown of the robot.
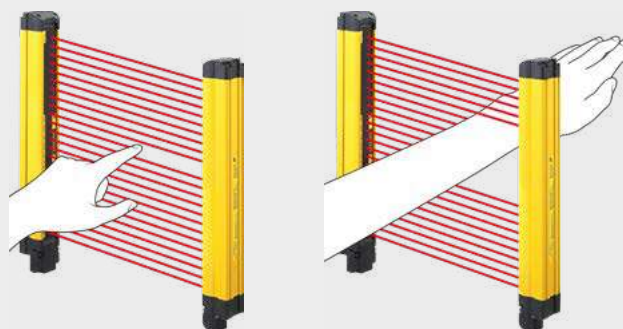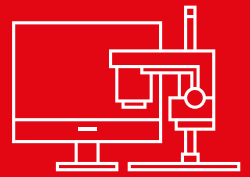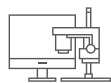
INSPECTION EQUIPMENT

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DAYLIGHT QUADRA PLUS MAGNIFIER

DESCRIPTION

- Quadra Magnifier PlusTM has an extra wide, 3 diopter (1.75X), lightweight rectangular acrylic lens, providing a superb panoramic view and precise inspection of mechanical and electrical components

- High power 6,000°K daylight LEDs on both sides of the lens give shadow-free magnification, or alternatively, each side can be independently turned on or off to give 3D viewing

- Heavy duty internal spring arm with side covers allows accurate and consistent positioning and an auto power off function saves energy

- The 12 diopter (4.0X) swing arm lens is included and various alternative diopter suction lenses are available separately

PRIMARY LENS MAGNIFICATION	3D (1.75x)
LENS MATERIAL	Acrylic
LIGHT SOURCE	32 SMD LED
COLOUR TEMPERATURE	6000ºK
POWER CONSUMPTION	10 W

DA-E25140

DAYLIGHT QUADRA ESD & UV MAGNIFIER

DESCRIPTION

- Quadra ESD & UV MagnifierTM has 4 features in 1: full ESD compliance, extra wide rectangular lens, daylight 6,000K LEDs & UV-A LEDs

- High tech carbon-fibre and special conductive coatings guarantee full ESD compliance for the lifetime of the magnifier (according to IIEC 61340-5-1)

- High power 6,000°K daylight LEDs on both sides of the lens give shadow-free magnification, or alternatively, each side can be independently turned on or off to give 3D magnification

- Heavy duty internal spring arm allows accurate and consistent positioning and an auto switch off function saves energy

PRIMARY LENS MAGNIFICATION	3D (1.75x), 12D (4.0x)
LENS MATERIAL	Optical Quality Low Iron Glass
LIGHT SOURCE	60 SMD LED
COLOUR TEMPERATURE	6000ºK
POWER CONSUMPTION	9 W

DA-E25181

DAYLIGHT IQ MAGNIFIER

DESCRIPTION

- The IQ has a large 17.5 cm (7") diameter, 3 diopter (1.75X), lightweight acrylic lens, providing the largest field of view, to allow precise inspection of small mechanical and electrical parts

- High power 6,000°K daylight LEDs give the optimum light for detailed inspection

- Heavy duty internal spring arm with side covers allows accurate and consistent positioning

- Fitted with removable lens protector for soldering. An optional 12.7 cm (5") diameter, 5 diopter (2.25X) lens is available separately

PRIMARY LENS MAGNIFICATION	3D (1.75x), 12D (4.0x)
LENS MATERIAL	Acrylic
LIGHT SOURCE	60 SMD LED
COLOUR TEMPERATURE	6000ºK
POWER CONSUMPTION	12 W

DA-E25100

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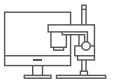
DAYLIGHT OMEGA 7 LED MAGNIFIER

DESCRIPTION

- The Omega 7 Magnifier is a modern, ergonomically designed magnifying lamp. It has a large 17.5cm (7") diameter, 3 diopter (1.75X), lightweight acrylic lens
- High power LEDs with 2 brigthness levels for clear viewing
- The internal spring arm allows accurate positioning
- An optional 12.7cm (5") diameter, 5 diopter (2.25X) lens and a 12 diopter (4.0X) swing arm lens are available separately

DA-E25130

PRIMARY LENS MAGNIFICATION	3D (1.75x)
LENS MATERIAL	Acrylic
LIGHT SOURCE	60 SMD LED
COLOUR TEMPERATURE	6000°K
POWER CONSUMPTION	12 W

DAYLIGHT OMEGA 7 ESD MAGNIFIER

DESCRIPTION

- Large 17.5 cm (7") diameter, 3 diopter (1.75X) optical quality glass lens provides the largest field of view to allow precise inspection
- Omega 7 ESD Magnifier™ uses carbon-fibre and special conductive coatings to guarantee 100% ESD compliance for the lifetime of the magnifier. According to IEC 61340-5-1
- Supplied with 12 diopter (4.0X) swing arm lens for inspecting fine detail
- An optional 12.7 cm (5") diameter, 5 diopter (2.25X) lens is available separately

DA-E25171

PRIMARY LENS MAGNIFICATION	3D (1.75x), 12D (4.0x)
LENS MATERIAL	Optical Quality Low Iron Glass
LIGHT SOURCE	60 SMD LED
COLOUR TEMPERATURE	6000°K
POWER CONSUMPTION	12 W

DAYLIGHT OMEGA 5 MAGNIFIER

DESCRIPTION

- The Omega 5 Magnifier™ has two small 12.7 cm (5") diameter lenses in both 3 diopter (1.75X) and 5 diopter (2.25X)
- High power LEDs with 2 brigthness levels for clear viewing
- The internal spring arm allows accurate positioning
- Modern, ergonomical design

DA-E25110

PRIMARY LENS MAGNIFICATION	3D (1.75x), 5D (2.25x)
LENS MATERIAL	Glass
LIGHT SOURCE	42 SMD LED
COLOUR TEMPERATURE	6000°K
POWER CONSUMPTION	8 W

DAYLIGHT OMEGA 5 LED ESD MAGNIFIER

DA-E25151

DESCRIPTION

- Large 17.5 cm (7") diameter, 3 diopter (1.75X) optical quality glass lens provides the largest field of view to allow precise inspection
- Carbon-fibre and special conductive coatings to guarantee 100% ESD compliance for the lifetime of the magnifier. According to IEC 61340-5-1

PRIMARY LENS MAGNIFICATION	3D (1.75x), 5D (2.25x)
LENS MATERIAL	Optical Quality Low Iron Glass
LIGHT SOURCE	42 SMD LED
COLOUR TEMPERATURE	6000°K
POWER CONSUMPTION	8 W

DAYLIGHT SLIMLINE LED MAGNIFIER

DA-E25030

DESCRIPTION

- Includes 2 glass lenses 3 diopter (1.75X) and 5 diopter (2.25X)
- Bright daylight SMD LEDs, Lamp brightness 5,500 Lux at 15cm (6")
- Long arm reach
- Supplied with table clamp

PRIMARY LENS MAGNIFICATION	3D (1.75x)
LENS MATERIAL	Optical Quality Low Iron Glass
LIGHT SOURCE	36 SMD LED
COLOUR TEMPERATURE	6000°K
POWER CONSUMPTION	7.2 W

DAYLIGHT ACCESORRIES

- Table base, compatible with all magnifiers except DA-E25151

- 5 diopter lens (2.25X)
- Acrylic
- For DA-E25130, DA-E22080, DA-E25100

- Floorstands
- Compatible with: DA-E25100, DA-E25130, DA-E25110, DA-E22080, DA-E35600

- Drawning board clamp
- Allows magnifiers to be clamped to a sloping/angled surface
- Compatible with all Daylight magnifiers except the DA-E25151, DA-E35611

- Additional 12 diopter swing arm lens (4.0X)
- Compatible with: DA-E25100, DA-E22080

- Wall bench bracket for DA-E22080
- Allows magnifiers to be secured to a flat vertical surface

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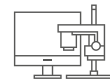
DIGITAL MICROSCOPE TAGARNO ZIP FHD

TG-MAGNUS-FHD-ZIP

DESCRIPTION

- Full HD technology ensures the highest image quality
- Maximum magnification: 48.1x
- Optical zoom: 30x
- Lens to object distance: min. 250 mm

STANDARD EQUIPMENT

- Digital microscope ZIP FHD
- XKEY Control box
- Lens: +4

MAGNIFICATION RANGE	1.6 - 48.1x (on 22" monitor)
WEIGHT	2.0 kg
AUTOFOCUS	Yes
MANUAL FOCUS	Yes
RESOLUTION	Full HD 1080p (1920 x 1080 – 60 Hz)
CONNECTORS	Micro-USB 3.0, Mini-HDMI
POWER CONSUMPTION	15 W

DIGITAL MICROSCOPE TAGARNO ZAP FHD

TG-MAGNUS-FHD-ZAP

DESCRIPTION

- The perfect solution for visual inspection on production lines
- Maximum magnification: 116x
- Optical zoom: 30x
- Lens to object distance: adjustable
- Laser pointer

STANDARD EQUIPMENT

- Digital microscope ZAP FHD
- VESA mount
- Lens: +4

MAGNIFICATION RANGE	1.6 - 116x (on 22" monitor)
WEIGHT	1.5 kg
AUTOFOCUS	Yes
MANUAL FOCUS	Yes
RESOLUTION	Full HD 1080p (1920 x 1080 – 60 Hz)
CONNECTORS	HDMI, USB 3.0
POWER CONSUMPTION	7.4 W
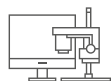
DIGITAL MICROSCOPE TAGARNO UNO FHD

TG-MAGNUS-FHD-UNO

DESCRIPTION

- An innovative video-microscope which uses Full HD technology
- Maximum magnification: 82x
- Optical zoom: 20x
- Lens to object distance: max. 415 mm
- Laser pointer
- The perfect solution for visual inspection on production lines

STANDARD EQUIPMENT

- Digital microscope UNO FHD
- Lens: +4

MAGNIFICATION RANGE	1.3x - 82x (on 22" monitor)
WEIGHT	5.2 kg
AUTOFOCUS	Yes
MANUAL FOCUS	Yes
RESOLUTION	Full HD 1080p (1920 x 1080 – 50/60 Hz)
CONNECTORS	HDMI
POWER CONSUMPTION	20 W

DIGITAL MICROSCOPE TAGARNO TREND FHD

TG-MAGNUS-FHD-TREND

DESCRIPTION

- An innovative video-microscope which uses Full HD technology
- Maximum magnification: 297x
- Optical zoom: 30x
- Lens to object distance: max. 335 mm

STANDARD EQUIPMENT

- Digital microscope TREND FHD
- Lens: +4

MAGNIFICATION RANGE	1.2x - 297.1x (on 22" monitor)
WEIGHT	6.8 kg
AUTOFOCUS	Yes
MANUAL FOCUS	Yes
RESOLUTION	Full HD 1080p (1920 x 1080 – 50/60 Hz)
CONNECTORS	HDMI
POWER CONSUMPTION	20 W

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DIGITAL MICROSCOPE TAGARNO PRESTIGE FHD

TG-MAGNUS-FHD-PRESTIGE

DESCRIPTION

- An innovative video-microscope which uses Full HD technology
- Maximum magnification: 590x
- Optical zoom: 30x
- Lens to object distance: max. 270 mm

STANDARD EQUIPMENT

- Digital microscope PRESTIGE FHD
- Lens: +4

MAGNIFICATION RANGE	1.6x – 591.4x (on 22" monitor)
WEIGHT	11 kg
AUTOFOCUS	Yes
MANUAL FOCUS	Yes
RESOLUTION	Full HD 1080p (1920 x 1080 – 50/60 Hz)
CONNECTORS	HDMI
POWER CONSUMPTION	20 W

TAGARNO ACCESSORIES

- Lens cover for +3, +4, +5 and +10
- Protects from scratches and keeps the lens clean
- Suitable for all TG digital microscopes

- Achromatic lenses +3, +4, +5 and +10
- Diameter: 58 mm
- Suitable for: FHD PRESTIGE, FHD TREND, FHD UNO

- Lenses with adapters:
  +25 - magnification range 9.6x – 297.1x
  +50 - magnification range 19x – 592x
- Diameter: 26 mm
- Suitable for: FHD PRESTIGE, FHD TREND

- Monitor flex arm
- Carrying capacity: 3 – 10 kg
- Suitable for all TG digital microscopes

- XKEY controller
- Controls magnification and focus of the image
- Suitable for: FHD TREND, FHD PRESTIGE, FHD UNO, FHD ZIP, FHD ZAP

- Monitor 22", 24"
- Format 16:9
- DVI and HDMI input
- Resolution: FHD 1080p

- Foot switch with zoom function
- Compatible with XKEY or XPLUS FHD control boxes
- Suitable for all TG digital microscopes

- Circular tilting table
- Allows for precise positioning of the observed object
- ESD safe surface
- Suitable for: FHD PRESTIGE, FHD TREND, FHD UNO, FHD ZAP

- Large built-in XY table
- Durable and stable construction
- Precise positioning of the observed object at high magnification
- Suitable for: FHD TREND, FHD UNO

- XPLUS FHD control box
- Control the microscope camera functions
- Access to the camera settings
- Suitable for: FHD PRESTIGE, FHD TREND, FHD UNO
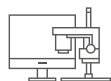
DIGITAL MICROSCOPE ASH INSPEX HD 1080P

AS-FI-801-017

DESCRIPTION

- Maximum magnification: 237x (while using the optional +10 lens)
- Lens to object distance: max. 250 mm
- Store images directly to a USB Storage Device
- Easy adjustment of the height and angle of the head
- ESD protection - grounding cable
- LED lighting with angle adjustment built into the arm

STANDARD EQUIPMENT

- Digital microscope INSPEX HD 1080p Table
- Lens: +4

DIGITAL MICROSCOPE ASH OMNI

AS-OMNI

DESCRIPTION

- Maximum magnification: 662.4x (while using the optional +25 lens)
- Lens to object distance: max. 200 mm
- Optical zoom: 30x
- Built-in measuring system with automatic calibration
- Plug&Play technology
- Omni GUI interface providing control over the applications, operated with a mouse

STANDARD EQUIPMENT

- Digital microscope Omni
- Lens: +5
- Mouse (with mouse pad) and keyboard

MODEL	INSPEX	OMNI
MAGNIFICATION RANGE	1,8x - 237x (while using the optional lenses)	2,5x - 662.4x (while using the optional lenses)
WEIGHT	2,5 kg	1,75 kg
AUTOFOCUS	Yes	
MANUAL FOCUS	Yes	
RESOLUTION	Full HD1080p (1920 x 1080 – 60 Hz)	
CONNECTORS	HDMI, USB 2.0	HDMI, USB 2.0, RJ45 Ethernet
POWER CONSUMPTION	8 W	24 W

ASH ACCESORIES

- Single and dual-arm stands
- Table mounted multi-arm stands

- Inspex: 3x, 4x, 5x and 10x lenses with 52 mm diameter
- Omni: 10x and 25x lenses with 58 mm diameter

- X-Y positioning tables
- Durable and stable construction
- Tables with measuring scales available

- Foot switch with zoom function
- Suitable for: Inspex

- LED point and right lights
- UV lighting

- Omni and Inspex hard cases made out of durable ABS

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ERGONOMIC STEREOMICROSCOPE VISION MANTIS COMPACT

VI-MANTIS-C

DESCRIPTION

- Quick and easy interchangeable 2x, 4x, 6x, 8x lenses
- True color, LED illumination provides a very long time of shadow-free inspection
- Long working distance
- Patented optical technology allows for freedom of head movement for superb ergonomics and hand-eye co-ordination

STANDARD EQUIPMENT

- Mantis Compact head
- Universal stand
- Selected lens

LENSES	2x	4x	6x	8x
WORKING DISTANCE	167 mm	96 mm	73 mm	58,5 mm
FIELD OF VIEW	45 mm	27,5 mm	19,2 mm	14,3 mm
LIGHT INTENSITY	20 LEDs	9400 LUX		10000 hours
BACKLIGHT	13 LEDs	1200 LUX		10000 hours
POWER SUPPLY	9V DC external plug transformer			

ERGONOMIC STEREOMICROSCOPE VISION MANTIS ELITE

VI-MANTIS-E

DESCRIPTION

- Excellent optical capabilities
- Large observation screen allows for increased freedom of head movement during work
- Long working distance and wide field of view
- „Cold" LEDs with long working life, provide accurate colour reproduction of the observed object
- Optional stands - Bench stand and Articulated Arm stand
- Patented, modern design

STANDARD EQUIPMENT

- Mantis Elite head
- Universal or Bench stand
- Selected lens

LENSES	4x	6x
	8x	10x
	15x	20x
WORKING DISTANCE	96 mm	68 mm
	59 mm	54 mm
	40 mm	29 mm
FIELD OF VIEW	34 mm	23 mm
	17 mm	13,5 mm
	8,8 mm	6,5 mm
LIGHT INTENSITY	24 LEDS	11000 LUX	10000 hours
BACKLIGHT (BENCH STANDS ONLY)	13 LEDS	1200 - 4000 LUX	10000 hours
POWER SUPPLY	9V DC external plug transformer		
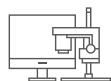
STEREOSCOPIC MICROSCOPES

- Attractively priced solutions with vast expansion capabilities

- Wide range of accessories: lighting, measuring tables, adapters, focusing eyepieces and reticular variants.

- Microscope series with a third eyepiece available for connecting a digital camera

- Microscopes with top lighting with a long lifespan, which do not heat up the observed objects

- Long distance between the lens and the observed object, with smooth adjustment

- Freely adjustable head – tube inclined at 45° with 360° rotation available

- With the optional equipment, you can achieve magnification of up to 224x

- Models with backlighting of observed objects, built into the base

STEREO MICROSCOPE 44P

CA-DSZ-44P

STEREO MICROSCOPE 44P-LED

CA-DSZ-44P-LED

TRINOCULAR STEREO MICROSCOPE T-44P

CA-DSZT-44P

TRINOCULAR STEREO MICROSCOPE T-44P-LED

CA-DSZT-44P-LED

MODEL	DSZ-44P	DSZT-44P	DSZ-44P-LED	DSZT-44P-LED
CAT. NO.	CA-DSZ-44P	CA-DSZT-44P	CA-DSZ-44P-LED	CA-DSZT-44P-LED
EYEPIECE	Wide angle			
DIOPTER ADJUSTMENT	+5,6D – 7,2D for both eyepieces			
FIELD OF VIEW	From 23 mm to 5,2 mm			
WORKING DISTANCE	90 mm			
INTERPUPILLARY DISTANCE	52 - 75 mm			
INCIDENT LIGHTING	None		LED ringlight (CA-LED-60T or CA-MIC-56)	
BASE DIMENSIONS	220 x 284 mm			
HEIGHT	328 mm	327 mm	353 mm	327 mm
THIRD EYEPIECE	No	Yes	No	Yes

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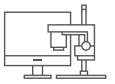
STEREO MICROSCOPE 70P

CA-DSZ-70P

STEREO MICROSCOPE 70P-LED

CA-DSZ-70P-LED

TRINOCULAR STEREO MICROSCOPE T-70P

CA-DSZT-70P

TRINOCULAR STEREO MICROSCOPE T-70P-LED

CA-DSZT-70P-LED

MODEL	DSZ-70P	DSZT-70P	DSZ-70P-LED	DSZT-70P-LED
CAT. NO.	CA-DSZ-70P	CA-DSZT-70P	CA-DSZ-70P-LED	CA-DSZT-70P-LED
EYEPIECE	Wide angle			
DIOPTER ADJUSTMENT	+5,6D – 7,2D for both eyepieces			
FIELD OF VIEW	From 10 mm to 2,8 mm			
WORKING DISTANCE	80 mm			
INTERPUPILLARY DISTANCE	53 - 75 mm			
INCIDENT LIGHTING	None		LED ringlight (CA-LED-60T or CA-MIC-56)	
BASE DIMENSIONS	220 x 284 mm			
HEIGHT	317 mm	353 mm	317 mm	
THIRD EYEPIECE	No	Yes	No	Yes
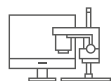
MICROSCOPE SERIES NSW-20P/30P/40P

CA-NSW-20P/30P/40P

MICROSCOPE SERIES NSW-20P-LED/30P-LED/40P-LED

CA-NSW-20P-LED/30P-LED/40P-LED

SERIES	NSW-20P/30P/40P	NSW-20P-LED/30P-LED/40P-LED
MAGNIFICATION WITH STANDARD CONFIGURATION	NSW-20P - 10x i 20x	NSW-20P-LED - 10x i 20x
	NSW-30P - 10x i 30x	NSW-30P-LED - 10x i 30x
	NSW-40P - 20x i 40x	NSW-40P-LED - 20x i 40x
DIOPTER ADJUSTMENT	+5,6D - 7,2D one the left eyepiece	+5,6D - 7,2D one the left eyepiece
WORKING DISTANCE	NSW-20P - 113 mm	NSW-20P-LED - 82,5 mm
	NSW-30P - 82,5 mm	NSW-30P-LED - 82,5 mm
	NSW-40P - 64,3 mm	NSW-40P-LED - 64,3 mm
INTERPUPILLARY DISTANCE	52 - 75 mm	
INCIDENT LIGHTING	None	LED ringlight (CA-LED-60T or CA-MIC-56)
STAND HEIGHT	250 mm	
BASE DIMENSIONS	220 x 284 mm	
HEIGHT	305 mm	

LIGHTING

SPECIFICATION

CAT. NO.	LIGHTING TYPE	LIFESPAN
CA-MIC-56	White ring light	Est. 10000 hours
CA-LED-60T	White ring light	Est. 10000 hours
CA-L-150FL	Reticular focusing lens	-
CA-L-150R60/L	Fiber optic 150 W	Est. 200 hours

DOUBLE ARM BOOM STAND

SPECIFICATION

- Universal double arm boom stand without holder

487mm

420mm

260mm

CA-DBS-2

CAMERAS AND PHOTO/VIDEO ADAPTERS

SPECIFICATION

CAT. NO.	DESCRIPTION	CAT. NO.	DESCRIPTION
CA-ADC25	Camera adapter for digital cameras	CA-VC-P-5MPIX	SCMOS camera, 2592 x 1944 pixels
CA-TVA-45	TV Camera Adapter for C-mount CCD camera	CA-VC-P-3MPIX	SCMOS camera, 2048 x 1536 pixels
CA-DG	Camera adapter for digital SLR cameras	CA-Z1014E	CMOS camera, 640 x 480 pixels

RETICULAR FOCUSING EYEPIECE

SPECIFICATION

CAT. NO.	MAGNIFICATION	SCALE	DESCRIPTION
CA-DFSW10XCROSS		10:100 mm	Scale with cross line
CA-DFSW10XLine		–	Cross line
CA-DFSW10XH10/10		–	Grid: 10:10 mm Raster: 1 mm
CA-DFSW10XH10/20	10x	–	Grid: 20:20 mm Raster: 0.5 mm
CA-DFSW10XH5/5		–	Grid: 5:5 mm Raster: 1 mm
CA-DFSW10X10/100		10:100 mm	–
CA-DFSW10X5/100		5:100 mm	–

FOCUSING EYEPIECES

SPECIFICATION

CAT. NO.	MAGNIFICATION	FIELD OF VIEW	COMPATIBILITY
CA-DHW10X	10x	23 mm	T-44/NSW
CA-DHW15X	15x	15 mm	SPZ-50/ SPZT-50
CA-DHW20X	20x	11,4 mm	SPZ-50/ SPZT-50
CA-DSW10X	10x	23 mm	44/T-44/NSW
CA-DSW10XZ	10x	20 mm	70/T-70
CA-DSW15X	15x	15 mm	44/T-44/NSW/70/T-70
CA-DSW20X	20x	11,4 mm	44/T-44/NSW

AUXILIARY OBJECTIVE LENSES

SPECIFICATION

CAT.NO.	MAGNIFICATION
CA-NSAL1,6X	1,6x
CA-NSAL2X	2x
CA-NSAL0,75X	0,75x
CA-NSAL0,5X	0,5x
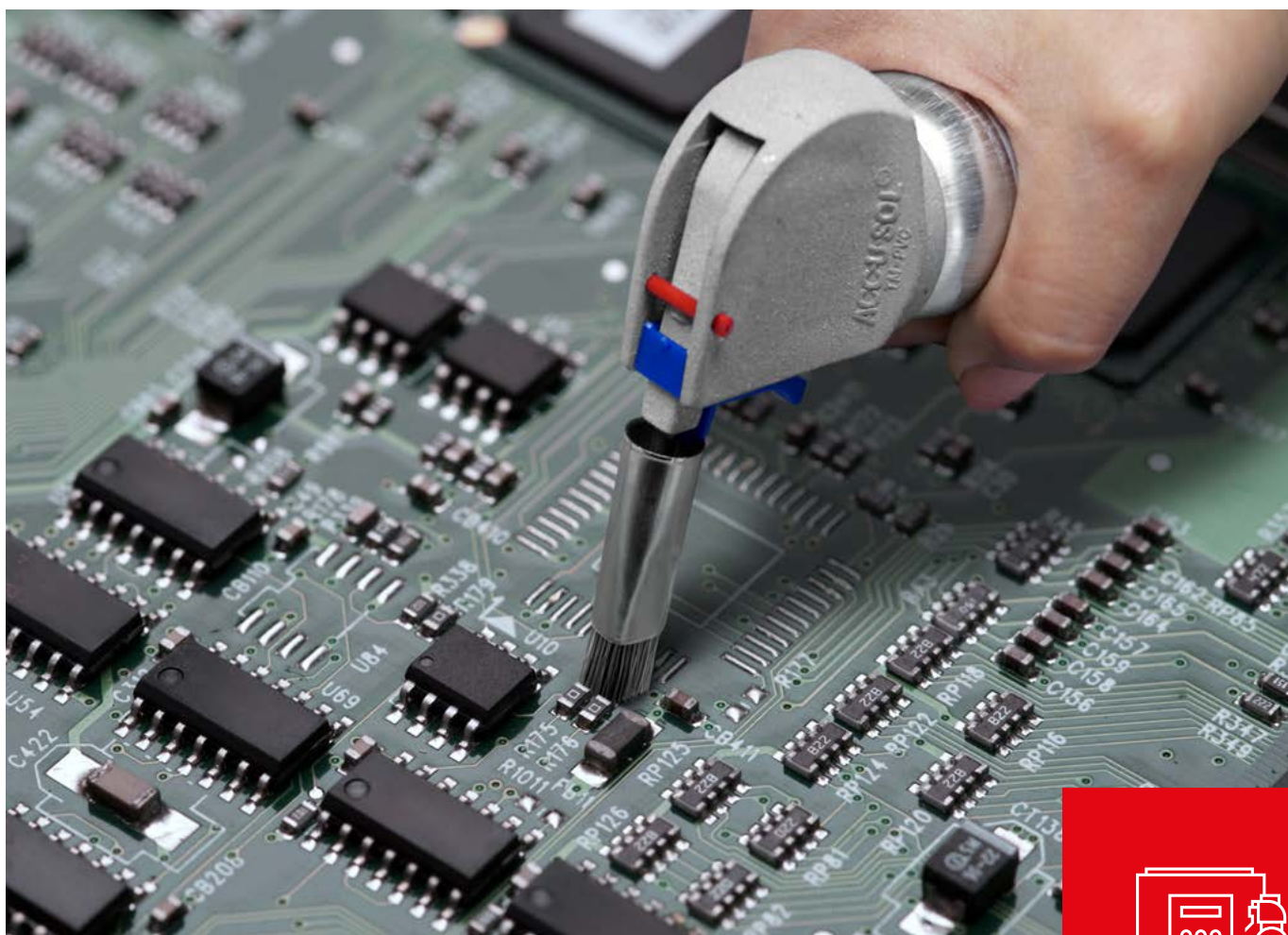
CLEANING AGENTS
AND EQUIPMENT

125

M1000 AUTOMAT FOR PCBA CLEANING

RE-001000

DESCRIPTION

- Capacity: 48 boards, dimensions: 340 x 260 mm
- Maximum PCB size: 340 x 260 mm
- 4 standard washing programs
- Easy to use
- Automatic control of contamination level
- Possibility of washing misprinted PCBs
- Low operating costs

M2000 CLEANING SYSTEM

RE-002000

DESCRIPTION

- For printed circuit boards, paste misprints, solder frames, SMD-stencils, small parts
- Capacity (with 10 mm height) of 170 euro Cards
- Stainless steel wash frame designed to receive the assembled printed circuit boards
- Large graphic display with simple, clearly arranged user interface
- Cleaning programs can be created individually
- Automatic dosing of liquid detergent with dosing monitoring
- Monitoring the purity level of the final rinse water (conductivity measurement)
- Low washing agent consumption
- Issue of data cleaning via the built-protocol printer
- Long operational life and cost-effectiveness

MODEL	M1000	M2000
CLEANING TEMPERATURE	20°C – 70°C	
CLEANING TIME	5 – 40 min	
RINSE TEMPERATURE	20°C – 70°C	
CYCLE LENGTH	2 - 10 min	
RINSE CYCLE	0 - 5	0 - 6
HOT AIR DRYING TEMPERATURE	50°C – 100°C	
POWER SUPPLY	230 V	
POWER CONSUMPTION	2,1 kW	3,0 kW
RUNNING NOISE	55 dB(A)	
WATER CONSUMPTION PER FILLING	3L	5 - 6L
DIMENSIONS OF THE PCB BASKET	39 x 38 cm	
MAX. PCB DIMENSIONS (WITH THE BASKET) / (IN THE FRAME)	490 mm x 250 mm / 405 mm x 503 mm	340 x 260 mm
DIMENSIONS	52 x 55 x 69 cm	90 x 60 x 78 cm
WEIGHT	40 kg	80 kg

REECO ULTRASONIC CLEANER US100

RE-US100

REECO ULTRASONIC CLEANER US200

RE-US200

REECO ULTRASONIC CLEANER US300

RE-US300

REECO ULTRASONIC CLEANER US400
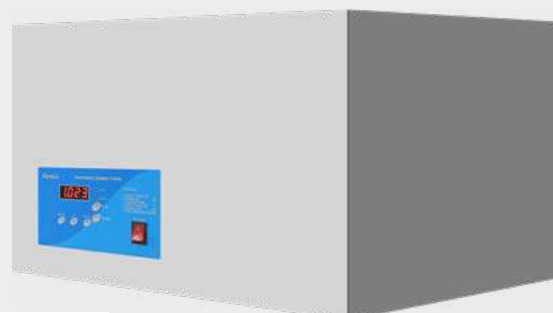
RE-US400

DESCRIPTION

- Ultrasound power and temperature of washing liquid set in real time
- The duration of the process is set in the range from 0 to 99 minutes
- Temperature control of washing liquid (in case of overheating the process stops until the liquid cools down)
- Beep a minute before the end of the process and at the end of the process
- Low cost of ownership (modular construction of the cleaner enables exchange of any component)
- Durable and homogeneous housing made of acid-resistant sheet
- Deepest tank in this class of devices: 200 mm
- High efficiency of ultrasound transmission
- Each cleaner equipped with a lid and a pump that pumps the fluid

APPLICATION

- Electronic – any contamination, dirt from PCBs and component cleaning
- Medicine – dental and surgical tools cleaning
- Dentistry and prosthetics – dental plates and clamps cleaning
- Jewellery – jewellery cleaning
- Watch-making – clocks mechanisms cleaning
- Optic – precise glasses cleaning without taking out lenses from holders, objectives and lenses
- Gunsmith – weapons cleaning
- Mechanic – cleaning of carburettors, bearing, injectors, etc.
- Numismatics - exhibits from polishing paste cleaning
- Laboratories – cuvettes and equipment cleaning (eg. glass sampling pipettes)

MODEL		US100	US200	US300	US400
CAT. NO.		RE-US100	RE-US200	RE-US300	RE-US400
POWER SUPPLY		230 V / 50 Hz			
MAX. POWER OF GENERATING ULTASOUNDS		100 W	200 W	400 W	800 W
MAX. POWER OF HEATING ELEMENT		300 W	500 W	1000 W	2400 W
CAPACITY OF WASHING TANK	MAXIMUM	7,3 L	12 L	26 L	52 L
	OPTIMAL	6 L	10 L	22 L	40 L
INTERNAL TANK DIMENSIONS		32,5 x 17,6 x 20 cm	35,5 x 26,5 x 20 cm	53 x 32,5 x 20 cm	61 x 47 x 20 cm
UNIT DIMENSIONS		18,8 x 36 x H 35 cm	27,8 x 36,5 x H 35 cm	57,5 x 35,5 x H 35 cm	70 x 55 x H 35 cm

BASKET FOR ULTRASONIC CLEANER REECO RE-US100

RE-US100-KOSZ

BASKET FOR ULTRASONIC CLEANER REECO RE-US200

RE-US200-KOSZ

BASKET FOR ULTRASONIC CLEANER REECO RE-US300

RE-US300-KOSZ

BASKET FOR ULTRASONIC CLEANER REECO RE-US400
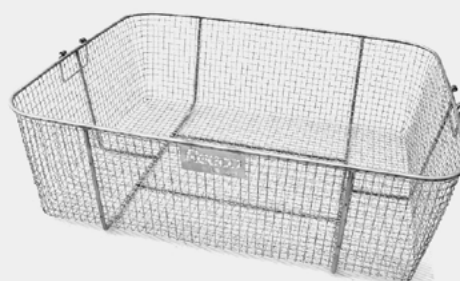
RE-US400-KOSZ

BASKET SPECIFICATION

- Made of acid-proof steel (mesh + wire)
- Mesh size: approx. 10 x 10 mm
- They enable washing details without the need of hand contact with the washing medium
- Protect the tank from mechanical damage
- Handles for easy removal of the basket from the tank

- Durable and solid construction
- High quality
- Successfully used also in other applications
- Dedicated to Reeco ultrasonic cleaners
- Specially made feet ensure proper insulation of washed items away from the sediment at the bottom of the tank

DETERGENTS FOR ULTRASONIC CLEANERS

DT-348/DT-C55S

LIQUID PUMP

RE-UPM

DESCRIPTION

- Liquids for ultrasonic cleaners
- Recommended for removing any contamination from PCBs

DESCRIPTION

- Pump powered by R20 battery
- Portable, high performance
- It is a standard equipment of each cleaner

POWERCLEAN

DESCRIPTION

- The strongest on the market from the available cleaning products
- Easily removes:
  - flux residues of all kinds
  - greases
  - oils
  - inks, etc.
- TriggerGrip compatible

MCC-PW2

SUPRCLEAN

DESCRIPTION

- Perfect for all rosin-based fluxes
- Due to high effectiveness, testing on soft plastics is recommended
- TriggerGrip compatible

MCC-SPR

FLUX REMOVER C

DESCRIPTION

- Suited for cleaning „no-clean" and most water-soluble fluxes
- Removes grease, oils, inks
- TriggerGrip compatible

MCC-FRC

UNIVERSAL FLUX REMOVER

DESCRIPTION

- Removes residues of fluxes, pastes, grease, oils, silicone
- Quick drying
- Plastic safe with excellent material compatibility
- TriggerGrip compatible

MCC-UFR107

ULTRACLEAN

DESCRIPTION

- Removes rosin-based fluxes, pastes, and silicone residues
- Highly-effective on „No Clean" fluxes
- Non-chlorinated / halogen-free cleaner
- TriggerGrip compatible

MCC-VOC

POLAR FLUX REMOVER

DESCRIPTION

- Cleans heavy, aged flux residues
- Removes polar and ionic activators
- TriggerGrip compatible

MCC-PFR10A

VERICLEAN

DESCRIPTION

- Effective on „No-Clean" fluxes and pastes
- Dissolves silicone coatings, oils, adhesives, oils and grease residues
- Available also in economy size
- TriggerGrip compatible

MCC-DC1

PROCLEAN

DESCRIPTION

- Universal cleaning agent (alcohol-based, without water)
- Removes most rosin-based and „No-Clean" fluxes
- Available also in economy size
- TriggerGrip compatible

MCC-PRO

ISOCLEAN

DESCRIPTION

- Universal cleaning agent, isopropanol based (no water content)
- Very effective in removing impurities from heads in audio-video equipment and „No-Clean" fluxes
- TriggerGrip compatible

MCC-BAC

REFLOW OVEN CLEANER

DESCRIPTION

- Melts away burned-on flux residues from wave solder machines and reflow ovens
- Water based, works up to four times faster than isopropanol

MCC-ROC

STENCIL CLEANER

DESCRIPTION

- A powerful cleaner, removes all types of solder paste from PCB boards and stencils
- Suitable for use in ultrasonic cleaners (without preheating)

MCC-BGA

CIRCUIT CHILLER

DESCRIPTION

- Used to find faults in circuit boards quickly
- Chills to lower than -45°C in seconds
- Nonflammable
- Does not leave any residue

MODEL	CAT. NO.
Regular version	MCC-FRZ
Antistatic version	MCC-FRZA

UNIVERSAL CONTACT CLEANER

DESCRIPTION

- Nonflammable and nonconductive
- Quick drying, plastic and rubber safe cleaner for general use
- Removes dust, fluxes, light oils and grease
- TriggerGrip compatible

MCC-CCH10A

DUST REMOVER

DESCRIPTION

- Dry circuit cleaner that blows dust and grit from keyboards, machinery and circuitry
- High pressure
- Nonflammable

MCC-DST

FLUX REMOVER PENS

DESCRIPTION

- Strong flux remover in a convenient, portable pen for quick and safe cleaning
- No-Clean Flux Remover Pen - best choice for no-clean fluxes and paste
- RMA Flux Remover Pen - Extra-strong formula to clean heavy, aged flux residues
- Water-soluble Flux Remover Pen - Universal cleaner for no-clean, rosin or water-based fluxes

No-Clean Flux Remover Pen (50 pcs.)	MCC-DC1PEN
RMA Flux Remover Pen (50 pcs.)	MCC-RMAPEN
Water-Soluble Flux Remover Pen (50 pcs.)	MCC-PROPEN

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CLEANING SOLUTIONS SELECTION GUIDE

	PowerClean	SuprClean	Flux Remover C	Universal Flux Remover	UltraClean	Polar Flux Remover	VeriClean	ProClean	IsoClean	Stencil Cleaner	Reflow Oven Cleaner	Universal Contact Cleaner	TidyPen
Lead-free flux residues	•	◊				•	◊						
No-Clean flux residues			•		•	•	•	◊	•				
Rosin-based fluxes	◊	•	◊	•	◊	◊							
Water-based fluxes						◊		•	◊				
Removing stickers and markers													•
Cleaning electrical contacts			◊									•	
Silicone coatings	◊			◊	◊		•						
Epoxy resins and system connectors		◊					•						
Cleaning stencils										•			
Flux residues (reflow ovens)											•		

◊ Approved for use | • Best to use

SPECIFICATION

	PowerClean	SuprClean	Flux Remover C	Universal Flux Remover	UltraClean	Polar Flux Remover	VeriClean	ProClean	IsoClean	Stencil Cleaner	Reflow Oven Cleaner	Universal Contact Cleaner	TidyPen
Cleaning potency	5	5	4	4	4	5	3	2	1	-	4	1	4
Scent	5	5	5	2	3	4	4	2	1	2	2	5	1
Evaporation time	5	4	4	5	3	1	3	2	1	1	3	5	3
Environmental impact	4	4	4	3	1	4	5	3	2	3	3	3	2
Safe to use on plastics	1	2	3	3	2	4	5	5	5	3	2	5	1

1 - low | 5 - very high / perfect

FLOOR DETERGENT

DESCRIPTION

- Dewaxing alkaline detergent have to be used the first time, before applying the coating on the floor
- It removes quickly multiple coats of wax and embedded dirt
- It is suitable on PVC, Rubber and Hard floors
- Weight: 5 kg
- Appearance: pale yellow colour liquid
- PH: 13
- Biodegradability: over 90%

IT-7805870

FLOOR DETERGENT

DESCRIPTION

- Low foaming-agent detergent with highly concentrated active substances and reduced alkalinity, normally used for floor cleaning
- This detergent is free of silicone or polishing additives, so it does not change the static-dissipative characteristics of the ESD surfaces both vinyl, rubber, paint or wax
- Weight: 5 kg
- Appearance: green colour liquid
- PH: 9
- Biodegradability: over 90%

IT-7805873

LIQUID AGENT FOR MATS & SURFACES
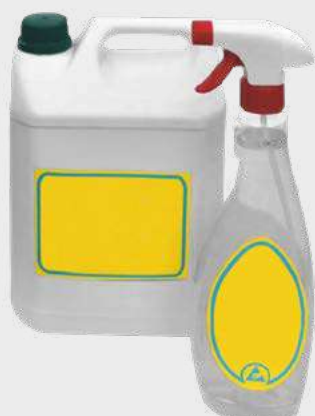
DESCRIPTION

- A non-toxic, low VOC static dissipative cleaner
- Used to remove dust, grease, grime, fingerprints, from all surfaces in the EPA area
- It cleans and rejuvenates static dissipative surfaces, as well as it makes non dissipative surfaces dissipative
- It can be used on rubber, vinyl and polyethylene table, laminate, tote boxes, epoxy, plexiglass, glass, metal, computer screens, shelving, conveyors belts and other
- It's an excellent product to avoid the electrostatic charges, it releases a thin invisible dissipative layer
- Capacity 750 ml or 5 L
- Appearance: transparent liquid
- PH: 7
- Biodegradable

IT-7805895/ 7805896

TIDYPEN

MCC-TIDYPEN

DESCRIPTION

- Perfect for removing glue residue from tape, labels resistant to pressure, paper labels, EPROM labels and kapton tapes residue
- Pen-style dispenser with a clip
- Easy and convenient to use
- Removes corrosion from gold-plated points on PCBs

PRESATURATED CLEANING WIPES

DESCRIPTION

- Wipes dimensions: 20 x 12 cm | Pieces per package: 100 pcs.

MODEL	APPLICATION	CAT. NO.
ProClean	For quickly removing soldering pastes, including lead-free	MCC-PROW (Container & Wipes)
		MCC-PROWR (Refill Wipes Only)
MultiClean	For removing soldering pastes, fluxes, fingerprints and light oils	MCC-MLCW (Container & Wipes)
		MCC-MLCWR (Refill Wipes Only)
IsoClean	For cleaning templates and other sensitive surfaces	MCC-BACW (Container & Wipes)
		MCC-BACWR (Refill Wipes Only)
ESD	For cleaning ESD equipment: mats, containers, tables, tool racks from residues of flux, glue, dirt and oils	MCC-EC00W (Container & Wipes)
		MCC-EC00WR (Refill Wipes Only)
ScreenClean	A replacement for methylene chloride and acetone	MCC-CDIW (Container & Wipes)

LINT-FREE DRY WIPES

FABRIC	ABSORPTIVITY	DIMENSIONS/PIECES	CAT. NO.
Synthetic polymer	445 ml/m²	15 x 15 cm / 50 pcs.	MCC-W66DF
Polyester and cellulose	320 ml/m²	15 x 15 cm / 50 pcs.	MCC-W66
Polyester	320 ml/m²	15 x 15 cm / 300 pcs.	MCC-W66CP
Polyester and cellulose	313 ml/m²	21 x 28 cm / 100 pcs.	MCC-W11
Polyester and cellulose	320 ml/m²	30 x 40 cm / 50 pcs.	MCC-W12
Polyester and cellulose	320 ml/m²	23 x 23 cm / 300 pcs.	MCC-W99
Synthetic polymer	445 ml/m²	23 x 23 cm / 300 pcs.	MCC-W99DF
Polyester	255 ml/m²	23 x 23 cm / 2.3 kg	MCC-W810

SMT STENCIL ROLLS
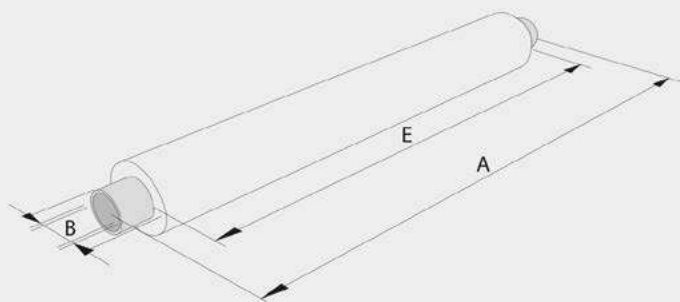
A	E	B	DŁ.	CAT. NO.
500 mm	500 mm	23 mm	10 m	RE-ROL-FUJI-500-10
500 mm	500 mm	23 mm	12 m	RE-ROL-FUJI-500-12
455 mm	450 mm	18 mm	10 m	RE-ROL-MPM-450
455 mm	300 mm	18 mm	10 m	RE-ROL-MPM-300
455 mm	250 mm	18 mm	10 m	RE-ROL-MPM-250
794 mm	770 mm	18 mm	10 m	RE-ROL-INN-770
400 mm	400 mm	12 mm	7 m	RE-ROL-EKRA-400
420 mm	420 mm	23 mm	30 m	RE-ROL-YA-420
375 mm	370 mm	18 mm	12 m	RE-ROL-PAN-370
530 mm	515 mm	18 mm	10 m	RE-ROL-DEK-515
530 mm	490 mm	18 mm	9 m	RE-ROL-DEK-490
540 mm	400 mm	20 mm	9 m	RE-ROL-DEK-400

STATZAP

MCC-ZAP

DESCRIPTION

- Connects to selected MicroCare precision dusters and freeze sprays
- The ShockShield™ safety feature protects from contact with energized electrical circuits
- Eliminates ESD damage by reducing voltages to a harmless 50 volts or less

TRIGGERGRIP

MCC-ESD

DESCRIPTION

- Dispenser for different cleaning solutions
- Ensures 50% savings of the used cleaning agent
- Full protection against ESD

BRUSHES FOR TRIGGERGRIP

SPECIFICATION

CAT.NO.	DESCRIPTION
MCC-RBNB	Tip with natural bristle. Standard TriggerGrip equipment
MCC-RBNB2	Slo-Flo tip with natural bristle
MCC-SMB	Standard tip for cleaning PCBs
MCC-SMB2	Slo-Flo tip for cleaning PCBs
MCC-SQB	Tip for cleaning PCBs (Camel hair)
MCC-SR35	Tip with a 0.35 mm diameter needle

BENCH MOUNTING KIT

MCC-BK

DESCRIPTION

- Two-piece mount keeps the aerosol can from tipping over and falling
- Mounting ensures that the cans will be emptied completely
- ESD safe
- Organises the work bench

DISSIPATIVE BRUSHES 6511

- Length:
  124 mm
- Handle:
  106 mm, Ø: 11.5 mm
- Bristle's length:
  18 mm

CAT. NO.
RE-HM-6511

DISSIPATIVE BRUSHES 6520

- Length:
  99 mm
- Handle:
  82 x 42,5 x 9,8 mm
- Bristle's length:
  20 mm

CAT. NO.
RE-HM-6520

DISSIPATIVE BRUSHES 6512

- Length:
  149 mm
- Handle:
  131 x 18,5 mm
- Bristle's length:
  18 mm

CAT. NO.
RE-HM-6512

DISSIPATIVE BRUSHES 6521

- Length:
  120 mm
- Handle:
  99 x 56 x 10 mm
- Bristle's length:
  25 mm

CAT. NO.
RE-HM-6521

DISSIPATIVE BRUSHES 6513

- Length:
  170 mm
- Handle:
  38 x 13 x 8,4 mm
- Bristle's length:
  16 mm

CAT. NO.
RE-HM-6513

DISSIPATIVE BRUSHES 6522

- Length:
  180 mm
- Handle:
  160 x 67 x 10,7 mm
- Bristle's length:
  25 mm

CAT. NO.
RE-HM-6522

DISSIPATIVE BRUSHES 6515

- Length:
  180 mm
- Handle:
  85 x 21 x 11,5 mm
- Bristle's length:
  18 mm

CAT. NO.
RE-HM-6515

DISSIPATIVE BRUSHES IT-7807301

- Hard brush
- Handle:
  9 x 32 mm
- Bristle's length:
  13 mm

CAT. NO.
IT-7807301

DISSIPATIVE BRUSHES 6518 | 6519

- Length:
  142 mm | 167 mm
- Handle:
  117 x 47 x 8 | 142 x 60,6 x 8
- Bristle's length:
  25 mm

CAT. NO.
RE-HM-6518 / RE-HM-6519

DISSIPATIVE BRUSHES IT-7807304

- Hard brush
- Handle:
  25 x 3 mm
- Bristle's length:
  23 mm

CAT. NO.
IT-7807304
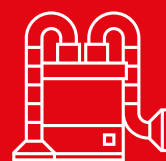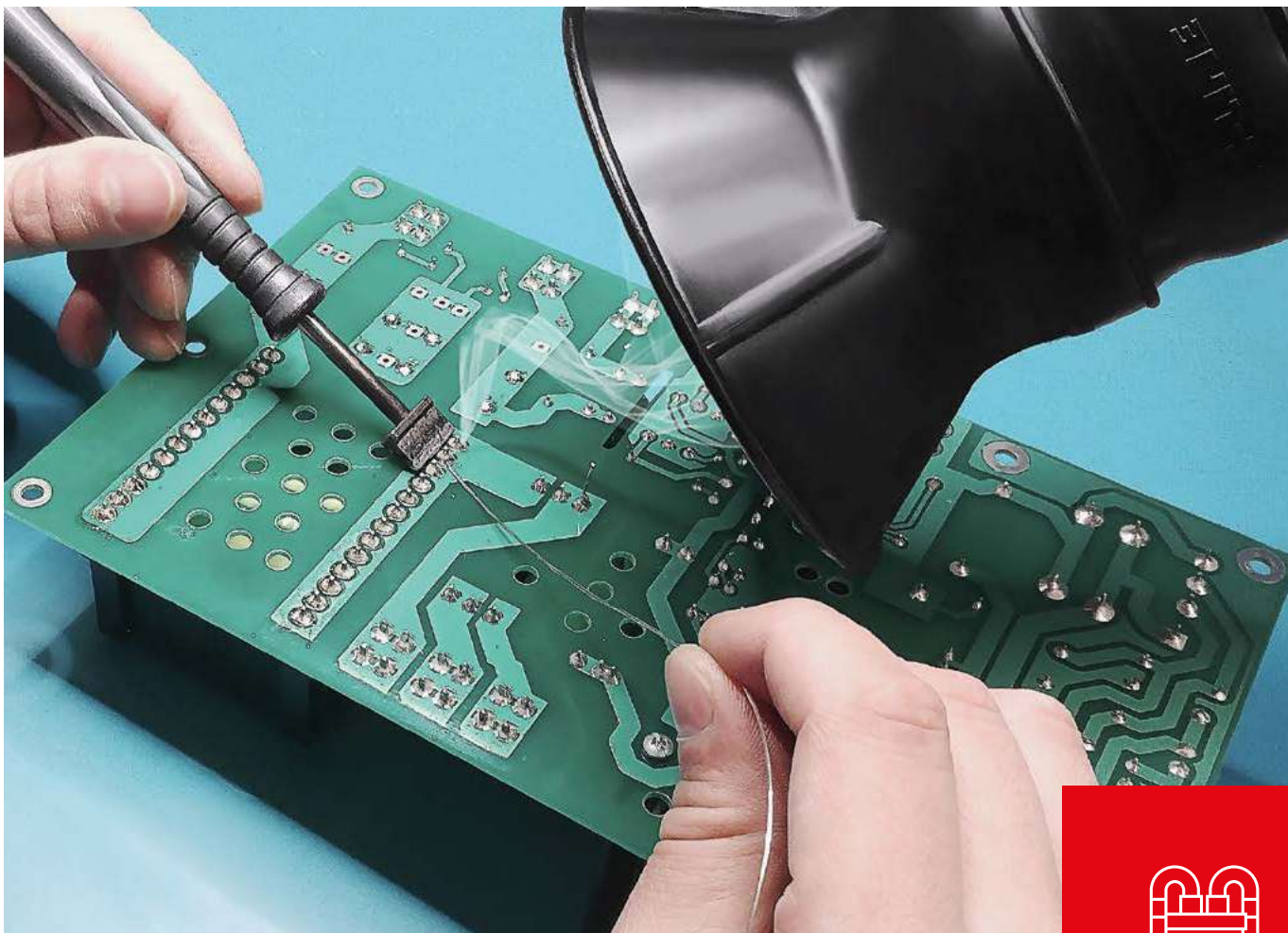
i Detailed information about products from this page (parameters, dimensions) can be found on our website: **renex.pl**

FUME EXTRACTION SYSTEMS

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PACE ARM-EVAC 50 FUME EXTRACTOR

DESCRIPTION

- Benchtop, compact and portable filtering fume removal system
- Daigned to take up a minimum of bench space and incorporates a utility platform to stack soldering irons or hand tools
- As standard the Arm-Evac 50 operates as a self-contained plenum providing wider area fume extraction
- System can be also configured to offer arm-extraction via optional arm attachments
- Operator adjustable airflow and quiet operation
- Airflow control and filter condition monitoring alerts the operator when it is time to change the filter
- Hight performance, brushless and maintenace free motor
- Wide variety of filters to meet the needs of virtually any application

PA-88890050

POWER REQUIREMENTS	230 V, 50 Hz
DIMENSIONS	215 x 330 x 315 mm
WEIGHT	6 kg
NOISE LEVEL	54,5 dB
FILTER MONITORING	LED Diode

PACE ARM-EVAC 105 FUME EXTRACTOR

DESCRIPTION

- Best protection from harmful fumes in its price range
- Portable, compact and can be easily placed on or under a workbench
- Unit features a heavy-duty, maintenance-free brushless motor
- Filtration process including a pre-filter for course particle removal, and a High Efficiency Particulate Arrestor (HEPA) / gas filter cartridge
- Low noise level (55 dBA)
- Multiple configuration options to suit your work space
- Wide variety of filters to meet the needs of virtually any application

PA-88880105

POWER REQUIREMENTS	230 V, 50 Hz
DIMENSIONS	500 x 290 x 290 mm
WEIGHT	11,5 kg
NOISE LEVEL	55 dB
NUMBER OF INLETS	2 - Ø75 mm
FLOW RATE (GENERAL PURPOSE FILTER)	up to 220m³/h
MAXIMUM DUCT RUN	2,5 mm (each channel)

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PACE ARM-EVAC 200 FUME EXTRACTOR

DESCRIPTION

- Lightweight and compact system for up to 4 workstations
- Designed to meet the needs of light-duty production as well as rework and repair operations
- Low noise level (58 dBA)
- Compatible with a number of accessorries
- Optional silencer / mobile cart available
- Numerous filtration options (Cleanroom Filter, Extended Life Filter, Economy Filter, etc.)
- Multiple configuration options to suit your work space

PA-88890200

PACE ARM-EVAC 250 FUME EXTRACTOR

DESCRIPTION

- High-capacity fume extractor for up to 4 workstations
- Ideal for heavy-duty operations that need continuous particle filter monitoring
- Microprocessor technology
- Filter monitoring system self calibrates using a membrane keypad on the front panel and an audible alarm alerts the operator when a filter change is required
- Flow sensors increase power to the motor as filters become blocked to assure peak performance
- Easy-to-read graphical LED filter condition monitor changes from green to yellow to red as the filter becomes clogged
- Three-position motor speed buton
- Wide variety of collection accessory options and filters available
- Optional silencer / mobile cart available

PA-88890250

MODEL	ARM-EVAC 200	ARM-EVAC 250
POWER REQUIREMENTS	230 V, 50 Hz, 1,3 A	230 V, 50 Hz, 3 A
DIMENSIONS	393 x 282 x 365 mm	393 x 282 x 365 mm
WEIGHT	13,75 kg	14 kg
NOISE LEVEL	58 dB	58 dB
NUMBER OF INLETS	2 - Ø 75 mm	2 - Ø 75 mm
FLOW RATE (GENERAL PURPOSE FILTER)	up to 288m³/h	
MAXIMUM DUCT RUN	5m per inlet	

PACE SILENCER CART

DESCRIPTION

- Constructed of 18-gauge steel and acoustical foam baffle liner to decrease noise generation
- Silencer doubles as a mobile cart
- Includes front locking casters
- For ARM-EVAC 200 and ARM EVAC 250

PC-88851225

PACE ARM-EVAC 500 HIGH CAPACITY FUME EXTRACTOR

DESCRIPTION

- Perfectly suited for high performance, cellular manufacturing activities and provides fume extraction for up to 6 workstations
- Microprocessor technology
- High airflow motor pump with an effective three-stage filtration system
- Laser-trimmed electronic air flow sensor
- Intelligent air flow compensation motor pump speed increases as filter becomes loaded
- Easy-to-read graphical LED filter condition monitor changes from green to yellow to red as the filter becomes clogged
- Filter monitoring system self calibrates using a membrane keypad on the front panel and an audible alarm alerts the operator when a filter change is required
- Wide variety of collection accessory options and filters are available

PA-88890500

POWER REQUIREMENTS	230 V, 50 Hz, 3 A
DIMENSIONS	640 x 400 x 500 mm
WEIGHT	28 kg
NOISE LEVEL	61 dB
NUMBER OF INLETS	3 pcs. - Ø 75 mm
FLOW RATE (GENERAL PURPOSE FILTER)	Up to 451m³/h
MAXIMUM DUCT RUN	5 m per inlet

FILTER TYPES FOR PACE ARM-EVAC SERIES

FILTER TYPE	FILTER EFFICIENCY RATING	RECOMMENDED APPLICATION
Pre-filters	90 % / EU4	Recommended for use with all filtration systems
Economy Filters	N/A	Ideal for applications where coarse dust is generated
General Purpose Filters	85% / EU8	Recommended for soldering applications where normal volumes of fumes are being generated for 1 or 2 shifts (.2-80 microns)
Cleanroom Filters	99,99% / EU13	Recommended for applications in Cleanroom environments or where the highest filtration efficiency is required (.2-2 microns)
High Capacity Filters	85% / EU8	Recommended for soldering applications where heavy volumes of fumes are generated or where operations are running 3 shifts
Adhesive Filters	N/A	Recommended for any bench-top application utilizing adhesives, solvents, or cleaners used in small quantities and not in open containers or 'baths"

FILTER SELECTION

The following chart is a quick reference guide for PACE Filtration Systems. Simply select your fume extraction central filtration unit and the type of filter you need to identify the part number of the filter. (Red part numbers indicates standard primary filter in Central Filtration Unit).

SYSTEM	PRE-FILTER	HIGH CAPACITY PRE-FILTER	ECONOMY FILTER	GENERAL FILTER	CLEANROOM FILTER	HIGH CAPACITY FILTER	CARBON FILTER	ADHESIVE FILTER
ARM-EVAC 50	PA-88830125	N/A	N/A	PA-88830280	PA-88830290	N/A	N/A	-
ARM-EVAC 105	PA-88830112	PA-88830986*	PA-88830871	PA-88830932	PA-88830921	PA-88830987*	N/A	PA-88830952
ARM-EVAC 200	PA-88830112	PA-88830986*	PA-88830871	PA-88830932	PA-88830921	PA-88830987*	N/A	PA-88830952
ARM-EVAC 250	PA-88830112	PA-88830986*	PA-88830871	PA-88830932	PA-88830921	PA-88830987*	N/A	PA-88830952
ARM-EVAC 500	PA-88830145	N/A	N/A	PA-88830955	PA-88830965	N/A	PA-88830956	N/A

* High Capacity Pre-fIlters must be used in combination with a High Capacity Filter. When filters need to be replaced, simply remove them from the Fume Extractor and replace with a new one. Disposal of filters should be done in compliance with local environmental regulations.

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PACE ESD 75MM SAFE FLEX-ARM KIT

DESCRIPTION

- Contains everything needed to mount an ESD Safe Flex-Arm to a workbench:

ESD Safe Flex-Arm of 915 mm	**PA-88860750**
Bench Mounting Bracket	**PA-88860770**
2.5 m of 75 mm ESD Safe Flex Hose	**PA-88860755**

PA-88860765

PACE 75MM ESD SAFE FLEX-ARM

DESCRIPTION

- Length: 915 mm
- Diameter: 75 mm
- Standard Endpiece: Round
- Mounting: Directly onto Fume Extractor or uses optional Bench Mounting Bracket

PA-88860750

PACE 75MM FLEX-ARM BENCH MOUNTING BRACKET KIT

DESCRIPTION

- Includes:

2.5 m of 75 mm ESD Safe Flex Hose	**PA-88860770**
Bench Mounting Bracket	**PA-88860755**

PA-88860745

PACE 75MM OPTIONAL ENDPIECES

DESCRIPTION

A: Round Endpiece	**PA-88860792**
B: Collection Tube Endpiece	**PA-88860794**
C: Cowl Endpiece	**PA-88860793**
D: Scoop Endpiece	**PA-8882040801**

A   B   C   D

PACE ESD 50MM STATIC-SAFE FLEX-ARM

DESCRIPTION

| A: Static-Safe Flex-Arm of 610 mm | PA-88820415 |
| B: Static-Safe Flex-Arm of 915 mm | PA-88820435 |

A   B

PACE ESD 50MM FLEX-ARM BENCH MOUNTING KIT

DESCRIPTION

- Includes:

75mm to 50mm reducer endcuff and 75mm endcuff	PA-88820776
2.5 m of 75 mm ESD Safe Flex Hose	PA-88860755
Bench Mounting Bracket	PA-88860552

PA-88860553

PACE ESD 75MM TO 50MM FLEX HOSE

DESCRIPTION

| 2.5 m length of 75 mm Expansion Flex Hose with 50 mm and 75 mm endcuffs | PA-88860299 |

PACE FUME EXTRACTION CONNECTORS AND ENDCUFFS

DESCRIPTION

A: 75 mm Y connector	PA-88820691
B: 75 mm to 50 mm reducer endcuff	PA-88820775
C: 75 mm endcuff	PA-88820776

A   B   C

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REECO THREE-SECTION FUME HOSE

RE-KAA3

DESCRIPTION

- Three-section straight fume hose with two joints
- The lenghts of the first section is 250 mm, then 450 mm, then 380 mm
- ESD safe
- Can use the round absorber KHRR105-50
- Used with the bench clamp KCC50-50

REECO FOUR-SECTION FUME HOSE

RE-KAA4

DESCRIPTION

- Four-section straight fume hose with two joints
- The lenghts of the first section is 250 mm, then 430 mm, then 450 mm, then 550 mm
- ESD safe
- Used with the bench clamp KCC50-50

REECO BENCH CLAMP

RE-KCC50-50

DESCRIPTION

- Bench clamp for fume hose, can connect to the 50 mm fume hose above

ALSIDENT FUME EXTRACTION SYSTEMS ESD/EX 50/75/100

Alsident is unrivaled producer of extraction arms and cabinets.

Alsident systems were designed to extract gas, fumes, odours, dust and other hazardous substances. Additional equipment such as nozzles, tubes and many types of brackets and columns is also available.

HIGHEST QUALITY
Arms are made of highest quality, acid-proof materials according to ESD/EEx standars (dependingly on the model). Quiet performance is another advantage of these systems.

SELF SUPPORTING CONSTRUCTION
This construction constitutes a very user-friendly fume extraction arm that is easy to adjust to the source of the pollutant during the work process. Both operation and maintenance are very easy.

TABLE, WALL OR CEILING MOUNTED
Assembly and disassembly are very easy and require no tools.

WIDE RANGE OF REDUCERS
Reducers are used to connect arms to ventilation system of diameter from 50 mm to 125 mm.

ALSIDENT ESD/EEX SYSTEM 50 FLEX/50/75/100

DESCRIPTION

- Used in various industries, e.g. electronics, chemistry, pharmacy, automotive, aerospace, etc.

- Approved for use in ESD areas according to IEC 61340-5-1, IEC 61340-4-1, IEC 13463-1:2001, IEC 61340-4-1:2003

AIR TEMPERATURE RANGE	-15°C to +90°C		
MATERIAL	Chromated aluminium (TCP)		
JOINTS	Conductive polypropylene (PP)		
MOUNTING	Table, wall, ceiling, furniture		
AIR FLOW EFFICIENCY	45 - 85 m³/h System 50	80 - 180 m³/h System 75	140 - 400 m³/h System 100

ALSIDENT ALUMINIUM SYSTEM 50/75/100

DESCRIPTION

- Used in environments with no special demands for chemical resistance or conductivity

AIR TEMPERATURE RANGE	-15°C to +90°C		
MATERIAL	Anodized aluminium		
JOINTS	Polypropylene (PP)		
MOUNTING	Table, wall, ceiling, furniture		
AIR FLOW EFFICIENCY	45 - 85 m³/h System 50	80 - 180 m³/h System 75	140 - 400 m³/h System 100

ALSIDENT CHEMICAL RESISTANT SYSTEM 63/75/100

DESCRIPTION

- Made to work with aggresive, hazardous chemical

- Reccomended for labolatories

- Safe work and measurement stability

AIR TEMPERATURE RANGE	-15°C to +90°C		
MATERIAL	Polypropylene (PP)		
JOINTS	Polypropylene (PP)		
MOUNTING	Table, wall, ceiling, furniture		
AIR FLOW EFFICIENCY	60 - 120 m³/h System 63	80 - 180 m³/h System 75	140 - 400 m³/h System 100

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ALSIDENT ACCESORIES

- Suction tubes
- Recommended for small concentrated sources of pollution
- Efficient as it gets close to the source without obstructing the work process

- Round Hoods
- For light fumes, gases and small open vessels
- Increased efficiency at an angled position
- Increased stability due to reinforced rim of the hood

- Table brackets

- Ceiling columns
- Four lengths available: 250, 500, 750, 1000, 1250, 1500, 1750, 2000 mm
- White or black

- Square Hoods
- For both light and heavy fumes, gases and for open vessels, as this hood is suited for horizontal position above and vertical position behind the source of pollution

- Flat Hood
- Especially suited for heavy fumes and gases
- High efficiency when placed vertically on a surface e.g. a table

ALSIDENT SYSTEM 25 WORK CABINETS - TYPE 1

DESCRIPTION

- Conapy with a transparent thermoformed PETG and window made of safety glass.
- Aluminium supports on edges

CAT. NO.	DIMENSIONS (cm)	OPENING (cm)	HEIGHT OF SIDE PANELS (cm)	AIR VOLUME (m³/h)
AL-25-106020	100 x 60 x 41	72 x 16	20	220
AL-25-106050	100 x 60 x 71	71.5 x 46	50	550
AL-25-106075	100 x 60 x 96	71.5 x 71	75	850

ALSIDENT SYSTEM 25 WORK CABINETS - TYPE 2

DESCRIPTION

- Thermoformed cabinet of transparent PETG with safety glass window
- Aluminium support brackets at the edges

CAT. NO.	DIMENSIONS (cm)	OPENING (cm)	COLOUR	AIR VOLUME (m³/h)
AL-25-604535	63.5 x 48 x 35	51.5 x 14.5	Transparent	117
AL-25-604530-7	63.5 x 48 x 35	51.5 x 14.5	White	117

ALSIDENT SYSTEM 25 WORK CABINETS - TYPE 3

DESCRIPTION

- The top made of transparent PETG
- Sides are made of white powder coated steel
- Mainly use for works with substances of intensive smell
- Possibility of connecting the extraction arm

CAT. NO.	DIMENSIONS (cm)	OPENING (cm)	HEIGHT OF SIDE PANELS (cm)	AIR VOLUME (m³/h)
AL-25-4030	42 x 32 x 51.5	33.5 x 39.5	40	204

SPECIALISED EQUIPMENT

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WRIST STRAP AND DUAL FOOTWEAR TEST STATION WRISTLAB II

DESCRIPTION

- Tester with optical and audio alarm
- Test station for checking personnel grounding connection of wrist straps and footwear, according to the IEC 61340-5-1
- Separate testing of left and right shoe
- A relay output allows access to ESD Protected Area (EPA)
- The personnel grounding test station can work in 4 modes:
    - Simultaneus measurement of wrist straps and footwears
    - Wrist straps only measurement
    - Footwears only measurement
    - HandsFree mode (if the serial measure of the two footwears pass the test then the internal relay enables the gate to the EPA area)
- ISO9000 traceable certificate is included
- Tester compatible with access gates from page 261

MEASURING RANGE		
	LOW LIMIT	HIGH LIMIT
WRIST STRAP	750 KΩ	35 MΩ
FOOTWEAR	0 - 100 KΩ	35 MΩ / 70 MΩ / 100 MΩ 1 GΩ (ATEX version)

TESTER WRISTLAB II

- Tester without accessories

Wristlab-II instrument for EPA zones	IT-9264960
Wristlab-II instrument ATEX version for Ex zones	IT-9264960.1G

VERSION WITH STAND-UP SUPPORT

- Accessories:
    - Wrist strap test station
    - Stand-up
    - Footwear test plate
    - Panel with user's manual

Wristlab-II instrument for EPA zones	IT-9264952
Wristlab-II instrument ATEX version for Ex zones	IT-9264952.1G
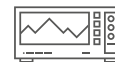
WALL-MOUNTED VERSION

- Accessories:
    - Wrist strap test station
    - Footwear test plate
    - Panel with user's manual

Wristlab-II instrument for EPA zones	IT-9264950
Wristlab-II instrument ATEX version for Ex zones	IT-9264950.1G

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TEST STATION EVO

DESCRIPTION

- Measurement of wrist straps and footwears according to IEC61340-5-1
- Up to 1000 different users identified through fingerprint recognition or manual recognition (entering the ID number)
- Datalogger can store data for the last 10000 access (date and time, user name and ID, the resistance values of the bracelet and shoes, etc.)
- Control footwear separate (left and right)
- Relay output for controlling the opening of the access door to the EPA
- LCD display with blue backlight 160 x 104 pixels, 74 x 46 mm viewable area
- Voltage Test selectable to 50V or 100V
- Programmable tresholds
- Wriststrap and footwear measuring range: 50kΩ – 2GΩ
- ISO9000 Traceable Calibration Certificate included
- Tester compatible with access gates from page 261

TESTER EVO

- Tester without accessories

Test Station EVO USB	**IT-9264925**
Test Station EVO ETHERNET	**IT-9264926**

VERSION WITH STAND-UP SUPPORT

- Accessories:
    - Wrist strap test station
    - Stand-up
    - Footwear test plate

Test Station EVO USB	**IT-9264922**
Test Station EVO ETHERNET	**IT-9264923**

WALL-MOUNTED VERSION
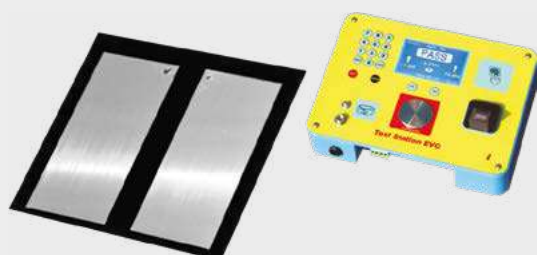
- Accessories:
    - Wrist strap test station
    - Footwear test plate

Test Station EVO USB	**IT-9264920**
Test Station EVO ETHERNET	**IT-9264921**

GIGALAB EVO METER

DESCRIPTION

- The GIGALAB-EVO multi-voltage high resistance meter is a portable, accurate, and versatile instrument designed to measure resistance between two points, surface to ground, and surface resistivity as defined in IEC61340-5-1

- Graphic LCD display 128 x 64 pixel, 66 x 51 mm

- Humidity measurement:

    - Range: 1 to 95%RH
    - Resolution: 0.1%RH
    - Accuracy: ±2% RH (a 25°C, 10%~90% RH),
        ±3% RH (a 25°C, 1%~10% RH, 90%~95% RH)

- Temperature measurement:

    - Range: –20°C to +60°C
    - Resolution: 0.1°C
    - Accuracy: ±1°C

- Internal memory where the data of 100 measures can be stored

- The data stored for each measurement are:

    - Resistance value
    - Voltage used for the measurement
    - Humidity detected during measurement
    - Measured temperature during measurement

MEASURING RANGE	
10 V	From 1KΩ to 50GΩ (±5% ±0,6% GΩ)
100 V	From 100KΩ to 1TΩ (±5% ±0,06% GΩ)
250 V	From 500KΩ to 1TΩ (±5% ±0,045% GΩ)
500 V	From 1MΩ to 1TΩ (±5% ±0,03% GΩ)
TECHNICAL DATA	
POWER SUPPLY	6 alcaline batteries, LR6 1.5V
DIMENSIONS	243 x 130 x 60 mm
WEIGHT	650 g

GIGALAB EVO Meter with batteries and case	**IT-9265063**
Cylindrical SHIELDED PROBE, Ø 65mm, weight: 2.3Kg	**IT-9265065**
Concentric ring PROBE, Ø 65/30mm, weight: 2.3Kg	**IT-9265070**

KIT: GIGALAB EVO METER

IT-9265064

DESCRIPTION

- Accessories:

    - GIGALAB meter (**IT-9265063**)
    - 2 probes **(IT-9265065)**
    - 2 cables
    - Batteries
    - Case

ESD SURFACE RESISTANCE TESTER EASY/EVO

DESCRIPTION

- The embedded probes are suitable for surface resistance measure, connecting one ground cord the resistance to ground can be read, and two external probes can be connected for point to point measurements

- The Easy version allows to measure the order of magnitude of surface resistance or resistance to ground

- The EVO version is more accurate (accuracy of 1/2 decade), it displays up to one significant digit and it is equipped with a graphical display and programmable sound alarm

- Measuring range: 10^4 - $10^{12}\,\Omega$

- Test voltage: 10 V: 10^4 - $10^5\,\Omega$, 100 V: 10^6 - $10^{12}\,\Omega$

EVO surface resistance tester	**IT-9265051**
EASY surface resistance tester	**IT-9265055**
Cylindrical SHIELDED PROBE, Ø 65mm, weight: 2.3Kg	**IT-9265065**
Concentric ring PROBE, Ø 65/30mm, weight: 2.3Kg	**IT-9265070**

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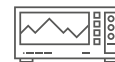
PORTABLE KIT: EASY/EVO

DESCRIPTION

- Equipment:

  - Tester
  - Two IT-9265065 probes
  - Carrying case

Portable kit including tester EVO	**IT-9265056**
Portable kit including tester EASY	**IT-9265057**

WALKING TEST EVO

IT-9265080

DESCRIPTION

- The WALKING TEST EVO is a portable measuring system that allows analysis of charge levels accumulated on the human body according to IEC 61340-5-1 standard

- It doesn't require a PC for data acquisition because all data are measured and logged in the internal memory

- The graphs of the tests can be displayed on the graphic LCD for a quick evaluation recording of 10 charts in the internal memory of the device

- A program to manage the tests recorded in the instrument is included in the Walking Test EVO

- It is possible to integrate with any system of access to the EPA zone

RANGE	± 1050 V
RESOLUTION	1 Volt
ACCURACY	5 % / ± 5 V
INPUT RESISTANCE	$10^{14}\,\Omega$
HUMIDITY	1 - 95% RH (accuracy ±2%RH to 25 °C, 10%RH1~90%RH)
TEMPERATURE	-20°C do + 60°C (accuracy: ±1°C)
DISPLAY	Graphic LCD 128 x 64 pixeli, 68 x 51 mm
POWER SUPPLY	6 alcaline batteries, LR6 1,5 V
DIMENSIONS	243 x 130 x 60 mm (instrument)
WEIGHT	650 g (instrument) - 250 g (probe)

ESD SURVEY KIT

IT-9265150

DESCRIPTION

- The ESD Survey Kit contains everything needed to conduct an ESD control program survey according to IEC 61340-5-1 in an ESD protected area (EPA)

- A set personalized depending in the needs of the customer

- Optional equipment:

  - GIGALAB EVO meter (**IT-9265063**)
  - Concentric Ring Probe (**IT-9265070**)
  - Shielded Probe (**IT-9265065**)
  - WRISTLAB-II instrument (**IT-9264960**)
  - x2 Single footwear plate (**IT-9264967**)
  - Ionizer Verification System (**IT-9265403**)
  - Adjustable Wrist Strap (**IT-7804190**)
  - Earth bonding plug (**IT-7804874**)

ELECTROSTATIC VOLTMETER TREK520

DESCRIPTION

- A new type of handheld electrostatic voltmeters provides accurate, noncontacting measurements of electrostatic surface voltage for ESD applications in either ionized or non-ionized environments
- No need to maintain fixed spacing
- Inspect small spots for charge accumulation
- Chopper stabilized circuit for accurate reading in ionized environments
- Measuring range:
  - TREK523: 0 to ±20 kV DC
  - TREK520-2: 1 to ±2 kV DC
  - TREK520-1: 1 to ±2 kV DC

Model TREK523	IT-9265101
Model TREK520-2 (with Voltage Monitor Output)	IT-9265100
Model TREK520-1	IT-9265099

FIELDLAB ELECTROSTATIC FIELDMETER

DESCRIPTION

- Digital display in KV from 0 to 20KV at 1"(25.4 mm)
- Accuracy ±5%
- LED distancing feature for accuracy
- Chopper stabilized circuit, for accurate reading in a ionized environment
- Analog output for recorder

Electrostatic Field Meter	IT-9265501

CHARGER EVO

DESCRIPTION

- Settable output: 100V to 1100V (step 1V)
- Resolution: 1 Volt
- Accuracy: 5%
- Dimensions: 124 x 72 x 28 mm
- Set includes: batteries, case, and grounding cord
- The CHARGER EVO is used to charge insulated plates at a desired voltage

Charger EVO	IT-9265401

SET: CHARGER EVO + ELECTROSTATIC FIELDLAB

DESCRIPTION

- It's a Ionizer Verification System which includes a detachable isolated plate and a 1100V charger in addition to the fieldmeter
- Together, the three components can be used to verify ionizer operation and check ion balance and discharge time

Ionizer Verification System (instrument, charger, plate, cables and carrying case)	IT-9265403
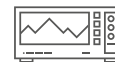
REECO WRIST STRAP RESISTANCE MONITOR

DESCRIPTION

- Made from high-precision electronic components
- Fast, small, lightweight and easy to use
- Automatically warns when a personal grounding system fails and monitors the anti-static wrist straps in real time
- Guarantees safe grounding of wrist straps in anti-static safety areas

CAT. NO.	RE-HM-518-1	RE-HM-518-2
TYPE	Single	Double
INPUT VOLTAGE	220 - 230V AC	
OUTPUT VOLTAGE	0,3a	
POWER	1,8 W	
DIMENSIONS	61 x 58 x 28 mm	110 x 58 x 28 mm
WEIGHT	62 g	110 g
ACCURACY	1,4MΩ ± 5%	
RESPONSE TIME	< 20 ms	

TEKMATRIX 32 HUMIDITY/TEMPERATURE MONITOR

DESCRIPTION

- It monitors simultaneously humidity, temperature on his large display, and alerts the engineers to check and repair the facilities immediately when the settable HIGH or LOW limits of RH/T are exceeded
- The internal datalogger samples the environmental data of humidity and temperature that can subsequently be transferred to a Windows PC via USB or Ethernet interface (the 'LogManager" software is included)
- Can be set to fixed display of RH/T or alternate it with date and time
- The instrument sensor can be hooked to the display or positioned externally

Humidity/Temperature TEKMATRIX 32 (Ethernet)	**IT-8105113E**
Humidity/Temperature TEKMATRIX 32 (USB)	**IT-8105113U**

IT-8105113

HUMIDITY	1 to 95%RH
TEMPERATURE RANGE	–20°C to +60°C resolution: 0.1°C
LED DISPLAY	190 x 190 mm
MEMORY	21600 samples
INTERFACE	USB + Ethernet
DIMENSIONS	Ø 300 x 40 mm

HUMIDITY / TEMPERATURE PEN

DESCRIPTION

- This pen continuously and simultaneously displays both RH and °F/°C with dual-recall memories.
- Memory displays highest and lowest humidity/temperature readings
- Temperature: 0 to +50
- Resolution 0,1°C
- Relative humidity: 20 to 98%

E20-1 & E20-3 CUTTING AND FORMING MACHINE
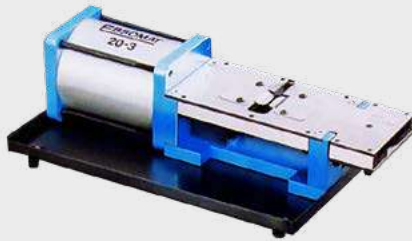
EB-E20-1-E20-3

DESCRIPTION

- Universal cutting and bending machine for loose, radial components
- Base machine works pneumatically and can be equiped with a cutting plate or a support plate for forming tools
- Cutting plates for 2, 3, 4, 5 mm cut lengths are available (other sizes also available)
- Tooling is available for a large variety of tran¬ sistors and capacitor forming and cutting configurations
- Truly cost effective
- Production rate: max. 2000 cph

E120 CUTTING AND FORMING MACHINE

EB-E120

DESCRIPTION

- Automatic operation of this machine is particularly weil suited for cutting and bending of power transistors of type TO 126/TO 220 ISOT
- Suitable for medium to high quantities
- Feed from sticks or loose components with a bowl feeder
- Easy tool changeover
- Easy and comfortable operation
- Stress relief tooling prevents component damage
- Production rate: max. 3600 cph

E300 CUTTING AND FORMING MACHINE

EB-E-300

DESCRIPTION

- Specially designed for efficient processing of taped components
- Easy tape insertion
- Adjustable displacement of component tape position
- Easy die changeover
- Adjustable lead diameter
- Leads diameter: max. 0.8 mm
- Production rate:
  – 10000 cph (manual operation)
  – 14000 cph (motorized)

E33-1 CUTTING AND FORMING MACHINE

EB-E33-1

DESCRIPTION

- Trimmer for radially taped components
- Interchangeable transport discs allow working with different pitch dimensions
- Cutting length directly and easy to adjust
- Maintenance-free through a robust construction
- Leads diameter: max. 1.3 mm
- Production rate:
  – 40000 cph (manual operation)
  – 60000 cph (motorized)
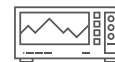
SUPERCUT/RP CUTTING AND FORMING MACHINE

IT-7915153

DESCRIPTION

- Machine designed to cut and form taped radial component leads
- The machine can be supplied with preforming curl dies different from the standard ones
- Leads diameter: 0.4 - 0.8 mm
- Production rate: max. 7000 cph

Manual machine SUPERCUT/RP without performing set	**IT-7915153**
Feed system for taped components, tape P=12.7	**IT-7915157**
Feed system for taped components, tape P=15	**IT-7915157A**

SUPERCUT/TOCF CUTTING AND FORMING MACHINE

IT-7915177

DESCRIPTION

- Machine is designed to cut and form tubed radial components type TO220, TO218, TO126
- The complete operation is fully automatic and each form needs dedicated die
- The full tube is introduced into the upper guide and a pneumatic system allows the component clamping and its positioning in the working point. The leads have before locked by the wire holder and after formed by the sliding die
- Production rate: max. 3000 cph

CO43E CUTTING AND FORMING MACHINE

EB-CO43E

DESCRIPTION

- Designed to cut stamp and bend axial leader components for both horizontal and vertical mounting
- Suitable length and required pitch of the leads can be adjusted by adjusting screws
- Adjustments can be checked by an optional digital display
- Machine can be re-set for the different tools manufactured to meet customers' requirements
- Taped components can be processed automatically with continuosly variable processing speed
- Leads diameter: 0.4 - 1.3 mm
- Production rate: max 8000 cph

E400 CUTTING AND FORMING MACHINE
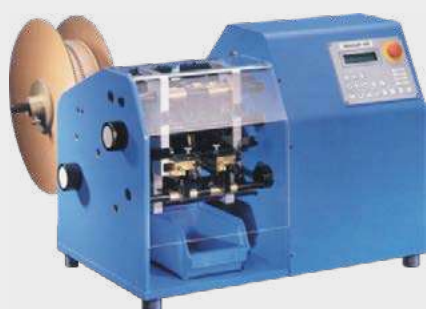
EB-E400

DESCRIPTION

- No mechanical stress of components due to interchangeable cutting, bending and forming
- Gradual adjusting of the cutting units realizes an „overbending' of the wire-components by more than 90°
- Bending components are supplied with a special roller design, so that the components can not be damaged by overbending
- Pitches and length of the connecting wires can be adjusted gradually
- Already the standard tooling allows the processing of the components either in horizontal or vertical mode
- Gradual adjusting of speed
- Leads diameter: 0.4 - 0.8 mm (optional 0.9 - 1.0 mm)
- Production rate:
  - 10000 cph (manual operation)
  - 14000 cph (motorized)

SUPERFORM-VP CUTTING AND FORMING MACHINE

DESCRIPTION

- Machine made for cutting and bending axial taped components for vertical mounting

- Leads diameter: 0.5 - 0.8 mm (optional 0.8 - 1.0 mm)

- Production rate:

  - from 3000 cph (manual)
  - up to 40000 cph (automatic)

Motor Unit for SUPERFORM, 220V – 50/60Hz	IT-7915032
Feeder CS30 for loose axial components	IT-7915182
Tape Reel Holder arm BR6	IT-7915185

IT-7915108A

SUPERFORM-V CUTTING AND FORMING MACHINE

DESCRIPTION

- Machine made for cutting and bending axial taped components for vertical mounting

- Leads diameter: 0.5 - 0.8 mm

- Production rate:

  - from 3000 cph(manual)
  - up to 40000 cph (automatic)

Motor Unit for SUPERFORM, 230V – 50/60Hz	IT-7915030
Feeder CS30 for loose axial omponents	IT-7915182
Tape Reel Holder arm BR6	IT-7915185

IT-7915101B

SUPERFORM-R CUTTING MACHINE
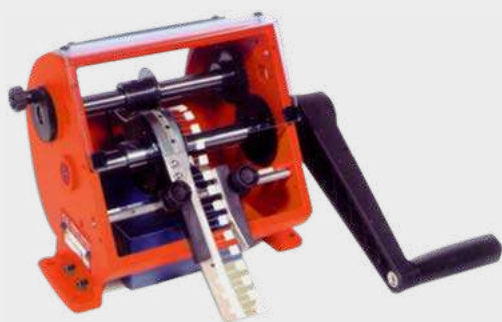
DESCRIPTION

- Machine made for cutting radial taped components such as capacitors, transistors and stand–off resistors

- Leads diameter: 0.3 - 1.0 mm

- Production rate:

  - from 3000 cph (manual)
  - up to 20000 cph (automatic)

(Standard Version) SUPERFORM/R P=12.7 mm	IT-7915113A
(Standard Version) SUPERFORM/R P=15 mm	IT-7915113B
Drive Unit for SUPERFORM 230 V 50/60 Hz	IT-7915030
Tape Reel Holder arm BR6	IT-7915185

IT-7915113

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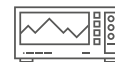
SUPERFORM-AF CUTTING AND FORMING MACHINE
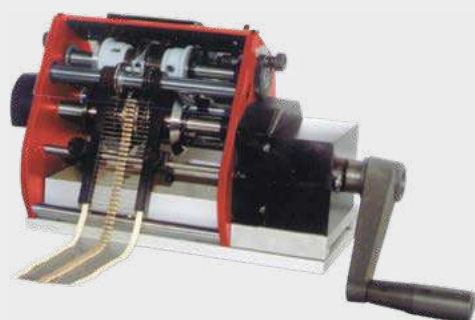
IT-7915095

DESCRIPTION

- Machine designed to cut, bend and preform axial components

- An innovatory preforming system, fully mechanic, allows the rotation of the central feed to stop while two preforming assemblies grip the component leads and preform the leads according to the chosen dies.

- The components are in this way first cut and 'U" bent to the dimensions previously set and then the preforming is made

- Leads diameter: 0.5 – 0.8 mm (optional: 0.6-0.9 mm; 0.8-1.0 mm; 1.0-1.3 mm)

- Production rate:
    - from 1000 cph (manual)
    - up to 8000 cph (automatic)

Motor Unit for SUPERFORM-AF 220V 50/ 60Hz	IT-7915032
Feeder CS40 for loose axial components	IT-7915184
Tape Reel Holder arm BR6	IT-7915185

SUPERFORM-A CUTTING AND FORMING MACHINE
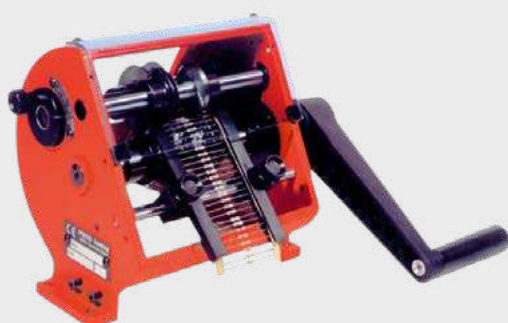
IT-7915100A

DESCRIPTION

- Machine made for cutting and bending axial taped components,

- It's tracking wheels are adjustable independently to allow rapid setup at different for ms

- Leads diameter: 0.4 – 1.3 mm (optional: 0.6-1.4 mm; 0.8 mm; 0.4–0.6 mm)

- Production rate:
    - from 3000 cph (manual)
    - up to 20000 cph (automatic)

Motor Unit for SUPERFORM–A 220V 50/60 Hz	IT-7915030
Feeder CS10 for loose axial components	IT-7915180
Tape Reel Holder arm BR6	IT-7915185

SUPERFORM-AP CUTTING AND FORMING MACHINE
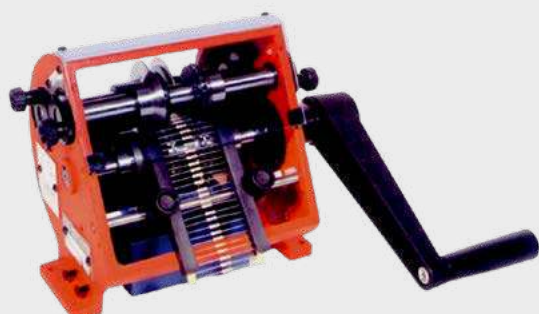
IT-7915102A

DESCRIPTION

- Machine made for cutting and bending axial taped components for vertical assembling, and shaping a little curl on each lead

- It is possible to obtain an U-shape without curls

- Leads diameter: 1 – 1.4 mm

- Production rate:
    - from 3000 cph (manual)
    - up to 20000 cph (automatic)

Motor Unit for SUPERFORM-AP 220V 50/60 Hz	IT-7915030
Feeder CS10 for loose axial components	IT-7915180
Tape Reel Holder arm BR6	IT-7915185

E40-2 / E40-3 CUTTING AND FORMING MACHINE
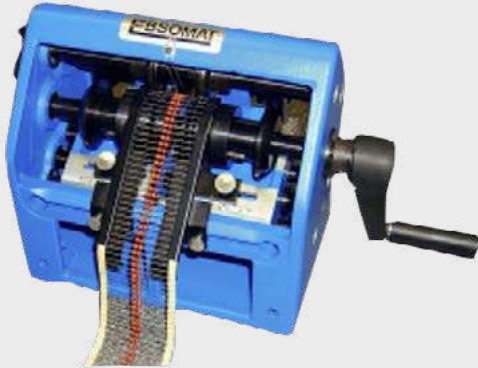
DESCRIPTION

- Capable of forming and trimming axial components and jumpwires to various configurations
- Left and right cut length are independently adjustable
- Extremely easy to operate. Adjustment of pitch dimension and cut length requires no tools
- Dial adjustable pitch dimension is easy and precise
- Designed to cut stamp and bend axial leader components for both horizontal and vertical mounting Capable
- Suitable length and required pitch of the leads can be adjusted by adjusting screws
- Machine can be re-set for the different tools manufactured to meet customers' requirements
- Taped components can be processed automatically with continuosly variable processing speed
- Leads diameter: 0.3 - 0.8 mm (optional 0.3 - 1.3 mm)
- Production rate:

  – from: 40000 cph (manual)
  – up to 70000 cph (automatic)

EB-E-40-2/40-3

SUPERCUT/LN5 | LN5L CUTTING MACHINE
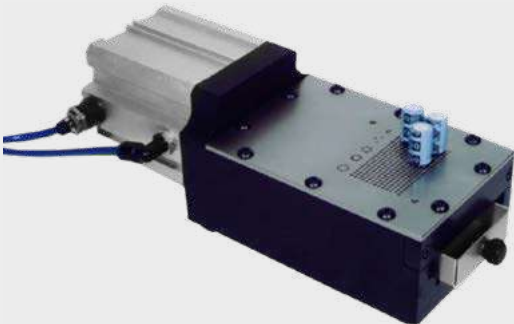
DESCRIPTION

- This pneumatic machine is designed to cut/trim almost every type radial lead components
- The guillotine cutting system, with zero clearance between the plates, guarantees a sharp and precise cut without burrs or damage to the leads
- It is possible to cut many components at the same time without any risk of wear of the blades
- The machine can be supplied with special cutting
- Production rate: max. 3000 cph
- Pressure: 6 ATM

IT-7915041

SUPERCUT CUTTING MACHINE

DESCRIPTION

- Machine made for cutting radial loose components and, with an optional adapter, also taped components
- There is an optional adapter for radial taped components
- The transfer speed is adjustable
- Leads diameter: 0.4 - 0.8 mm
- Production rate: max. 15000 cph

Tape Reel Holder BR3, P=12.7 mm	**IT-7915160**
Tape Reel Holder BR3, P=15 mm	**IT-7915159**
SUPERCUT, 230 V - 50/60 Hz	**IT-7915148N**

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C-066MA CUTTING MACHINE
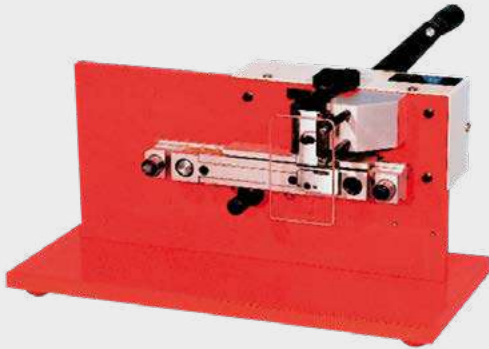
DESCRIPTION

- Cutting device for radial taped components
- All taped radial components, which meet the IEC-specification, can be cutted to the desired length
- Integrated touch-facility for components eliminates any kind of belt tolerances
- Leads diameter: 1.3 mm
- Production rate: 5000 cph

EB-C-066-MA

C-057 CUTTING MACHINE

DESCRIPTION

- Universal cutting machine is designed to cut the leads of loose radial components
- Machine utilizes spring loaded cutting blade traversing a top shear plate to perform the cutting action
- Standard shear plate is supplied with pre-drilled hole patterns at a thickness of 3.0 mm
- Foot pedal operated
- C057 provides a simple, economical solution to cutting radial loose components
- Leads diameter: 0.8 - 1.3 mm (other options customised)
- Production rate: 2000 cph
- Pressure: 4 - 6 ATM

EB-C-057

E 20-5 CUTTING MACHINE

DESCRIPTION

- Cutting machine for D-SUB connectors and connectors
- Flexible and cost effective
- Basic pneumatic machine could be equipped with one (of four) standard cutting plates
- Cutting plates are available from 2 mm up to 5 mm cut length
- Custom cutting plates of cut lengths and custom patterns are available
- Basic machine included a foot pedal, junction box and an air hose
- Leads diameter: max. 1.3 mm
- Production rate: max. 1800 cph
- Pressure: 6 ATM

EB-E20-5

ASSEMBLY FIXTURES PCSA1/PCSA2/PCSA4

DESCRIPTION

- A professional line of assembly jigs for PCB's, designed to simplify placing and soldering of electronic components
- PCSA1,2,4 are supplied with central and two sliding rails as standards
- Additional rails may be added to accommodate a larger number of small boards
- The frame and lid assembly may be detached from the mounting base
- An ingenious design of the base permit an adjustable working angle on both side of the PCB's
- The jig is varnished steel, and the component pressing foam is in conductive material

PCSA1 working dimensions: 270 x 220 mm	**IT-7915599**
PCSA2 working dimensions: 500 x 220 mm	**IT-7915601**
PCSA4 working dimensions: 500 x 350 mm	**IT-7915605**
Additional sliding rail for PCSA1	**IT-7915610**
Additional sliding rail for PCSA2 i PCSA4	**IT-7915612**

HAND SEALER

SPECIFICATION

CAT. NO.	SEALING LENGTH (mm)	POWER (WATTS)
IT-7914201	200	260W
IT-7914211 (WITH CUTTER BLADE)	200	260W
IT-7914221	300	380W
IT-7914222 (WITH CUTTER BLADE)	300	380W
IT-7914231	400	500W
IT-7914232 (WITH CUTTER BLADE)	400	500W
IT-7914233 (WITH CUTTER BLADE)	500	550W

HAND SEALER WITH HOLDING MAGNET AND CUTTER

DESCRIPTION

- The machine operates quickly and efficiently with magnet hold, offering consistent secure sealing for every package
- After the seal cycle the machine re-opens automatically
- Adjustable welding and cooling time

Hand Sealer (max. seal length 300 mm)	**IT-7914245**
Hand Sealer (max. seal length 400 mm)	**IT-7914246**

VACUUM TANK SEALERS

SPECIFICATION

- Vacuum pump Oil bath, 20 m³/h
- Vacuum dimensions:

    - 410 x 400 x 90 mm (**IT-7914262**)
    - 460 x 450 x 90 mm (**IT-7914263**)

- Power supply: 220 V/50 Hz, 2 kW

Seal length: 400 x 5 mm	**IT-7914262**
Seal length: 450 x 5 mm	**IT-7914263**

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COUNTY-S EVO COMPONENTS COUNTER

DESCRIPTION

- County-s Evo is a motorized counting machine for taped SMD component counting
- It can operate in two different ways:
  - Totalizer - components are counted from a zero reference, tape feed is motorized and the counter automatically stops at the tape end, to prevent loss of the total
  - Tryb Preset - the desired component number is keyed on the keyboard and the counter automatically stops when it reaches the corresponding component. Checks the presence of the component
- Aditionals functions: adjustable speed control, empty pocket check, barcode reader input
- Step by step mode (1 component at a time)

IT-8301131

COUNTING	Max. 999999 pcs, 6 digits 22 mm height
MAXIMUM COUNTING SPEED	220 pcs./sec. (1 piece per hole)
PITCH (HOLES FOR COMPONENT)	From 0,5 to 99
MAXIMUM TAPE HEIGHT	56 mm
MAXIMUM REEL DIAMETER	400 mm (standard configuration), 650 mm (with IT-8301150 support)
DISPLAY	Blue LCD with led backlight 160 x 104 pixel
VISIBLE AREA	74 x 46 mm
SELECTION OF THE OPERATOR	10 operators can be memorized with 8 alphanumerical chars everyone
INTERNAL CLOCK	1 week backup
DATALOGGER	Stores the last 500 counting data
DIMENSIONS	525 x 340 x 250(H) mm
WEIGHT	9.5 kg

COUNTY EVO COMPONENTS COUNTER
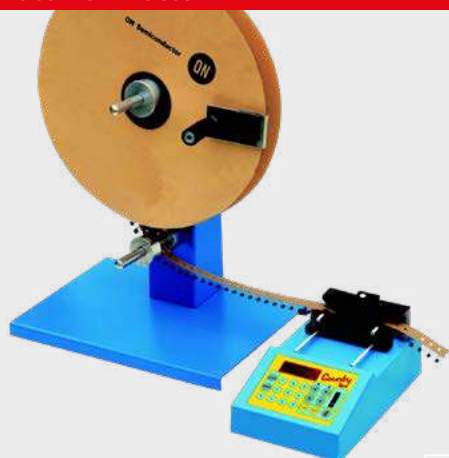
DESCRIPTION

- Microprocessor-controlled counter for radial axial components and SMD with optional adapter IT-8301018
- Two ways of counting
- It is counting the set number of components or counts the total number of components
- The maximum of counting value: 999999
- The minimum lead diameter: 0,4 mm
- Axial component bandolier width: 55 - 110 mm
- Radial component bandolier width: max. 18 mm
- Maximum component diameter: 14 mm
- Display: 4 positions, height: 13 mm

IT-8301081

IT-8301081	COUNTY EVO with accumulator
IT-8301018	SMD adapter
IT-8301023	Stand for spooled components
IT-8301025	SMD support for rolled bandolier
IT-8301028	Bandolier SMD handle
IT-8301030	SMD support for rolled bandolier

DM-500 PCB DEPANELING MACHINE

DESCRIPTION

- Easy and safe separation of panellised scored boards without damaging delicate SMD components
- Adjustable blade height helps avoid expensive blade replacement when they lose their sharpness
- Blade is driven by operating a foot pedal, avoiding any risk of accident
- Special design of the DM-500 makes it possible to depanel PCBs with tall components very close to the scoring line
- Blade speed can be adjusted at any time and it stops immediately when the pedal is released

TWS-DM500

TRACTOR 2 PCB DEPANELING MACHINE

DESCRIPTION

- Separates both small and large pre-scored PCBs
- The maximum separation length is 450 mm
- The PCB is placed with its pre-scored groove onto the linear blade and the circular blade is then drawn by hand, or by motor, across the PCB
- The clearance between the upper circular blade and the lower linear blade is adjustable

TRACTOR 2 - PCB Hand depaneling machine	IT-7915560
TRACTOR 2M - PCB Motorized depaneling machine 230V	IT-7915564

SMA 10 PCB DEPANELING MACHINE

DESCRIPTION

- Machine designed to separate Printed Circuit Boards previously scored
- It works either on traditional materials like FR4 as well as on aluminium substrates (MCPCB)-
- The alignement system allows three degrees of regulation
- SMA10 can depanel both short and long boards bare or populated. In this last case the maximum component heigth is 32 mm cutting tools have a diameter of 125 mm
- Adjustable speed

PG-SMA-10

TWO CIRCULAR TOOLS	Ø 125 mm
MOTORIZED LOWER TOOL WITH ADJUSTABLE SPEED	0 - 120 (rpm)
WORKING PLANE SIZE	1000 x 250 mm
UNLOADING PLANE SIZE	200 x 400 mm
WORKING PLANE HEIGTH ADJUSTMENT	0 - 17 mm
SUGGESTED PANEL SIZE	900 x 350 mm
MAXIMUM COMPONENTS HEIGHT FOR POPULATED BOARDS	32 mm

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DPA-500 PCB DEPANELING MACHINE

DESCRIPTION

- Automatic machine for the PCBs separation
- Easy exchange of cutting blades
- The user friendly software
- Through a self learning process performed by a camera and a geometric balance, the machine can correct errors on the board
- High repeatability of the processes
- Integrated vacuum system

PG-DPA-500-K

POWER CONSUMPTION		< 1200 W	
WORK AREA		500 x 500 x 50 mm	
PCB DIMENSIONS		500 x 500 mm	
PCB THICKNESS		0,6 - 6 mm	
AXES CONTROL X, Y, Z		Interpolation on the 3 axes with brushless motors	
VACUUM SPEED		1000 mm/s	
WORK SPEED		50 mm/s	
MAX. CUTTING FORCE		100 N	
POSITIONING PRECISION	REPEATABILITY	0,03 mm	0,02 mm
CUTTER DIAMETER		1 - 3 mm	
DIMENSIONS		900 x 1000 x 750 mm	
WEIGHT		120 kg	

DPF-200 PCB DEPANELING MACHINE

DESCRIPTION

- Manual depaneling system designed to solve needs of depanellizing small series of PCB
- Easy and fast changed milling cutters
- The design of the cutters enables full depanelization of the PCB
- Integrated electrical or pneumatic aspiration system located directly on the interchangeable rail; with integrated cartridge filter
- Cutting mills and rails made of special steel for extended lifetime
- Patented cutting mills design
- ESD safe

PG-DPF-200-E

POWER CONSUMPTION	0,55 kW
PRESSURE CONTROLLER	-22 kPa (-220 mBar)
PRESSURE OF AIR	6 bar
PIPE CONNECTION	Ø 6 mm
AIR COMPRESSED	Max. 210 Nl/min - approx. 140 Nl/min
DIMENSIONS	65 x 65 x 95 mm
WEIGHT	55 kg
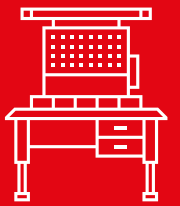
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INDUSTRIAL FURNITURE

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MANUFACTURING OF EQUIPMENT FOR ELECTRONICS

Since the very beginning, REECO's goal has been to manufacture high quality products, which could be used for many years while satisfying our customers needs.

Many trainings, constant commitment and practice allowed us to implement a number of modern technical solutions. The quality of the brand is confirmed by many awards, e.g:

- 1st PLACE in the DOBRY WZÓR 2015 competition for Reeco Premium Table in the WORK ZONE category
- 1st PLACE in the DOBRY WZÓR 2018 competition for RE-2100 Soldering robot in the WORK ZONE category

organized by the Institute of Industrial Design in Warsaw.

Reeco GROUP

Reeco ESD Workstations

Reeco Robots

Reeco ESD Clothing

Reeco Equipment

ESD WORKSTATIONS

A wide range of ESD industrial furniture. Thanks to the modularity of Reeco furniture, they can be freely configured in line with the growing customers requirements.

SOLDERING AND DOSING ROBOTS

Robots for selective soldering of through-hole elements using SCARA robots and robots for dosing and potting.

ESD CLOTHING

High quality anti-static clothing, produced in appropriate working conditions, in compliance with the strictest standards of the production process.

EQUIPMENT AND ACCESORIES

Advanced equipment for BGA assembly and disassembly, pre-heaters, feeders and dispensers, ultrasonic cleaners, anti-static mats and many other accessories.

CONTACT US

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E: esdworkstations@reeco.info

ROBOTS

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E: office@renexrobotics.pl

ESD CLOTHING

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EQUIPMENT

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E: equipment@reeco.info

VISIT OUR WEBSITE

For a detailed offer and more information about the company, please visit our website: **REECO.INFO.PL**

PREMIUM TABLE FRAME

DESCRIPTION

- Max load capacity: 600 kg
- Height adjustment: 670 –1120 mm
- Type of height adjustment: stepless (internal rail)
- Type of height adjustment lock: 4 screws per leg
- Leveling feet
- Applicable table top: rectangular, ergonomic
- Metal cast foot for increased stability

CAT. NO.	WIDTH	DEPTH	HEIGHT
RF-001-12075-9003	1200 mm	750 mm	670 - 1120 mm
RF-001-15375-9003	1530 mm	750 mm	670 - 1120 mm
RF-001-18375-9003	1830 mm	750 mm	670 - 1120 mm

PREMIUM ELECTRICALLY ADJUSTABLE TABLE FRAME

DESCRIPTION

- Compliant with EN 60335-1 standard
- Smooth starting and stopping provided by the control box
- Low noise level
- Maximum power: 1600 N (per leg)
- Maximum speed: 43 mm/s (at no load)
- Power supply: 24 V (AC adapter included)
- Smartphone application for height adjustment via Bluetooth

CAT. NO.	WIDTH	DEPTH	HEIGHT
RF-001-12075-9003-M	1200 mm	750 mm	740 - 1240 mm
RF-001-15375-9003-M	1530 mm	750 mm	740 - 1240 mm
RF-001-18375-9003-M	1830 mm	750 mm	740 - 1240 mm

CLASSIC TABLE FRAME

DESCRIPTION

- Max load capacity: 300 kg
- Height adjustment: 670 - 1120 mm
- Type of height adjustment: stepless (internal rail)
- Type of height locking: 2 screws per leg
- Leveling feet
- Applicable table top: rectangular, ergonomic

CAT. NO.	WIDTH	DEPTH	HEIGHT
RF-002-12075-9003	1200 mm	750 mm	670 - 1120 mm
RF-002-15375-9003	1530 mm	750 mm	670 - 1120 mm
RF-002-18375-9003	1830 mm	750 mm	670 - 1120 mm

PREMIUM CORNER MODULE

DESCRIPTION

- Comes together with ESD table top
- Max load capacity: 100 kg
- Stepless height adjustment: 670 - 1120 mm
- Additional supporting leg provided as an option for higher load capacity

DIMENSIONS
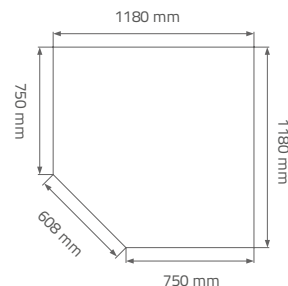
CAT. NO.
RF-003P-11860-9003

CLASSIC CORNER MODULE

DESCRIPTION

- Comes together with ESD table top
- Maximum load capacity: 100 kg
- Stepless height adjustment: 670 - 1120 mm

DIMENSIONS
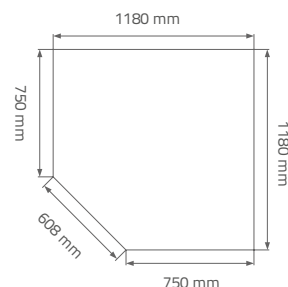
CAT. NO.
RF-003C-11860-9003

CLASSIC SIDE MODULE

DESCRIPTION

- Comes together with ESD table top
- Maximum load capacity: 100 kg
- Attachable to both left and right side

DIMENSIONS

CAT. NO.	WIDTH	DEPTH
RF-003-12075-9003	1200 mm	750 mm
RF-003-15375-9003	1530 mm	750 mm

ANTI-VIBRATION TABLE

DESCRIPTION

Anti-vibration table is an essential element of every laboratory. In order to ensure consistent and proper operation of scales microscopes and measuring devices they are placed on a specially designed granite plate.

All types of vibration that may affect the operation of the devices (generated by other devices in a laboratory or transmitted through the floor) is eliminated thanks to vibroisolators on which the plate is mounted.

- Height adjustment range: 670 - 1120 mm
- Max load capacity of granite plate: 40 - 100 kg
- 4 robust vibroisolators
- Two-layer board made of polished granite
- Standard sizes of granite board: 400 x 400 mm
- Different sizes of granite board applicable

CAT. NO.	WIDTH	DEPTH
RF-030-15375-9003	1530 mm	750 mm
RF-030-18375-9003	1830 mm	750 mm

MOVABLE ESD UPRIGHT FRAME

DESCRIPTION

Movable ESD upright frame is ideal for manufacturing facilities, workshops, laboratories and all these places where mobility is required for fast movement of parts and tools. Thanks to modular design all 900 mm accessories are applicable.

- 4 x 75 mm swivel castors - 2 with braking systems
- 2 horizontal bars for better stability
- CPU holder
- Wheel diameter: 75 mm
- External dimensions (w/o wheels): 900 x 1860 mm

TABLE TOP FOR MOVABLE FRAME - DIMENSIONS (MM)

900 mm

600 mm

CAT. NO.	HEIGHT	TABLE TOP WIDTH	TABLE TOP DEPTH
RF-098-20090-9003	2000 mm	900 mm	600 mm

ERGONOMIC TABLE TOP

DESCRIPTION

- Colour: RAL 7036
- Outer surface: conductive laminate, moisture and scratch resistant
- Core: conductive, moisture resistant
- Fixing to frame: threaded bushings

CAT. NO.	WIDTH	DEPTH	THICKNESS
RF-005-12075-7036	1200 mm	750 - 800 mm	25 mm
RF-005-15375-7036	1530 mm	750 - 800 mm	25 mm
RF-005-18375-7036	1830 mm	750 - 800 mm	25 mm

RECTANGULAR TABLE TOP

DESCRIPTION

- Colour: RAL 7036
- Top layer: conductive laminate, increased resistance to moisture and scratches (only table top with conductive laminate)
- Core: conductive, resistant to moisture
- Fixing to frame: threaded bushings

CAT. NO.	WIDTH	DEPTH	THICKNESS
RF-004-12075-7036	1200 mm	750 mm	25 mm
RF-004-15375-7036	1530 mm	750 mm	25 mm
RF-004-18375-7036	1830 mm	750 mm	25 mm

PERFORATED UPRIGHT FRAME

DESCRIPTION

- Perforated vertical frame is one of the basic elements
- Accessories such as shelves, suspension rails with plastic containers, perforated panels are mounted on the frame
- Perforation allows the placement of accessories at any height
- The frame is available in three standard widths

PERFORATED UPRIGHT FRAME (HIGH) - DIMENSIONS		
CAT. NO.	WIDTH	HEIGHT
RF-008-0900-9003	900 mm	1555 mm
RF-008-2750-9003	1530 mm	1555 mm
RF-008-2900-9003	1830 mm	1555 mm

PERFORATED UPRIGHT FRAME (SHORT) - DIMENSIONS		
CAT. NO.	WIDTH	HEIGHT
RF-008-09009-9003	900 mm	900 mm
RF-008-27509-9003	1530 mm	900 mm
RF-008-29009-9003	1830 mm	900 mm

UPPER SHELF FOR PREMIUM /CLASSIC FRAME

DESCRIPTION

- Convenient additional surface for tool and other equipment placement
- Bending resistant thanks to supporting bars
- Outer layer: scratch and moist resistant ESD laminate
- Core: conductive, moist resistant
- Installation: metal bushings

TABLE TOP FOR UPPER SHELF - DIMENSIONS (mm)

CAT. NO.	WIDTH	DEPTH
RF-007-12030-9003	900 mm	300 mm
RF-007-15330-9003	1530 mm	300 mm
RF-007-18330-9003	1830 mm	300 mm

900 | 1530 | 1830 mm

300 mm

LIGHT AND BALANCER RAIL

DESCRIPTION

Another useful accessory is lamp and balancer rail. Lamp and balancer rail is mounted on upright frame.

LAMP BRACKET

Lighting and balancer rail is dedicated to LED lamp installation. Thanks to its design it provides easy vertical adjustment of the light beam.

LIGHT AND BALANCER RAIL
Lamp and balancer rail is mounted on upright frame. Thanks to perforation of upright frame it can be installed at almost any height above table top.

CAT. NO.	WIDTH
RF-009-0900-9003	900 mm
RF-009-2750-9003	1500 mm
RF-009-2900-9003	1800 mm

LED LIGHTING PRODUCT

DESCRIPTION

- REECO lamps through the use of LED s are characterized by low energy consumption and longer life span
- Ergonomic LED lighting has been designed in accordance with European EN 12464-1 standard
- The light emitted does not cause eyestrain and glares
- Color temperature: 5700K
- Luminous efficacy: 105 lm/W
- 1500 and 1800 LED lamps consist of two zones that can be lit independently creating either shadow free or 3D effect
- SL - SLIM type lamp

CAT. NO.	WIDTH	POWER
RF-015-0900-7021	900 mm	60 W
RF-015-0900-7021-SL	900 mm	48 W
RF-015-1500-7021-SL	1500 mm	60 W
RF-015-1800-7021-SL	1800 mm	48 W
RF-015-1500-7021	1500 mm (3D)	120 W
RF-015-1800-7021	1800 mm (3D)	140 W

DAYLIGHT LUMI LAMP

DESCRIPTION

- Powerful Daylight LEDs - 15W
- Modern design
- Two levels of light intensity
- Pantograph arm that allows for any lamp setting
- Fixing standard: to the worktop edges

POWERFUL DAYLIGHT	88 SMD LED
COLOUR TEMPERATURE	6000°K
LAMP BRIGHTNESS	3800 lx
LONG REACH ARM	108 cm

DA-E35500

DAYLIGHT LUMINOS LED LAMP

DESCRIPTION

- Light source: LED
- Energy consumption: 24W
- 3 brightness levels
- Effortless free-motion head joint & arm - holds any position
- Heavy duty arm with reinforced joints
- Anti-reflection diffuser

POWERFUL DAYLIGHT	120 SMD LED
COLOUR TEMPERATURE	6000°K
LAMP BRIGHTNESS	3800 lx
LONG REACH ARM	112 cm

DA-E35600

DAYLIGHT LUMINOS LED ESD LAMP

DESCRIPTION

- Light source: LED
- Energy consumption: 24W
- Modern design
- Suitable for use in EPA, (Electrostatic Protected Areas) to IEC 61340-5-1
- Dimmer: 3 Levels
- Motion arm & head joint with wing nut - holds any position
- Suitable for use in EPA
- Wide dispersion of light (65 cm)

POWERFUL DAYLIGHT	120 SMD LED
COLOUR TEMPERATURE	6000°K
LAMP BRIGHTNESS	3800 lx
LONG REACH ARM	112 cm

DA-E35611

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MODULAR STORAGE SYSTEMS

DESCRIPTION

- Modularity means that the entire storage system can be easily expanded or modified by adding or exchanging several basic components

- The construction of cabinets and shelves is based on the perforated frames allowing quick and easy upgrades

- Inside there are supports ensuring high stability even at high loads

- You can easily create versatile storage solution by customizing it to suit your needs

- Simply choose appropriate accessories and position them at desired height

- Accessories compatible with racks and cabinets:
    - 1000 x 400 mm shelves
    - Perforated panels
    - Drawers
    - Stencil holders

PLEASE CONTACT OUR SALES REPRESENTATIVE IN ORDER TO RECEIVE QUOTATION OF SOLUTION CUSTOMIZED TO YOUR NEEDS

ROLLER ESD TRANSPORT SYSTEMS

DESCRIPTION

Thanks to the modularity of REECO Roller transport systems it is possible to adopt the system to many production processes taking into account subsequent production phases.

ADVANTAGES

- Stable and rigid construction

- Possibility of connecting with other transport systems

- Height and angle adjustment of upperand lower transport pallets

- Possibility of integration with workplaces

INDIVIDUAL SOLUTIONS

To ensure work ergonomics, it is necessary to design hall project with planned transportation system. Considering such necessity, at design stage, we offer tailor the system to application, weight and dimensions of goods and characteristics of environment.

Electronic industry has large number of small components, requiring precision transport and short production cycle.

For these reasons, production lines should be optimally configured. Therefore, project includes not only production phases, but also inspection and service stands as well as specific storage requirements of product sensitive to electrostatic discharges (ESD).

SYSTEM MODULES - DIMENSIONS (mm)		
CAT. NO.	MODULE	LENGTH
RF-029-ML-H	Start/Stop	1500 mm
RF-029-HP1500	Extending	1500 mm
RF-029-HP2000	Extending	2000 mm
RF-029-HP2500	Extending	2500 mm
ESD PALLETS - DIMENSIONS (mm)		
CAT. NO.	WIDTH	LENGTH
RF-006-3030-7036	300 mm	300 mm
RF-006-4040-7036	400 mm	400 mm
RF-006-6060-7036	600 mm	600 mm

RACK 19" 6HU ESD CABINETS

DESCRIPTION

- 10 profiles RACK with possibility of position adjustment
- Cabinet mounting on two tilted brackets - adjustable possibility of position adjustment relative to a table top
- Detachable back cover divided into 3 parts
- Cable duct in the lower wall on whole cabinet width
- Ventilation openings in the upper and lower wall
- Safety module in the right segment of the cabinet equipped in safety button, RCD fuse 16A 30mA AC , 4 overcurrent switches S301 B16 and 3x10 mm2 strip
- 4 external socket 230V/16A on the back of the safety module
- 230 V/16A power cord 3 m length
- 2 grounding points
- Whole construction protected against ESD
- 1 end cup 2WU width and 2 end cups 1WU width
- Self assembly cabinet, delivered in one package

CAT. NO.	WIDTH	DEPTH	HEIGHT
RF-022-1209-9003	1200 mm	340 mm	350 mm
RF-022-1509-9003	1500 mm	340 mm	350 mm
RF-022-1809-9003	1800 mm	340 mm	350 mm

ADJUSTABLE LABORATORY POWER SUPPLY DC 6U155

DESCRIPTION

- Power supply with smooth regulation of voltage in range of 0-30V with possibility of current adjustment in range of 0.1-4A
- Adjustable part of power supply is equipped in digital voltage and current displays. Equipped in temperature sensors with fans

POWER SUPPLY VOLTAGE	230 V/50 Hz
ADJUSTABLE VOLTAGE	1 x 0 - 30 V
ADJUSTABLE CURRENT	1 x 0 - 4 A
CONSTANT VOLTAGE	1 x 5 V
CONSTANT CURRENT	1 x 3 A
WIDTH	180 mm

RF-DC-6U155

ADJUSTABLE LABORATORY POWER SUPPLY DC 6U1541

DESCRIPTION

- Power supply equipped in two channels with smooth regulation of voltage in range of 0-40V
- Has one 5 V/3A DC voltage output
- Single power supply outputs are equipped in illumination signalling work of power supply

POWER SUPPLY VOLTAGE	230 V/50 Hz
ADJUSTABLE VOLTAGE	2 x 0 - 40 V
ADJUSTABLE CURRENT	2 x 0 - 3 A
CONSTANT VOLTAGE	1 x 5 V
CONSTANT CURRENT	1 x 3 A
WIDTH	240 mm

RF-DC-6U1541

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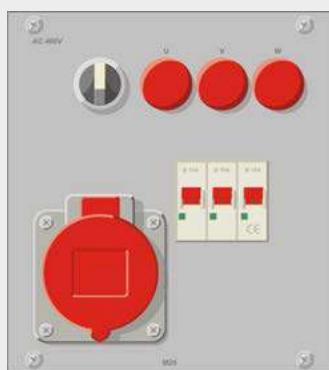
3F 6U1525 MODULE

DESCRIPTION

- Model with three phase 16A socket, switch and three control lamps
- Module has self protection with three phase 10A fuse (16A optional)

MAX. CURRENT	10 A (16 A - option)
MAX. VOLTAGE	3 x 400 V
FUSE	B10A (B16A - option)
WIDTH	180 mm

RF-3F-6U1525

DIGITAL MULTIMETER 6U1526

DESCRIPTION

- Measurement: AC voltage, DC dual channel voltage, AC current, DC current, resistance, capacity, temperature, frequency, inductance, diode test, thyristors test

AC VOLTAGE	0,4; 4; 40; 400; 700 V
DC VOLTAGE	0,4; 4; 40; 400; 1000 V
AC CURRENT	0,04; 0,4; 10 A
DC CURRENT	0,004; 0,4; 10 A
WIDTH	120 mm

RF-6U1526

DUAL CHANNEL OSCILLOSCOPE 100 MHZ 6U1558
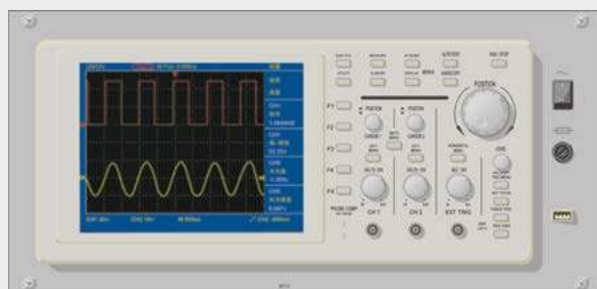
DESCRIPTION

- Digital two-channel oscilloscope with sampling rate 500 MS /s and colour 8"LCD display
- 20 automatic measurements enables on fast and accurate determining parameters of signal
- Equipped in USB port

INPUT COUPLING	AC, DC, GND
INPUT IMPEDANCE	1 MΩ parallel with 15 PF
MAX. INPUT VOLTAGE	300 V peak-peak
RECORD LENGTH	6000 PPC
WIDTH	420 mm

RF-6U1558

THREE-PHASE AUTOTRANSFORMER 6U1551

DESCRIPTION

- Equipped in one three phase regulator of voltage, adjustable in range of 3 x < 5 - 230V with max. 2A current intensity

POWER SUPPLY VOLTAGE	3 x 230 V/50 Hz
OUTPUT VOLTAGE	3 x < 5 - 230 V
MAX. OUTPUT CURRENT	3 x 2 A
WIDTH	240 mm

RF-6U1551

STANDARD SHELF

DESCRIPTION

- The design enables for installation at an angle of 90° or 60° relative to a perforated vertical frame

CAT. NO.	WIDTH	DEPTH
RF-010-0750-7021	750 mm	300 mm
RF-010-0900-7021	900 mm	300 mm

ADJUSTABLE SHELF

DESCRIPTION

- The design enables for smooth adjustment of an angle in range of 90° - 60° relative to a perforated vertical frame

CAT. NO.	WIDTH	DEPTH
RF-011-0750-7021	750 mm	300 mm
RF-011-0900-7021	900 mm	300 mm

ADJUSTABLE REINFORCED SHELF
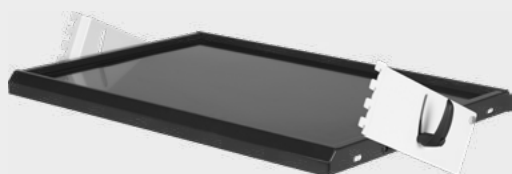
DESCRIPTION

- The design allows for smooth adjustment of an angle in range of 90° - 60° relative to a perforated vertical frame
- Enables you to store heavy equipment

CAT. NO.	WIDTH	DEPTH
RF-0110-0750-7021	750 mm	500 mm
RF-0110-0900-7021	900 mm	600 mm

STANDARD STEEL SHELF - ILLUMINATED

DESCRIPTION

- The design enables for installation at an angle of 90° or 60° relative to a perforated vertical frame

CAT. NO.	WIDTH	DEPTH	POWER
RF-017P-0750-7021	750 mm	300 mm	30W
RF-017P-0900-7021	900 mm	300 mm	38W

ADJUSTABLE SHELF - ILLUMINATED

DESCRIPTION

- The design enables for smooth adjustment of an angle in range of 90° - 60° relative to a perforated vertical frame

CAT. NO.	WIDTH	DEPTH	POWER
RF-017-0750-LED-7021	750 mm	300 mm	30W
RF-017-0900-LED-7021	900 mm	300 mm	38W

KEYBOARD TRAY
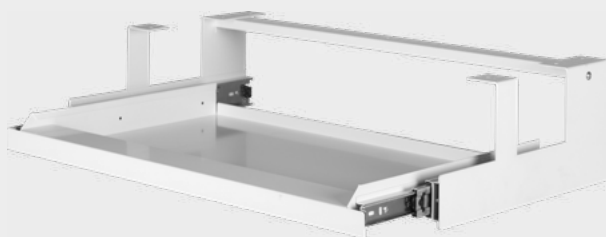
DESCRIPTION

- Mounted under tabletop enables to gain additional usable space, and also puts the keyboard at the correct height

CAT. NO.	WIDTH	HEIGHT	DEPTH
RF-025-KEY-9003	Overall dimensions		
	680 mm	120 mm	380 mm
	Tray dimensions		
	595 mm	30 mm	310 mm

PLASTIC CONTAINERS

DESCRIPTION

- Plastic containers are ideal for storing small elements like: components, screws, nuts, seals, etc.

CAT. NO.	VOLUME
RF-013-0001-ESD	1,0 L
RF-013-0038-ESD	3,8 L
RF-013-0094-ESD	9,4 L

SUSPENSION RAIL
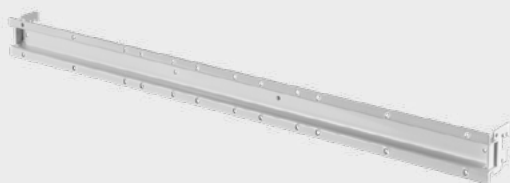
DESCRIPTION

- Its width should be chosen in accordance with the width of used perforated frame

CAT. NO.	WIDTH	CONTAINERS
RF-012-0750-9003	750 mm	7 (1L) / 5 (3,8L) pcs.
RF-012-0900-9003	900 mm	8 (1L) / 6 (3,8L) pcs.

PERFORATED PANEL
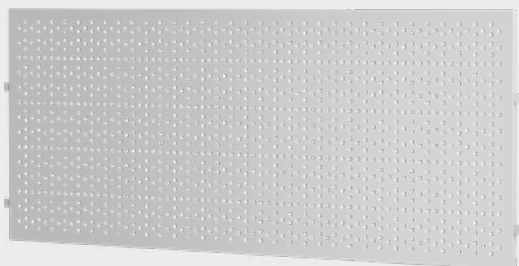
DESCRIPTION

- When equipped with suitable hooks, they constitute a practical storage place for various tools and equipment

CAT. NO.	WIDTH	HEIGHT
RF-014-07503-9003	750 mm	300 mm
RF-014-09003-9003	900 mm	300 mm
RF-014-07504-9003	750 mm	400 mm
RF-014-09004-9003	900 mm	400 mm

4 X 1/2" PNEUMATIC STRIP

DESCRIPTION

- Made of high quality aluminum

- Equipped with mounting brackets. 3/8" or 1/2" input valve

- 1/2" output valve

CAT. NO.	VALVES
RF-LP1/2G	4

POWER STRIP WITH E-TYPE SOCKETS

DESCRIPTION

- Strip has automatic fuse and electronic overvoltage circuit
- Power cord length: 3 m
- Sockets with protective contacts

CAT. NO.	CURRENT	SOCKETS
RF-LZ-10A8G-3	10 A	8
RF-LZ-16A8G-3	16 A	8

LEGRAND POWER STRIP
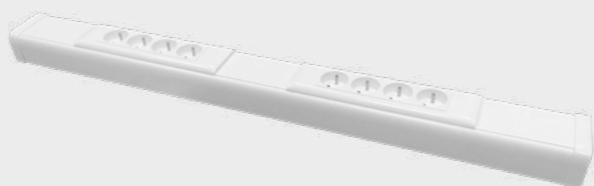
DESCRIPTION

- Power strips are selected and assembled at the customer's request
- Designed in accordance with PN-EN 50085-1

CAT. NO.
RF-LZ1000

POWER STRIP WITH SCHUKO SOCKETS

DESCRIPTION

- Strip has automatic fuse and electronic overvoltage circuit
- Power cord length: 1,5 m
- Sockets with protective contacts

CAT. NO.	CURRENT	SOCKETS
RF-LZ-530W-1,5	16 A	5

UNIVERSAL CPU HOLDER

DESCRIPTION

- Compatible with CLASIC, PREMIUM as well as PREMIUM ELECTRIC frame
- Width adjustment range: 120 - 195 mm

CAT. NO.	WIDTH	DEPTH	HEIGHT
RF-025-CHU-9003	120 - 195 mm	445 mm	460 mm

CPU HOLDER FOR PREMIUM FRAME
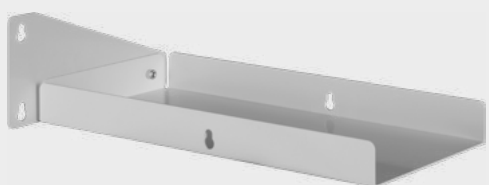
DESCRIPTION

- It is ideal solution to increase optimum of used workspace, while keeping your computer above the floor thus enables of maintaining workplace and surroundings cleanliness

CAT. NO.	WIDTH	HEIGHT
RF-025-CHP-9003	215 mm	500 mm

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CPU HOLDER FOR CLASSIC FRAME
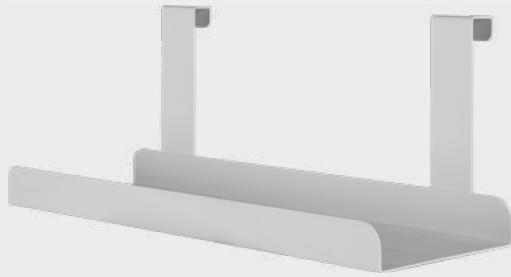
DESCRIPTION

- Bracket is mounted to the frame of CLASSIC undercounter construction
- Easy and fast assembly without tools, optimizes work area

CAT. NO.	WIDTH	HEIGHT
RF-025-CHC-9003	195 mm	650 mm

LAPTOP SHELF

DESCRIPTION

- Easy horizontal, vertical and angular adjustment thanks to triple-jointed arm

CAT. NO.	WIDTH	HEIGHT
RF-025-LH-9003	435 mm	300 mm

DOCUMENT HOLDER

DESCRIPTION

- Double-jointed arm allowing for horizontal and angular adjustment

CAT. NO.
RF-025-DH-9003

LCD HOLDER

DESCRIPTION

- The holder is equipped with a joint, which provides the possibility of horizontal regulation of a monitor
- Standard VESA 75-100

CAT. NO.
RF-025-VESA-9003

PROTECTIVE PANEL

DESCRIPTION

- Protective panels are intended only to be mounted on the back side of the Premium or Premium Electric construction

CAT. NO.	WIDTH	HEIGHT
RF-026-0750-9003	750 mm	300 mm
RF-026-0900-9003	900 mm	300 mm

CABLE DUCTS - VERTICAL AND HORIZONTAL

DESCRIPTION

- Cable ducts, as well as protective panels enables hiding of cables
- Intended only to be mounted on perforated frame on the back side of the Premium or Premium Electric table frame

CAT. NO.	TYPE	LENGTH
RF-026H-0750-9003	Horizontal	750 mm
RF-026H-0900-9003	Horizontal	900 mm
RF-026U-1200-9003	Horizontal	1200 mm

UTILITY SHELF
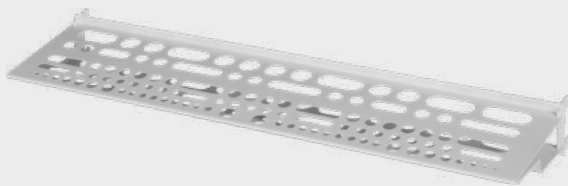
DESCRIPTION

- Shelf was equipped with different size holes, which enable storage of differently sized tools

CAT. NO.	WIDTH	DEPTH
RF-010N-0300-9003	300 mm	170 mm
RF-010N-0700-9003	750 mm	170 mm
RF-010N-0900-9003	900 mm	170 mm

SLIDING PIECE
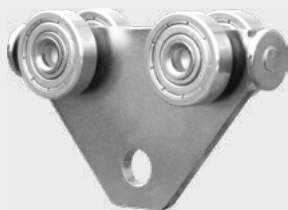
DESCRIPTION

- Made of galvanized steel and rolling bearings
- Travel speed of trolley is 80 m/min
- Max. load capacity - 20 kg

CAT. NO.
RF-023-WK-S1

FOOTREST

DESCRIPTION

- The freestanding footrest increases the ergonomics and comfort of the operator's work
- Its height and angle are adjustable

CAT. NO.	WIDTH	DEPTH	HEIGHT
RF-021-FR-9003	600 mm	420 mm	370 mm

DRAWER UNIT - 2 DRAWERS

DESCRIPTION

- Equipped with central locking system and two drawers of equal height

CAT. NO.	WIDTH	DEPTH	HEIGHT
RF-016-3826-9003	380 mm	520 mm	260 mm

DRAWER UNIT - 4 DRAWERS

DESCRIPTION

- Equipped with central locking system and four drawers of various height

CAT. NO.	WIDTH	DEPTH	HEIGHT
RF-016-4567-9003	455 mm	520 mm	700 mm

WHEELED DRAWER

DESCRIPTION

- Drawer unit equipped with 4 swivel wheels and central locking system
- Auxiliary table top with limiters on three sides
- Two castors equipped with braking system

CAT. NO.	WIDTH	DEPTH	HEIGHT
RF-016-4566-9003	455 mm	520 mm	700 mm

ESD WASTE BIN

DESCRIPTION

- Leveling feet
- Self-closing lid
- Easy waste bag installation and replacement
- Oblique design, front door locked with a key

CAT. NO.	WIDTH	DEPTH	HEIGHT
RF-097-PS01-120	355 mm	355 mm	1007 mm

TROLLEY WITH HEIGHT ADJUSTABLE TOP

DESCRIPTION

- Upper platform made of moist and scratch resistant ESD laminate
- Height adjustment range: 665 - 1100 mm

CAT. NO.	WIDTH	DEPTH	HEIGHT
RF-028-450700-9003	790 mm	950 mm	990 mm

LAPTOP TROLLEY

DESCRIPTION

- ESD protected
- Height adjustment range: 650 - 999 mm
- Upper platform dimensions: 400 x 540 mm

CAT. NO.	WIDTH	DEPTH	HEIGHT
RF-028-6045-9003	600 mm	450 mm	1000 mm

MODULAR WORKSHOP TROLLEY
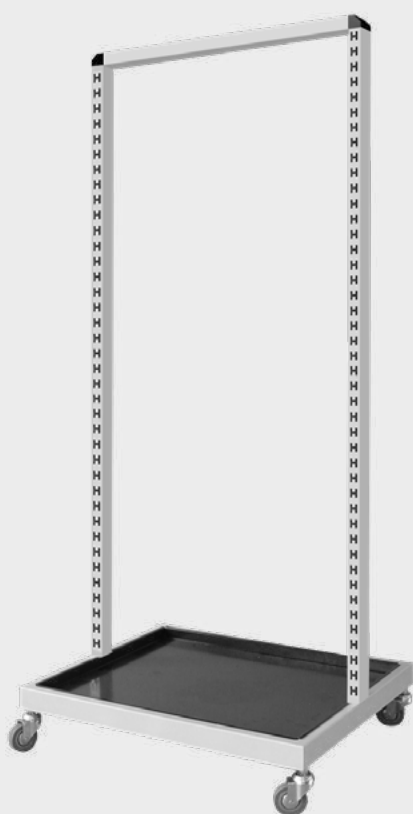
DESCRIPTION

- A workshop trolley with a perforated frame, which enables mounting additional accessories, e.g. perforated plates, shelves etc.
- It has two castors with brakes

CAT. NO.	WIDTH	HEIGHT
RF-024-0750-9003	750 mm	1555 mm
RF-024-0900-9003	900 mm	1555 mm

SOLO 10A CHAIR

DESCRIPTION

- Five-pointed star polished aluminium base

- Adjustable seat height 46.5-55 cm

- Ergonomic, moulded seat made of plywood and hardwood, coated with polyurethane foam (PU) - guarantee of excellent resistance on bending and maximum seating comfort

- Shelled back - contoured shape of the back, especially in the lumbar spine, significantly improves work comfort and positively impacts ergonomics

- Height, seat depth and angle adjustment

- Antistatic fabric with specially fused graphite thread combined with metallic elements of the construction

- Seat dimensions: 480 x 460 mm (width x depth)

SOLO 10A chair	RE-SOLO10A
Armrests for SOLO 10A chair	RE-SOLO10A-AR
Foot ring for SOLO 10A chair	RE-SOLO10A-FR

SOLO 20A CHAIR

DESCRIPTION

- Specialised laboratory chair with handle at the top of backrest for easy carrying

- Five-star base - high durability and stability

- Gas spring - adjustable seat height in range 45.5-56 cm

- Height, depth and angle adjustment of the backrest

- Non-slip backrest surface made of soft, contoured black plastic (PU) - contoured shape of the backrest significantly increases comfort of work and gives positive impact on ergonomics

- Antistatic fabric with specially fused graphite thread combined with metallic elements of the construction

- Seat dimensions: 465 x 430 mm (width x depth)

SOLO 20A chair	RE-SOLO20A
Armrests for SOLO 20A chair	RE-SOLO10A-AR
Foot ring for SOLO 20A chair	RE-SOLO10A-FR

RF-P301

RF-P302

RF-P303

RF-C311

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RF-C312

RF-C313

RF-C314

RF-C315
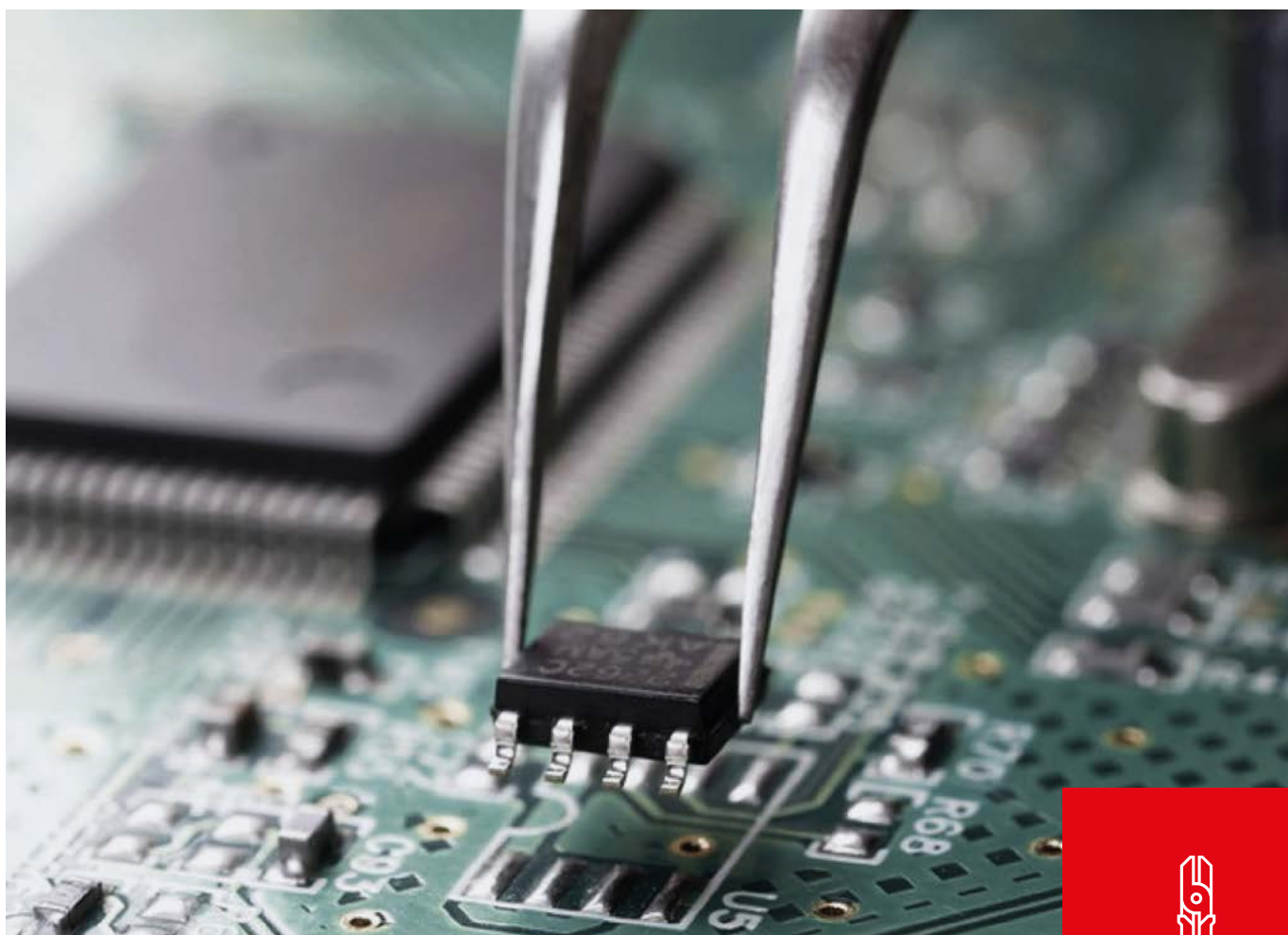
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HAND TOOLS

189
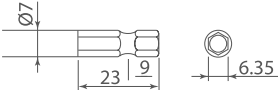
DELVO ELECTRIC SCREWDRIVERS - DLV30S/45S/70S SERIES

DESCRIPTION

- For 2,5 - 8,0 mm screws
- Built-in brushless motor
- Built-in screw counting funtion
- Up to eight types of motion setting or up to 8 channels can be saved in the screwdriver
- Setting with the Remote Controller RC100
- Automatic screw counting funtion
- Complient with IEC61340-5-1
- LCD display
- Built-in Security Function

CAT. NO.	LEVER START	DE-DLV30S06L-AY	DE-DLV30S12L-AY	DE-DLV30S20L-AY	DE-DLV45S06L-AY	DE-DLV45S12L-AY	DE-DLV70S06L-AY
	PUSH TO START	DE-DLV30S06P-AY	DE-DLV30S12P-AY	DE-DLV30S20P-AY	DE-DLV45S06P-AY	DE-DLV45S12P-AY	DE-DLV70S06P-AY
INPUT VOLTAGE		45 V DC					
POWER CONSUMPTION		44 W					
TORQUE		0,4 - 1,6 Nm (Low Torque Spring)			2,0 - 4,5 Nm		3,8 - 7,0 Nm
		1,2 - 3,0 Nm (High Torque Spring)			2,0 - 4,5 Nm		3,8 - 7,0 Nm
FREE SPEED		160 - 2000 (rpm)					
SCREW SIZE	MACHINE SCREW	2,6 - 5,0 mm			4,5 - 6,0 mm		5,0 - 8,0 mm
	TAPPING SCREW	2,5 - 4,0 mm			4,0 - 5,0 mm		4,5 - 6,0 MM
BIT TYPE (mm)		Ø7 23 9 6.35					
WEIGHT		0.71 kg			0.86 kg		
STANDARD ACCESORIES							
BIT NO. 2 X 7 X 75		1					
SPRING FOR LOW TORQUE		1			–		
CONNECTION CORD 9073		1					
SUSPENSION BAIL		1					

CONTROLLERS FOR DLV30S/45/70S SERIES

DESCRIPTION

DE-DEA0151N-AZ

DE-DEA0241N-AZ

CAT. NO.	DE-DEA0151N-AZ	DE-DEA0241N-AZ
INPUT	100 - 240 V AC, 50/60 Hz	
MAX. POWER	150 W	240 W
WEIGHT	0.56 kg	0.9 kg

* Power cord to be ordered separately (DE-DLW9240)

CONTROLLERS SELECTION TABLE FOR DLV30S/45/70/S SERIES					
DE-DEA0151N-AZ		DE-DEA0241N-AZ			
DE-DLV30S06L-AY	DE-DLV30S06P-AY	DE-DLV30S06L-AY	DE-DLV30S06P-AY	DE-DLV45S06L-AY	DE-DLV45S06P-AY
DE-DLV30S12L-AY	DE-DLV30S12P-AY	DE-DLV30S12L-AY	DE-DLV30S12P-AY	DE-DLV45S12L-AY	DE-DLV45S12P-AY
DE-DLV45S06L-AY	DE-DLV45S06P-AY	DE-DLV30S20L-AY	DE-DLV30S20P-AY	DE-DLV70S06L-AY	DE-DLV70S06P-AY

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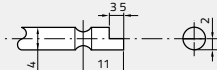
DELVO ELECTRIC SCREWDRIVERS - DLV7400A

DESCRIPTION

- For miniature screws: 1,0 - 2,6 mm
- Reduces shock applied to workpieces when fastening screws
- Stepless torque adjustment
- The controller provides a soft start function
- ESD protection compliant with IEC61340-5-1
- Lightweight
- The initial speed at screwdriver startup can therefore be slowed down, effectively preventing screw heads from being schratched
- High torque accuracy

CAT. NO.		DE-DLV7410A-BME	DE-DLV7420A-BME
STARTING METHOD		Lever Start	
INPUT VOLTAGE		40 V DC	
POWER CONSUMPTION		Approx. 10 W	
TORQUE		0,02 ~ 0,2 Nm	0,15 ~ 0,4 Nm
FREE SPEED		500 ~ 750 (rpm)	450 ~ 600 (rpm)
SCREW SIZE	MACHINE SCREW	1,0 - 2,3 mm	1,6 - 2,6 mm
	TAPPING SCREW	1,0 - 2,0 mm	1,4 - 2,3 mm
BIT TYPE (mm)			
WEIGHT		0,23 kg	
STANDARD ACCESORIES			
BIT NO. 0 X 1,8 X 44		1	-
BIT NO. 0 X 2,5 X 44		1	1
BIT NO. 1 X 4 X 44		-	1
CONNECTION CABLE DLW9070		1	1
SPRING FOR LOW TORQUE		1	-

CONTROLLER FOR DLV7400A SERIES

DESCRIPTION

- Input voltage 230 V AC, 50/60 Hz
- Soft start function prevents screw heads from being schratched
- Speed control
- Mass: 0,9 kg
- Dimensions: 91 x 150 x 52 mm
- Power cord 2 m long
- ESD protection compliant with IEC61340-5-1

DE-DLC1110-GG
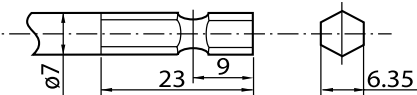
DELVO ELECTRIC SCREWDRIVERS - DLV7300

DESCRIPTION

- For miniature screws: 1,0 – 3,5 mm
- Reduces shock applied to workpieces when fastening screws
- Stepless torque adjustment
- Lightweight
- High repeatable torque accuracy
- Variable speed adjustment enables to select optimum screw tightening speed
- Power cord 1,5 m long
- Easy change of working direction
- Suspension bail

CAT. NO.		DE-DLV7323-CKE	DE-DLV7321-BKE	DE-DLV7333-CKE	DE-DLV7331-BKE
ESD VERSION		No	Yes	No	Yes
STARTING METHOD		Lever start			
INPUT VOLTAGE		36 V DC			
POWER CONSUMPTION		35 W			
TORQUE		0,05 - 0,5 Nm		0,3 - 1,2 Nm	
FREE SPEED		700 - 1,000 (rpm)		500 - 700 (rpm)	
SCREW SIZE	MACHINE SCREW	1,0 - 3,0 mm		2,0 - 3,5 mm	
	TAPPING SCREW	1,2 - 2,6 mm		2,0 - 3,0 mm	
BIT TYPE (mm)		Ø7 23 9 6.35			
WEIGHT		0.35 kg			
STANDARD ACCESORIES					
BIT NO. 1 x 7 x 50		1	1	1	1
BIT NO. 2 x 7 x 50		1	1	1	1
CONNECTION CORD		1			

CONTROLLER FOR DLV7300 SERIES

DESCRIPTION

- Input voltage 230 V AC, 50/60 Hz
- Soft start function prevents screw heads from being schratched
- Speed control
- Weight: 2,3 kg
- Dimensions: 143x145x102 mm
- Power cord 2 m long

DE-DLC1213A-GG
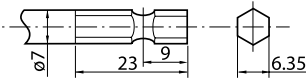
DELVO ELECTRIC SCREWDRIVERS - DLV7500/8500 SERIES

DESCRIPTION

- For miniature screws: 2,6–6 mm
- ESD protection compliant with IEC61340-5-1
- Stepless torque adjustment
- Easy gripping and compact design
- Easy change of working direction
- Suspension bail
- The combination of an advanced clutch design and the auto-stop circuit assures torque accuracy

SPECIFICATION		STANDARD		HIGH TORQUE	STANDARD		HIGH TORQUE
CAT. NO.	STANDARD	DE-DLV7530-MKE	DE-DLV7540-MKE	DE-DLV7550-MKE	DE-DLV8530-MKE	DE-DLV8540-MKE	DE-DLV8550-MKE
	ESD VERSION	DE-DLV7530-BKE	DE-DLV7540-BKE	DE-DLV7550-BKE	DE-DLV8530-BKE	DE-DLV8540-BKE	DE-DLV8550-BKE
STARTING METHOD		Lever start			Push to start		
INPUT VOLTAGE		59 V DC					
TORQUE		0,5 - 1,7 Nm	1,2 - 2,7 Nm	2,0 - 4,5 Nm	0,5 - 1,7 Nm	1,2 - 2,7 Nm	2,0 - 4,5 Nm
FREE SPEED		1,100 (rpm)	700 (rpm)	500 (rpm)	1,100 (rpm)	700 (rpm)	500 (rpm)
SCREW SIZE	Machine screw	2,6 - 4,0 mm	3,5 - 5,0 mm	4,5 - 6,0 mm	2,6 - 4,0 mm	3,5 - 5,0 mm	4,5 - 6,0 mm
	Tapping screw	2,3 - 3,5 mm	3,0 - 4,0 mm	4,0 - 5,0 mm	2,3 - 3,5 mm	3,0 - 4,0 mm	4,0 - 5,0 mm
BIT TYPE (mm)		ø7 23 9 6.35					
WEIGHT		0,65 kg		0,75 kg	0,65 kg		0,75 kg
STANDARD ACCESORIES							
BIT NO. 1 X 7 X 75		1	-		1		-
BIT NO. 2 X 7 X 75		1	1		1		1
BIT NO. 3 X 7 X 50		-	1		-		1
CONNECTION CORD		1					
SPARE CARBON BRUSH		2					
SUSPENSION BAIL		1					

CONTROLLERS FOR DLV7500/8500 SERIES

DESCRIPTION

CAT. NO.	DE-DLC4511-GGB	DE-DLR1510-JE
INPUT VOLTAGE	230V AC, 50/60 Hz	
WEIGHT	3,5 kg	5,1 kg
FUNCTION	Stepless speed adjustment / Soft start / ESD / External output signals: start and torque up	Screw counting / Setting protection by key lock switch / Setting by touch switch for easy operation / External output signals: Start, Torque up, Count up & Cyckle OK
DIMENSIONS	139 x 140 x 81,5 mm	143 x 177 x 126 mm

DE-DLC4511-GGB

DE-DLR1510-JE
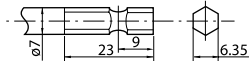
DELVO ELECTRIC SCREWDRIVER - DLV02/12/16 SERIES

DESCRIPTION

- For screws 1,0 - 4,2 mm
- Brushless motors are incorporated for maximum tool life
- Stepless torque adjustment
- Grounded bit system standard
- Clear plastic torque adjustment cover
- Forward/Reverse changeover switch
- Ergonomic grip offers greater operator comfort and increased maneuverability
- Variable speed adjustment
- As standard, the power supply

CAT. NO.	STANDARD	DE-DLV02SL-CKE	DE-DLV12SL-CKE	DE-DLV16SL-CKE
	ESD VERSION	DE-DLV02SL-BKE	DE-DLV12SL-BKE	DE-DLV16SL-BKE
STARTING METHOD		Lever start		
INPUT VOLTAGE		20 - 30 V DC		
TORQUE		0,03 - 0,2 Nm	0,15 - 1,2 Nm	0,2 - 1,6 Nm
FREE SPEED		700 - 1000 (rpm)		
BIT TYPE (mm)		Ø7 — 23 — 9 — 6.35		
SCREW SIZE	MACHINE SCREW	1,0 - 2,2 mm	1,4 - 3,0 mm	2,2 - 4,0 mm
	TAPPING SCREW	1,0 - 2,0 mm	1,4 - 2,6 mm	2,0 - 3,0 mm
POWER CONSUMPTION		48 W		
WEIGHT		0,47 kg		
STANDARD ACCESORIES				
BIT NO. 0 X 3,8 X 50		1	-	-
BIT NO. 1 X 3,8 X 50		1	1	1
BIT NO. 2 X 4,5 X 50		-	1	1
CONNECTION CORD		1		

CONTROLLER FOR DLV02/12/16 SERIES

DESCRIPTION

- Input voltage 100–240 V AV, 50/60 Hz
- Speed control
- Power cord 1,6m long
- Weight 0,38 kg
- Dimensions: 65 x 150 x 46,3 mm
- Standard equipment for screwdriver series DLV02/12/16

DE-DLC16S
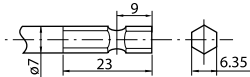
DELVO ELECTRIC SCREWDRIVER - DLV30A/45A/70A SERIES

DESCRIPTION

- For screws: 2,6 mm – 8 mm
- Brushless motors are incorporated for maximum tool life
- Ergonomic grip offers greater operator comfort and increased maneuverability
- Start and Push to Start type models are available
- Equipped with a torque adjustment ring cover
- Easy to change direction of work

VERSION		LOW SPEED	STANDARD	HIGH SPEED	LOW SPEED	STANDARD	LOW SPEED
CAT. NO.	LEVER START	DE-DLV30A06L-ABK	DE-DLV30A12L-ABK	DE-DLV30A20L-ABK	DE-DLV45A06L-ABK	DE-DLV45A12L-ABK	DE-DLV70A06L-ABK
	PUSH TO START	DE-DLV30A06P-ABK	DE-DLV30A12P-ABK	DE-DLV30A20P-ABK	DE-DLV45A06P-ABK	DE-DLV45A12P-ABK	DE-DLV70A06P-ABK
INPUT VOLTAGE		230 V AC, 50/60 Hz					
POWER CONSUMPTION		Approx. 45 W					
LOW TORQUE SPRING		0,4 - 1,6 Nm			2,0 - 4,5 Nm		3,8 - 7,0 Nm
HIGH TORQUE SPRING		1,2 - 3,0 Nm					
FREE SPEED		650 (rpm)	1200 (rpm)	2000 (rpm)	650 (rpm)	1200 (rpm)	650 (rpm)
MACHINE SCREW		2,6 - 5,0 mm			4,5 - 6,0 mm		6,0 - 8,0 mm
TAPPING SCREW		2,5 - 4,0 mm			4,0 - 5,0 mm		4,5 - 6,0 mm
TYP BITU (mm)				9 ⌀7 23 6.35			
WEIGHT		0,70 kg			0,87 kg		
		STANDARD ACCESSORIES					
MODEL		DLV30A			DLV45A/70A		
BIT NO. 2 X 7 X 75		1					
HOOK		1					
SPRING THAT ROTATES THE TORQUE		1			-		
CONNECTION CORD		1					

TORQUE CHECKERS DELVO

DE-DLT1673A

DE-DLT1173A

DESCRIPTION

- Devices with particular precision perform measurements of very small torques
- Measured data is stored even after the power is turned off, preventing any data loss
- Single charge of the battery is enough for 20 hours of work
- Energy saving type with AUTO POWER OFF function (Power is automatically turned off when left unused for 10 minutes)

CAT. NO.	DE-DLT1173A	DE-DLT1673A	
MEASUREMENT RANGE	0,015 - 1,500 Nm	0,15 - 10,00 Nm	
CALIBRATION PRECISION	+/- 0,5%	+/- 0,5%	
DISPLAY	4-digit display (single-line); data sampling: 1000 times/sec.; display rate: 12 times/sec.		
MEASURING UNIT	kgf, cm, Nm, lbf.in (selectable)		
DATA MEMORY	800 pieces of data		
MEASURING DIRECTION	Clockwise / counterclockwise		
MEASURING MODE	3 modes: PD-TR-PP		
AUTO POWER OFF	Power off if left untouched for 10 minutes		
EXTERNAL OUTPUT	USB		
ANALOG OUTPUT	Approx. 1,5 V max.	Approx. 1,0 V max.	
CONTINUOUS OPERATION TIME	20 hours		
EXTERNAL DIMENSIONS	160 x 110 x 47 mm		
WEIGHT	1,1 kg		
CHARGER TYPE	DLE1833A		
INPUT VOLTAGE FOR CHARGER	100 - 240 V AC		
CHARGING TIME	4 hours		
STANDARD ACCESSORIES	DE-DLT1173A	DE-DLT1673A	
SCREW JOINT	Screw Joint	Screw Joint	Spring for Joint
MODEL	DE-DLW4430	DE-DLW4360	DE-DLW4660
MEASURING RANGE	0,15 - 1,5 Nm	0,15 - 6,5 Nm	0,15 - 1,5 Nm

OPTIONAL ACCESSORIES	CAT. NO.	SHAPE	TORQUE RANGE	DLT1173A	DLT1673A
BIT JOINT	DE-DLW4330	Type OD 4 mm	0,015 - 0,25 Nm	◊	-
	DE-DLW4340	Type OD 4 mm	0,15 - 1,5 Nm	◊	◊
	DE-DLW4350	Hex 5 and Hex 6,35 Type	0,15 - 1,5 Nm	◊	◊
	DE-DLW4360	Hex 5 and Hex 6,35 Type	0,15 - 6,5 Nm	-	•
COUPLING FOR CROSS-BITS	DE-DLW4430	Bit no. 1	0,15 - 1,5 Nm	•	◊
	DE-DLW4530	Bit no. 2	0,15 - 5 Nm	-	◊
SOFT JOINT	DE-DLW4000	For hexagonal screws	4,0 - 12,0 Nm	-	◊
SPRINGS	DE-DLW4660	Spring for DLW4340, 4350, 4430		◊	•

• : Standard equipment   ◊ : Optional equipment   - : Not available

| DE-DLW4330 | DE-DLW4340 | DE-DLW4350 | DE-DLW4360 | DE-DLW4430 | DE-DLW4530 | DE-DLW4000 | DE-DLW4040 | DE-DLW4660 |

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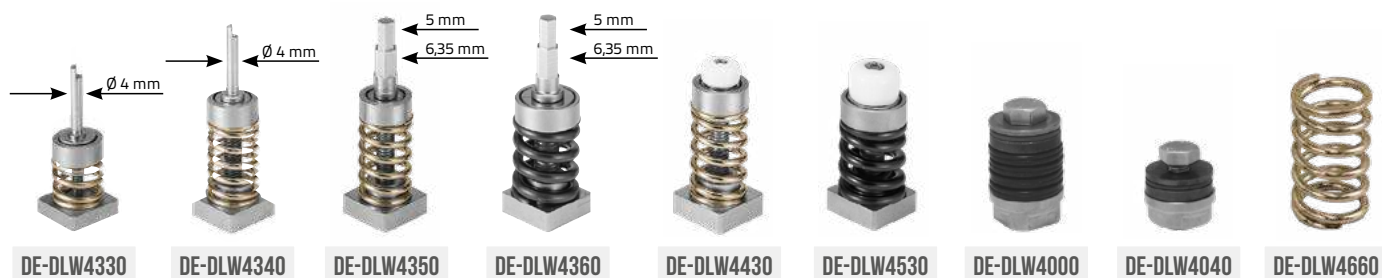
BALANCER

DE-TW-06/1R   DE-RW-3/5

CAT. NO.	DE-TW06R	DE-TW1R	DE-RW3	DE-RW5
CAPACITY	0,2 - 0,6 kg	0,5 - 1,5 kg	1,0 - 3,0 kg	2,5 - 5,0 kg
STROKE	1,5 m	1,5 m	2 m	
WEIGHT	0,3 kg	0,3 kg	0,7 kg	0,9 kg

TORQUE REACTION ARM

CAT. NO.	DESCRIPTION	APPLICABLE SCREWDRIVER
DE-DNTD06180	Torque Reaction Arm	DLV30, 45, 70

FLANGED COUPLING

DE-DLW5201

CAT. NO.	FOR SERIES ELECTRIC SCREWDRIVERS
DE-DLW5600	Series 7500 and 8500
DE-DLW5700	Series 7400A

PISTOL GRIP

DE-DLW2300/2300ESD

Easy to attach grip suitable for horizontal operation.
For series: DLV7500, 8500, 30, 45 and 70.

OPTIONAL CORD

0,4 or 1,0 m
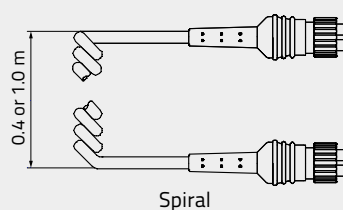
Spiral
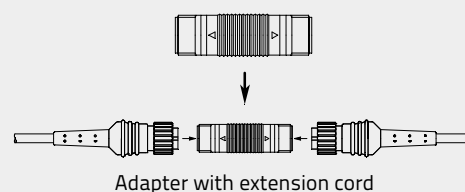
Adapter with extension cord

CAT. NO.	OPTIONAL CORD APPLIED	MODELS	LENGHT
DE-DNTD02826	5P to 6P exchange cord	DLV7300	0,1 m
DE-DNTD02548	Extension cord for 5P		3,0 m
DE-DNTD03159	Extension cord for 6P		2,0 m
DE-DNTD01882	Curl cord	DLV7500/8500	0,4 m
DE-DNTD02820	Curl cord		1,0 m
DE-DLW9100	Cord connector DLW9100		-

*1: „5P to 6P Exchange Cord" is used to connect „5-prong Screwdriver" to „6-prong Controller".

VACUUM PUMP

CAT. NO.	DE-DLP2570
INPUT VOLTAGE	230 V AC, 50/60 Hz
POWER CONSUMPTION	30 W (50 Hz), 26 W (60 Hz)
UNDERPRESSURE	-21,3 kPa
TRANSFER (L/min)	24 (50 Hz), 26 (60 Hz)
SCREW SIZE	4 mm or less
WEIGHT	3,8 kg

DE-DLP2570

VACUUM SYSTEM ADAPTER FOR DLV7400A/5700/5800/7300/7000/8000 SERIES SCREWDRIVERS

- DLP5300 (for series of DLV7400A/5700/5800 screwdrivers)
- DLP7100 (for series of DLV7313 screwdrivers)
- DLP7200 (for 4 mm bits with round hexagon shaft for DLV7323/7333 screwdriver series)
- DLP7300 (for 6.35 mm bits with hexagon shaft for DLV7323/7333 screwdriver series)
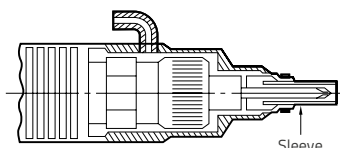
Sleeve
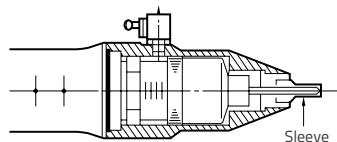
Sleeve

ADAPTER (CAT. NO.)	DE-DLP5300	DE-DLP7100	DE-DLP7200	DE-DLP7300
ACCESSORIES	DE-DLS2120 x 1 pcs.	DE-DLS2122 x 1 pcs.	DE-DLS2123 x 1 pcs.	DE-DLS2135 x 1 pcs.
	DE-DLS2124 x 1 pcs.	DE-DLS2124 x 1 pcs.	DE-DLS2124 x 1 pcs.	-
	-	DE-DLS2127 x 1 pcs.	DE-DLS2127 x 1 pcs.	-

SLEEVE FOR DLS200 (PLASTIC)

For Vacuum system:

- DLP5300
- DLP6500
- DLP7100
- DLP7200
- DLP7300

For Screwdrivers :

- DLV7325
- DLV7335

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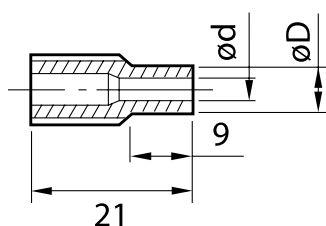
SLEEVE			BIT	
CAT. NO.	Ød	ØD		
DE-DLS2120	2 mm	3,5 mm	No. 0 x 1,8 x 44 mm	Head Phillips (No. x d x L)
DE-DLS2121	2,2 mm			
DE-DLS2122	2,5 mm			
DE-DLS2123	2,7 mm			
DE-DLS2124	3,1 mm	4,5 mm	No. 0 x 2,5 x 44 mm	
DE-DLS2125	3,3 mm			
DE-DLS2126	3,5 mm			
DE-DLS2127	3,7 mm			

SLEEVE			BIT	
CAT. NO.	Ød	ØD		
DE-DLS2128	4 mm	5,5 mm	No. 1 x 3 x 44 mm	Head Phillips (No. x d x L)
DE-DLS2129	4,2 mm			
DE-DLS2130	4,5 mm		No. 1 x 4 x 44 mm	
DE-DLS2131	4,7 mm			
DE-DLS2132	5,1 mm	6,5 mm	No. 2 x 4 x 44 mm	
DE-DLS2133	5,3 mm			
DE-DLS2134	5,6 mm			
DE-DLS2135	6,1 mm	7 mm		

PANASONIC CORDLESS SCREWDRIVER EY7410LA2S

PANASONIC CORDLESS SCREWDRIVER EY411LA1S32

DESCRIPTION

- Compact, light weight 0,5kg (incl. battery) and easy to use
- 1.5Ah Li-ion battery pack
- 15min. usable and 30min. full charging
- Screw count function (applies to EY411LA1S32)
- 1/4" hex drive
- 21-clutch postions for a wide torque range
- 'Auto shut off clutch' extends battery and clutch life by immediately stopping rotation once selected torque setting is reached

- Two forward speeds, reverse, and a two-position ergonomic handle
- Electronic shut off
- Clutch lock cover (applies to EY7410LA2S)
- Lock switch
- Non-slip rubber grip
- Built-in LED light illuminates the assembly area for better visibility
- Incl. second battery pack and plastic box (applies to EY7410LA2S)

CAT. NO.	PNS-EY7410LA2S	PNS-EY411LA1S32
COMPACT DIMENSIONS	Overall length: 276 mm	
WEIGHT	0,5 kg	
HIGH POWER	To 4,4 Nm	
BATTERY	3,6 V Li-Ion 1,5 Ah	
EXTRA BATTERY	Yes	No
CHARGER	Yes	Yes
CHARGING THE BATTERY	30 minutes	
ADJUSTABLE SPEED	Low: 200 rpm High: 600 rpm	Low: 200 rpm High: 600 rpm
CLUTCH	21 steps with function „Auto Shut-Off"	
BIT FIXING SYSTEM	HEX 6,35 mm	HEX 6,35 mm
ERGONOMY	Ergonomic design to reduce fatigue effect	
LED LIGHTING	Yes	
REPEAT COUNTER	No	Yes
CASE	Yes	No

PIERGIACOMI CUTTERS

Cutters are mainly intended for use in the electronics industry.

They are used to cut off the leads of components located on long-range PCBs.

Tools have a different form of cutting and the possibility of simultaneous embarrassment of leads. Each of the offered cutters has information about the maximum thickness of the cut tool.

Failure to follow these guidelines may result in damage to the tool.

CUTTERS PG-TRE03NB
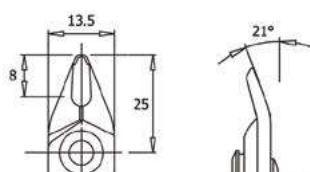
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	3	138

CUTTERS PG-TR25L
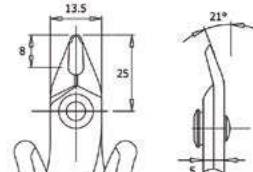
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	3	160

CUTTERS PG-TR20M
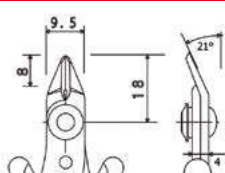
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
0,81	20	3	132

CUTTERS PG-TR25L25
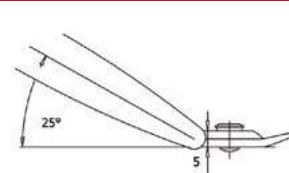
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	3	160

CUTTERS PG-TR20SM
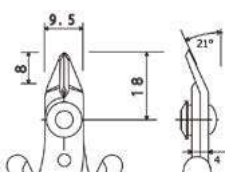
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
0,81	20	3	132

CUTTERS PG-TR30
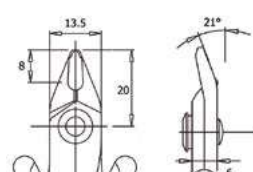
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	5,5	138

CUTTERS PG-TR25P
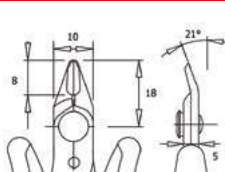
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,02	18	3,5	132

CUTTERS PG-TR3058R
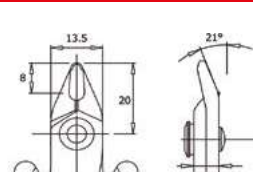
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,63	14	6,5	138

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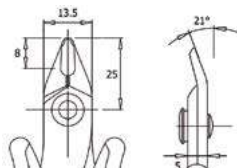
CUTTERS PG-TR25

COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	5	138

CUTTERS PG-TR20VM
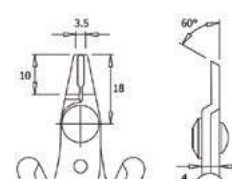
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
0,64	22	2	132

CUTTERS PG-TR58R
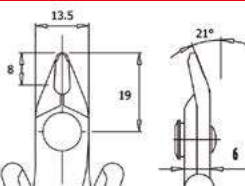
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
2,05	12	9	138

CUTTERS PG-TR30V
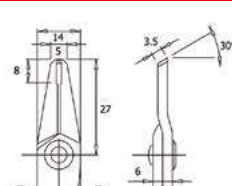
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,02	18	3	144

CUTTERS PG-TRR58G
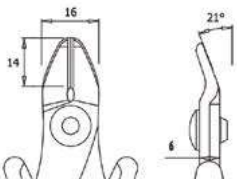
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
2,59	10	1,5	160

CUTTERS PG-TR5000V
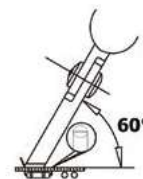
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	3,5	147

CUTTERS PG-TR2515
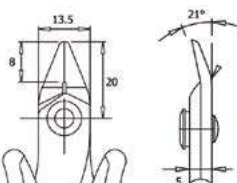
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	5	138

CUTTERS PG-TR2550
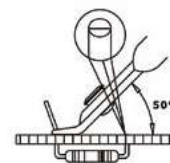
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	5	135

CUTTERS PG-TR2515L
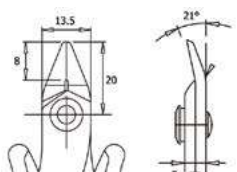
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	3	160

CUTTERS PG-TR500013
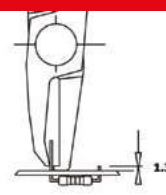
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	5,5	147

CUTTERS PG-TR2050M
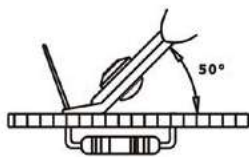
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
0,64	22	2	131

CUTTERS PG-TR500015D
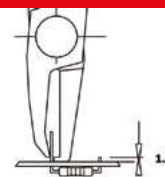
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	5,5	147

CUTTERS PG-TR5000W

COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	3,5	147

CUTTERS PG-TR5000R
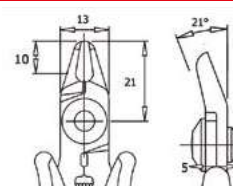
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
2,00	12	8	138

CUTTERS PG-TR3010
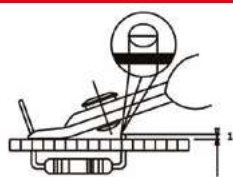
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	5,5	138

CUTTERS PG-TR5000PR
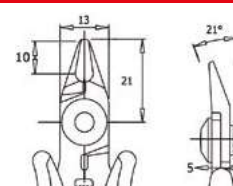
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	5	138

CUTTERS PG-TR500010
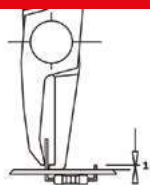
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	5,5	147

CUTTERS PG-TR3058
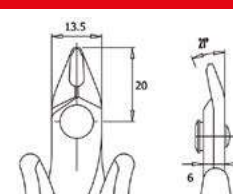
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,63	14	8,5	138

CUTTERS PG-TR25B
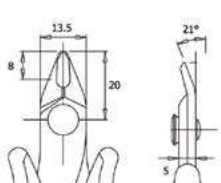
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,02	18	5	138

CUTTERS PG-TR58
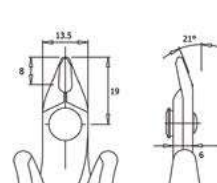
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
2,05	12	11	138

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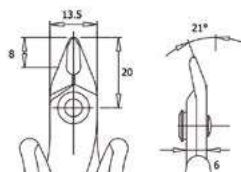
CUTTERS PG-TR30B

COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,02	18	5,5	138

CUTTERS PG-TRR58
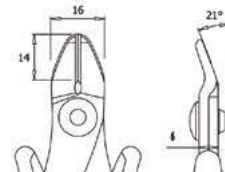
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
2,59	10	15	160

CUTTERS PG-TRR58B
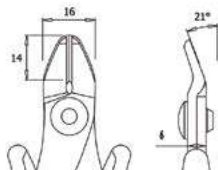
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
2,05	12	3	160

CUTTERS PG-TRR5000
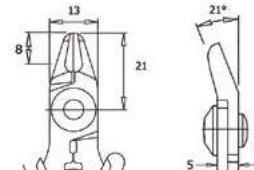
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
2,59	10	14	138

CUTTERS PG-TR5000PG
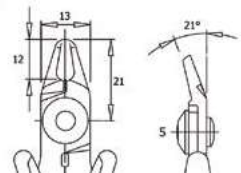
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,02	18	5	138

CUTTERS PG-TR3015V
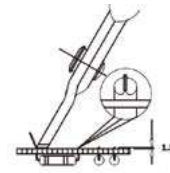
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,02	18	3	144

CUTTERS PG-TR5000P
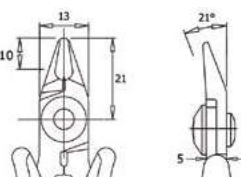
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	8	138

CUTTERS PG-TR20TM

COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
0,64	22	2	129

CUTTERS PG-TR3015
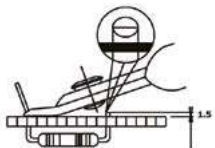
COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,30	16	5,5	138

CUTTERS PG-TR30T

COPPER WIRE		MAX. PRESSURE	LENGTH
Ø (mm)	(AWG)	(kg)	(mm)
1,02	18	2,5	137

HEAVY DUTY CUTTER PG-ITR30
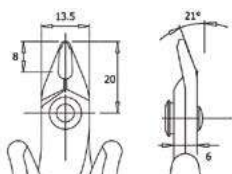
COPPER WIRE		FERROUS WIRE		STEEL WIRE	
Ø (mm)	(AWG)	Ø (mm)	(AWG)	Ø (mm)	(AWG)
1,30	16	1,02	18	-	-

HEAVY DUTY CUTTER PG-ITR58R
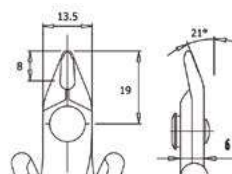
COPPER WIRE		FERROUS WIRE		STEEL WIRE	
Ø (mm)	(AWG)	Ø (mm)	(AWG)	Ø (mm)	(AWG)
2,05	12	1,63	14	-	-

HEAVY DUTY CUTTER PG-ITRR58
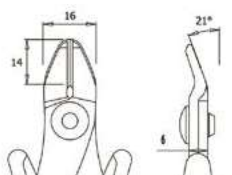
COPPER WIRE		FERROUS WIRE		STEEL WIRE	
Ø (mm)	(AWG)	Ø (mm)	(AWG)	Ø (mm)	(AWG)
2,59	10	1,63	14	-	-

HEAVY DUTY CUTTER PG-ITRR58G

COPPER WIRE		FERROUS WIRE		STEEL WIRE	
Ø (mm)	(AWG)	Ø (mm)	(AWG)	Ø (mm)	(AWG)
2,59	10	1,63	14	-	-

HEAVY DUTY CUTTER PG-ITR3058
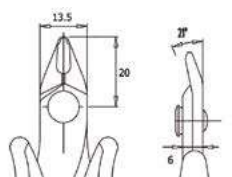
COPPER WIRE		FERROUS WIRE		STEEL WIRE	
Ø (mm)	(AWG)	Ø (mm)	(AWG)	Ø (mm)	(AWG)
1,63	14	1,30	16	-	-

HEAVY DUTY CUTTER PG-ITR5000D
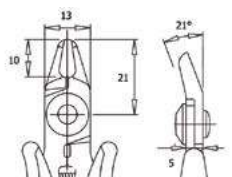
COPPER WIRE		FERROUS WIRE		STEEL WIRE	
Ø (mm)	(AWG)	Ø (mm)	(AWG)	Ø (mm)	(AWG)
2,05	12	1,63	14	-	-

HEAVY DUTY CUTTER PG-ITR58
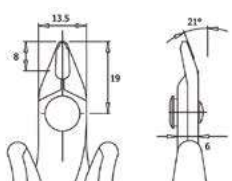
COPPER WIRE		FERROUS WIRE		STEEL WIRE	
Ø (mm)	(AWG)	Ø (mm)	(AWG)	Ø (mm)	(AWG)
2,05	12	1,63	14	-	-

HEAVY DUTY CUTTER PG-TTR5000
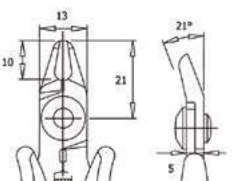
COPPER WIRE		FERROUS WIRE		STEEL WIRE	
Ø (mm)	(AWG)	Ø (mm)	(AWG)	Ø (mm)	(AWG)
2,05	12	1,63	14	0,6	22

LINDSTRÖM CUTTERS

The tools are made of chrome-plated bearing steel, which uses forging technology to preserve the internal structure of the material.
Most of the cutters are equipped with special antistatic handles to protect the cut parts from the destructive effect of electrostatic charge.

DIAGONAL CUTTER, RX SERIES, OVAL HEAD
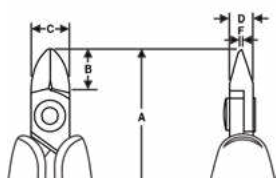
CAT. NO.	(mm)					BLADE	CUTTING RANGE Cu (mm)
	A	B	C	D	F		
VERY SMALL HEAD WITH ACCESS							
LI-RX8130	133,5	8,5	8,0	5,0	0,8	Micro-Bevel	0,2 - 1,00
LI-RX8131	133,5	8,5	8,0	5,0	0,8	Flush	0,1 - 1,00
LI-RX8132	133,5	8,5	8,0	5,0	0,8	Ultra-Flush	0,1 - 0,80
SMALL HEAD WITH ACCESS							
LI-RX8140	135,5	10,5	10,0	6,0	0,8	Micro-Bevel	0,2 - 1,25
LI-RX8141	135,5	10,5	10,0	6,0	0,8	Flush	0,1 - 1,25
LI-RX8142	135,5	10,5	10,0	6,0	0,8	Ultra-Flush	0,1 - 1,00
MEDIUM-WEIGHT, WEAR-RESISTANT HEAD							
LI-RX8150	138,0	13,0	12,5	6,0	1,2	Micro-Bevel	0,3 - 1,60
LI-RX8151	138,0	13,0	12,5	6,0	1,2	Flush	0,2 - 1,60
LI-RX8152	138,0	13,0	12,5	6,0	1,2	Ultra-Flush	0,2 - 1,25

DIAGONAL CUTTER, RX SERIES, TIP CUTTER
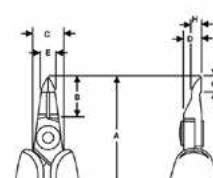
CAT. NO.	(mm)							BLADE	CUTTING RANGE Cu (mm)
	A	B	C	D	E	G	H		
LI-RX8149	139,0	14,0	10,0	6,0	5,0	5,0	3,2	Flush	0,1 - 0,60

DIAGONAL CUTTER 20°, SHORT HEAD
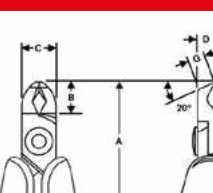
CAT. NO.	(mm)					BLADE	CUTTING RANGE Cu (mm)
	A	B	C	D	G		
LI-RX8211	134,5	9,5	10,0	6,0	4,1	Flush	0,1 - 1,00

DIAGONAL CUTTERS WITH TAPERED AND RELIVED HEAD
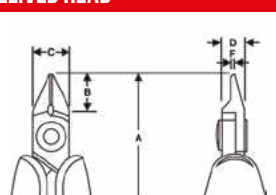
CAT. NO.	(mm)					BLADE	CUTTING RANGE Cu (mm)
	A	B	C	D	F		
LI-RX8146	135,5	10,5	10,0	6,0	0,8	Micro-Bevel	0,2 - 1,00
LI-RX8147	135,5	10,5	10,0	6,0	0,8	Flush	0,1 - 1,00
LI-RX8148	135,5	10,5	10,0	6,0	0,8	Ultra-Flush	0,1 - 0,80

DIAGONAL CUTTERS WITH TAPERED HEAD
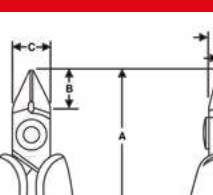
CAT. NO.	(mm)					BLADE	CUTTING RANGE Cu (mm)
	A	B	C	D	F		
LI-RX8143	135,5	10,5	10,0	6,0	0,8	Micro-Bevel	0,2 - 1,25
LI-RX8144	135,5	10,5	10,0	6,0	0,8	Flush	0,1 - 1,25
LI-RX8145	135,5	10,5	10,0	6,0	0,8	Ultra-Flush	0,1 - 1,00

OBLIQUE CUTTERS 45°
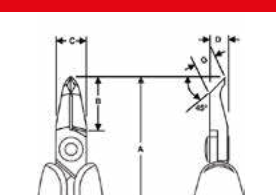
CAT. NO.	(mm)					BLADE	CUTTING RANGE Cu (mm)
	A	B	C	D	G		
LI-RX8248	143,0	18,0	10,0	6,0	6,7	Flush	0,2 - 0,80

OBLIQUE CUTTERS 45°, WITH LONG HEAD
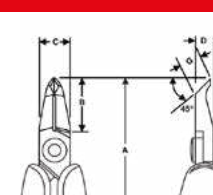
CAT. NO.	(mm)					BLADE	CUTTING RANGE Cu (mm)
	A	B	C	D	G		
LI-RX8247	143,0	18,0	10,0	6,0	6,7	Flush	0,2 - 1,00

PIERGIACOMI SPECIAL TOOLS

Cutting tools and pneumatic knives are used wherever there is a need to bend and cut large quantities of leads of components and serial PCB separation, leaving smooth edges of the board. Pneumatic power supply ensures excellent repeatability and eliminates operator fatigue. Set includes a cutter with head and blade.

COMPRESSED AIR	6 - 7 bar
CONSUMPTION	3,5 Nm³/min
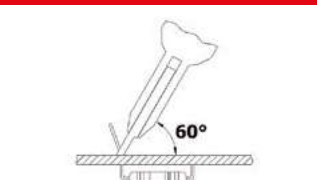
PG-TPP-TP-6000-15 PNEUMATIC CUTTER

CUTTING FORCE (kg)	COPPER WIRE Ø (mm)	COPPER WIRE (AWG)
70	1,02	18

PG-TPP-TR-6000 PNEUMATIC CUTTER

CUTTING FORCE (kg)	COPPER WIRE Ø (mm)	COPPER WIRE (AWG)
90	1,60	14

PG-TPP-TR-6000-V PNEUMATIC CUTTER

CUTTING FORCE (kg)	COPPER WIRE Ø (mm)	COPPER WIRE (AWG)
90	1,30	16
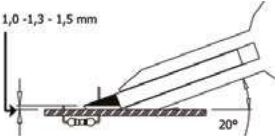
PG-DPP PNEUMATIC CUTTER

CAT. NO.	PG-DPP-20N	PG-DPP-23N	PG-DPP-24N	PG-DPP-25N
BLADE THICKNESS	2,0 mm	2,3 mm	2,4 mm	2,5 mm
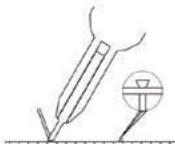
PG-TPP-TR-6000-C/A/PR PNEUMATIC CUTTER

CUTTING FORCE (kg)	COPPER WIRE Ø (mm)	COPPER WIRE (AWG)	CAT. NO.
110	1,80	13	TPP-TR-6000-C
70	1,60	14	TPP-TR-6000-A
90	1,30	16	TPP-TR-6000-PR
90	1,60	14	TPP-TR-6000-R

PG-TPP-TR-6000-10/13/15 PNEUMATIC CUTTER

CUTTING FORCE (kg)	COPPER WIRE Ø (mm) / (AWG)	CAT. NO.	DISTANCE FROM THE SURFACE
90	1,60 / 14	TPP-TR-6000-10	1,0
		TPP-TR-6000-13	1,3
		TPP-TR-6000-15	1,5

PG-TPP-TS-6000 PNEUMATIC CUTTER

CUTTING FORCE (kg)	COPPER WIRE Ø (mm)	COPPER WIRE (AWG)
80	1,30	16

PG-TPP-TP-6000 PNEUMATIC CUTTER

CUTTING FORCE (kg)	COPPER WIRE Ø (mm)	COPPER WIRE (AWG)
50	1,02	18

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PG-CL6000 CUTTING BLADE

Cutting blades (chamfered cut) for **TPP TR 6000**

DIAMETER Ø (mm)	WIRE (AWG)
1,6	14

PG-CL6000A CUTTING BLADE

Cutting blades (chamfered cut) with safety clip for **TPP TR 6000 A**

DIAMETER Ø (mm)	WIRE (AWG)
1,6	14

PG-CL6000C CUTTING BLADE

Cutting blades (chamfered cut) with short & strong tips for **TPP TR 6000 C**

DIAMETER Ø (mm)	WIRE (AWG)
1,8	13

PG-CL6000R CUTTING BLADE

Cutting blades (flush cut) for **TPP TR 6000 R**

DIAMETER Ø (mm)	WIRE (AWG)
1,6	14

PG-CL6000PR CUTTING BLADE

Cutting blades (flush cut) with pointed tips for **TPP TR 6000 PR**

DIAMETER Ø (mm)	WIRE (AWG)
1,3	16

PG-CL6000V CUTTING BLADE

Cutting blades (flush cut) inclined at 60° for **TPP TR 6000 V**

DIAMETER Ø (mm)	WIRE (AWG)
1,3	16

PG-CL6000-10 CUTTING BLADE

Cutting blades (clean cut) at 1 mm from the surface for **TPP TR 6000-10**

DIAMETER Ø (mm)	WIRE (AWG)
1,6	14

PG-CL6000-13 CUTTING BLADE

Cutting blades (clean cut) at 1.3mm from the surface for **TPP TR 6000-13**

DIAMETER Ø (mm)	WIRE (AWG)
1,6	14

PG-CL6000-15 CUTTING BLADE

Cutting blades (clean cut) at 1.5 mm form the surface for **TPP TR 6000-15**

DIAMETER Ø (mm)	WIRE (AWG)
1,6	14

PG-CL-TS6000 CUTTING BLADE

Cutting blades (cutting and pressing) for **TPP TS 6000**

DIAMETER Ø (mm)	WIRE (AWG)
1,3	16

SPARE HEAD PG-TSR6000
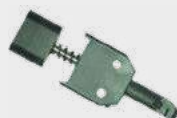
Spare Head for **TPP TP 6000**

DIAMETER Ø (mm)	WIRE (AWG)
1,02	18

SPARE HEAD PG-TSR6000-15

Spare Head for **TPP TP 6000-15**

DIAMETER Ø (mm)	WIRE (AWG)
1,02	18

SPARE HEAD PG-TR6000

Pneumatic head for **TPP TR 6000**

DIAMETER Ø (mm)	WIRE (AWG)
1,6	14

SPARE HEAD PG-TR6000C

Pneumatic head for **TPP TR 6000 C**

DIAMETER Ø (mm)	WIRE (AWG)
1,8	13

SPARE HEAD PG-TR6000A

Pneumatic head for **TPP TR 6000 A** with safety clip

DIAMETER Ø (mm)	WIRE (AWG)
1,6	14

SPARE HEAD PG-TR6000R

Precise pneumatic head for **TPP TR 6000 R**

DIAMETER Ø (mm)	WIRE (AWG)
1,6	14

SPARE HEAD PG-TR6000PR

Pneumatic head for **TPP TR 600 PR** precise and pointed blades

DIAMETER Ø (mm)	WIRE (AWG)
1,6	16

SPARE HEAD PG-TR6000V

Pneumatic head for **TPP TR 6000 V**. Precise cutting at an angle of 60° blades

DIAMETER Ø (mm)	WIRE (AWG)
1,3	16

SPARE HEAD PG-TR6000-10

Pneumatic head for **TPP TR 6000-10**. Cutting blade at a height of 1.0 mm from the surface

DIAMETER Ø (mm)	WIRE (AWG)
1,6	14

SPARE HEAD PG-TR6000-13

Pneumatic head for **TPP TR 6000-13**. Cutting blade at a height of 1.3 mm from the surface

DIAMETER Ø (mm)	WIRE (AWG)
1,6	14

SPARE HEAD PG-TR6000-15

Pneumatic head for **TPP TR 6000-15**. Cutting blade at a height of 1.5 mm from the surface

DIAMETER Ø (mm)	WIRE (AWG)
1,6	14

SPARE HEAD PG-TP6000

Pneumatic head for **TPP TP 6000**, which cuts and bends the workpiece by attaching it to the circuit

DIAMETER Ø (mm)	WIRE (AWG)
1,02	18

SPARE HEAD PG-TP6000-15

Pneumatic head for **TPP TP 6000-15**, which cuts and bends the workpiece by attaching it to the circuit

DIAMETER Ø (mm)	WIRE (AWG)
1,02	18

SPARE HEAD PG-TS6000

Pneumatic head for **TPP TS 6000**, which cuts and bends the workpiece by attaching it to the circuit

DIAMETER Ø (mm)	WIRE (AWG)
1,3	16

BODY PG-TPP

Body for any pneumatic tool of the TPP series

PG-SET-DPP KIT

Case with pneumatic depanellation tool + cutting blade + 3 rails + hexagonal wrench 2 mm

PG-SET-TPP KIT

Case with TPP TR 6000 + spare head TP 6000 + cutting blade CL 6000R + wrench

PIERGIACOMI PLIERS

The precision pliers are suitable for all types of components.
The ergonomic handle makes gripping easier and more comfortable.
Models with bent ends allow gripping of workpieces on high-density
plates and internally milled for a more secure gripping of the workpiece.

PG-PN2001 PLIERS

HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	146

PG-PN2002 PLIERS

HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	146

PG-PN2003 PLIERS

HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	146
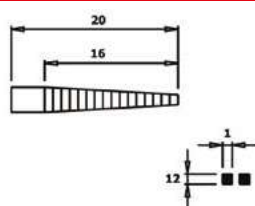
PG-PN2004 PLIERS

HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	146

PG-PN2005 PLIERS

HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	160

PG-PN2006 PLIERS

HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	160

PG-PN2007 PLIERS

HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	160
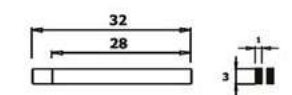
PG-PN2008 PLIERS

HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	160

PG-PN2015 PLIERS
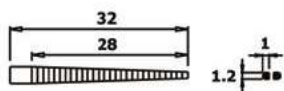
HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	160

PG-PN2018 PLIERS
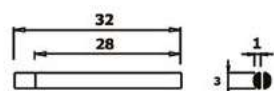
HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	160

PG-PNB2005 PLIERS
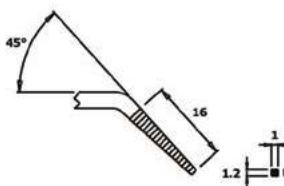
HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	152

PG-PNB2016 PLIERS
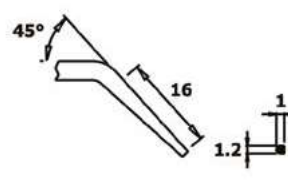
HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	152

PG-PNB2006 PLIERS
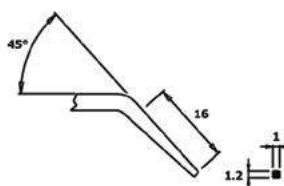
HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	152

PG-PNB2017 PLIERS
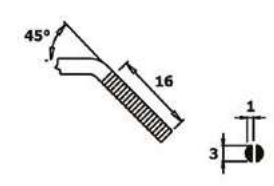
HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	152

PG-PNB2007 PLIERS
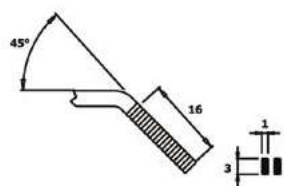
HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	152

PG-PNB2018 PLIERS
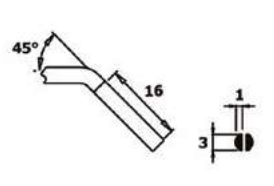
HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	152

PG-PNB2008 PLIERS
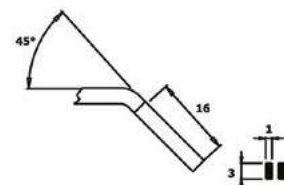
HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	78	152

PG-PN20M PLIERS
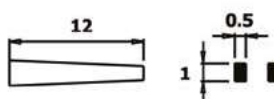
HRC	WEIGHT (g)	LENGTH (mm)
48 – 50	60	136

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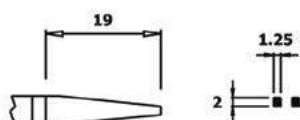
PG-PN5002 PLIERS

HRC	WEIGHT (g)	LENGTH (mm)
48 - 50	98	146

PG-PN5003 PLIERS
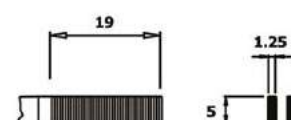
HRC	WEIGHT (g)	LENGTH (mm)
48 - 50	98	146

PG-PNB2015 PLIERS
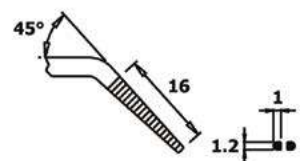
HRC	WEIGHT (g)	LENGTH (mm)
48 - 50	78	152

PG-PN5001 PLIERS
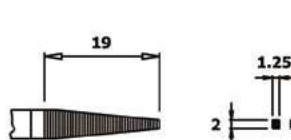
HRC	WEIGHT (g)	LENGTH (mm)
48 - 50	98	146

SPECIALISED PLIERS PIERGIACOMI

Special pliers are designed for shaping the leads of all types of through-hole copmoments. Ergonomic handle for increased operator comfort and durable design for a very long life.

PG-TS30D SPECIALISED PLIERS
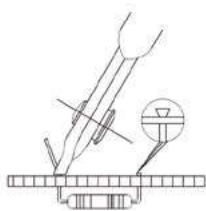
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
9	1,02	18

PG-PNG5000D SPECIALISED PLIERS

SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	1,02	18

PG-TP30D SPECIALISED PLIERS
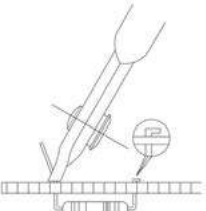
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	1,02	18

PG-PNR5000D SPECIALISED PLIERS
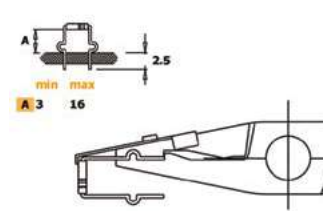
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	1,02	18

PG-PPR5001D SPECIALISED PLIERS
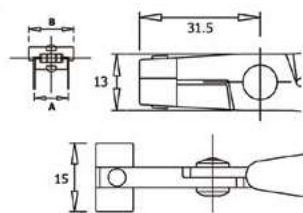
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	0,6 - 0,8	22 - 20

PG-PN5050D SPECIALISED PLIERS
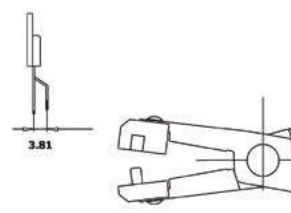
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	1,30	16

PG-PPR5002D SPECIALISED PLIERS
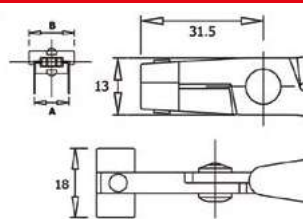
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	0,6 - 0,8	22 - 20

PG-PN5050/14D SPECIALISED PLIERS
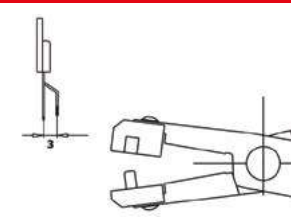
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	1,30	16

PG-PPR5003D SPECIALISED PLIERS

A=15.24
B=20
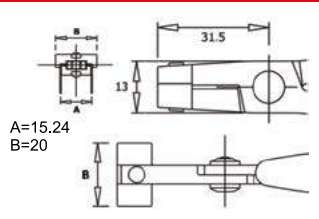
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	0,6 - 0,8	22 - 20

PG-PN5050/6D SPECIALISED PLIERS
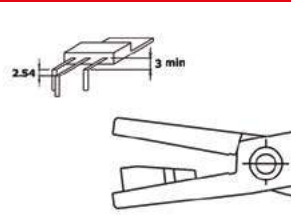
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	1,30	16

PG-PNI5000D SPECIALISED PLIERS
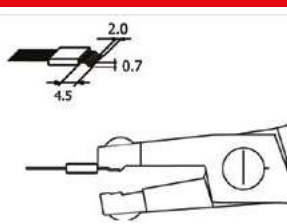
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	0,80	20

PG-P1 SPECIALISED PLIERS

for shafts Ø 4-9
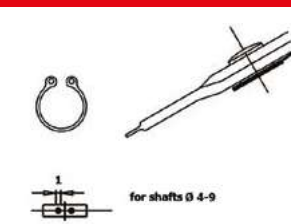
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
–	81	155

PG-PN5040/7D SPECIALISED PLIERS

	Min	Degrees
A	2.5	90°
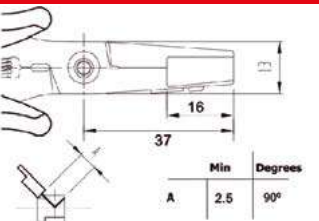
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	1,30	16

PG-PN5040/90D SPECIALISED PLIERS

	Min	
A	5	90°
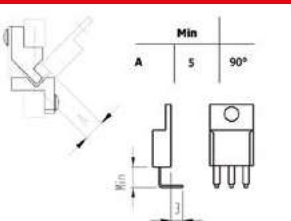
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	1,30	16

PG-PP1 SPECIALISED PLIERS
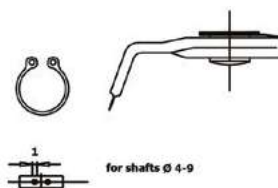
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
–	83	150

PG-PP2 SPECIALISED PLIERS
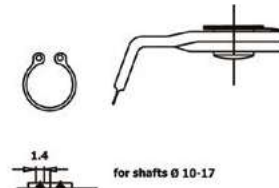
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
–	83	150

PG-PN5030 SPECIALISED PLIERS
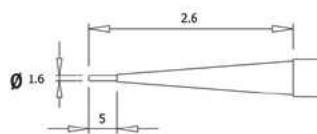
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
–	98	155

PG-PN5025C SPECIALISED PLIERS
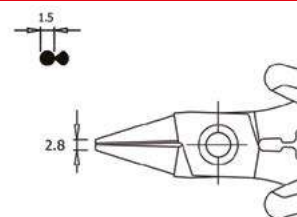
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	1,02	18

PG-TP5000-15D SPECIALISED PLIERS
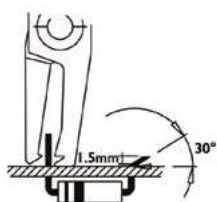
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	1,02	18

PG-PTR30CD SPECIALISED PLIERS
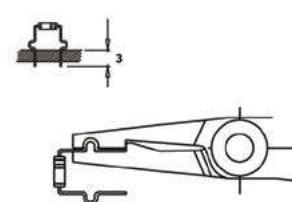
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	1,02	18

PG-PNR30D SPECIALISED PLIERS
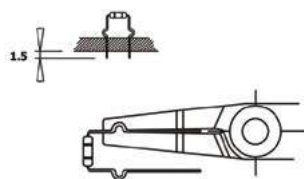
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	1,02	18

PG-PTR30LD SPECIALISED PLIERS
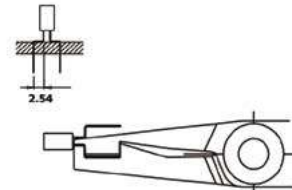
SHAPING FORCE	COPPER WIRE	
(kg)	Ø (mm)	(AWG)
3	1,02	18

PIERGIACOMI SHEARS

Cable shears and wire stripping tools for flat, round and coaxial cables are characterised by their robust construction, which ensures a very long service life.

Each tool has information about the maximum cable thickness.
Failure to follow these guidelines may result in damage to the tool.

PG-CS30 CUTTING SHEARS
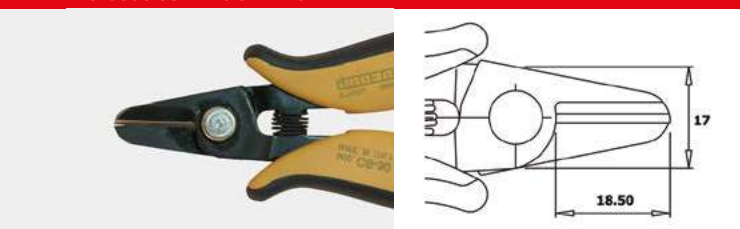
Ø (mm)	(AWG)	LENGTH (mm)
1,30	16	144

PG-CS30X CUTTING SHEARS
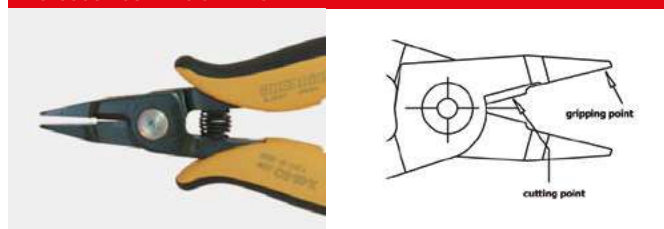
Ø (mm)	(AWG)	LENGTH (mm)
1,63	14	150

PG-CS30L CUTTING SHEARS
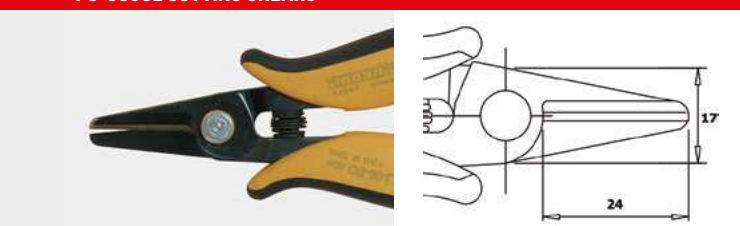
Ø (mm)	(AWG)	LENGTH (mm)
1,30	16	152

PG-CS30XZ CUTTING SHEARS
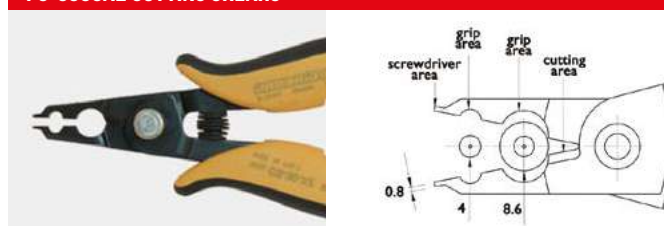
Ø (mm)	(AWG)	LENGTH (mm)
1,63	14	150

PG-CS030 CUTTING SHEARS

Ø (mm)	(AWG)	LENGTH (mm)
1,63	14	148

PG-SF30 INSULATION STRIPPERS
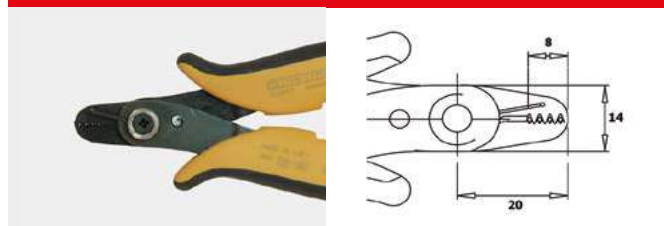
Ø (mm)	(AWG)	LENGTH (mm)
0,20 ÷ 0,64	32 - 22	141

PG-SFF30 INSULATION STRIPPERS
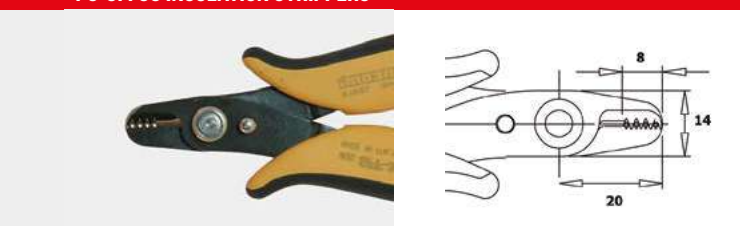
Ø (mm)	(AWG)	LENGTH (mm)
0,32 ÷ 0,51	28 - 24	141

PG-CSP303 INSULATION STRIPPERS
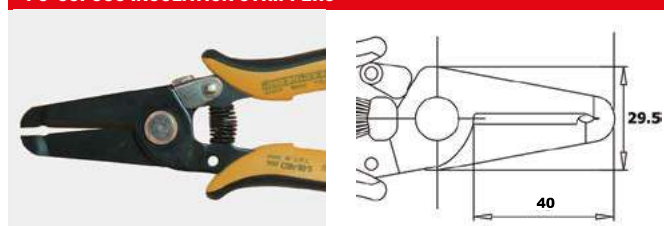
Ø (mm)	(AWG)	LENGTH (mm)
MAX. 10	000	165

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PG-CSF30 INSULATION STRIPPERS
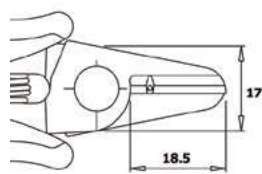
Ø (mm)	(AWG)	LENGTH (mm)
s0,4 ÷ c1,8	26 – 16	144

PG-CSP305 INSULATION STRIPPERS
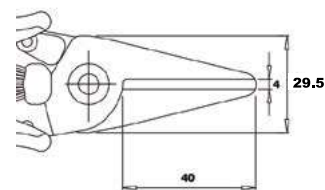
Ø (mm)	(AWG)	LENGTH (mm)
1,63	14	165

PG-CSF30S INSULATION STRIPPERS
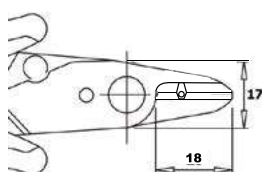
Ø (mm)	(AWG)	LENGTH (mm)
0,4 ÷ 1,0	26 – 18	144

PG-CSP307 INSULATION STRIPPERS
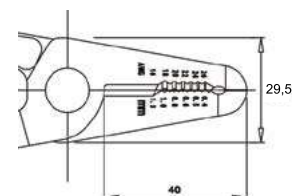
Ø (mm)	(AWG)	LENGTH (mm)
0,4 ÷ 1,3	26 – 16	165

PG-CSP301 INSULATION STRIPPERS
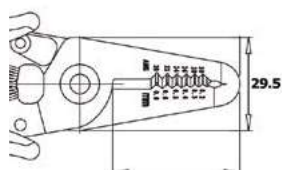
Ø (mm)	(AWG)	LENGTH (mm)
0,25 ÷ 0,81	30 – 20	165

PG-CSP30G INSULATION STRIPPERS
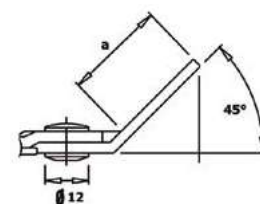
Ø (mm)	(AWG)	LENGTH (mm)
–	–	155

PG-CSP302 INSULATION STRIPPERS
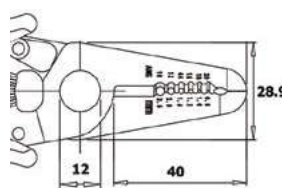
Ø (mm)	(AWG)	LENGTH (mm)
0,81 ÷ 2,59	20 – 10	165

PG-CSP30GL INSULATION STRIPPERS

a=35
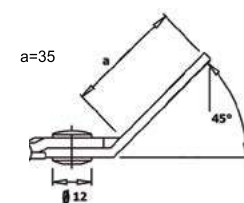
Ø (mm)	(AWG)	LENGTH (mm)
–	–	165

PG-CSP30GR INSULATION STRIPPERS
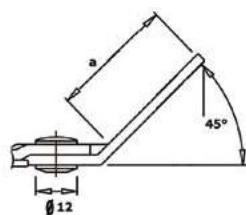
Ø (mm)	(AWG)	LENGTH (mm)
–	–	155

PG-CCS15NB INSULATION STRIPPERS
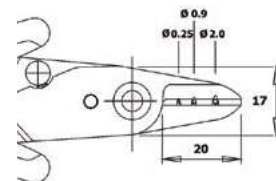
Ø (mm)	(AWG)	LENGTH (mm)
0,25 – 0,9 – 2,0	30 – 19 – 12	148

PG-CCS18NB INSULATION STRIPPERS
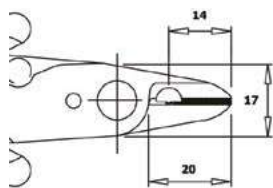
Ø (mm)	(AWG)	LENGTH (mm)
0,18	33	148

PG-CCS10NB INSULATION STRIPPERS
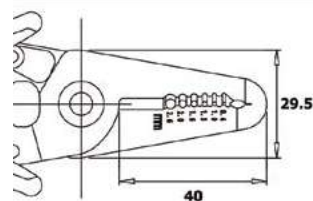
Ø (mm)	(AWG)	LENGTH (mm)
0,4 ÷ 2,6	26 - 10	165

PG-CCS11NB INSULATION STRIPPERS
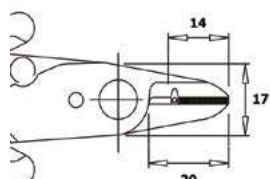
Ø (mm)	(AWG)	LENGTH (mm)
0,2 ÷ 1,0	32 - 18	148

PG-CCS12NB INSULATION STRIPPERS
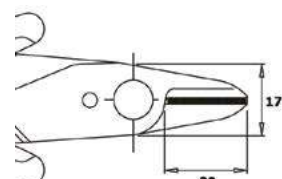
Ø (mm)	(AWG)	LENGTH (mm)
-	-	148

PG-CCS13NB INSULATION STRIPPERS
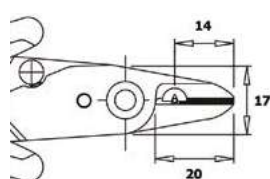
Ø (mm)	(AWG)	LENGTH (mm)
0,13	36	148

PG-PRF0 INSULATION STRIPPERS
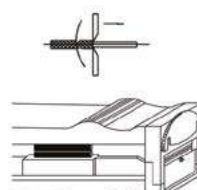
Ø (mm)	(AWG)	LENGTH (mm)
0,8 ÷ 2,6	20 ÷ 10	115

PG-PS410 INSULATION STRIPPERS
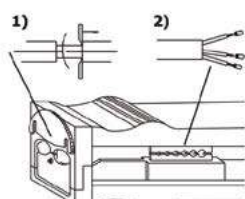
Ø (mm)	(AWG)	LENGTH (mm)
4 ÷ 10 / 0,8 ÷ 2,6	6 ÷ 000 / 20 ÷ 10	115

PG-SC1S INSULATION STRIPPERS
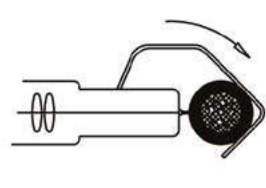
CABLE DIAMETER (mm)
4 - 16

PG-PCC1 INSULATION STRIPPERS
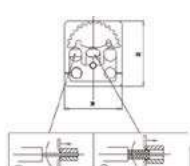
Ø (mm)	(AWG)	LENGTH (mm)
-	-	115

PG-SC2S INSULATION STRIPPERS
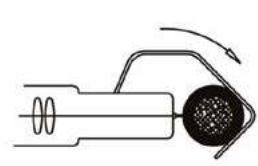
CABLE DIAMETER (mm)
8 - 28

PG-SC42C INSULATION STRIPPERS
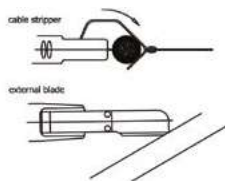
CABLE DIAMETER (mm)
8 - 28

PG-SC31C INSULATION STRIPPERS
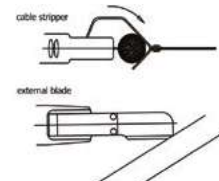
CABLE DIAMETER (mm)
8 - 28

PG-SC-6ST INSULATION STRIPPERS
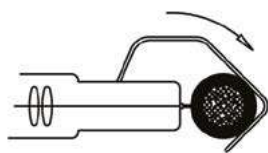
CABLE DIAMETER (mm)
35 - 50

PG-SC5ST INSULATION STRIPPERS
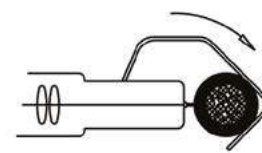
CABLE DIAMETER (mm)
28 - 35

PG-SF401 INSULATION STRIPPERS
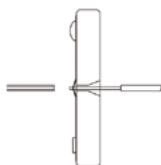
Ø (mm)	(AWG)	LENGTH (mm)
0,25 ÷ 1,0	30 - 18	50 x 55

PG-SF402 INSULATION STRIPPERS
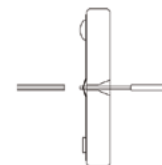
Ø (mm)	(AWG)	LENGTH (mm)
1,3 ÷ 1,8	16 - 13	50 x 55

PG-PST-(0,5-0,6-0,8-1,0) INSULATION STRIPPERS

order code		mm	awg
PST 0.5		0.5	24
PST 0.6		0.6	22
PST 0.8		0.8	20
PST 1.0		1.0	18

CAT. NO.	Ø (mm)	(AWG)	LENGTH (mm)
PST 05	0,5	24	125
PST 06	0,6	22	125
PST 08	0,8	20	125
PST 10	1,0	18	125

PIERGIACOMI TWEEZERS
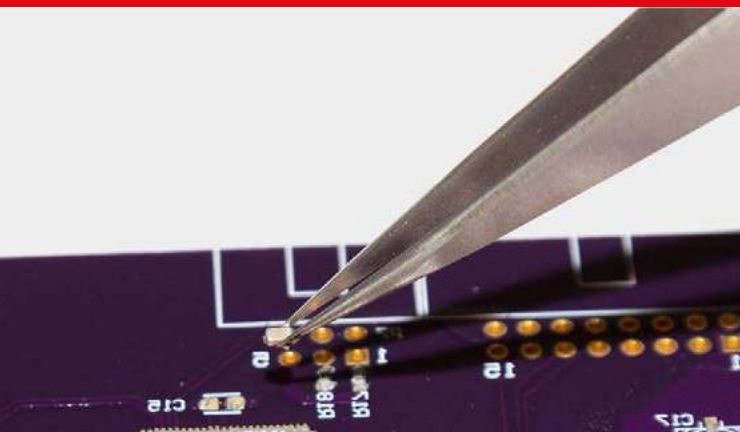
PIERGIACOMI tweezers are widely used in many branches of industry – wherever precision is required, e.g. electronics, precision mechanics.

The tweezers differ from each other:

- the shape of the tip
- type of cutter: internal or external

The tweezers marked with the R symbol have a self-locking mechanism. Most of the tweezers are made of antimagnetic materials. and acid resistant, there are also nickel and nylon tweezers, and Teflon coated.

PN-38-SA SMD TWEEZERS

Tweezer with round hole 1 mm for small components.
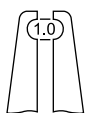
LENGTH (mm)
120

PN-103-SA SMD TWEEZERS

Tweezers with bent tips for handling of chips and SMD components; angled tips for fatigue reduction.
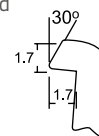
LENGTH (mm)
120

PN-40A-SA SMD TWEEZERS

Tweezers with a rhombus–shaped hole on its tip, for handling of wires and small components Ø 0.71 mm.
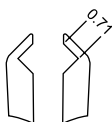
LENGTH (mm)
120

PN-103R-SA SMD TWEEZERS

Tweezers with bent tips for handling of chips and SMD components; angled tips for fatigue reduction; with reverse action.

LENGTH (mm)
120

PN-102-SA SMD TWEEZERS
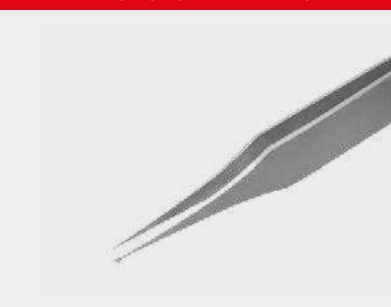
Tweezers for handling of chips and SMD components; angled tips for fatigue reduction.

LENGTH (mm)
120

PN-104-SA SMD TWEEZERS

Tweezers for handling of SMD components.

LENGTH (mm)
120

PN-102R-SA SMD TWEEZERS
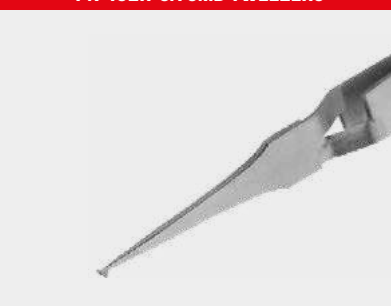
Tweezers for handling of chips and SMD components; angled tips for fatigue reduction; with reverse action.
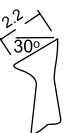
LENGTH (mm)
120

PN-105-SA SMD TWEEZERS

Tweezers for handling of SMD components; bent tips.

LENGTH (mm)
120

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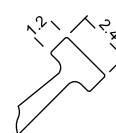
PN-106-SA SMD TWEEZERS

Tweezers for handling of SMD components with 45° curved tip.

2.7
45°
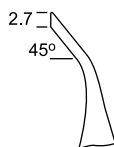
LENGTH (mm)
120

PN-110N-SA SMD TWEEZERS

Nylon acid proof tweezers.

LENGTH (mm)
110

PN-107-SA SMD TWEEZERS

Tweezers for handling of SMD components; hole in the tips Ø 0.75 mm.

0.75
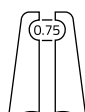
LENGTH (mm)
120

PN-111-SA SMD TWEEZERS

Tweezer for SMD components.

2.2

LENGTH (mm)
120

PN-108-SA SMD TWEEZERS

Tweezers for handling SMD components.

1.8
4
30°
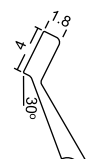
LENGTH (mm)
120

PN-0-SA SHARP TWEEZERS

Very sharp and flat tweezer. ESD version available.

LENGTH (mm)
120

PN-109-SA SMD TWEEZERS

Tweezers for handling of SMD components.

2.5
30°

LENGTH (mm)
120

PN-0C11-SA SHARP TWEEZERS

Flat tweezers with very fine tips and thin blades.

LENGTH (mm)
110

PN-110-SA SMD TWEEZERS

Teezers for handling of SMD components.

0.8
2.7

LENGTH (mm)
120

PN-00B-SA SHARP TWEEZERS
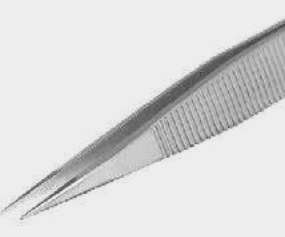
Tweezers with flat and thick tips, externally serrated for general purpose.

LENGTH (mm)
120

PN-00C-SA SHARP TWEEZERS

Tweezers with flat and thick tips for general purpose.

LENGTH (mm)
105

PN-00-SA SHARP TWEEZERS

Tweezers with flat and thick tips for general purpose.
ESD version available.

LENGTH (mm)
120

PN-00D-SA SHARP TWEEZERS
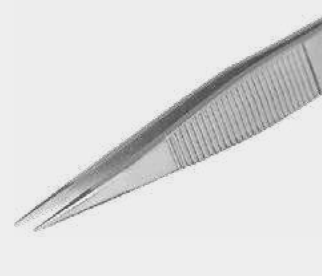
Tweezers with flat and thick tips, internally serrated (on the tips) and externally serrated (on the handles). ESD version available.

LENGTH (mm)
120

PN-0R-SA SHARP TWEEZERS

Tweezer with very sharp and flat tips, self-locking.

LENGTH (mm)
115

PN-0A-SA SHARP TWEEZERS

Tweezers with very fine tips.

LENGTH (mm)
120

PN-1-SA SHARP TWEEZERS

Tweezers with strong tips and thin blades for generic purpose.
ESD version available.

LENGTH (mm)
120

PN-0C9-SA SHARP TWEEZERS

Flat tweezers with very fine tips and thin blades.

LENGTH (mm)
90

PN-0C10-SA SHARP TWEEZERS

Flat tweezers with very fine tips and thin blades.

LENGTH (mm)
100

PN-3-SA SHARP TWEEZERS

Tweezers with strong tips and thin blades, ideal for microelectronic applications.
ESD version available.

LENGTH (mm)
120

PN-4A-SA SHARP TWEEZERS

Tweezers with sharp and strong tips.

LENGTH (mm)
110

PN-4R-SA SHARP TWEEZERS

Tweezers with very fine and sharp tips with reverse action.

LENGTH (mm)
110

PN-7-SA SHARP TWEEZERS

Tweezers with very fine and bent tips for an easier grip in high density areas.
ESD version available.

LENGTH (mm)
120

PN-5-SA SHARP TWEEZERS

Tweezers with very fine and sharp tips, ideal for SMD applications.
ESD version available.

LENGTH (mm)
110

PN-7B-SA SHARP TWEEZERS

Tweezers with very fine and bent tips for an easier grip in high density areas; similar to 7 but with stringer tips.
ESD version available.

LENGTH (mm)
120

PN-5A-SA SHARP TWEEZERS

Tweezers with very fine, sharp and oblique tips.

LENGTH (mm)
115

PN-7A-SA SHARP TWEEZERS

Tweezers with very fine and bent tips for easier grip in high density areas (same as 7 but with blades internally serrated).

LENGTH (mm)
120

PN-5AR-SA SHARP TWEEZERS

Tweezers with very fine, sharp and oblique tips with reverse action.

LENGTH (mm)
115

PN-7E-SA SHARP TWEEZERS

Tweezers with very fine and bent tips for easier grip in high density areas.

LENGTH (mm)
120

PN-5B-SA SHARP TWEEZERS

Tweezers with very fine and sharp tips, ideal for SMD applications; tips bent at 40° for a better visual of the work area.

LENGTH (mm)
110

PN-51S-SA SHARP TWEEZERS

Tweezers with very fine tips bent at 40° for handling of micro components.

LENGTH (mm)
120

PN-65A-SA SHARP TWEEZERS

Tweezers with long, thin handles and very fine tips bent at 40°. Suitable for the gripping of generic micro chips and micro components.

LENGTH (mm)
135

PN-P-SA SHARP TWEEZERS

Tweezers with strong tips, for general purpose.

LENGTH (mm)
120

PN-A-SA SHARP TWEEZERS

Tweezers with strong and precise tips for bending wires and components.

LENGTH (mm)
115

PN-SS-SA SHARP TWEEZERS

Tweezers with very fine tips, long and thin handles, ideal for operating close to heat sources.

LENGTH (mm)
140

PN-AA-SA SHARP TWEEZERS

Tweezers with strong gripping action. ESD version available.

LENGTH (mm)
130

PN-SA SHARP TWEEZERS

Tweezers with very strong tips for general purpose.

LENGTH (mm)
120

PN-AAR-SA SHARP TWEEZERS

Sharp and strong tweezer, self-locking.

LENGTH (mm)
125

PN-3D-SA PCB TWEEZERS

Tweezers with three teeth for wafer handling.

7 mm

LENGTH (mm)
130

PN-AC-SA SHARP TWEEZERS

Tweezers with strong tips, externally serrated for a safer grip.

LENGTH (mm)
110

PN-4DW-SA PCB TWEEZERS

Tweezers with flat lower tip for wafer handling (available in different sizes).

1.2 cm

LENGTH (mm)
125

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PN-4D-SA PCB TWEEZERS

Special tweezer for components (available in various sizes).

1,2 cm

LENGTH (mm)
125

PN-5D-SA PCB TWEEZERS

Tweezers with five teeth with flat lower tip for wafer handling.

1,7 cm

LENGTH (mm)
125

PN-85C-SA PCB TWEEZERS

Special tweezer to SMD with serrated handle.

7 mm

LENGTH (mm)
120

PN-19-SA TRADITIONAL TWEEZERS

Tweezers for assembly, serrated internally and externally on the handles.

LENGTH (mm)
160

PN-29D16-SA / PN-29D22-SA / PN-29D28-SA PCB TWEEZERS

Self-locking extractor for components.

Handle width: 16,22 and 28 mm

LENGTH (mm)
152

PN-26-SA TRADITIONAL TWEEZERS

Tweezers with very strong and flat tips.

LENGTH (mm)
135

PN-30D16-SA / PN-30D22-SA / PN-30D28-SA PCB TWEEZERS

Tweezers with curved tips for removing dips, self-locking; 16, 22, 28 mm

LENGTH (mm)
152

PN-33A-SA TRADITIONAL TWEEZERS

Tweezers with bent tips, with reverse action, ideal to be used during soldering operations.

LENGTH (mm)
150

PN-31D28-SA / PN-31D40-SA PCB TWEEZERS

Tweezers with large and flat tips for removing dips, 28 or 40 mm

LENGTH (mm)
140

PN-2-SA TRADITIONAL TWEEZERS

Tweezers with flat tips for handling of very small parts.

LENGTH (mm)
120

PN-150/1,5-SA | PN-150/3-SA TRADITIONAL TWEEZERS

Tweezers for insertion and extraction of micro components; tips diameter 1.5–3 mm

1.5 - 3.0
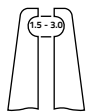
LENGTH (mm)
120

PN-35A-SA TRADITIONAL TWEEZERS

Flat tweezers with expanding tip, serrated handle.

6 mm

LENGTH (mm)
120

PN-231-SA TRADITIONAL TWEEZERS

Tweezers with internally serrated tips for general purpose.

LENGTH (mm)
120

PN-578-SA TRADITIONAL TWEEZERS

Tweezers for handling and assembly of cylindrical components Ø 2 mm.

5 mm

LENGTH (mm)
120

PN-232-SA TRADITIONAL TWEEZERS

Tweezers with smooth tips and strong gripping action.

LENGTH (mm)
150

PN-C3-SA TRADITIONAL TWEEZERS

Tweezers internally serrated, curved with pivot direction.

LENGTH (mm)
145

PN-233-SA TRADITIONAL TWEEZERS

Tweezers internally serrated and with a strong gripping action.

LENGTH (mm)
160

PN-H-SA TRADITIONAL TWEEZERS

Tweezers with swallow–shaped head and fine tips.

LENGTH (mm)
90

PN-321-SA TRADITIONAL TWEEZERS

Tweezers with flat, rounded tip.

LENGTH (mm)
120

PN-6-SA TRADITIONAL TWEEZERS

Tweezers with fine hook–shaped tips.

LENGTH (mm)
115

PN-2AB-SA TRADITIONAL TWEEZERS

Tweezers with rounded and flat tips for general purpose.

LENGTH (mm)
120

PN-2A-SA TRADITIONAL TWEEZERS

Tweezers with rounded and flat tips for general purpose. ESD version available.

LENGTH (mm)
120

PN-2AT-SA TRADITIONAL TWEEZERS

Tweezers with rounded and flat teflon tips for general purpose.

LENGTH (mm)
120

PN-2AR-SA TRADITIONAL TWEEZERS

Tweezers with rounded and flat tips for general purpose with reverse action.

LENGTH (mm)
120

PN-5C-SA TRADITIONAL TWEEZERS

Tweezers with sharp and strong tips, ideal for SMD applications; similar to 5 but shorter.

LENGTH (mm)
100

PN-85A-SA PCB TWEEZERS

Tweezers for wafer handling.

7 mm

LENGTH (mm)
120

PN-19P-SA TRADITIONAL TWEEZERS

Tweezers for assembly with bent tips, serrated internally and externally on the handles.

LENGTH (mm)
160

PN-4-SA PCB TWEEZERS
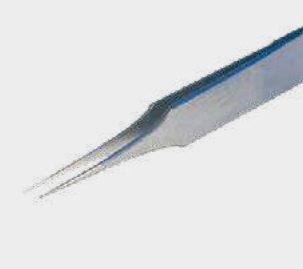
Tweezers with very fine and sharp tips.

LENGTH (mm)
110

XONIC ESD, SLOT SCREWDRIVERS

CAT. NO.	⊖ mm	◑ mm	mm	mm
WS-640060	0,8	0,2	60	97
WS-640070	1,2	0,25	60	97
WS-640080	1,5	0,3	60	97
WS-640090	1,8	0,3	60	97
WS-640100	2,0	0,4	60	97
WS-640010	2,5	0,4	60	97
WS-640110	2,5	0,4	75	97
WS-640310	3,0	0,5	100	97
WS-640410	3,0	0,5	150	97
WS-640430	3,0	0,5	240	97
WS-640440	3,5	0,6	100	97
WS-640450	3,5	0,6	150	97
WS-640510	4,0	0,6	100	97
WS-640610	4,0	0,6	150	97
WS-640710	4,5	0,6	250	97

PHILIPS PS SCREWDRIVERS

CAT. NO.	⊕ mm	mm	mm
WS-642000	000	60	97
WS-642100	00	60	97
WS-642010	0	60	97
WS-642110	1	80	97
WS-642120	1	185	97
WS-642130	1	285	97

HEX SCREWDRIVERS

CAT. NO.	⬡ mm	mm	mm
WS-647020	0,7	50	97
WS-647030	0,9	50	97
WS-647040	1,3	50	97
WS-647050	1,5	50	97
WS-647060	2,0	50	97
WS-647070	2,5	60	97
WS-647080	3,0	60	97

TORX SCREWDRIVERS

CAT. NO.	⬢ mm	mm	mm
WS-640190	TX-01	50	97
WS-640290	TX-02	50	97
WS-640390	TX-03	50	97
WS-640490	TX-04	50	97
WS-640590	TX-05	50	97
WS-640690	TX-06	50	97
WS-640790	TX-07	50	97
WS-640890	TX-08	60	97
WS-640990	TX-09	60	97
WS-641090	TX-10	80	97
WS-641590	TX-15	80	97
WS-642090	TX-20	100	97

SAFETY TC TAMPERPROOF SCREWDRIVERS

CAT. NO.	⬢ mm	mm	mm
WS-640798	TX-07S	50	97
WS-640898	TX-08S	60	97
WS-640998	TX-09S	60	97
WS-641098	TX-10S	80	97
WS-641598	TX-15S	80	97
WS-642098	TX-20S	100	97

BALL END HEX SCREWDRIVERS

CAT. NO.	⬡ mm	mm	mm
WS-647450	1,5	50	97
WS-647460	2,0	50	97
WS-647470	2,5	60	97
WS-647480	3,0	60	97

POZIDRIV PZ SCREWDRIVERS

CAT. NO.	⊕ mm	mm	mm
WS-643120	0	60	97
WS-643220	1	80	97

NUT SCREWDRIVERS

CAT. NO.	⬡ mm	↔ mm	mm
WS-647670	1,5	60	97
WS-647680	2,0	60	97
WS-647620	2,5	60	97
WS-647630	3,0	60	97
WS-647640	3,2	60	97
WS-647650	3,5	60	97
WS-647660	4,0	60	97
WS-647710	4,5	60	97
WS-647810	5,0	60	97
WS-647910	5,5	60	97

PHILIPS PH SCREWDRIVERS BE-8600 - BE-8620L

CAT. NO.	✚ mm	mm	mm	mm	g
BE-8600	0	60	16 x 102	162	19
BE-8610	1	75	20 x 122	197	46
BE-8610L	1	200*	20 x 122	322	75
BE-8620	2	100	27 x 122	222	72
BE-8620-L	2	200*	27 x 122	322	85

FLATHEAD SCREWDRIVERS BE-8865 - BE-8890

CAT. NO.	mm	mm	mm	mm	mm	g
BE-8865	1,6	8	175*	36 x 161	336	176
BE-8870	1,6	10	175*	36 x 161	336	200
BE-8880	2	12	200*	36 x 161	361	272
BE-8890	2,5	14	200*	36 x 161	361	276

POZIDRIV PZ SCREWDRIVERS BE-8840 - BE-8802

CAT. NO.	✚ mm	mm	mm	mm	g
BE-8840	4	200*	36 x 161	361	222
BE-8801	1	25	36 x 58	83	40
BE-8802	2	25	36 x 58	83	45

TIPS SHAPES

WS-145010   WS-145020   WS-145030   WS-145110

P   P   P   M

WS-145130   WS-145140   WS-145120

M   M   M

P = Plastic

M = Brass

PHILIPS PH SCREWDRIVERS BE-8630 - BE-8602

CAT. NO.	✚ mm	mm	mm	mm	g
BE-8630	3	150	36 x 122	272	154
BE-8640	4	200	36 x 161	361	222
BE-8601	1	25	36 x 58	83	40
BE-8602	2	25	36 x 58	83	45

POZIDRIV PZ SCREWDRIVERS BE-8820 - BE-8830

CAT. NO.	✚ mm	mm	mm	mm	g
BE-8820	2	100	27 x 122	222	72
BE-8820-L	2	200*	27 x 122	322	85
BE-8830	3	150*	36 x 122	272	154

FLATHEAD SCREWDRIVERS BE-8330 - BE-8360

CAT. NO.	mm	mm	mm	mm	mm	g
BE-8330	0,6	3,5	25	36 x 58	83	43
BE-8340	0,8	4	25	36 x 58	83	43
BE-8350	1	5,5	25	36 x 58	83	43
BE-8450	1	5,5	45	36 x 58	103	51
BE-8355	1,2	6,5	25	36 x 58	83	43
BE-8455	1,2	6,5	45	36 x 58	103	60
BE-8360	1,2	8	45	36 x 58	83	60

CAT. NO.	DESCRIPTION
BE-M780	Magnetising and demagnetising box

FLATHEAD SCREWDRIVERS BE-8010 - BE-8240

CAT. NO.	mm	mm	mm	mm	mm	g
BE-8010	0,4	2,5	50	16 x 102	152	17
BE-8210	0,4	2,5	75	16 x 102	177	18
BE-8020	0,5	3	60	16 x 102	152	20
BE-8020-L	0,5	3	75	16 x 102	177	22
BE-8220	0,5	3	125*	16 x 102	227	22
BE-8030	0,6	3,5	75	20 x 122	197	35
BE-8230	0,6	3,5	125	20 x 122	247	38
BE-8040	0,8	4	100	20 x 122	222	38
BE-8240	0,8	4	175*	20 x122	297	47

TORX SCREWDRIVERS BE-8906 - BE-8930

CAT. NO.		d mm	mm	mm	mm	g
BE-8906	T6	1,70	75	16 x 102	152	15
BE-8907	T7	1,99	75	16 x 102	157	22
BE-8908	T8	2,31	75	16 x 102	162	23
BE-8909	T9	2,50	75	20 x 122	182	30
BE-8910	T10	2,74	75	20 x 122	187	34
BE-8915	T15	3,25	100	20 x 122	192	40
BE-8920	T20	3,86	100	27 x 122	202	50
BE-8925	T25	4,43	125	27 x 122	202	55
BE-8927	T27	4,99	125	36 x 122	222	96
BE-8930	T30	5,52	150	36 x 122	222	96

POZIDRIV PZ SCREWDRIVERS BE-8800 - BE-8810L

CAT. NO.	mm	mm	mm	mm	g
BE-8800	0	60	16 x 102	162	19
BE-8810	1	75	20 x 122	197	46
BE-8810-L	1	200*	20 x 122	322	75

TORX SCREWDRIVERS BE-8940 - BE-8945

CAT. NO.		d mm	mm	mm	mm	g
BE-8940	T40	6,65	150	36 x 161	291	163
BE-8945	T45	6,65	150	36 x 161	291	163

SCREWDRIVERS FOR NUTS BE-7803 - BE-7814

CAT. NO.	mm	Hole depth (mm)	mm	mm	g
BE-7803	3	40	125	20 x 122	70
BE-7835	3,5	40	125	20 x 122	70
BE-7804	4	50	125	20 x 122	70
BE-7845	4,5	50	125	20 x 122	70
BE-7805	5	50	125	20 x 122	72
BE-7855	5,5	50	125	20 x 122	72
BE-7806	6	50	125	20 x 122	85
BE-7807	7	50	125	20 x 122	85
BE-7808	8	50	125	20 x 122	90
BE-7809	9	50	125	27 x 122	95
BE-7810	10	50	125	36 x 122	117
BE-7811	11	50	125	36 x 122	140
BE-7812	12	50	125	36 x 122	145
BE-7813	13	50	125	36 x 161	145
BE-7814	14	50	125	36 x 161	213
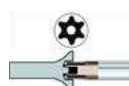
TAMPERPROOF SCREWDRIVERS FOR TORX SCREW BE-7910 - BE-7940

CAT. NO.		d mm	mm	mm	mm	g
BE-7910	T10	2,74	75	20 x 122	187	34
BE-7915	T15	3,27	100	20 x 122	192	40
BE-7920	T20	3,86	100	27 x 122	202	50
BE-7925	T25	4,43	125	27 x 122	202	55
BE-7927	T27	4,99	125	36 x 122	222	96
BE-7930	T30	5,52	150	36 x 122	222	96
BE-7940	T40	6,65	150	36 x 161	291	163

SCREWDRIVERS FOR NUTS WITH FLEXIBLE JOINT

CAT. NO.	mm	Hole depth (mm)	mm	mm	g
BE-7606	6	–	150	27 x 122	85
BE-7607	7	–	150	27 x 122	85
BE-7608	8	–	150	27 x 122	85

FLATHEAD SCREWDRIVERS BE-8150 - BE-8260

| CAT. NO.	mm	mm	mm	mm	mm	g
BE-8150	1	5,5	100	27 x 122	222	70
BE-8250	1	5,5	150	27 x 122	272	75
BE-8250L	1	5,5	200	27 x 122	322	90
BE-8155	1,2	6,5	125	36 x 122	247	101
BE-8255	1,2	6,5	150	36 x 122	272	114
BE-8160	1,2	8	125*	36 x 122	247	142
BE-8260	1,2	8	175*	36 x 122	297	165

INSULTED SCREWDRIVERS IEC/VDE-1000V FOR SOCKET-HEAD SCREWS

CAT. NO.	mm	mm	mm	mm	g
BE-8725-S	2,5	75	16 x 102	177	22
BE-8703-S	3	75	16 x 102	177	25
BE-8704-S	4	150	20 x 122	197	41
BE-8705-S	5	175	27 x 122	197	65
BE-8706-S	6	200	27 x 122	222	97
BE-8708-S	8	200	36 x 122	222	178

INSULTED SCREWDRIVER IEC/VDE-1000V FOR PHILIPS PH-HEAD SCREWS

CAT. NO.	mm	mm	mm	mm	g
BE-8600-S	0	75	16 x 102	162	20
BE-8610-S	1	80	20 x 122	202	60
BE-8620-S	2	100	27 x 122	222	80
BE-8630-S	3	150	36 x 122	272	175
BE-8640-S	4	200	36 x 161	361	240

INSULATED SCREWDRIVERS IEC/VDE-1000V FOR TORX HEAD SCREWS

CAT. NO.		d mm	mm	mm	mm	g
BE-8910-S	T10	2,74	100	20 x 122	187	39
BE-8915-S	T15	3,27	125	20 x 122	192	45
BE-8920-S	T20	3,86	125	27 x 122	202	55
BE-8925-S	T25	4,43	150	27 x 122	202	60
BE-8930-S	T30	5,52	175	36 x 122	222	105

BALL END SCREWDRIVERS FOR HEX SCREW BE-8702 - BE-8710

CAT. NO.	mm	mm	mm	mm	g
BE-8702	2	100	16 x 102	212	22
BE-8725	2,5	100	16 x 102	212	22
BE-8703	3	100	16 x 102	212	25
BE-8704	4	100	20 x 122	232	41
BE-8705	5	100	27 x 122	232	65
BE-8706	6	125	27 x 122	262	97
BE-8708	8	150	36 x 122	272	178
BE-8710	10	150	36 x 161	311	304

INSULTED SCREWDRIVERS IEC/VDE-1000V FOR SLOTTED HEAD SCREWS

CAT. NO.	mm	mm	mm	mm	mm	g
BE-8010-S	0,4	2,5	75	16 x 102	177	23
BE-8220-S	0,5	3	100	16 x 102	202	28
BE-8230-S	0,6	3,5	100	20 x 122	222	44
BE-8040-S	0,8	4	100	20 x 122	222	46
BE-8050-S	1,0	5,5	125	27 x 122	247	75
BE-8255-S	1,2	6,5	150	36 x 122	272	124
BE-8065-S	1,2	8	175	36 x 122	297	195

INSULATED SCREWDRIVER IEC/VDE-1000V FOR POZIDRIV PZ HEAD SCREW

CAT. NO.	mm	mm	mm	mm	g
BE-8800-S	0	75	16 x 102	162	19
BE-8810-S	1	80	20 x 122	202	60
BE-8820-S	2	100	27 x 122	222	80
BE-8820-SL	2	250	27 x 122	372	110
BE-8830-S	3	150	36 x 122	272	175
BE-8840-S	4	200	36 x 161	361	222

ERGO™ BIT HOLDER FEMALE HEXAGON 1/4"

CAT. NO.	mm	mm	mm	mm	g
BE-8577	1/4"	118	36 x 122	240	155

SCREWDRIVER SETS

BE-9881 SET	6 pieces
BE-8020	0,5 x 3 x 50 mm
BE-8040	0,8 x 4 x 100 mm
BE-8150	1 x 5,5 x 100 mm
BE-8155	1,2 x 6,5 x 125 mm
BE-8610	PH 1 x 75 mm
BE-8620	PH 2 x 100 mm
BE-9882 SET	**6 pieces**
BE-8020	0,5 x 3 x 50 mm
BE-8040	0,8 x 4 x 100 mm
BE-8150	1 x 5,5 x 100 mm
BE-8155	1,2 x 6,5 x 125 mm
BE-8810	PZ 1 x 75 mm
BE-8820	PZ 2 x 100 mm
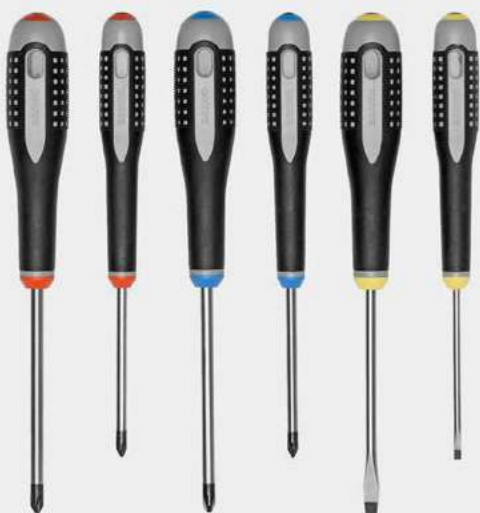
BE-9886 SET	6 pieces
BE-8030	0,6 x 3,5 x 75 mm
BE-8150	1 x 5,5 x 100 mm
BE-8610	PH 1 x 75 mm
BE-8620	PH 2 x 100 mm
BE-8810	PZ 1 x 75 mm
BE-8820	PZ 2 x 100 mm
BE-9885 SET	**5 pieces**
BE-8910	T10
BE-8915	T15
BE-8920	T20
BE-8925	T25
BE-8930	T30

INSULTED SCREWDRIVERS SET

BE-9881-S SET	5 pieces
BE-8220-S	0,5 x 3 x 10 mm
BE-8040-S	038 x 4 x 100 mm
BE-8050-S	1 x 5,5 x 125 mm
BE-8610-S	PH 1 x 80 mm
BE-8620-S	PH 2 x 100 mm
BE-9882-S SET	**5 pieces**
BE-8220-S	0,5 x 3 x 100 mm
BE-8040-S	0,8 x 4 x 100 mm
BE-8050-S	1 x 5,5 x 125 mm
BE-8810-S	PZ x 80 mm
BE-8820	PZ 2 x 100 mm

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STATIC
CONTROL

231

SHORT SLEEVE T-SHIRT

CE-TSHIRT.050

DESCRIPTION

- Fabric: Knit fabric 050
- Cut: Female/Male
- Sizes: 2XS – 2XL
- ESD sign: Side tag

OPTIONS

- Custom size: Bespoke
- Custom colour: Bespoke
- Customer's logo: Embroidery

STANDARD COLORS | KNIT FABRIC 050

Navy Blue	Black	White	Blue	Pink	Orange	Red	Grey
25	27	28	30	31	38	39	40
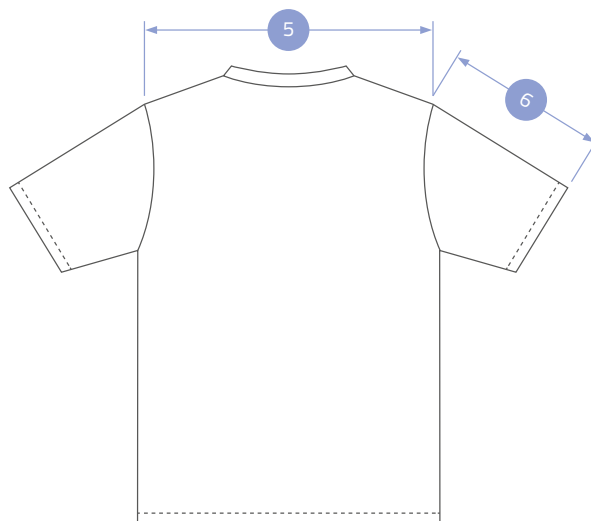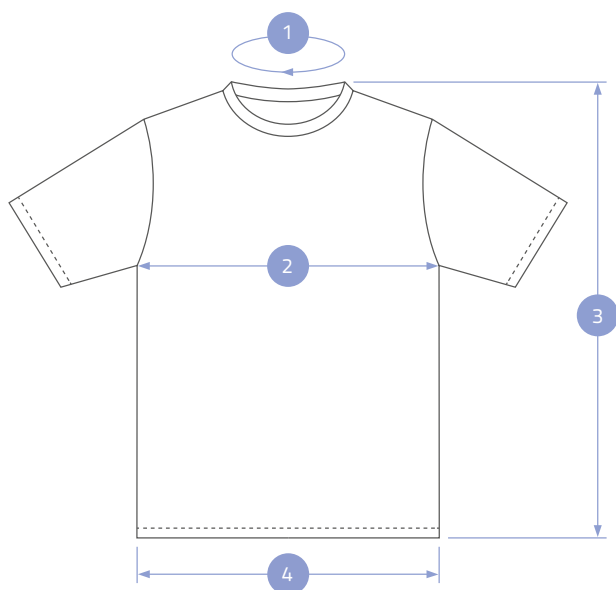
	2XS	XS	S	M	L	XL	2XL
BODY							
1	40	41	41	43	45	48	49
2	46	49	52	55	58	61	64
3	66	67	68	68	70	70	72
4	46	49	52	55	58	61	64
5	47	48	49	50	51	52	53
SLEEVES							
6	22	22	22	23	23	24	25

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LONG SLEEVE T-SHIRT

CE-TSHIRT.050-LS

DESCRIPTION

- Fabric: Knit fabric 050
- Cut: Female/Male
- Sizes: 2XS – 2XL
- Sleeves: Rib cuff
- ESD sign: Side tag

OPTIONS

- Custom size: Bespoke
- Custom colour: Bespoke
- Customer's logo: Embroidery

STANDARD COLORS | KNIT FABRIC 050

Navy Blue	Black	White	Blue	Pink	Orange	Red	Grey
25	27	28	30	31	38	39	40
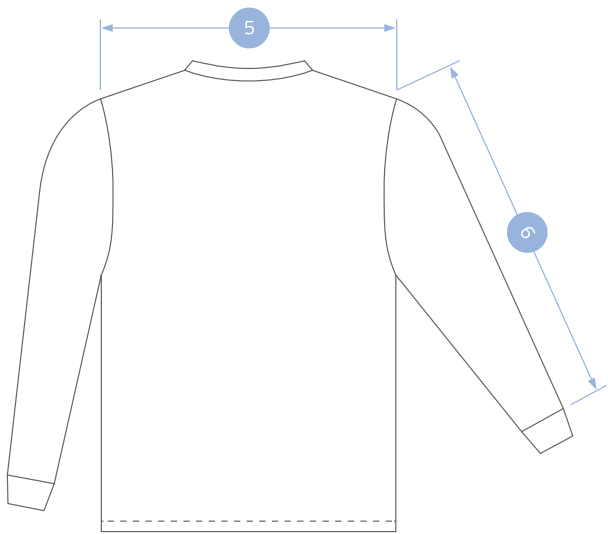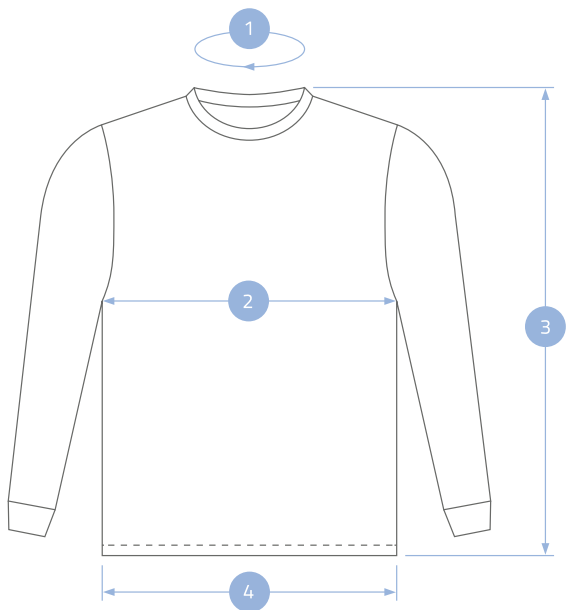
	2XS	XS	S	M	L	XL	2XL
BODY							
1	40	41	41	43	45	48	49
2	46	49	52	55	58	61	64
3	66	67	68	68	70	70	72
4	46	49	52	55	58	61	64
5	47	48	49	50	51	52	53
SLEEVES							
6	58	58	60	60	62	62	64

SHORT SLEEVE POLO SHIRT

CE-POLO.050

DESCRIPTION

- Fabric: Knit fabric 050
- Cut: Female/Male
- Sizes: 2XS – 2XL
- Fastener: Three buttons
- Pocket: One on the left breast
- ESD sign: On the pocket

OPTIONS

- Custom size: Bespoke
- Custom colour: Bespoke
- Customer's logo: Embroidery
- ESD sign: Side tag

STANDARD COLORS | KNIT FABRIC 050

Navy Blue	Black	White	Blue	Pink	Orange	Red	Grey
25	27	28	30	31	38	39	40
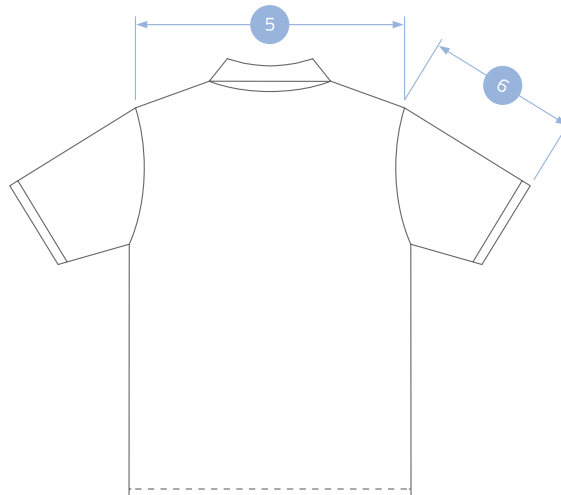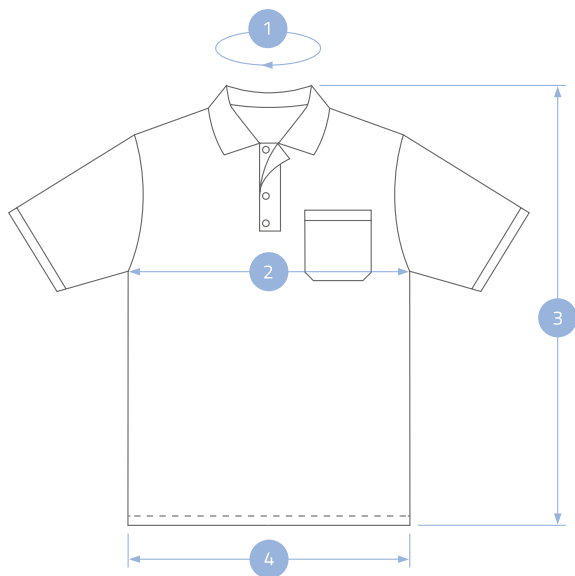
	2XS	XS	S	M	L	XL	2XL
BODY							
1	38	38	38	40	40	42	42
2	47	50	54	58	62	66	70
3	68	68	70	71	73	74	74
4	47	50	54	58	62	66	70
5	45	46	48	50	52	54	55
SLEEVES							
6	24	24	24	26	26	27	27

LONG SLEE VE POLO SHIRT

CE-POLO.050-LS

DESCRIPTION

- Fabric: Knit fabric 050
- Cut: Female/Male
- Sizes: 2XS – 2XL
- Fastener: Three buttons
- Pocket: One on the left breast
- Sleeves: Rib cuff
- ESD sign: On the pocket

OPTIONS

- Custom size: Bespoke
- Custom colour: Bespoke
- Customer's logo: Embroidery
- ESD sign: Side tag

STANDARD COLORS | KNIT FABRIC 050

	Navy Blue	Black	White	Blue	Pink	Orange	Red	Grey
	25	27	28	30	31	38	39	40
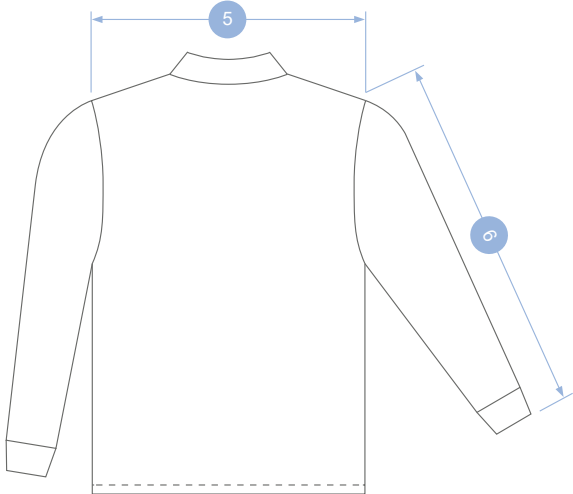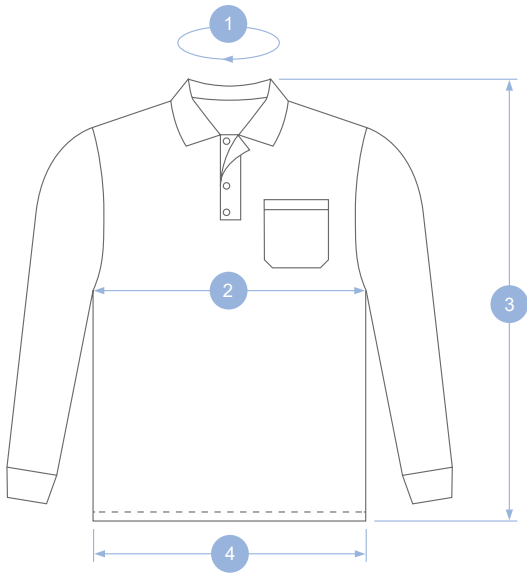
	2XS	XS	S	M	L	XL	2XL
BODY							
1	38	38	38	40	40	42	42
2	47	50	54	58	62	66	70
3	68	68	70	71	73	74	74
4	47	50	54	58	62	66	70
5	45	46	48	50	52	54	55
SLEEVES							
6	58	58	60	60	62	62	64

PIQUE TYPE SHORT SLEEVE POLO SHIRT

DESCRIPTION

- Fabric: Knit fabric PIQUE
- Cut: Female/Male
- Sizes: 2XS – 2XL
- Fastener: Three buttons
- Pocket: One on the left breast
- ESD sign: On the pocket

OPTIONS

- Custom size: Bespoke
- Custom colour: Bespoke
- Customer's logo: Embroidery
- ESD sign: Side tag

STANDARD COLORS | KNIT FABRIC PIQUE

Blue	Navy Blue	Black	Turquoise
19	20	23	33

CE-POLO.PIKA

	2XS	XS	S	M	L	XL	2XL
BODY							
1	38	38	38	40	40	42	42
2	47	50	54	58	62	66	70
3	68	68	70	71	73	74	74
4	47	50	54	58	62	66	70
5	45	46	48	50	52	54	55
SLEEVES							
6	24	24	24	26	26	27	27

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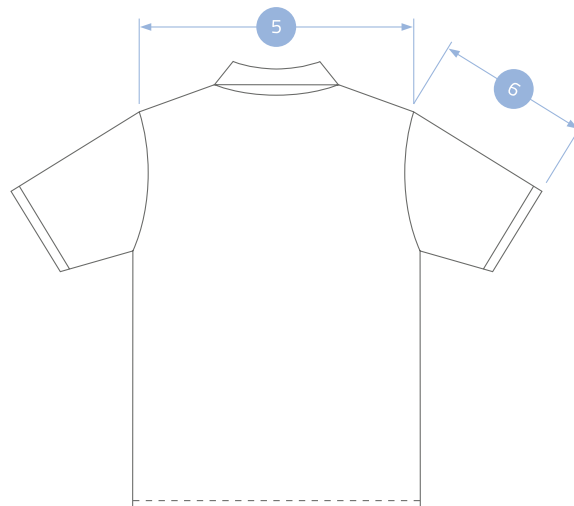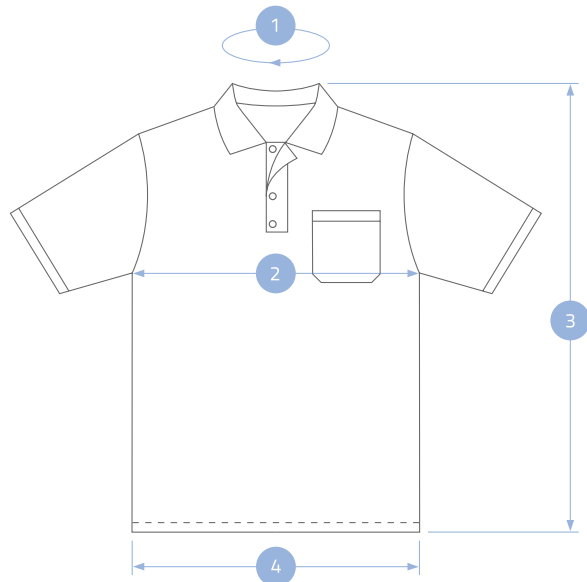
PIQUE TYPE LONG SLEEVE POLO SHIRT

CE-POLO.PIKA-LS

DESCRIPTION

- Fabric: Knit fabric PI QUE
- Cut: Female/Male
- Sizes: 2XS – 2XL
- Fastener: Three buttons
- Pocket: One on the left breast
- Sleeves: Rib cuff
- ESD sign: On the pocket

OPTIONS

- Custom size: Bespoke
- Custom colour: Bespoke
- Customer's logo: Embroidery
- ESD sign: Side tag

STANDARD COLORS | KNIT FABRIC PIQUE

Blue	Navy Blue	Black	Turquoise
19	20	23	33
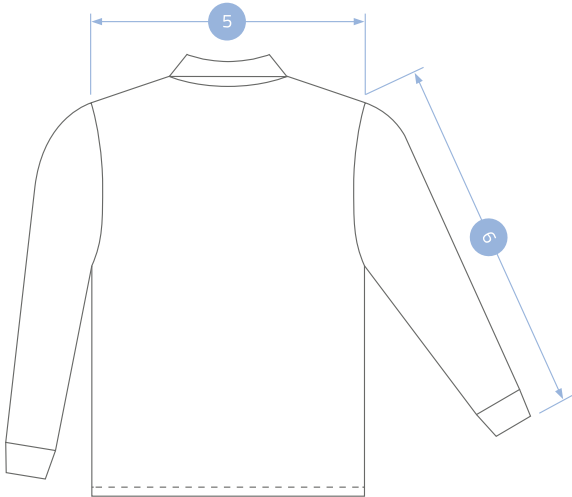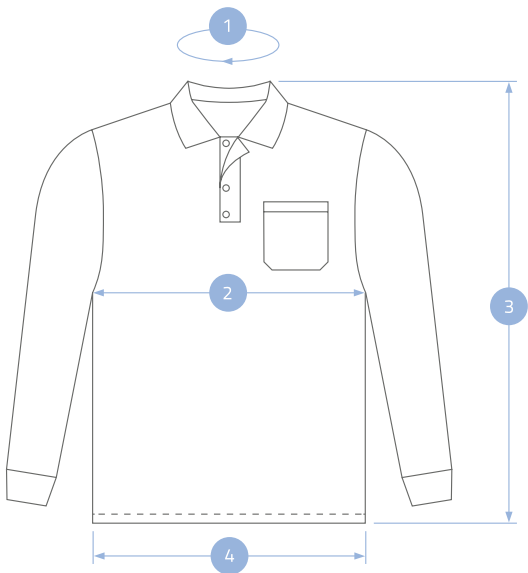
	2XS	XS	S	M	L	XL	2XL
BODY							
1	38	38	38	40	40	42	42
2	47	50	54	58	62	66	70
3	68	68	70	71	73	74	74
4	47	50	54	58	62	66	70
5	45	46	48	50	52	54	55
SLEEVES							
6	58	58	60	60	62	62	64

CLASSIC SWEATSHIRT

CE-BLUZA.260-BS

DESCRIPTION

- Fabric: Knit fabric 260
- Cut: Unisex
- Sizes: 2XS – 2XL
- Neck: Rib cuff
- Sleeves: Rib cuff
- Bottom: Rib welt
- ESD sign: Side tag

OPTIONS

- Custom size: Bespoke
- Custom colour: Bespoke
- Customer's logo: Embroidery

STANDARD COLORS | KNIT FABRIC 260

Grey	Blue	Navy Blue	Black
13	35	34	26
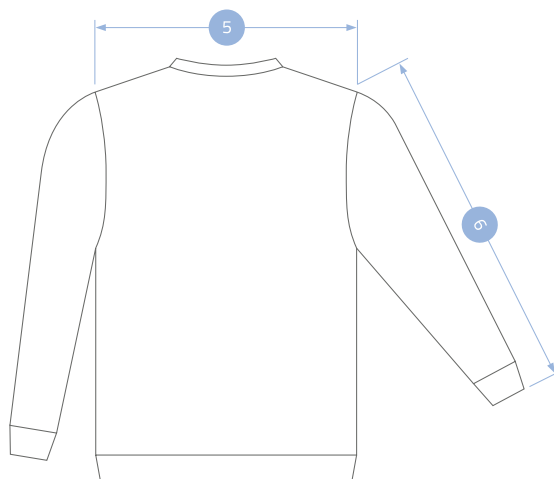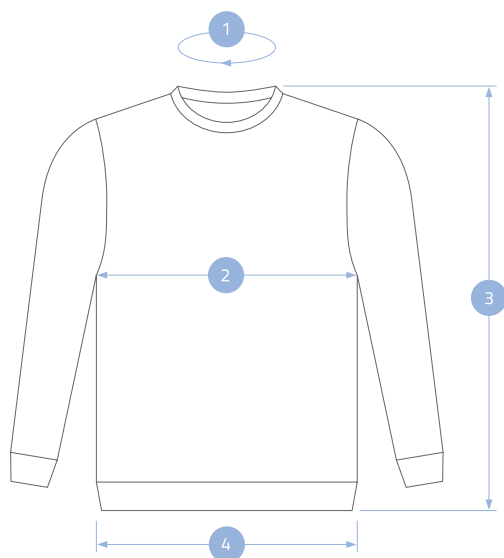
	2XS	XS	S	M	L	XL	2XL
BODY							
1	40	42	44	46	47	48	49
2	46	50	54	58	62	66	70
3	56	56	59	63	66	69	72
4	44	48	52	56	60	64	68
5	47	48,5	52	56	60	64	68
SLEEVES							
6	56	57	58	61	63	67	70

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ZIP UP SWEATSHIRT

CE-BLUZA.260-UP

DESCRIPTION

- Fabric: Knit fabric 260
- Cut: Unisex
- Sizes: 2XS – 2XL
- Fastener: Covered zipper
- Neck: Turtle neck
- Sleeves: Rib cuff
- Bottom: Rib welt
- ESD sign: Side tag

OPTIONS

- Custom size: Bespoke
- Custom colour: Bespoke
- Customer's logo: Embroidery

STANDARD COLORS | KNIT FABRIC 260

Grey	Blue	Navy Blue	Black
13	35	34	26
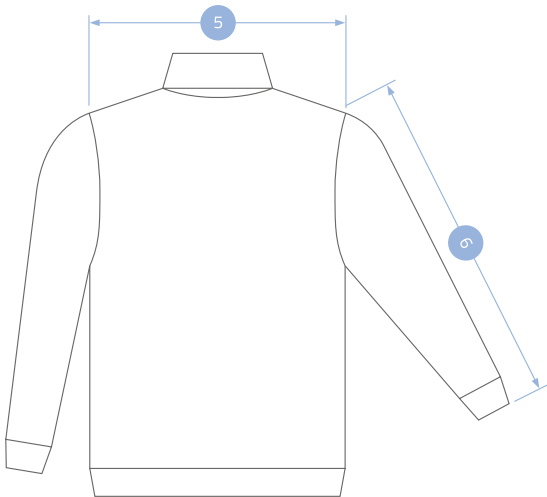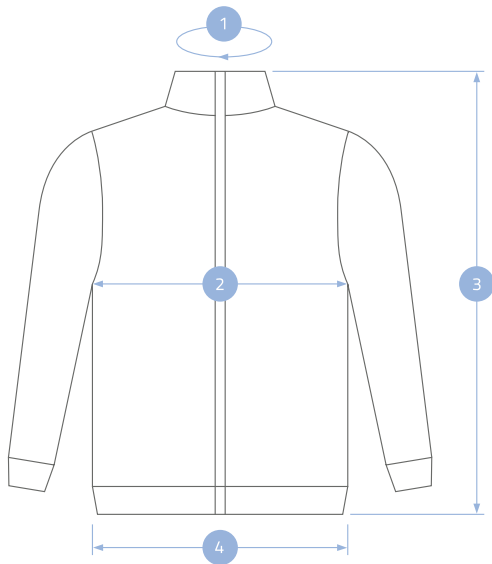
	2XS	XS	S	M	L	XL	2XL
BODY							
1	38	38	38	40	40	42	42
2	47	50	54	58	62	66	70
3	68	68	70	71	73	74	74
4	47	50	54	58	62	66	70
5	45	46	48	50	52	54	55
SLEEVES							
6	58	58	60	60	62	62	64

STANDARD COAT

DESCRIPTION

- Fabric: Fabric 065
- Cut: Female/Male
- Sizes: 2XS – 2XL
- Fastener: Covered metal snaps
- Pockets:
  - two on the bottom
  - one on the left breast
  - one on the left sleeve
- Sleeves: Finished with adjustable hem
- ESD sign: On the breast pocket

OPTIONS

- Custom size: Bespoke
- Custom colour: Bespoke
- Customer's logo: Embroidery

STANDARD COLORS | FABRIC 065

White	Blue	Navy Blue	Green	Yellow	Pink	Light Grey	Grey	Black
01	02	03	04	06	07	14	29	22

CE-FARTU.065
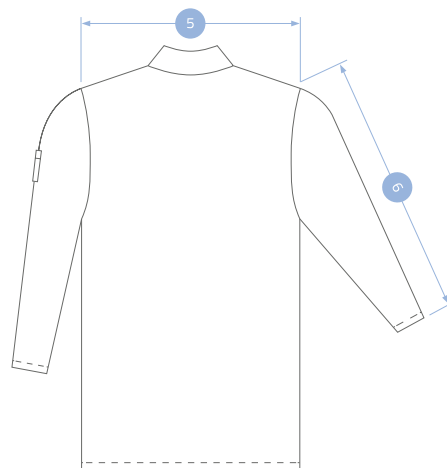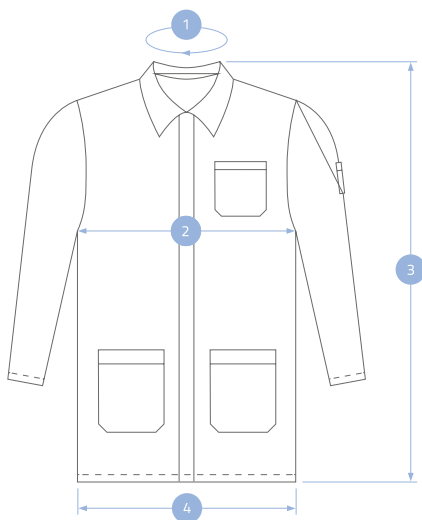
	2XS	XS	S	M	L	XL	2XL
BODY							
1	45	45,5	46,5	47,5	47,5	47,5	49
2	56	58	60	62	64	66	68
3	80	80	85	90	95	100	105
4	56	58	60	62	64	66	68
5	45	46	47	48	49	50	51
SLEEVES							
6	58	60	62	64	66	68	68

SHORT SLEEVE SHIRT

CE-KOSZU.065

DESCRIPTION

- Fabric: Fabric 065
- Cut: Female/Male
- Sizes: 2XS – 2XL
- Fastener: Covered metal snaps
- Sleeves: Finished with hem
- Pockets: One on the left breast
- ESD sign: On the pocket

OPTIONS

- Custom size: Bespoke
- Custom colour: Bespoke
- Customer's logo: Embroidery

STANDARD COLORS | FABRIC 065

White	Blue	Navy Blue	Green	Yellow	Pink	Light Grey	Grey	Black
01	02	03	04	06	07	14	29	22
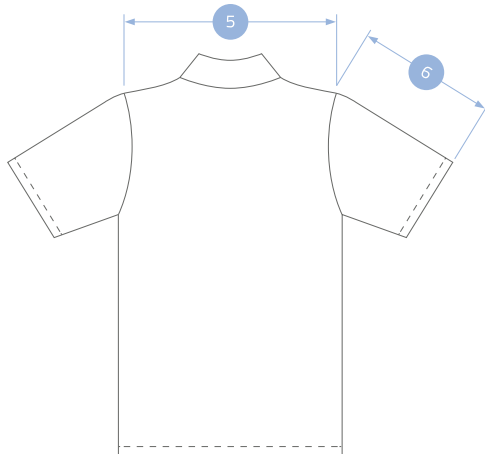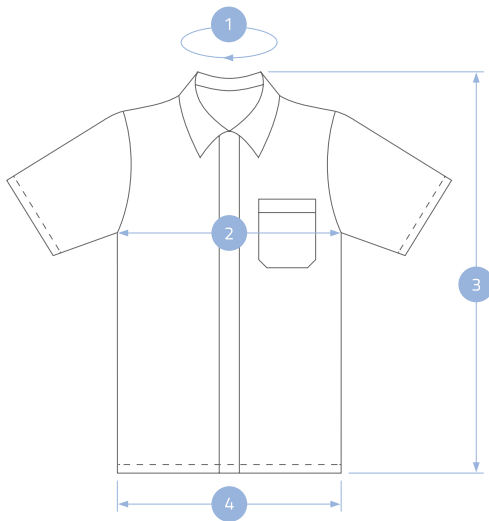
	2XS	XS	S	M	L	XL	2XL
BODY							
1	40	40	42	42	44	44	44
2	52	55	58	61	65	67	69
3	64	66	68	68	72	76	76
4	52	55	58	61	65	67	69
5	45	46	47	48	49	50	52
SLEEVES							
6	25	26	26	28	28	28	30

CASAQUE TYPE COAT

DESCRIPTION

- Fabric: Fabric 065
- Cut: Unisex
- Sizes: 2XS – 2XL
- Fastener: Covered metal snaps
- Sleeves: Finished with elastic hem
- Pocket: Internal, one on the right side
- ESD sign: On the left sleeve

OPTIONS

- Custom size: Bespoke
- Custom colour: Bespoke
- Customer's logo: Embroidery

CE-KASAK.065

STANDARD COLORS | FABRIC 065

White	Blue	Navy Blue	Green	Yellow	Pink	Light Grey	Grey	Black
01	02	03	04	06	07	14	29	22
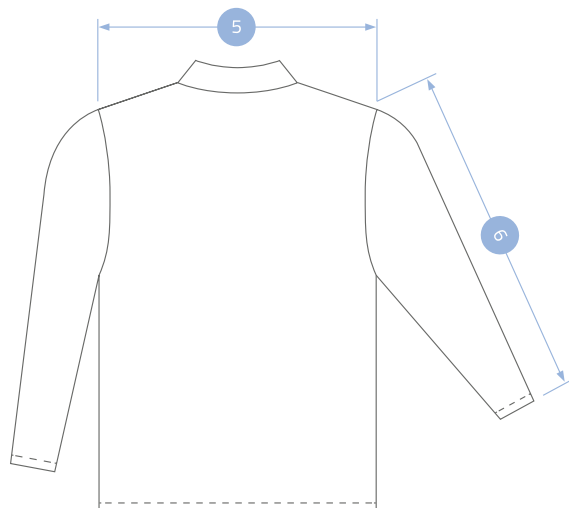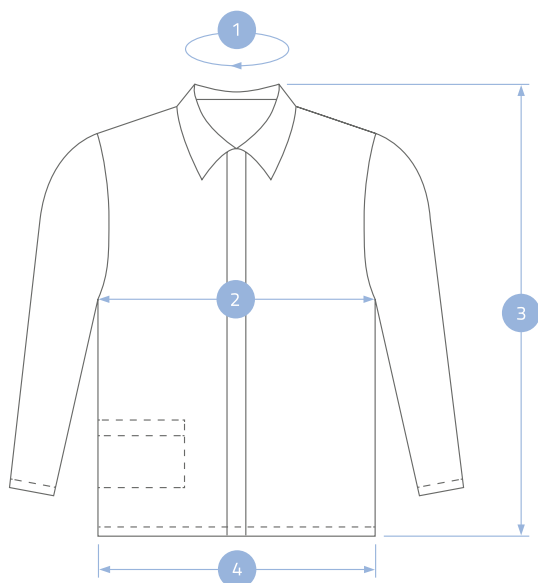
	2XS	XS	S	M	L	XL	2XL
BODY							
1	44	45	46	47	48	49	50
2	54	57	60	63	66	68	70
3	70	72	74	76	78	80	82
4	54	57	60	63	66	68	70
5	44	45	46	47	48	49	50
SLEEVES							
6	60	60	62	64	66	68	68

LADIES TROUSERS

CE-SPODN.065-DAM

DESCRIPTION

- Fabric: Fabric 065
- Cut: Female
- Sizes: 36 – 48
- Fastener: Zipper
- Pockets: Two side pocket, one on the backside
- Legs: Finished with hem
- ESD sign: Side tag

OPTIONS

- Custom size: Bespoke
- Custom colour: Bespoke
- Customer's logo: Embroidery

STANDARD COLORS | FABRIC 065

White	Blue	Navy Blue	Green	Yellow	Pink	Light Grey	Grey	Black
01	02	03	04	06	07	14	29	22
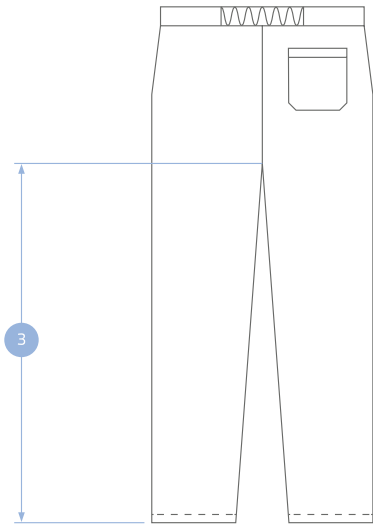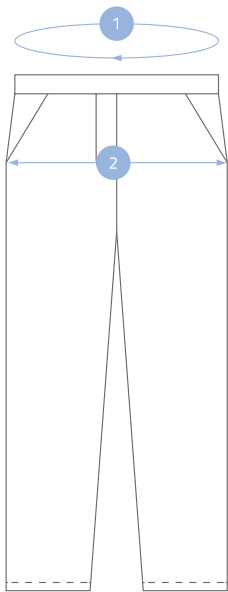
	36	38	40	42	44	46	48
BODY							
1	68 – 72	72 – 76	76 – 80	80 – 84	84 – 88	88 – 92	92 – 96
2	45	47	49	51	53	55	57
3	72	72	73	73	74	74	75

MEN'S TROUSERS

CE-SPODN.065-MES

DESCRIPTION

- Fabric: Fabric 065
- Cut: Male
- Sizes: 44 - 60
- Fastener: Zipper
- Pockets:
    - two side pocket
    - one on the backside
    - one on the right thigh
- Legs: Finished with hem
- ESD sign: Side tag

OPTIONS

- Custom size: Bespoke
- Custom colour: Bespoke
- Customer's logo: Embroidery

STANDARD COLORS | FABRIC 065

White	Blue	Navy Blue	Green	Light Grey	Grey	Black
01	02	03	04	14	29	22
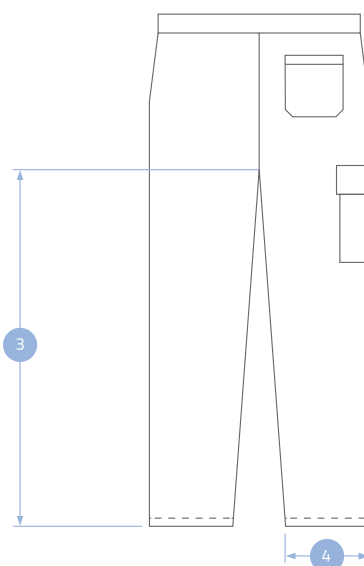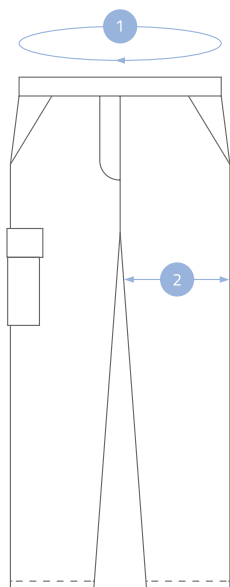
	44	46	48	50	52	54	56	58	60
BODY									
1	78	82	86	90	94	98	102	106	110
2	28	30	31	32	33	34	35	36	37
3	82	82	82	82	82	82	84	84	84
4	21	22	23	24	25	26	27	28	29

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CLEAN ROOM COAT

CE-FARTU.099

DESCRIPTION

- Fabric: Fabric 099
- Cut: Unisex
- Sizes: 2XS – 2XL
- Fastener: Covered metal snaps
- Pockets: One on the left breast, two on the bottom
- ESD sign: Internal tag

OPTIONS

- Custom size: Bespoke
- Custom colour: Bespoke
- Customer's logo: Embroidery
- Fastener: Covered zipper

STANDARD COLORS | FABRIC 099

White	Light Grey	Grey	Navy Blue	Maroon	Blue	Dark Green	Lemon green	Orange
01	09	36	10	12	15	16	18	32
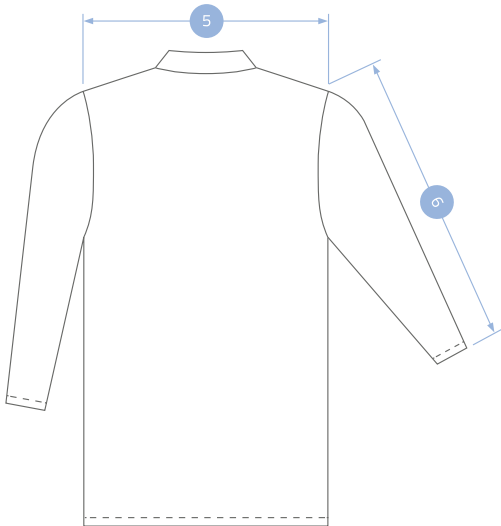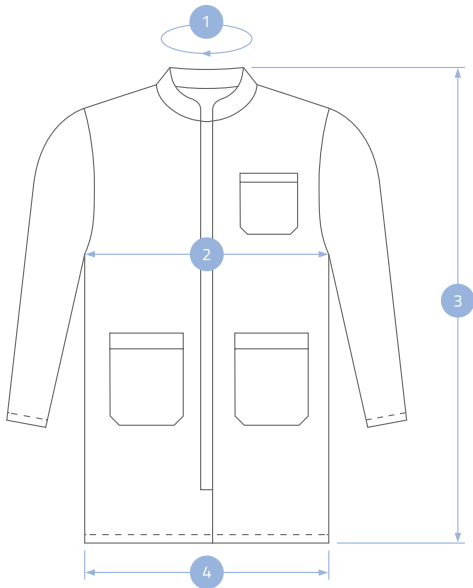
	2XS	XS	S	M	L	XL	2XL
BODY							
1	44	45	46	47	48	49	50
2	55	57	60	63	65	67	69
3	90	95	100	105	110	115	120
4	55	57	60	63	65	67	69
5	45	46	47	48	49	50	51
SLEEVES							
6	58	58	60	62	64	64	66

CLEAN ROOM COAT WITH INTEGRATED HOOD

DESCRIPTION

- Fabric: Fabric 099
- Cut: Unisex
- Sizes: 2XS – 2XL
- Fastener: Covered zipper
- Sleeves: Rib cuff
- ESD sign: Internal tag

OPTIONS

- Custom size: Bespoke
- Custom colour: Bespoke
- Customer's logo: Embroidery

STANDARD COLORS | FABRIC 099

White	Light Grey	Grey	Navy Blue	Maroon	Blue	Dark Green	Lemon green	Orange
01	09	36	10	12	15	16	18	32

CE-FARTU.099-KAP
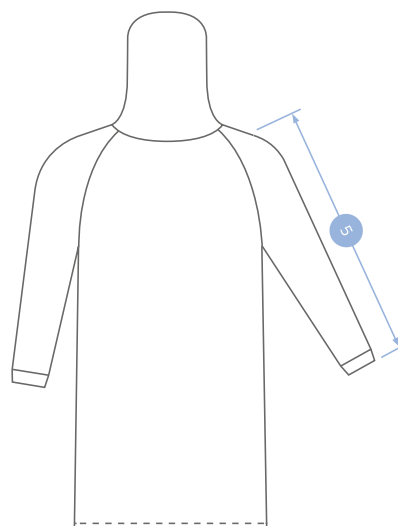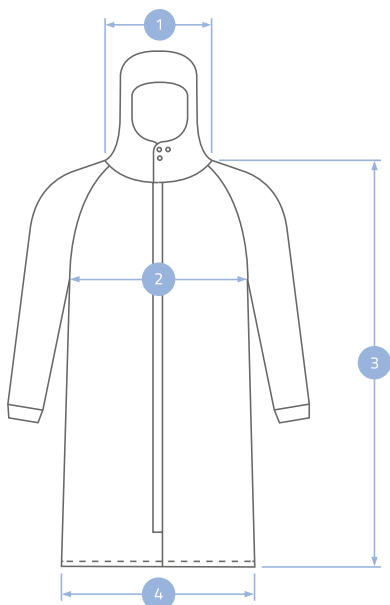
	2XS	XS	S	M	L	XL	2XL
BODY							
1	18	18	18	18	18	18	18
2	54	58	62	66	70	74	78
3	102	103	104	105	106	107	108
4	56	60	64	68	70	74	78
SLEEVES							
5	79	80	80,5	81,5	82,5	83,5	85

CLEAN ROOM COVERALL

CE-KOMBI.099

DESCRIPTION

- Fabric: Fabric 099
- Cut: Unisex
- Sizes: 2XS – 2XL
- Fastener: Zipper
- Sleeves: Finished with elastic hem
- Legs: Finished with elastic hem
- Hood: Separated from the coverall adjustable, tied under the arms
- ESD sign: Internal tag

OPTIONS

- Custom size: Bespoke
- Custom colour: Bespoke
- Hood: Integrated with the coverall

STANDARD COLORS | FABRIC 099

White	Light Grey	Grey	Navy Blue	Maroon	Blue	Dark Green	Lemon green	Orange
01	09	36	10	12	15	16	18	32
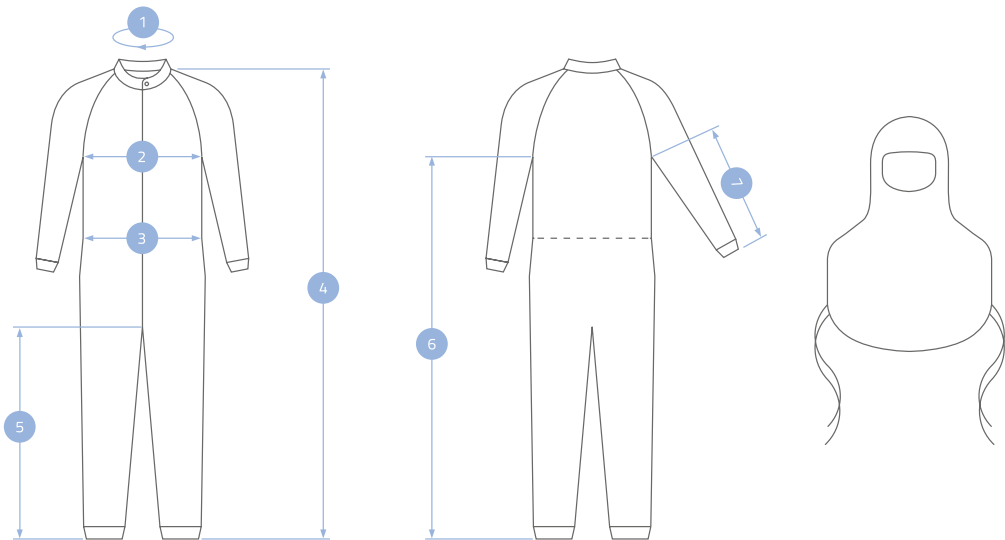
	2XS	XS	S	M	L	XL	2XL
BODY							
1	47	47	48	51	52	53	54
2	51	55	59	63	67	71	75
3	42	46	50	54	58	62	66
4	164	165	166	169	171	173	175
5	77,5	78	78,5	80,5	81	82	81,5
6	132	133	134	136	137	137,5	138
SLEEVES							
7	60	61	62	63	64	64,5	65

ANTISTATIC FOOTWEAR

Comfortable and aesthetic antistatic footwear provides an efficient and comfortable way to discharge electrostatic charges generated by humans.

The EN-PN 61340-5-1 norm requires that the resistance level to grounding should be within 50kΩ - 100MΩ range.
When using ESD shoes / floor as the basic grounding for employees, the resistance level should be within 750kΩ - 35MΩ range.

Electrical resistance of ESD footwear should be measured between the operator's hands and the metal base on which he must stand on with both legs. For new shoes, it is recommended to use them for at least 30 minutes before the first test. For a periodic inspection, 5 minutes of use is sufficient to obtain a reliable result.

ABEBA FOOTWEAR AB-5310/5300

DESCRIPTION

- External material: leather
- Slip resistant special rubber outsole
- Heel strap foldable, adjustable
- Perforated
- Size: 36 - 47
- Colour: black/white

ABEBA FOOTWEAR AB-32310/32300

DESCRIPTION

- External material: leather
- Slip resistant PU outsole
- Lining microfiber, moisture absorbing
- Replaceable insole AAC AB-3551
- Size: 35 - 47
- Colour: black/white

ABEBA FOOTWEAR AB-4085/4080

DESCRIPTION

- External material: leather
- Slip resistant PU outsole
- 2 adjustable instep straps, velcro fastening
- No metal parts
- Size: 34 - 48
- Colour: black/white

ABEBA FOOTWEAR AB-31036/31031

DESCRIPTION

- External material: leather
- Lining microfiber, moisture absorbing, antibacterial
- Shock absorbing gel insole (AB-3562)
- Double velcro fastening
- Size: 35 - 48
- Colour: black/white

i Detailed information about products from this page (parameters, sizes) can be found on our website: renex.pl

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REECO ESD POLYURETHANE PALM COATED GLOVES

DESCRIPTION

- Antistatic gloves
- Palm coated with a layer of polyurethane
- Made of knit with addition of carbon fiber
- Resistance $10^7\Omega$
- Available sizes: S, M, L, XL

CAT. NO.	COLOUR	MATERIAL
MK-PKG-NB-231	White	Nylon
MK-PKG-NS-231	Grey	Polyester

REECO ESD POLYURETHANE FINGERTIPS COATED GLOVES

DESCRIPTION

- Antistatic gloves, fingertips covered with a layer of polyurethane
- Made of knit with addition of carbon fiber
- Resistance $10^7\Omega$
- Sizes: S, M, L, XL

CAT. NO.	COLOUR	MATERIAL
MK-TDK-NS-298	Grey	Polyester
MK-TDK-NB-298	White	Nylon

REECO KNITTED GLOVE

DESCRIPTION

- Antistatis gloves without a slip-resistant layers
- Made of knit with addition of carbon fiber
- Resistance $10^7\Omega$
- Sizes: S, M, L, XL

CAT. NO.	COLOUR	MATERIAL
MK-SKG-211MM	Grey	Polyester

MECHANICAL HAZARD EN388:2003

MECHANICAL RISKS	MK-PKG-NB	MK-PKG-NS	MK-TDK-NB/ MK-TDK-NS	MK-SKG
Abrasion resistance	4	2	0	0
Tear strength resistance	3	2	3	3
Blade cut resistance	1	1	1	1
Puncture resistance	1	1	X	X

REECO FINGER COATS
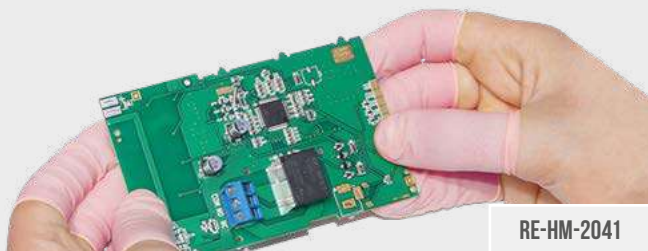
RE-HM-2041

DESCRIPTION

- Colour: pink
- Package: 1440 pcs
- Material: dissipative latex
- Powdered / non-powdered
- Sizes: S, M, L, XL

REECO ESD WRIST STRAP 001/003

RE-001/RE-003

DESCRIPTION

- Anti-static, non-allergenic wrist strap made out of elastic fabric
- Adjustable strap
- Plug: 10 mm latch / banana plug / crocodile clip for banana plug
- Cable length: 1.8 m | 3.2 m
- Colour: blue | burgundy

REECO ESD WRIST STRAP 004

RE-004

DESCRIPTION

- Anti-static, non-allergenic wrist strap made out of elastic fabric
- Adjustable strap
- Plug: 10 mm latch / 10 mm latch
- Cable length: 1.8 m
- Colour: blue

REECO SINGLE USE SHOE COVERS

RE-HM-20521

DESCRIPTION

- Disposable shoe covers for anti-static footwear
- They are used in hospitals, Cleanrooms and other industrial facilities
- 100 pcs per package

REECO ANTISTATIC SHOE STRAP

RE-006

DESCRIPTION

- For low-heeled shoes
- Buckle for easy adjustment
- Length of conductive tape: 43 cm
- Resistor: 1 mΩ
- Non-slip outer part of the band
- Non-slip inner part of the band prevents slipping off of the shoe

REECO SINGLE USE ANTISTATIC SHOE STRAP

RE-HM-6229

DESCRIPTION

- Single use straps for use in areas where voltage higher than 120V is not present
- Self-adhesive
- 100 pieces per package

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REECO ANTI-STATIC TABLE MATS

DESCRIPTION

- Very high durability against temperature, mechanical damage, oils, liquids with an alkaline reaction
- Excellent elastic properties
- Surface resistance from 10^7 to 10^9 Ω
- Mats are offered both with or without accessories
- Thickness: 2 mm
- Accessories:

  - grounding wire
  - wrist strap with cable
  - latches for self-assembly

CAT. NO.	MAT DIMENSIONS	MAT COLOUR	ACCESSORIES
RE-MSMN2-Z	120 x 100 cm	Blue	Wrist strap + cable
RE-MSMS2-Z	120 x 100 cm	Grey	Wrist strap + cable
RE-MSMZ2-Z	120 x 100 cm	Green	Wrist strap + cable
RE-MSMN2	120 x 100 cm	Blue	None
RE-MSMS2	120 x 100 cm	Grey	None
RE-MSMZ2	120 x 100 cm	Green	None
RE-MSMN2-Z0,6	60 x 120 cm	Blue	Wrist strap + cable
RE-MSMS2-Z0,6	60 x 120 cm	Grey	Wrist strap + cable
RE-MSMZ2-Z0,6	60 x 120 cm	Green	Wrist strap + cable
RE-MSMN2-0,6	60 x 120 cm	Blue	None
RE-MSMS2-0,6	60 x 120 cm	Grey	None
RE-MSMZ2-0,6	60 x 120 cm	Green	None
RE-MSMN2-Z0,5x0,6	60 x 50 cm	Blue	Wrist strap + cable
RE-MSMS2-Z0,5x0,6	60 x 50 cm	Grey	Wrist strap + cable
RE-MSMZ2-Z0,5x0,6	60 x 50 cm	Green	Wrist strap + cable
RE-MSMN2-0,5x0,6	60 x 50 cm	Blue	None
RE-MSMS2-0,5x0,6	60 x 50 cm	Grey	None
RE-MSMZ2-0,5x0,6	60 x 50 cm	Green	None

REECO ANTISTATIC MATS IN ROLLS

DESCRIPTION

- Smoothly adheres without folding or bending corners
- Surface resistant to mechanical scratches and abrasions
- Time of charge decay: 5000 - 500 V <1.9 s
- Thickness: 2 mm
- Mats sold per running meter

CAT. NO.	MAT SIZE	MAT COLOUR
RE-MSMN2-ROLKA	120 x 1000 cm	Blue
RE-MSMS2-ROLKA	120 x 1000 cm	Grey

REECO ESD ANTI-FATIGUE MATS

SPECIFICATION

- Anti-static mats eliminate employee's fatigue due to prolonged work in standing position
- Specially designed, ergonomic surface, provides maximum comfort while increasing productivity

CAT. NO.	MAT SIZE	MAT COLOUR	NO. OF LAYERS
RE-HM-1095	600 x 900 x 17 mm	Black with yellow edges	Single-layer
RE-HM-10970	600 x 900 x 15 mm	Black	Dual-layer
RE-HM-10971	600 x 900 x 15 mm	Black	Triple-layer

REECO STICKY MATS

DESCRIPTION

- Protects against the introduction of pollutants into Cleanrooms and areas of increased cleanliness
- Collect dirt from shoes and wheels of transport trolleys
- 30 layers of polyethylene film covered with adhesive layer
- Made of LDPE - low density polyethylene

CAT. NO.	MAT SIZE	MAT COLOUR	LAYER THICKNESS
RE-HM-1103-BL	66 x 114 cm	Blue	35μm
RE-HM-1103-WH	66 x 114 cm	White	35μm

FLOOR TREAD

DESCRIPTION

- Width: 190 cm
- Resistance: $10^7 - 10^9$ Ω
- Colour: grey
- Thickness: 2.5 mm
- Conductive material

AR-GGRA-MB

ECO V4 GLUE FOR MATS

DESCRIPTION

- Conductive glue for conductive flooring
- Very low emissions of volatile organic compounds (VOC)
- Surface resistance: $< 3 \times 10^5$Ω
- Consistency of a creamy paste
- Consumption: approx. 350 g/m^2
- Weight: 16 kg
- Colour: grey
- PH: 7

IT-7805840

ESD & CLEANROOM FLOORING

7 BENEFITS OF COLOREX

- Colorex offers peace of mind as it fully complies with all ESD and clean room standards

- Colorex offers a life-time conductivity warranty guaranteeing optimal performance throughout the life of the product

- The dense construction of Colorex provides a porefree surface ensuring the highest hygiene properties

- The low plasticiser content in Colorex tile creates a unique dimensional stability and prevents shrinkage

- The low plasticiser content also ensures extremely low emissions and outgassing making Colorex the right choice for cleanrooms

- The surface of Colorex can be fully repaired extending the useful life of the product

- The dense construction of Colorex provides excellent resistance to to heavy loads making it an ideal solution for commercial and industrial environments

COLOREX SD (DISSIPATIVE) / EC (CONDUCTIVE)

Colorex construction

copper band

conductive glue

floor

subfloor

- Colorex glued to the floor

- Suitable for very intensive areas, also by forklift trucks/pallet trucks

- As an alternative to epoxy coatings

- Easy repair of damage such as burning, rubbing or decolorization

- Thickness: 2 mm | Size: 615 x 615 mm

- Resistance: $10^6 \leq R \leq 10^8$ Ω (SD) / $5 \cdot 10^4 \leq R \leq 10^6$ Ω (EC)

- Electrical resistance in combination with ESD Shoes: ESD: 40 V (SD), 20 V (EC)

COLOREX SD (DISSIPATIVE) / EC (CONDUCTIVE) PLUS
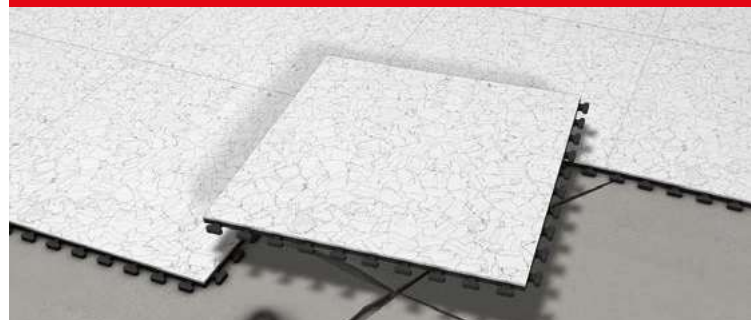
- Floor covering system tha consists of loose lay tiles

- Can be installed on any surface

- Quick adaptation of the building to the requirements of EPA - assembled without the use of glue

- Standard connection (puzzle) or hot welding possible for hygienic surfaces

- Thickness: 10,5 mm | Size: 608 x 608 mm

- Resistance: $2,5 \cdot 10^4 \leq R \leq 10^6$

- Electrical resistance in combination with ESD Shoes: 20 V

THE COLOREX SYSTEM

Colorex is available with two levels of conductivity - High performance (EC range) and Performance (SD range). There is also a choice of fitting as Colorex can be installed by fully adhering it directly to a subfloor or by bonding it to a raised access floor panel. It can also be laid as part of a loose lay tile system.

	COLOREX EC	COLOREX EC PLUS	COLOREX SD	COLOREX SD PLUS
FUNCTIONALITY	Permanently conductive	Permanently conductive	Permanently static dissipative	Permanently static dissipative
DESCRIPTION	Permanently conductive floor, connectionbetween tiles through conductive adhesive and connected to earth through copper strip. Glued to the floor. Compliant to IEC 61340-4-5 with appropriate ESD shoes	Permanently conductive floor, connection between tiles through dovetails and connected to earth with copper strip. Mounted without the use of glue. Compliant to IEC 61340-4-5 with appropriate ESD shoes	Permanently static dissipative floor, connection between tiles through conductive adhesive and connected to earth through copper strip. Glued to the floor.	Permanently static dissipative floor, connection between tiles through dovetails and connected to earth with copper strip. mounted without the use of glue.

3 METHODS INSTALLATION OF COLOREX

COLOREX GLUED DIRECTLY TO THE FLOOR

Colorex can be installed onto a solid subfloor. When conductive properties are required, this should be done by firstly using a conductive primer after which copper tape, connected to an earth point, and conductive adhesive is applied.

When Colorex is installed using this process, the static charged is drained to earth via the earthing point. When conductivity is not required a standard primer and adhesive can be used.

When Installed on solid floors, Colorex can withstand heavy loads such as fork lift trucks without being damaged. The welding of Colorex tiles is optional for ESD areas however, is a requirement for cleanrooms.

COLOREX ON TOP OF A RAISED FLOOR PANEL

Often Colorex is bonded to a raised access floor panel that can be used in cleanrooms or data centres.

Due to the strength and unique properties of Colorex, it is suitable for use on all formats of raised access floor panels, including those designed to withstand the heavy point loading found in data centres.

Since Colorex has extremely low emissions and a high density, it can be perforated for air flow systems that are often used in combination with raised access floors.
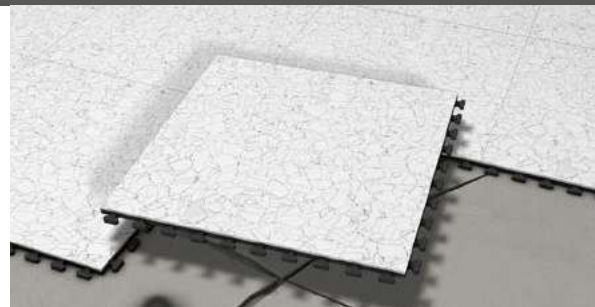
COLOREX WITHOUT THE USE OF GLUE

Colorex plus is a high performance floor covering system consisting of loose lay tiles for all areas of application where expensive sub floor preparation or downtime is an issue.

Colorex plus can be installed without disruption of activities and it can be used immediately after installation, even by fork lift trucks. The unique honeycomb structure on the underside of Colorex plus allows damp floors to be ventilated during use.

Colorex plus tiles offer all the benefits associated with Colorex along with a unique dovetail system that remains hidden under the surface.

THE COLOREX COLLECTION
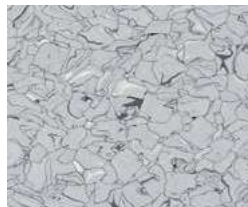
Everest	Adula	Pacific	Sahara	Kilimanjaro
SD 150201	EC 250201	SD 150205	EC 250205 EC plus 621005	SD 150221	EC 250221	SD 150213	EC 250213 EC plus 621013	SD 150203	EC 250203

Niagara	Ivory	Moonstone	Atlantic	Jade
SD 150222	EC 250222 EC plus 621022	SD 150202	EC 250202	SD 150206	EC 150206	SD 150223	EC 250223	SD 150236	EC 250236
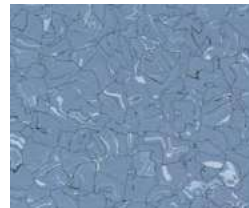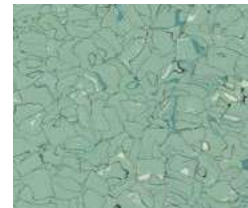
Montblanc	Granite	Twilight	Musk	Lux
SD 150204	EC 250204 EC plus 621004	SD 150208	EC 250208	SD 150234	EC 150234	SD 150232	EC 250232	SD 150212	EC 250212
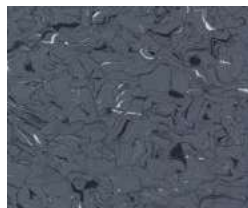
i   A full offer of products from this page can be found on our website: renex.pl

renex.PL

PRE-FORMED INTERNAL AND EXTERNAL CORNER PIECES - COLOREX SD
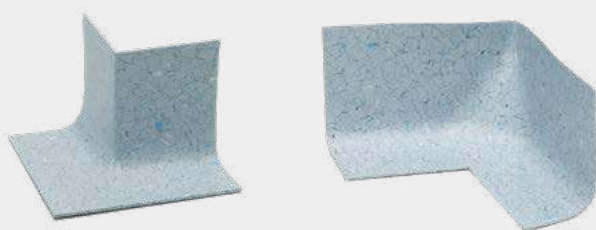
DESCRIPTION

- These corners are moulded from Colorex SD material
- Reinforced on the reverse with resin to increase the durability
- Designed to avoid the need to weld into corners, there by providing installations that meet the requirements for cleanrooms

COVE SKIRTING STRIP - COLOREX EC

DESCRIPTION

- Length: 12,2 m
- Heigth: 15 cm (5 cm on the floor, 10 cm on the wall

SKIRTING FOR COLOREX PLUS
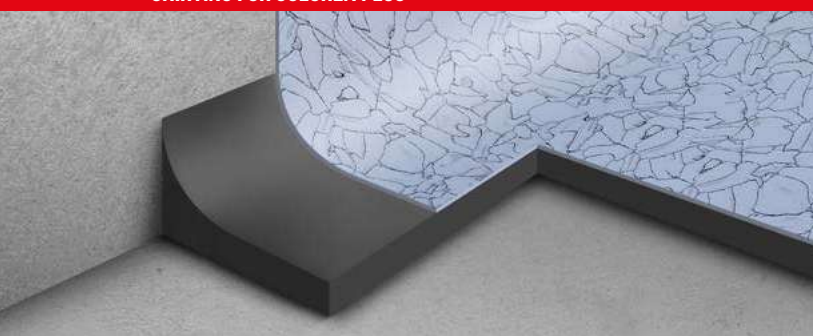
DESCRIPTION

- There are two types of skirtings available for the various versions of Colorex Plus:
  - In hygiene critical areas, the proposed solution is similar to that used with 2 mm Colorex tiles with tailor made coved skirting which should be fitted by a skilled and trained installer
  - If Colorex Plus has been fitted over a damp floor, we can provide a ventilated skirting that allows the humidity to escape into the room
- Radius: 20 mm

COLOREX RAMP

DESCRIPTION

- In applications where Colorex plus has been installed as a stand alone working island or does not finish at a wall
- Available in grey or colour matched to the main Colorex tile (Signal colours on request)

COLOREX WELDING RODS

DESCRIPTION

- Ropes for welding floors and tiles
- Diameter: 4 mm
- Roll: 100 m
- Available in colours to match the Colorex collection

PANASONIC ER-F 12 FAN TYPE IONIZER

DESCRIPTION

- Compact size of 150x166x62mm and a fan with 120mm diameter, the ER-F belongs to the leading class of compact fan type ionizers
- System employs a high-frequency AC method and boasts a +/-2kV discharge output voltage that discharges electrostatic contaminated objects quickly and safely
- Straight and angle louvers for long distance and wide area applications provided with the ionizer
- Easy maintenance of discharge needle
- Safe design
- No external, compressed air necessary

PNS-ER-F12

POWER CONSUMPTION	700mA or less
DISCHARGE METHOD	High-frequency AC method
POWER SUPPLY VOLTAGE	24 V DC +/-10%
MAX. FAN VOLUME	3,68 m³/min
MAX. FAN SPEED	5,3 m/s
ION BALANCE	+/- 10 V (or less)
CHARGE REMOVAL TIME	Approx. 1s (1000 V -> 100 V)
MATERIAL	ABS, discharge needle unit: tungsten
WEIGHT	790 g

PANASONIC ER-X SERIES IONIZERS

DESCRIPTION

- Conceived with wide surface areas in mind
- Operation using variable air pressure (from airless to 5 bar air pressure)
- Discharge frequency and ion balance can be set manually or operated in automatic mode
- Six different head sizes, from 50 mm to 640 mm in length
- Ability to connect up to two heads to one controller with areas up to 1.2 m wide that can be handled
- Heads feature an angle adjustment of 360° permitting the best possible charge neutralization
- Easy maintenance

HEADS	ER-X001	ER-X008	ER-X016	ER-X032	ER-X048	ER-X064
TYPE	Wide area ionizer					
EFFECTIVE CHARGE REMOVAL WIDTH	50 mm	80 mm	160 mm	320 mm	480 mm	640 mm
ION BALANCE	Max. +/- 30 V					
DISCHARGE METHOD	Pulse AC					
OZONE CONCENTRATION	Max. 0.01ppm					
AIR PRESSURE	Filtered air, max. 5bar					

PANASONIC ER-VS02 ULTRA-COMPACT IONIZER

DESCRIPTION

- High performance without need for controller
- Produces excellent ion balance
- Nozzle variations can be selected to suit the application
- Ultra compact design fits even into narrow spaces
- Built-in hight voltage power supply

PNS-ER-VS02

SUPPLY VOLTAGE	24 V DC ±10 %
ION BALANCE	Max. +/- 10V
CHARGE ROMOVAL TIME	< 1,0 s
AIR PRESSURE RANGE	0,05 - 0,7 MPa
OZONE GENERATION	Max. 0,03ppm
DISCHARGE METHOD	High frequency AC method

PANASONIC ER-VW THIN TYPE IONIZER

DESCRIPTION

- Compact and ultra thin design of 18,9 mm thickness
- Angles of the two nozzles can be adjusted within a range of approximately 190°
- ER-VW series can utilize air flow levels starting from a minimum of 15l / min.
- Air supply monitoring function ensures a constat discharging
- Optional joint kit can be used to connect up to a maximum of 5 ER-VW units

PNS-ER-VW

SUPPLY VOLTAGE	24 V DC ±10 %
ION BALANCE	< +/- 10 V
CHARGE ROMAVAL TIME	< 1,0 s
AIR PRESSURE RANGE	0,05 - 0,7 MPa
OZONE GENERATION	Max. 0,05ppm
DISCHARGE METHOD	High frequency AC method

PANASONIC ER-Q MINATURE IONIZER

DESCRIPTION

- Extremely compact design (65 x 60 x 33 mm)
- Fan type, no need for compressed air
- Easy maitenance of needle and air filter
- Mountable in any direction
- Particularly well suited for removing localized electrostatic charge on manufacturing equipment for electronic equipment or in semiconductor processes

PNS-ER-Q

POWER SUPPLY VOLTAGE	24 V DC +/- 10%
ION BALANCE	+/-10V or less
CHARGE REMOVAL TIME	Approx. 1.5s (1,000V -> 100V)
POWER CONSUMPTION	200mA or less
DISCHARGE METHOD	High-frequency AC method
MAX. FAN VOLUME	0,2 m³/min
MAX. FAN SPEED	6,4 m/s
MATERIAL	PBT, discharge needle unit: tungsten
WEIGHT	Approx. 110 g

PANASONIC EC-G PULSE AIR-GUN IONIZER

DESCRIPTION

- Two pulse air modes in addition to the standard continuous mode
- High-voltage power supply circuit and solenoid valve are built into the air gun, providing a high level of usability and eliminating the need to install an external controller or route thick, highvoltage cables
- Compact, highly usable design weighs just 270 g, it reduces stress on the operator, even when used for extended periods of time
- Improved dust removal effectiveness thanks to pulse intermittent air
- Highbrightness white LED above the ionized air outlet, allows you to target and spray dust revealed by the light with a stream of ionized air
- External input allows the unit to be used in combination with a foot switch or other device
- All parts along the air path (air nozzle, solenoid valve, joints, etc.) are no-oil compliant

PNS-EC-G02

POWER SUPPLY VOLTAGE	DC 24V OUTPUT (Napięcie: AC 100 - 240 V (+/-10%) / 50 Hz)
CHARGE ROMOVAL TIME	0.5 sec. or less approx. (±1,000V -> ±100V)
SUPPLIED AIR FLOW	300 l/min
AIR PRESSURE RANGE	0,05 - 0,50 MPa
PULSE AIR MODE	Pulse1 (long) / Pulse 2 (short) / CONT (continuous) selectable by switch
LED ILLUMINATION MODE	ON (always ON) / SYNC (synchronized with trigger) / OFF (always OFF)
AMBIENT TEMPARATURE	0º to +50ºC
AMBIENT HUMIDITY	35 to 65% RH (No dew condensation)

TWO-WAY, SEMI-AUTOMATIC TURNSTILE ACCESS GATE

| RE-ACG-001 | RE-ACG-002 | RE-ACG-003 |

DESCRIPTION

- When synchronized with an external device, the access gate unlocks the entrance to EPA zone via the turnstile mechanism

- Synchronization of a two-way access gate with resistance tester (wrist strap and/or footwear) enables effective protection of entry into the EPA zone

- Provides effective means of controlling pedestrian flow at entrances to production facilities, administration buildings, company offices, schools, university campuses, etc.

- Made out of stainless steel

CAT. NO.	RE-ACG-001	RE-ACG-002	RE-ACG-003
DIMENSIONS	420 x 330 x 990 mm	420 x 330 x 1020 mm	1200 x 280 x 990 mm
VOLTAGE	AC230V±10%, 50Hz±10%		
THROUGHPUT	30 people/minute		
COMMUNICATION PORT	RS485 or TCP/IP		

EXAMPLE GATE CONFIGURATION

DESCRIPTION

- Automatic access control to the EPA zone

- Monitoring the condition of wrist straps and footwear (footwear grounding)

- Gates can be configured with other testers

- Included in the set:

EPA access control gateway	RE-ACG-001
ESD wrist strap and footwear tester, with stand	IT-9264922

i CAUTION! Access gates are compatible with all testers on our offer. These devices must be ordered separately.

BELT BARRIER

SPECIFICATION

CAT. NO.	TYPE	TAPE LENGTH
IT-7807950	Wall mounting	4 m
IT-7807952	Post with a single belt	4 m
IT-7807954	Post with double belt	2 m
IT-7807956	Information plate for the post IT-7807954	
IT-7807957	Information plate for the post IT-7807952	

FOAMS

DESCRIPTION

- Possibility of making individual customer's projects
- Full assortment on the website

CAT. NO.	IT-7804161	IT-7804162	IT-7804168	IT-7804170	IT-7804172	IT-7804174
DIMENSIONS	1 x 1,5 m	1 x 1,5 m	1 x 1 m	1 x 1 m	1 x 1 m	1 x 1 m
MATERIAL	Diffuser foam	Diffuser foam	Conductive soft foam	Conductive soft foam	Conductive hard foam	Conductive hard foam
THICKNESS	6 mm	10 mm	6 mm	10 mm	6 mm	10 mm
COLOUR	Pink	Pink	Black	Black	Black	Black

TUBES

DESCRIPTION

- Wide range of available sleeves:
    - conductive sleeves
    - dissipative sleeves
    - shielding sleeves
- Different widths available
- The sleeves can be tailored to individual customer requirements

BUBBLE FOIL

DESCRIPTION

- Electrostatically dissipative bubble polyethylene film
- Material: non-amino, allows for recycling
- Material structure: two or three layers
- Length: 100 m
- Colour: Pink
- Other dimensions are available upon individual request and according to the client's needs

STRETCH FOIL

DESCRIPTION

- Electrostatically dissipative stretch polyethylene film
- Material: non-amino, allows for recycling
- Material structure: two or three layers
- Length: 100 m
- Colour: Pink
- Other dimensions are available upon individual request and according to the client's needs

BAGS

DESCRIPTION

- Wide range of available bags:
  - Dissipative bags
  - Permanently dissipative bags
  - Shielding bags
  - Barrier bags
- 100 bags per pack
- Wide range of standardised bag sizes
- Possibility of individual customer projects including: dimensions, ZIP locks, logos

WASTE BAGS

SPECIFICATION

PRODUCT NAME	DIMENSIONS
Dissipative waste bags 30L	300+2F100 x 600 x 0,03 mm
Dissipative waste bags 90L	420+2F140 x 850 x 0,05 mm
Dissipative waste bags 120L	380+2F160 x 1100 x 0,06 mm
Dissipative waste bags 120L	700+2F100 x 1100 x 0,06 mm
Dissipative waste bags 120L	500+2F200 x 1200 x 0,08 mm

WASTE BIN

SPECIFICATION

CAT. NO.	PART	CAPACITY	DIMENSIONS
IT-7804406	Waste bin	17 L	300 x 330 mm
IT-7804405	Waste bin	50 L	360 x 360 x 500 mm
IT-7804405C	Cover for waste bin **IT-7804405**		
IT-7804404	Waste bin	120 L	400 x 400 x 780 mm

VACUUM

DESCRIPTION

- ESD-safe construction
- Capacity: 35 litres
- Perfect for use on large work areas
- Anti-static brush for cleaning both floors and tabletops
- Wide selection of tips
- EMI/RFI/HEPA filters
- Ideal for use in Cleanroom environments

|	
DIMENSIONS	350 x 350 x 565 mm
CAPACITY	35L
POWER	1250W
VOLTAGE	230V/50Hz
POWER CORD LENGTH	4 m
VACUUM HOSE LENGTH	1,5 m
EXTENSION LENGTH	480 mm
SUCTION POWER	18 Kpa
NOISE LEVEL	82 dBa

CONTAINERS

DESCRIPTION

- Intended for transportation and storage
- Can be easily combined into a stackable system
- High durability against mechanical damage
- Conductive material: polypropylene

PLATFORM
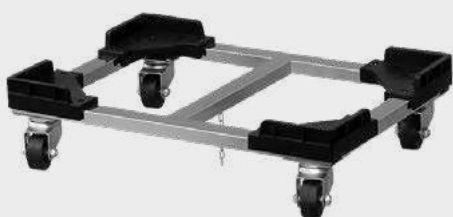
DESCRIPTION

- Platform designed for the transportation of containers
- Restraints to keep objects from sliding
- Dimensions: 600 x 400 mm
- Maximum load 150 kg
- 4 wheels - 2 with stop lock
- Wheel diameter 100 mm

STACKING BINS

DESCRIPTION

- Designed for the transportation and storage of electronic components
- Ideal for all rack types
- Vertical storage possibility
- Ergonomic shape
- Conductive material: polypropylene
- Optional equipment: yellow label for containers of various sizes

CONTAINERS

DESCRIPTION

- SMD component containers with lids
- Built-in spring automatically closes the lid
- Can be connected via a latch system
- Conductive material: polypropylene
- Optional equipment: galvanized storage rack for containers, recommended for use on assembly tables

BOXES

DESCRIPTION

- Boxes filled with hard foam
- Cover removable or hinged
- Different sizes
- Conductive material: polypropylene

i Detailed information about products from this page (parameters, sizes) can be found on our website: **renex.pl**

SUITCASES

DESCRIPTION

- Excellent for storing and handling PCBs, components and tools
- Different sizes available
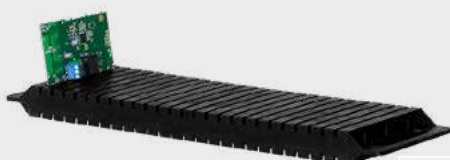- Conductive material: polypropylene

PCB RACK 6379

RE-HM-6379

SPECIFICATION

- Made out of conductive polypropylene
- Dimensions: 485 x 178 x 50 mm
- Capacity: 25 PCB/PCBA
- Resistance: $10^4 - 10^6$ Ω
- Designed for air circulation

PCB RACK 6380

RE-HM-6380

SPECIFICATION

- Made out of conductive polypropylene
- Dimensions: 480 x 140 x 35 mm
- Capacity: 25 PCB/PCBA
- Resistance: $10^4 - 10^6$ Ω
- Designed for air circulation

PCB RACK 6382-265

RE-HM-6382-265

SPECIFICATION

- Made out of conductive polypropylene
- Model: L
- Dimensions: 265 x 205 x 92 mm
- Capacity: 25 PCB/PCBA
- Resistance: $10^4 - 10^6$ Ω
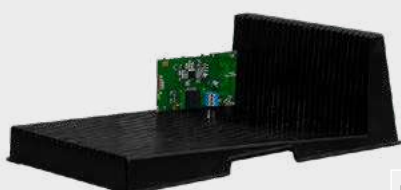
PCB RACK 6382-270

RE-HM-6382-270

SPECIFICATION

- Made out of conductive polypropylene
- Model: L
- Dimensions: 270 x 250 x 130 mm
- Capacity: 30 PCB/PCBA
- Resistance: $10^4 - 10^6$ Ω

PCB RACK 6382-355

RE-HM-6382-355

SPECIFICATION

- Made out of conductive polypropylene
- Model: L
- Dimensions: 355 x 270 x 130 mm
- Capacity: 25 PCB/PCBA
- Resistance: $10^4 - 10^6$ Ω

POLYAMIDE ADHESIVE TAPES

- Kapton tape with high temperature resistance – up to 250°C
- Self-adhesive
- Different sizes available

COPPER TAPES

- Grounding copper tape, conductive, with high temperature resistance – up to 260°C
- Self-adhesive
- Different sizes available

„ESD PROTECTED AREA" TAPES

- EPA zone protection marking
- Self-adhesive tapes with „ESD Protected Area" print for floor surfaces
- Dimensions: 75 mm x 33 m

„ATTENTION" PACKING TAPES

- Self-adhesive packing tapes with „Attention" print
- PVC and paper versions available
- Different dimensions available

„ATTENTION" LABELS

- Self-adhesive label with ESD symbol „ATTENTION"
- Different sizes available
- 1000 pieces per package

„ESD PROTECTED AREA" PLATES

- Warning plate „EPA" or „High Voltage + EPA"
- Option: self-adhesive or stable structure
- Various sizes available

„SUSCEPTIBLE" LABELS

- Self-adhesive label with ESD symbol „SUSCEPTIBLE"
- Different sizes available
- 1000 pieces per package

„PROTECTIVE" LABELS

- Self-adhesive label with ESD symbol „PROTECTIVE"
- Different sizes available
- 1000 pieces per package

i Detailed information about products from this page (parameters, sizes) can be found on our website: renex.pl

renex.PL

PENS

RE-007

DESCRIPTION

- Conductive pen
- Pen refill available in blue colour
- Colour: black/silver

BINDERS

RE-HM-91601

DESCRIPTION

- Format: A4
- Width: 45mm
- Colour: black
- ESD-SAFE logo

DOCUMENT SLEEVES

RE-HM-91599

DESCRIPTION

- Format: A4
- Removable blue back, which blocks the documents
- ESD-SAFE logo placed in the top right corner

RING BINDER AND WALLETS

SPECIFICATION

CAT. NO.	FORMAT	NUMBER OF PIECES
IT-7804413	A4 permanent antistatic Document Pocket with holes	100
IT-7804414	A4	100
IT-7804400	A4 dissipative Ring Binder – 4 ring 35 mm, blue	
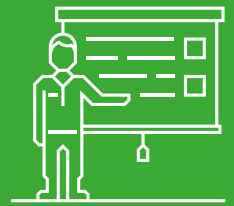
renex.PL

TRAINING
FOR ELECTRONICS

267

AUTHORIZED TRAINING CENTER
FOR IPC | ESA | PACE

RENEX EEC is an autonomous extension of the RENEX company
and at the same time one of the most advanced and active
Training Centers for electronic engineers in Central and Eastern Europe.

30 years of experience in the electronics industry allows us to train electronic engineers
at the highest level, confirmed by universally recognised international certificates.

A detailed offer and more about the company
can be found on the website at:

renex E E C

RENEXEEC.PL

WELL-EQUIPPED TRAINING ROOMS

Training stations equipped with professional equipment for component assembly and disassembly.

SPECIALISED TEACHING STAFF

Highly specialised teaching staff with extensive practical experience guarantees the highest level of training.

IPC

esa

PACE worldwide

TRAINING REIMBURSEMENT

For several years now, RENEX has been offering its customers the opportunity to participate in various reimbursable training programs.

We offer you support in obtaining funds, preparation of the application, training and settlement of the co-financing.

For further information, please contact:

T: + 48 609 210 551
E: magda@ipctraining.pl
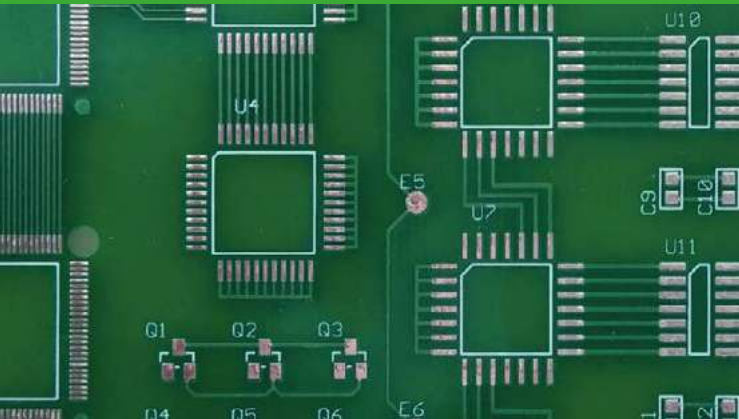
6
LANGUAGE VERSIONS OF
LEARNING MATERIALS

15
TRAINERS
ACROSS EUROPE

30
SPECIALIST TRAINING
COURSES ON OFFER

IPC-A-610 CIS TRAINING
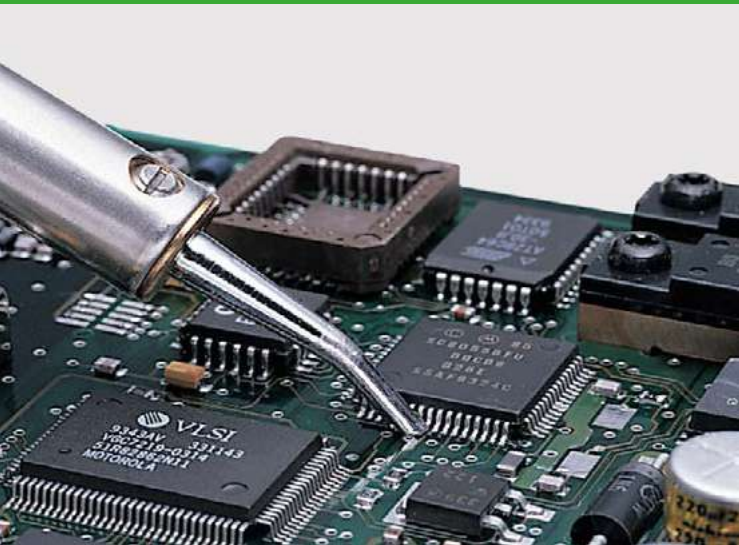
TRAINING ADVANTAGES

- Will gain the latest knowledge on the existing international standards of printed circuit assembly made in through hole and surface mount technology

- Will acquire the ability to control quality performance of electronic packages

- Receive handbook with educational materials and gain personal, international certificate of IPC-A-610 training completion Certified IPC Specialist

TRAINING PROGRAM

- Policies and procedures of IPC

- Product classes and conditions of acceptability by IPC

- Electrostatic discharge - the rules of safe operation, use of equipment and electronic components

- Detailed criteria for:

  - mechanical assembly and installation/orientation of electronic components,

  - acceptability of solder joints,

  - connection of cables and wires

  - cleanliness of devices after assembly

  - laminate quality

  - quality of protective coating and markings

  - discrete wiring

  - assemblies mounted in through hole and surface mount, technology

- Theoretical exam

IPC-7711/7721 CIS TRAINING

TRAINING ADVANTAGES

- Will gain the latest knowledge on the existing international standards for repairs and modification of electronic packages and printed boards made in through hole and surface mount technology

- Receive handbook with educational materials

- Gain personal, international certificate of IPC-7711/7721 Certified IPC Specialist

TRAINING PROGRAM

- Introduction: commonly used procedures

- Wire connections by splicing

- Disassembly/assembly of through hole components

- Disassembly/assembly of Chip and Melf components

- Disassembly/assembly of SOT and SOIC components

- Disassembly/assembly of J-Lead and QFP components

- Repair of printed circuits boards: repair of solder lands, eyelets and holes metallization, printed circuits, jumpers installing

- Laminate repairs

- Coating: identification, removal, repair

- Theoretical and practical exam

renex.PL

IPC/WHMA-A-620 CIS TRAINING
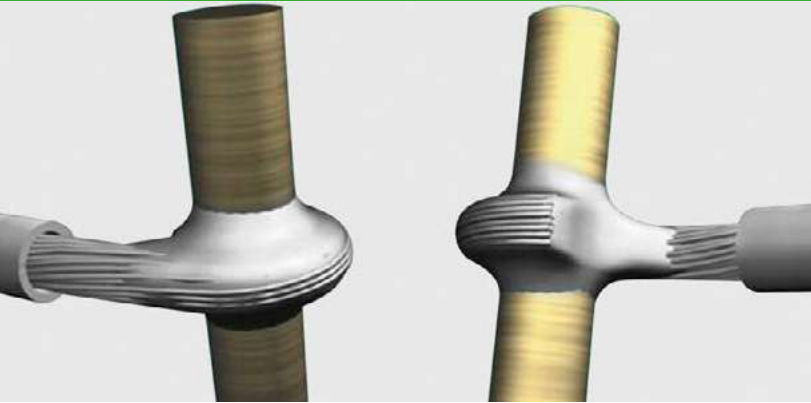
TRAINING ADVANTAGES

- Will gain the latest knowledge about requirements on cables and wires assembly according to current international standards
- Receive handbook with educational materials
- Gain personal, international certificate of IPC/WHMA-A-620 training completion Certified IPC Specialist

TRAINING PROGRAM

- Introduction: olicies and procedures of IPC product classes and conditions of acceptability by IPC
- Documents used in IPC/WHMA-A-620 standard
- Wire preparation
- Soldered terminations
- Crimp terminations
- Connections of insulated wires - Insulation Displacement Connection (IDC)
- Ultrasonic welding
- Splices
- Connections

- Molding/putting
- Cables assemblies and wires
- Marking/labeling
- Coaxial and twinaxial cable assemblies
- Securing
- Harness/Cable Electrical Shelding
- Cable/wire harness Protective Coverings
- Finished Assembly Installation
- Solderless Wrap
- Electrical and mechanical test
- Exam

IPC-A-600 CIS TRAINING

TRAINING ADVANTAGES

- Will gain knowledge about acceptability criteria of printed circuit boards
- Will acquire the ability to control quality of printed circuit boards
- Receive handbook with educational materials and gain personal, international certificate of IPC-A-600 training completion Certified IPC Specialist

TRAINING PROGRAM

- Policies and procedures of IPC
- Product classes and conditions of acceptability by IPC
- Classification of printed circuit boards
- Characteristics visible externally:
 - Edges of board
 - Base material
 - Solder coverage
 - Metallized and Non-metallized holes - general requirements
 - Printed contact pads
 - Marking
 - Protective layer of solder mask
 - Dimensional characteristics of conductive layers
 - Flatness

- Characteristics visible internally:
 - Dielectric materials
 - Conductive layers
 - Metallized holes - general requirements
 - Metallized holes - drilled, punched
- Special types of printed circuit boards:
 - Flexible and rigid-flexible printed circuit
 - Printed circuit boards with metal core
 - One layer printed circuit boards
- Testing of purity
- Testing of solderability
- Electrical integrity
- Theoretical exam

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IPC-J-STD-001 CIS TRAINING

TRAINING ADVANTAGES

- Gaining knowledge about assembly criteria of printed circuits boards made in surface mount and through hole technology as well as wires and cables with consideration of current international standards
- Receive handbook with educational materials
- Gain personal, international certificate of IPC-J-STD-001 Certified IPC Specialist

TRAINING PROGRAM
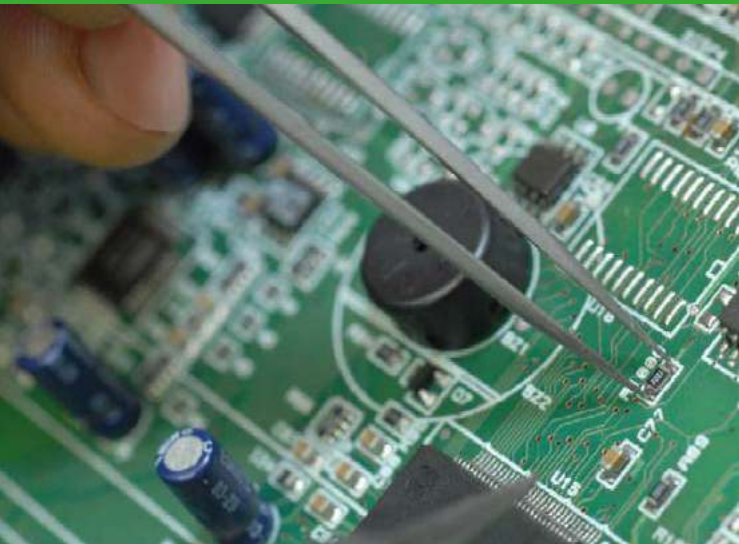
Module I – theory

- Introduction
- Products classes and acceptability states according to IPC
- Classification of printed circuit boards
- General requirements related to safety, equipment
- Materials, electronic discharges
- General requirements related to solder connections
- General requirements for through hole, surface components, wires and cables.Process requirements related to cleaning of electronic assemblies
- Requirements for coated layers

- Assurance of production quality – testing methods, the use of statistical process control
- Theoretical and practical exam

Module II – theoretical and practical classes

- Soldering wires to any types of terminals

Module III – theoretical and practical classes

- Assembly of components made in surface mount technology

Module IV – theoretical and practical classes

- Assembly of components made in through hole technology

Module V – theoretical classes

- Methodologies of inspections: requirements for assembling through hole and surface components, wires and cables

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IPC-A-610 CIT TRAINING
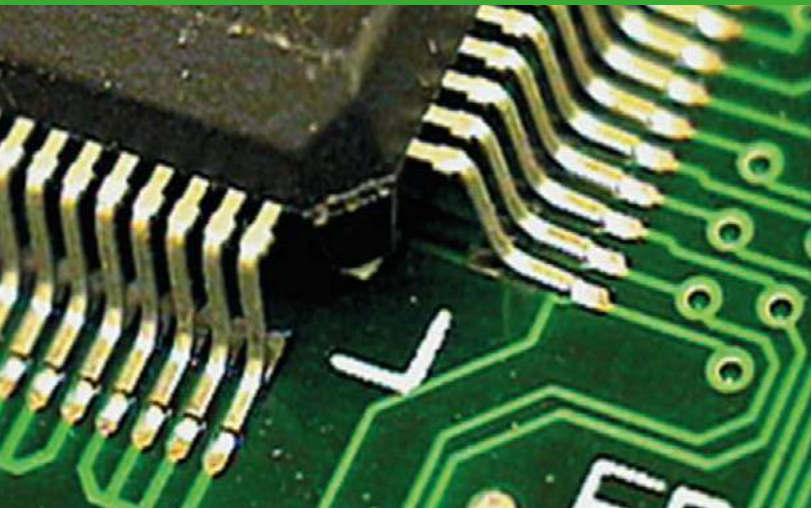

TRAINING ADVANTAGES

- Will gain the latest knowledge on the existing international standards of printed circuit assembly made in through hole and surface mount technology
- Will acquire the ability to control quality performance of electronic package
- Will be eligible to train Certified IPC Specialists for their own companies needs
- Will receive:
- – IPC-A-610 norm, IPC-A-610 CIT Student Handbook IPC-T-50 „Terms and Definitions"
- – trainer's instructions for performng trainings for CIS
- – personal certificate of Certified IPC Trainer
- – set of examination tests
- – CD-ROM containing: presentation, answer questionary, evaluations and reports forms

TRAINING PROGRAM

- Policies and procedures of IPC
- Role and responsibility of trainer
- Product classes and conditions of acceptability by IPC
- Documents used by IPC
- Electrostatic discharge
- Mechanical assembly, installation/orientation of electronic components
- Acceptability of soldered connections
- Connections of cables and wires

- Cleanliness of assemblies after mounting
- Laminate quality
- Quality of protective layers and labelling
- Discreet wiring
- Assemblies made in through hole and surface mount technology
- Development of classroom plans
- Presentation of skills of future trainer
- Exam

IPC-7711-21 CIT TRAINING

TRAINING ADVANTAGES

- Will gain the latest knowledge on the existing international standards for repairs and modification of electronic packages and printed boards made in through hole and surface technology
- Will be eligible to train Certified IPC Specialists for their own companies needs
- Will receive:
- – IPC-7711/ 7721 norm, CIT Student Handbook, CIT Certificate
- – trainer's instructions for performng trainings for CIS
- – personal certificate of Certified IPC Trainer
- – CD-ROM for CIS trainings

TRAINING PROGRAM

- Introduction: commonly used procedures in IPC
- Role and responsibility of trainer
- Wire splicing
- Disassembly/assembly of PTH components
- Disassembly/assembly of Chip and Melf components
- Disassembly/assembly of SOT and SOIC components

- Disassembly/assembly of J-Lead and QFP components
- Repair of printed circuits boards: repair of solder lands, eyelets and holes metallization, printed circuits, jumpers installing
- Laminate repairs
- Coating: identification, removal, repair
- Theoretical and practical exam

IPC/WHMA-A-620 CIT TRAINING
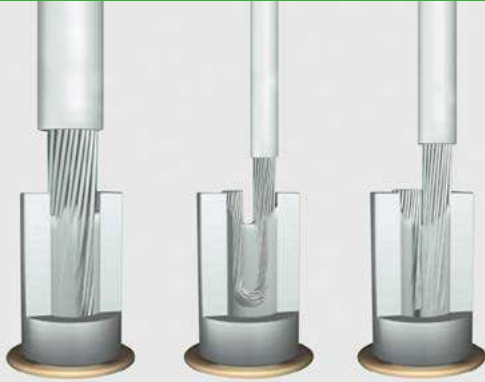
TRAINING ADVANTAGES

- Will gain the latest knowledge about requirements on cables and wires assembly according to current international standards
- Will be eligible to train Certified IPC Specialists for their own companies needs
- Receive handbook with educational materials
- Will acquire the ability to control quality of cable and wire harnesses assembly
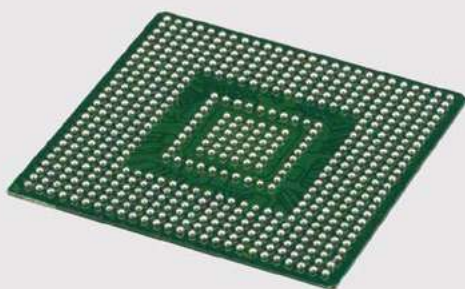- Participants will receive a set materials for CIS training

TRAINING PROGRAM

- Policies and procedures of IPC
- Role and responsibility of trainer
- Product classes and conditions of acceptability by IPC
- Documents used in IPC/WHMA-A-620 standard
- Wire preparation
- Soldered terminations
- Connections of insulated wires - Insulation Displacement Connection (IDC)
- Ultrasonic welding
- Splices
- Connections
- Molding/putting

- Cables assemblies and wires
- Marking/labeling
- Coaxial and twinaxial cable assemblies
- Securing
- Harness/Cable Electrical Shelding
- Cable/wire harness Protective Coverings
- Finished Assembly Installation
- Solderless Wrap
- Electrical and mechanical test
- Development of classroom plans
- Presentation of skills of future trainer
- Exams

IPC-A-600 CIT TRAINING

TRAINING ADVANTAGES

- Will gain knowledge about acceptability criteria of printed circuit boards
- Will be eligible to train Certified IPC Specialists for their own companies needs
- Will acquire the ability to control quality of printed circuit boards
- Participants will receive a set materials for CIS training

TRAINING PROGRAM

- Policies and procedures of IPC
- Role and responsibility of trainer
- Product classes and conditions of acceptability by IPC
- Classification of printed circuit boards
- Characteristics visible externally
- Characteristics visible internally
- Special types of printed circuit boards:
 - Flexible and rigid-flexible printed circuit

 - Plans elaboration of courses
 - Printed circuit boards with metal core
 - One layer printed circuit boards
- Testing of purity
- Testing of solderability
- Electrical integrity
- Development of classroom plans
- Presentation of skills of future trainer
- Exam

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IPC-J-STD-001 CIT TRAINING
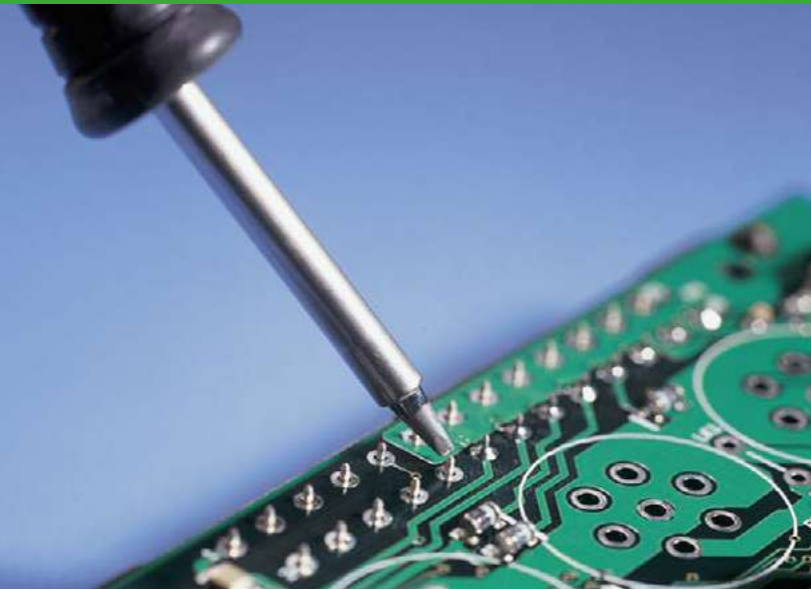
TRAINING ADVANTAGES

- Will gain knowledge about existing international standards of through hole and surface components assembly, wires and cables
- Receive handbook with educational materials
- Will acquire the ability to control quality of electronic packets and connections made with use of wires and cables
- Will be eligible to train Certified IPC Specialists for their own companies needs
- Will receive:
- IPC-J-STD-001, IPC-J-STD-001 CIT Student Handbook
- the latest revision of IPC-J-STD-002, 003, 004, 005, 006, IPC Handbook-00, IPC-9191 document
- trainer's instructions for performng trainings for CIS
- personal certificate of Certified IPC Trainer
- set of examination tests
- CD-ROM containing: presentation, answer questionary, evaluations and reports forms

TRAINING PROGRAM

- Policies and procedures of IPC
- Role and responsibility of trainer
- Product classes and conditions of acceptability by IPC
- Documents used in IPC J-STD-001 standard
- Requirements related to safety, equipment, materials and electronic discharges
- Requirements related to alignment and soldering of wires
- Requirements related to technology of through hole assembly
- Requirements related to technology of surface assembly
- Acceptability criteria for solder joints

- Process requirements related to cleaning of electronic assemblies
- Requirements for printed boards
- Requirements for coated layers
- Assurance of production quality - testing methods, the use of statistical process control
- Repair and modyfication
- Development of classroom plans
- Presentation of skills of future trainer
- Theoretical and practical exam

RTC-01 TRAINING

STATIC ELECTRICITY
– FOR OPERATORS

TRAINING ADVANTAGES

- Will acquire knowledge about requirements related to protection against static electricity when working with electronic components
- Will gain personal, international certificate of IPC

TRAINING PROGRAM

- Theory of electrification mechanisms
- Basic knowledge about electrostatic discharges
- Procedures with electronics components and modules
- Protection measures
- Identification of ESDS in equipment (devices sensitive to electrostatic discharges)
- Scope of protection ESDS sensitivity

- Use of new technologies, antistatic processes and equipment, creation of EPA zones
- Inconsistency with safety requirements
- Protection measures against high voltage
- Clean Room - properties, applications, construction
- Exam

RTC-01K TRAINING

ESD

STATIC ELECTRICITY
- FOR COORDINATORS

TRAINING ADVANTAGES

- Will acquire knowledge about requirements related to protection against static electricity, necessary on position of ESD Coordinator
- Will acquire knowledge on how to perform audits in EPA zones and edit reports
- Will receive a didactic handbook
- Will gain personal, international certificate of IPC

TRAINING PROGRAM

- Basic information on electrostatic discharges (ESD) and electrical over-stress (EOS)
- Theory of electrification mechanisms
- Components sensitive to electrostatic discharge (ESDS)
- Protection measures against electrostatic discharges
- Requirements for creation and use of zones protected against electrostatic discharges
- High voltage in EPA zone
- Clean Room - properties, applications, construction

- Responsibility of employees for use of protection measures
- Role of ESD Coordinator
- Training of personnel
- Instructional and teaching material of IPC
- Discussion on requirements for conducting audits of EPA zones
- Creations of reports in accordance with international recommendations
- Making measurements and editing reports
- Theoretical and practical exam

RTC-02 TRAINING

MANUAL SOLDERING IN
THROUGH HOLE
TECHNOLOGY - THT

TRAINING ADVANTAGES

- Will acquire the latest knowledge about assembly of printed circuit boards made in through hole technology, taking into account the existing international standards
- Will receive a handbook with didactic materials
- Will obtain personal certificate of training completion

TRAINING PROGRAM

- Health and Safety at the workplace
- Protections against ESD
- Handling of soldering stations
- Basics of soldering
- Role and properties of solder and fluxes

- Types and construction of printed circuit boards
- Identification of components in through hole technology
- IPC-A-610E standard in assembly of through hole components
- Practical classes
- Theoretical and practical exam

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RTC-03 TRAINING

MANUAL SOLDERING IN SURFACE MOUNT TECHNOLOGY - SMT
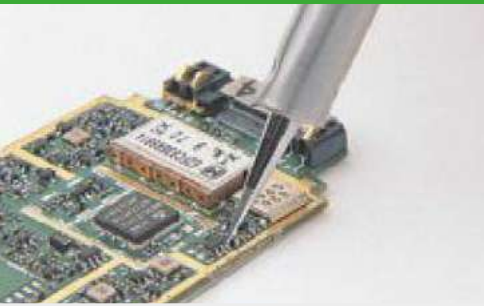
TRAINING ADVANTAGES

- Will acquire the latest knowledge about assembly of printed circuit boards made in surface mount technology, taking into account the existing international standards
- Will receive a handbook with didactic materials
- Will obtain personal certificate of training completion

TRAINING PROGRAM

- Health and Safety at the workplace
- Protections against ESD
- Handling of soldering stations
- Basics of soldering
- Role and properties of solder and fluxes

- Types and construction of printed circuit boards
- Identification of components in surface mount technology
- IPC-A-610E standard in assembly of surface components
- Practical classes
- Theoretical and practical exam

RTC-04 TRAINING

MANUAL SOLDERING IN MIXED TECHNOLOGY – THT AND SMT

TRAINING ADVANTAGES

- Will acquire the latest knowledge about soldering of printed circuits made in surface mount and through hole technology, taking into account the existing international standards
- Will receive a handbook with didactic materials
- Will obtain personal certificate of training completion

TRAINING PROGRAM

- Health and safety at the workplace
- Protections against ESD
- Handling of soldering stations
- Basics of soldering
- Role and properties of solder and fluxes

- Types and construction of printed circuit boards
- Identification of components in mixed technology (SMT and THT)
- IPC-A-610 standard in assembly of SMD and PTH components
- Practical classes
- I Theoretical and practical exam

RTC-05 TRAINING

MANUAL SOLDERING OF WIRES AND CABLES

TRAINING ADVANTAGES

- Will acquire the latest knowledge about requirements for assembly wires and cables, taking into account the existing international standards
- Will receive a handbook with didactic materials
- Will obtain personal certificate of training completion

TRAINING PROGRAM

- Health and safety at the workplace
- Protections against ESD
- Handling of soldering stations
- Basics of soldering
- Role and properties of solder and fluxes

- Types and constuction of wires and cables
- IPC/WHMA-A-620 standard of connections quality of wires and cables (crimping, soldering)
- Practical classes
- Theoretical and practical exam

RTC-06 TRAINING

REPAIR OF ELECTRONIC
ASSEMBLIES MADE
IN THT/SMT TECHNOLOGY

TRAINING ADVANTAGES

- Will acquire knowledge about requirements related to repairs of electronic pakets made in THT/SMT technology, taking into account the existing international standards
- Will obtain personal certificate of training completion

TRAINING PROGRAM

- Health and safety at the workplace
- Protections against ESD
- Handling of soldering stations and repair systems
- Role and properties of solder and fluxes
- Types and construction of printed circuit boards
- Identification of components in through hole and surface mount technology

- IPC–A–610 standard in assembly of through hole and surface components
- Disassembly and assembly techniques of through hole components according to IPC-7711
- Disassembly and assembly techniques of surface components according to IPC-7711
- Practical classes
- Theoretical and practical exam

RTC-07 TRAINING

REPAIR AND MODIFICATION OF
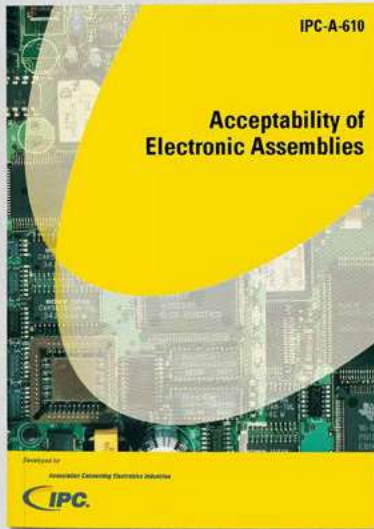PRINTEDCIRCUIT BOARDS

TRAINING ADVANTAGES

- Will acquire knowledge about requirements related to perfoming repairs of printed circuit boards, taking into account the existing international standards
- Will obtain personal certificate of training completion

TRAINING PROGRAM

- Health and safety at the workplace
- Protections against ESD
- Technology of prinded circuits production
- Types and construction of printed circuit boards

- Repair techniques of damaged printed circuits boards: laminates, hols metallization, conductors and solder pads, edge connectors
- Assembly of connecting jumper wires
- Practical classes
- Theoretical and practical exam

RTC-08 TRAINING

ASSEMBLY, DISASSEMBLY
AND REGENERATION OF
BGA/CSP COMPONETS LEADS

TRAINING ADVANTAGES

- Will acquire the latest knowledge about assembly, disassembly and regeneration of BGA/CSP components leads, taking into account the existing international standards
- Will receive a handbook with didactic materials
- Will obtain personal certificate of training completion

TRAINING PROGRAM

- Health and safety at the workplace
- Protections against ESD
- Types and kinds of circuits with BGA/CSP components
- Assembly and disassembly with use of vision positioning systems according to IPC-7711

- Methods of inspection and proper interpretaion of X-ray documentation according to IPC-7095
- Regeneration techniques of BGA/CSP components leads
- Practical classes
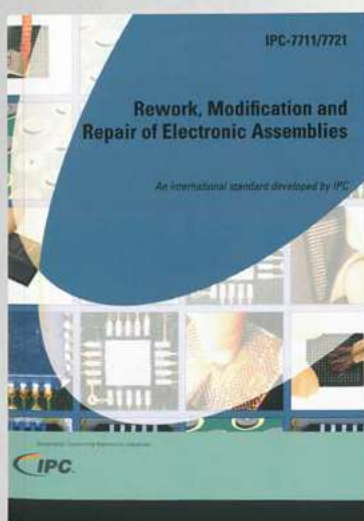- Theoretical and practical exam

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IPC-A-610 STANDARD

TOPICS

- Introduction, product classes, terms and definitions, acceptability conditions, etc.
- Applicable documents
- Handling of electronic assemblies
- Mechanical assembly
- Soldering (general criteria)
- Cable connections in configuration with various types of terminals
- Hole mounting technology
- Surface mount technology
- Component damages
- Criteria for acceptability of printed boards (laminate, markings, covering layer, pollution)
- Solder mask
- Discrete wiring
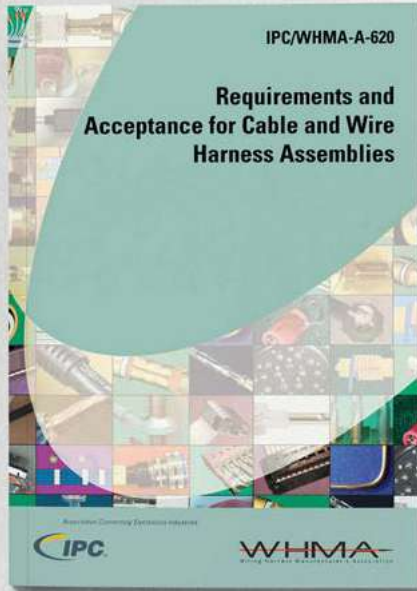- High voltage

IPC 7711 / 7721 STANDARD

TOPICS

- Introduction, product classes, terms and definitions, acceptability conditions , etc.
- Handling of electronic assemblies/cleaning
- Covering layer
- Drying and preheating
- Epoxy resins – mixing and applying
- Description/labeling
- Care and maintenance of tip
- Disassembly/assembly of through hole components
- Disassembly/assembly of connector and PGA
- Disassembly/assembly of Chip and LCC component
- Disassembly/assembly of SOT, SOIC and QFP and PLCC component
- Disassembly/assembly of BGA/CSP and PLCC socket
- SMD solder pads preparation
- Short circuits removal
- Blistering and delamination
- Warping and twisting
- Repair of hole
- Repair of base material and edge connector
- Repair of conductors and solder pads as well as metallized holes
- Connection wires and additional components
- Repair of flexible conductor wire and wire splicing

IPC/WHMA-A-620 STANDARD

TOPICS

- Introduction, product classes, terms and definitions, acceptability conditions, etc.
- Applicable documents
- Wires preparation
- Soldered terminations
- Crimped terminations (contacts and holders)
- Insulation Displacement Connector (IDC)
- Ultrasonic welding
- Wire braids
- Connector assembly
- Molding/pouring
- Cable sets and wires
- Marking/labeling
- Coaxial and biaxial cable connections
- Securing wire harnesses
- Electrical shielding of cables/wire harnesses
- Protective coatings of cables/wire harnesses
- Final product assembly
- Wrapped connections without soldering
- Mechanical and electrical testing

IPC-J-STD-001 STANDARD
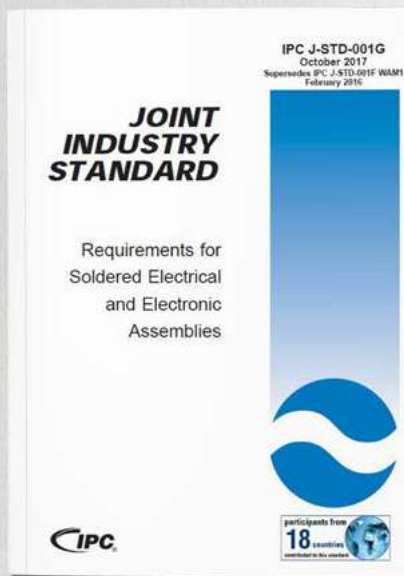
TOPICS

- Introduction – general news
- Applicable documents
- Requirements for materials, components and equipment
- General requirements for soldering and assembly
- Wire connections and connections to terminate
- Through hole assembly and terminations
- Assembly of surface components
- Requirements concerning cleaning process
- Requirements for PCBs
- Covering layers and sealing
- Product quality assurance
- Implementing of improvements and repairs

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IPC-A-600 STANDARD
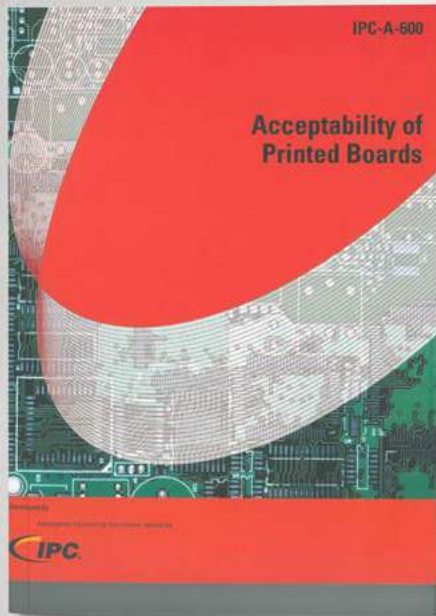
TOPICS

- Introduction - general news
- Externally visible characteristics
- Plate edges
- Base material
- Subsurface base material
- Solder coating and tin-lead melt
- Metallized holes
- Non-metallised holes
- Printed contact pads
- Marking
- Solder mask
- Definition of conductive layer - dimensional characteristics
- Flatness
- Internally visible characteristics
- Dielectric materials
- Conductive layers - general requirements
- Metallized holes - general requirements
- Metallized holes - drilled or punched
- Special types of printed boards
- Flexible and rigid-flexible printed circuits
- Printed circuit boards with metal core
- Single-leaf printed circuit boards
- Purity testing
- Solder ovality testing
- Electrical integrity

TRAINING REIMBURSEMENT

DESCRIPTION

- For several years now, RENEX has been offering its customers the opportunity to participate in various reimbursed training programs, thereby facilitating ability to raise qualifications of its employees
- Depending on the project, the co-financing rate is 80% (de mini mis aid), remaining 20% is covered by the company in cash with the exception of micro-companies, which are entitled to 100% of financing
- Depending on the program, reimbursed training projects may involve micro, small, medium, large companies, vocational and secondary schools, universities and other institutions
- Through a number of actions in District and Voivodeship Labour Offices, it is also possible to organise reimbursed training courses for the unemployed applying for employment

THE BENEFITS OF IPC TRAINING COURSES

- International IPC Certificate
- Qualified personnel means higher quality of production
- Professional quality control of manufactured products
- Possibility of obtaining profitable orders, where IPC certificates are required

- Cooperation with recognized companies, which always require high quality production
- Raising the profile of the company
- Making the offer of schools or universities more attractive
- Start up support for graduates finding employment

CONFERENCE CENTER
HOTEL AND RESTAURANT

The Portofino Conference Center has 6 conference and training rooms
of various sizes, all with modern and elegant design, perfectly adapted
to the customer's needs.

Additionally, each meeting can be accompanied with catering services.
In case of a longer stay, rest at the comfortable Portofino hotel.

Detailed offer and more about the company
can be found on the website at:

Portofino
★ ★ ★

PORTOFINO.COM.PL

HOTEL ***

Uniquely designed rooms are prepared for both work and rest to ensure comfort in every situation. Pleasant hotel staff provides friendly and professional assistance around the clock.

MEDITERRANEAN RESTAURANT

A carefully selected menu ensures a balance between the tradition of Polish cuisine and an exotic expedition through the flavours of the Mediterranean Sea.

RELAX ZONE

A high-level training is one, where time works to your advantage and temporal issues give way to relaxation and new energy.

At the disposal of all hotel guests, we leave the RELAX ZONE, where you will find a salt cave, sauna and billard club.

For more information, please contact us:
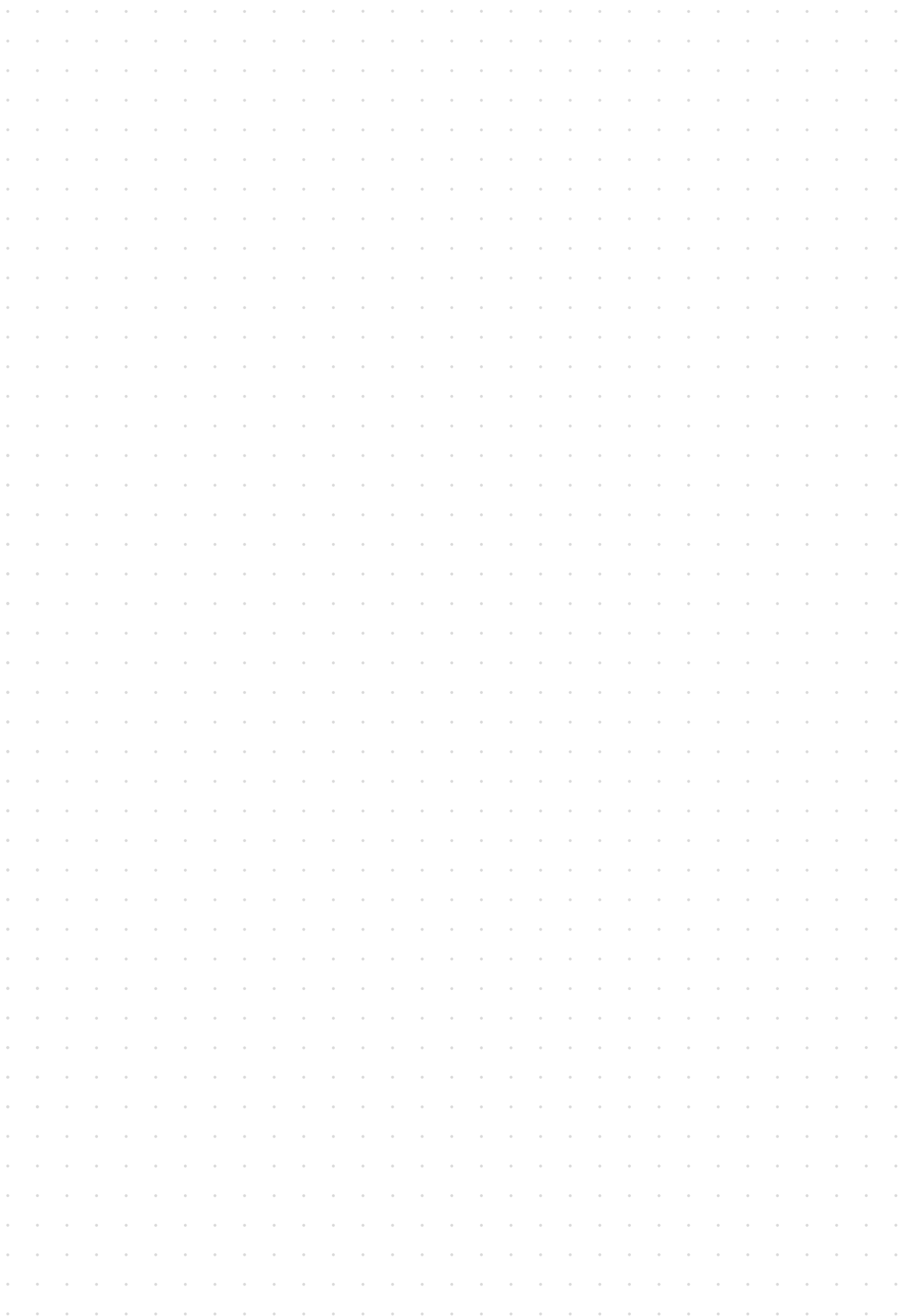
T: + 48 54 233 05 55
E: hotel@portofino.com.pl

20
MODERN AND
COMFORTABLE ROOMS

6
AIR-CONDITIONED CONFERENCE
AND TRAINING HALLS

10
YEARS OF EXPERIENCE IN TRAINING
AND CONFERENCE SERVICES

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CLEANROOM
FACILITIES

285

PLANNING, CONSTRUCTION AND EQUIPMENT FOR CLEANROOMS

We provide the access to modern, very affordable technology and engineers with many years of experience in the design and construction of CleanRoom and CleanBox areas.

For both solutions we are able to carry out all the necessary work – from planning, to construction and continued maintenance of the zone. Our team has extensive work experience resulting from numerous training courses and implementation of previous projects, so we can guarantee diligence at work and reliability of execution.

CC CleanRoom

Detailed offer and more information about the company can be found on our website:

CLEANROOM.COM.PL

CLEANROOM CONSTRUCTION

An area with a predetermined way of controlling pollution from particles and micro-organisms in the environment, built and used in a way that limits the entry, generation and accumulation of pollution.

CLEANBOX CONSTRUCTION

A separate clean zone created with a mobile construction installed inside the room, manufacturing hall or Clean Room area.
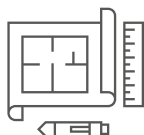
PLANNING

During the planning phase we deliberately take into account the smallest details, which are verified many times.

CONSTRUCTION

Teams with extensive work experience guarantee diligence and reliability of execution.

EQUIPMENT

We offer a wide range of high quality products designed primarily to equip cleanroom areas.

THE HIGHEST QUALITY OF SERVICES

We invite you to our headquarters, where you can learn more about the creation process for clean zones.

We can also always visit you at your premises and discuss the project, but visiting us will not be a waste of time.

For more information, please contact us:

T: + 48 54 413 83 00
E: office@cleanroom.com.pl

SAFE AND EFFICIENT CLEANROOMS

WE WORK IN YOUR LANGUAGE: POLISH, ENGLISH, RUSSIAN

WE CARRY OUT PROJECTS THROUGHOUT THE COUNTRY

DISPENSER

DESCRIPTION

- Dispenser for caps, gloves, safety covers, footwear or masks
- Furniture made of stainless steel, to be hanged on the wall
- Top-loaded - openings provide a visual check on the quantity of stocks of a given product
- Inclined top reduces particle build-up and makes cleaning easier
- An essential part of most clean working environments and auxiliary rooms

CR-DIS-001

DIMENSIONS	40 x 22 x 105 cm
MATERIAL	Stainless steel
COMPARTMENTS	2

BENCH

DESCRIPTION

- Bench made with round profiles with solid sheet metal seatings, made of stainless steel, easy to clean and disinfect
- Rigidly combinable modules on levelling feet
- Rounded edges, smooth welds

CR-BEN

CAT. NO.	CR-BEN-001	CR-BEN-002
DIMENSIONS	100 x 35 x 45 cm	60 x 35 x 45 cm
	Other sizes and models on request	
MATERIAL	Stainless steel	

MOBILE STAND FOR A LAPTOP

DESCRIPTION

- Perforated worktop minimizes turbulent air movement in the cleanroom
- Choice of vibration-reducing shims or lockable castors
- In order to make the equipment safe, there is an option of attaching the laptop to the stand
- Easy to clean and disinfect
- Smooth welds

CR-OTH-001

DIMENSIONS	50 x 50 x 100 cm
	Other sizes and models on request
MATERIAL	Stainless steel

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MOBILE CABINET

DESCRIPTION

- Fitted 4 castors Ø125 mm
- Two castors with a brake
- Easy to clean and disinfect, smooth welds
- Equipped with 2 drawers

CR-

DIMENSIONS	890 x 700 x 600 mm
MATERIAL	Stainless steel
TABLE TOP DIMENSIONS	700 x 600 mm

WORKSTATION

DESCRIPTION

- Stainless steel work table for CleanRooms
- Fittings made of stainless steel or anodised aluminium
- Table base made with round profiles on vibration-reducing, chemical-resistant shims
- Design: perforated table, rounded edges, smooth welds
- Easy to clean and disinfect

CR-TAB

CAT.NO.	CR-TAB-001	CR-TAB-002
DIMENSIONS	180 x 76 x 90 cm	150 x 76 x 90 cm
MATERIAL	Stainles steel	
BEARING CAPACITY	Max. 100 kg	

COMPUTER WORKSTATION

DESCRIPTION

- Made out of electropolished stainless steel
- Design: perforated table, rounded edges, smooth welds
- Table base made with round profiles on vibration-reducing, chemical-resistant shims
- Equipped additionally with one lockable drawer mounted under the worktop, as well as a sliding shelf for the keyboard
- Station designed for sedentary work
- Easy to clean and disinfect

CR-TAB-003

DIMENSIONS	120 x 60 x 78cm
	Other sizes and models on request
MATERIAL	Stainless steel
BEARING CAPACITY	Max. 80 kg

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GROUP

renex
Distributor of specialized
equipment and machines

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IPC | ESA | PACE

RENEXEEC.COM

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implementation of
technological processes

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renex R O B O T I C S
Official distributor of YAMAHA
industrial robots

RENEXROBOTICS.COM

Reeco
Manufacturer of ESD furniture,
ESD clothing, industrial equipment
and robots

REECO.INFO

CleanRoom
Design, construction and equipping
of Cleanroom areas

CLEANROOM.COM.PL

Reeco

Reeco
ESD Workstations

Reeco
Robots

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ESD Clothing

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Equipment

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REECO.INFO

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THANK YOU
FOR AUDIENCE