

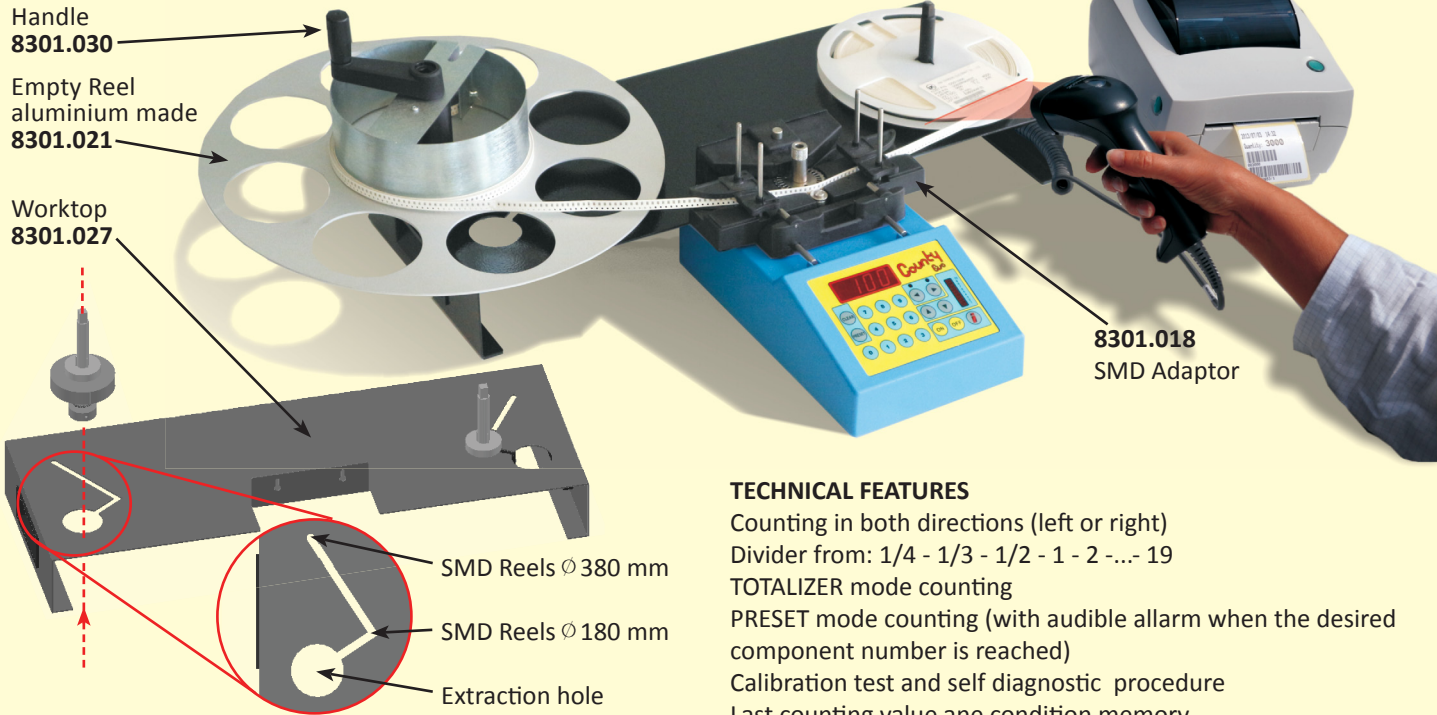
iteco



English

COUNTY EVO

COUNTY EVO is a microcomputer based instrument which counts axial, radial and SMD (with **8301.018** option) components

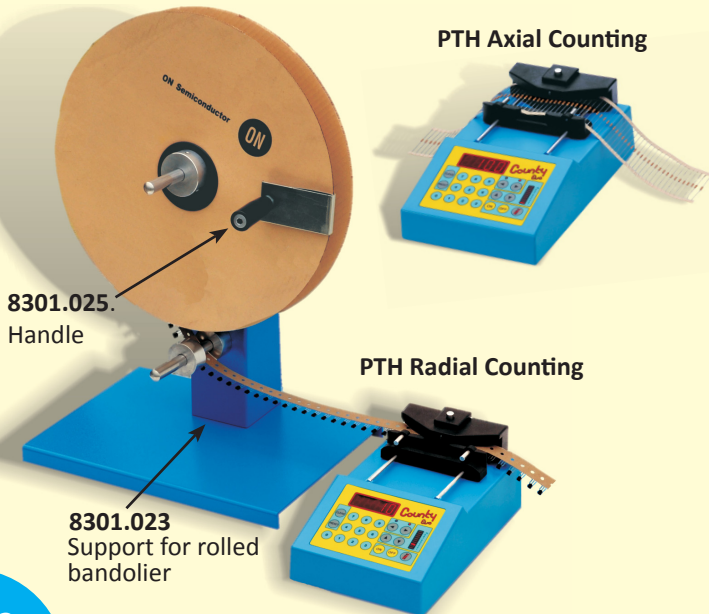


SMD COMPONENT COUNTING

The County adaptor for counting taped SMD components is an optional accessory (**8301.018**), allows the counting of the SMD components through the holes of the support tape. The worktop **8301.027** includes two easy insertions pins with adjustable clutch. Furthermore, at least one handle (**8301.030**) is required for rewinding the reels. The aluminum empty reel (**8301.021**) is an available optional to speed up the counting operations and subsequent rewinding of the SMD components

AXIAL AND RADIAL PTH COUNTING

Before counting it is necessary to select the lead component number by setting the divider. For bandolier counting the **8301.023** support is available, with an easily inserted **8301.025** handle (see figure on right)



TECHNICAL FEATURES

- Counting in both directions (left or right)
- Divider from: 1/4 - 1/3 - 1/2 - 1 - 2 - ... - 19
- TOTALIZER mode counting
- PRESET mode counting (with audible alarm when the desired component number is reached)
- Calibration test and self diagnostic procedure
- Last counting value and condition memory
- Models **8301.082** and **8301.084** with rechargeable battery, Barcode reader input, output for printer/PC, Watch, Datalogger with 500 counting record
- Maximum counting value: 999999 comp.
- Minimum lead diameter (PTH component): 0,4 mm
- Axial component bandolier width (PTH): 55 - 110 mm
- Radial component bandolier width (PTH): max 18 mm
- Maximum component diameter (PTH): 14 mm
- Maximum tape height (SMD component): 56 mm
- Display: 4 digits 13 mm height
- Dimensions: 240 x 130 x 110 mm - Weight 1,8 kg

- 8301.081** County EVO 230V/50-60Hz
- 8301.082** County EVO 230V/50-60Hz with accumulator, barcode input, printer output, watch
- 8301.083** County EVO 115V/50-60Hz
- 8301.084** County EVO 115V/50-60Hz with accumulator, barcode input, printer output, watch
- 8301.350** ISO9000 traceable certificate

Accessories for counting of PTH taped component

- 8301.023** Complete support for rolled bandolier
- 8301.025** PTH Bandolier handle

Accessories for counting of SMD taped component

- 8301.018** SMD Adaptor
- 8301.027** Worktop with 2 pins for reel
- 8301.030** SMD Reel handle
- 8301.021** Empty Reel aluminium made for County-EVO

Barcode e Printer (photos and specifications at page 4)

- 8301.155** Barcode with coiled cord
- 8301.095** Direct thermal label printer
- 8301.096** 57x51mm 1360 labels/roll

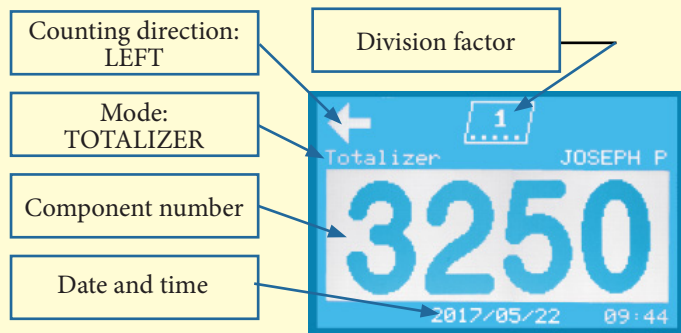
COUNTY-S EVO



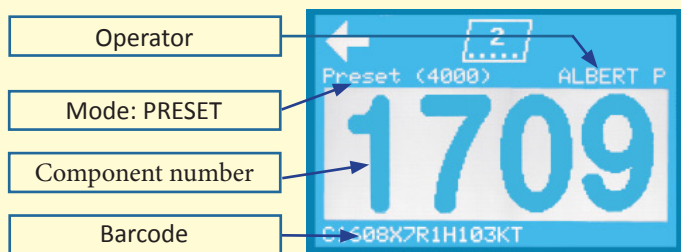
COUNTY-S EVO

County-s evo is a motorized counting machine for taped SMD component counting. It can operate in two different ways:

1) 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



2) PRESET MODE: the desired component number is keyed on the keyboard and the counter automatically stops when it reaches the corresponding component



EMPTY POCKET CHECK

Checks the presence of the component
Programmable Stop: Never - 1 - 2
It only works on black plastic tapes



EPC disabled



EPC enabled



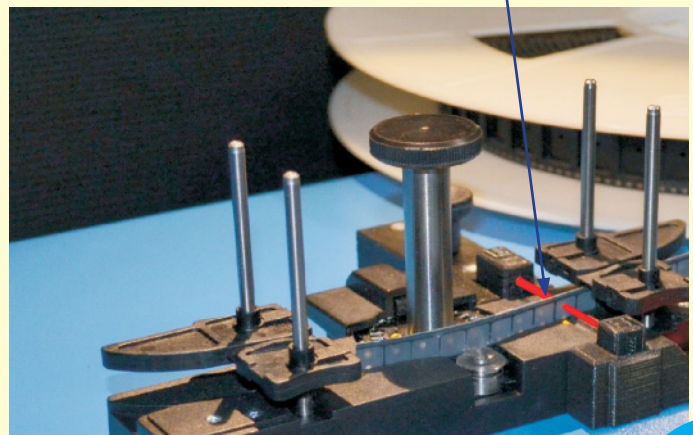
EPC counting



TECHNICAL FEATURES

- Counting: max 999999 pcs, 6 digits 22mm height
- Maximum counting speed: 220pcs/sec (1 piece for hole)
- Pitch (holes for component): from 1/4 - 1/3 - 1/2 - 1 - 2 - ... - 19
- Maximum tape height: 56mm
- Maximum reel diameter: 400mm (standard configuration) 650mm (with **8301.150** support)
- Display: blue LCD with led backlight 160x104 pixel visible area: 74x46mm
- Adjustable speed control
- Step by step mode (1 component at a time)
- Empty pocket check (optional)
- Barcode reader input
- Serial connection for label printer or PC
- Selection of the operator (10 operators can be memorized with 8 alphanumerical chars everyone)
- Internal clock (1 week backup)
- Datalogger that stores the last 500 counting data
- Memory storage for subtotals
- 2 side handles for easy transport.
- Dimensions: 525 x 340 x 250(H) mm
- Weight: 9,5 Kg

Infrared ray



COUNTY-S EVO

County-S EVO control keyboard



8301.131 County-S EVO 230V/50-60Hz

8301.133 County-S EVO 230V/50-60Hz with Empty Pocket Check

8301.141 County-S EVO 115V/50-60Hz

8301.143 County-S EVO 115V/50-60Hz with Empty Pocket Check

8301.350 ISO9000 Traceable® Certificate

8301.150 Support for reels > 400mm diameter

8301.110 Empty Reel, aluminium made, 350mm diameter

8301.155 Barcode with coiled cord

8301.095 Direct thermal label printer

8301.096 57x51mm, 1360 labels/roll

PRINTER

For County EVO and County-S EVO

Direct thermal label printer built for ease-of-use and durability, ac adaptor 110-230Vac and data cable included.

Maximum print width is 104mm however the print is optimized for 57x51mm labels

8301.095 Direct thermal label printer

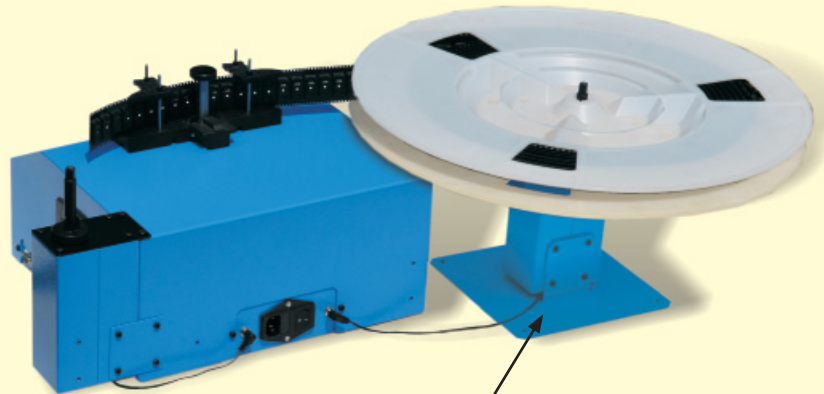
8301.096 57x51mm, 1360 labels/roll



PRINTER



EMPTY REEL aluminium made diameter 360mm (cod. **8301.110**)



Support for reels with diameter > 400mm (cod. **8301.150**)

BARCODE (for County EVO and County-S EVO)

It's small, lightweight and ergonomic design, coiled cable included, a wider than usual scan angle provides the ability to read a longer bar code from a shorter distance, IP42 protection.

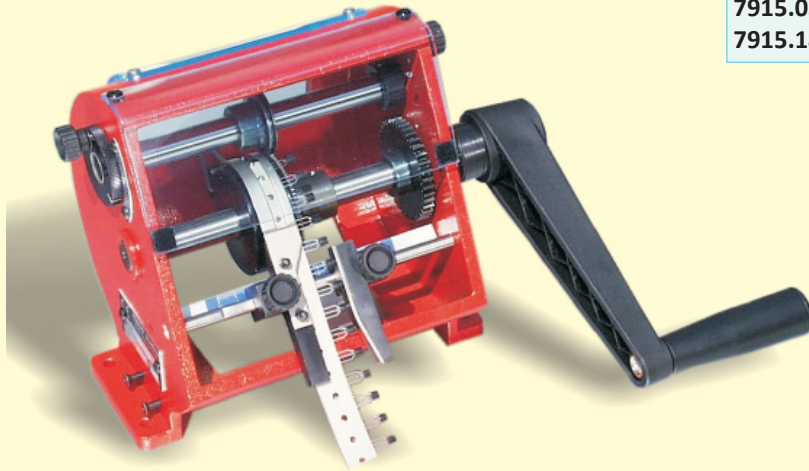
The barcode is connected and powered via a single cable, without the hassle of two separate cables1

8301.155 Barcode with coiled cord



SUPERFORM/R is a machine made for cutting radial taped components such as capacitors, transistors and stand-off resistors.

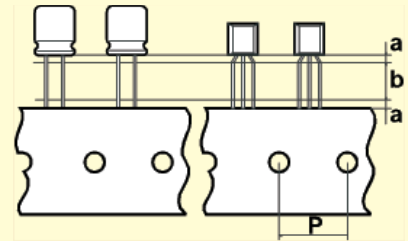
Production rate: up to 20000 pcs/hr



SUPERFORM-R

- 7915.113A** SUPERFORM/R P=12.7mm (.5") (standard model)
- 7915.113B** SUPERFORM/R P=15.0mm (.59")
- 7915.030** Motor Unit for SUPERFORM, 230V - 50/60Hz
- 7915.031** Motor Unit for SUPERFORM, 115V - 50/60Hz
- 7915.185** Tape Reel Holder arm BR6

| | a | b | d | D |
|-----------|---|---|-----|----|
| Min. (mm) | 2 | | 0.4 | |
| Max. (mm) | | 8 | 1 | 14 |



SUPERCUT is a machine made for cutting radial loose components and, with an optional adapter, also taped components.

It is extremely compact and sturdy and all mechanical parts have been designed to ensure the highest quality and the longest possible life.

The loading of components is easy and quick, and the production is high because there is no down time due to the automatic transfer and ejection of the components.

The transfer speed is adjustable.

The small sliding door in front allows for lead length adjustments.

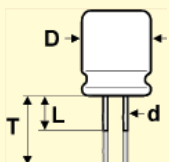
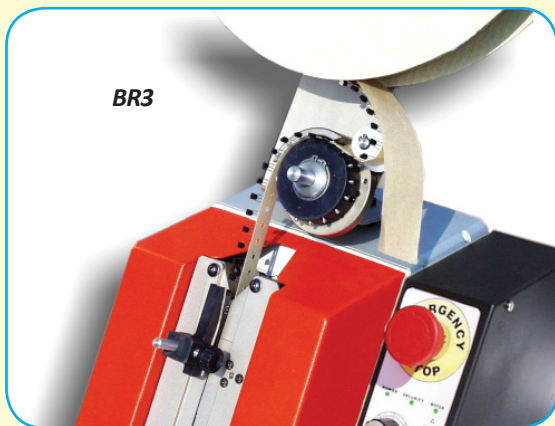
There is an optional adapter for radial taped components.

SUPERCUT



TECHNICAL FEATURES

Production rate: up to 3000 pcs/hr
 Dimensions: 400 x 270 x 270(H)mm
 Weight: 14Kg

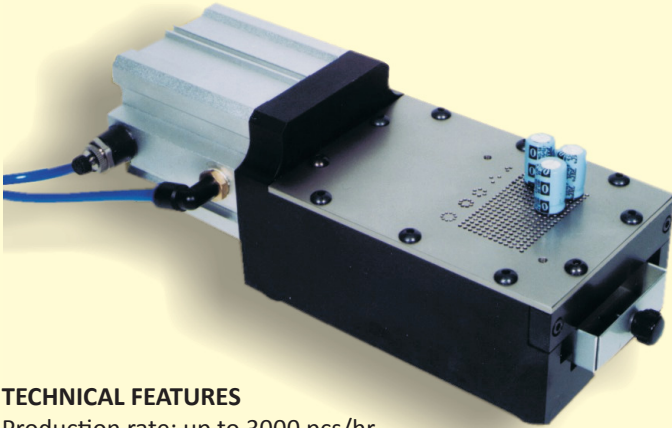


| | L | d | D |
|-----------|----|-----|----|
| Min. (mm) | 3 | 0.4 | 1 |
| Max. (mm) | 12 | 0.8 | 15 |

- 7915.147N** Motorized cutting machine SUPERCUT, 115V - 50/60Hz
- 7915.148N** Motorized cutting machine SUPERCUT, 230V - 50/60Hz
- 7915.160** Tape Reel Holder BR3, P=12.7mm
- 7915.159** Tape Reel Holder BR3, P=15mm

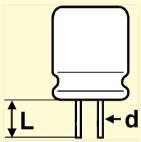
T (original length) > L + 6 mm

SUPERCUT-LN5



TECHNICAL FEATURES

Production rate: up to 3000 pcs/hr
 Dimensions (7915.041): 100 x 250 x 93 mm
 Dimensions (7915.041L): 100 x 300 x 93 mm
 Supply: 6 ATM
 Weight: 4,5/6 Kg

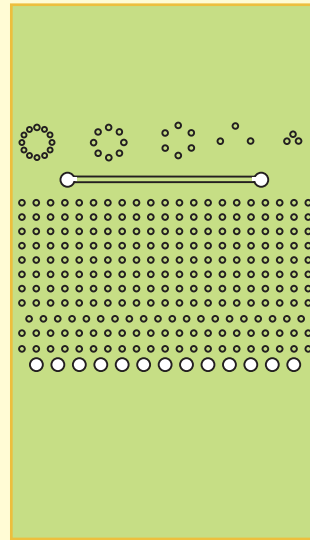


| | L | d |
|-----------|-----|-----|
| Min. (mm) | | 0.3 |
| Max. (mm) | | 1.3 |
| Fix. | 3.2 | |

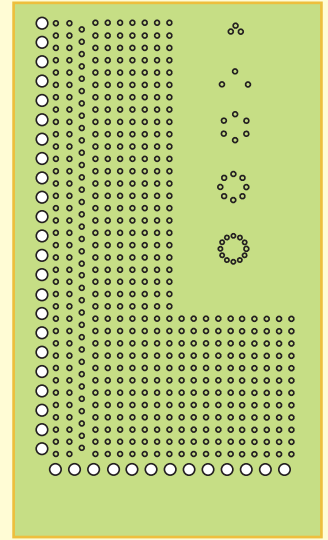
- 7915.041** SUPERCUT/LN5 with foot pedal control
- 7915.041L** SUPERCUT/LN5L long model with foot pedal control
- 340.114** Optional additional plate for SUPERCUT/LN5 (max 3mm)
- 340.214** Optional additional plate for SUPERCUT/LN5L (max 3mm)

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 jig. An additional optional plate (thickness to be specified, max 3mm) can be supplied to increase the cutting height of the leads. Two models available, the first with a cutting area 53x43mm, the second with a cutting area 53x93mm.

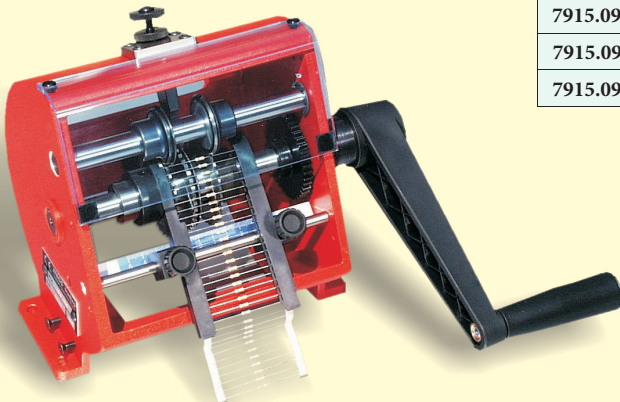
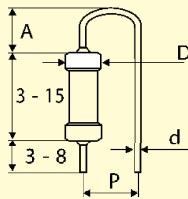


Standard plate hole layout
SUPERCUT/LN5



Standard plate hole layout
SUPERCUT/LN5L

SUPERFORM-V



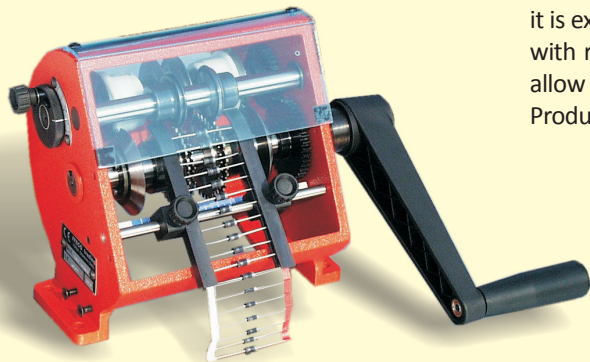
| | P | | d | | A | | D |
|----------------------------|------|------|------|------|------|------|------|
| | fix. | min. | min. | max. | min. | max. | max. |
| 7915.101 B standard | 2.54 | 0.5 | 0.5 | 0.8 | 2 | 6 | 3 |
| 7915.101 C | 3.8 | 0.5 | 0.5 | 0.8 | 2.5 | 5 | 5 |
| 7915.101 D | 5.08 | 0.5 | 0.5 | 0.8 | 3 | 7 | 8 |
| 7915.101 E | 7.62 | 0.5 | 0.5 | 0.8 | 4 | 7 | 10 |
| 7915.091 A | 3.8 | 0.8 | 0.8 | 1.3 | 4 | 9 | 5 |
| 7915.091 B | 5.08 | 0.8 | 0.8 | 1.3 | 5 | 9 | 8 |
| 7915.091 C | 7.62 | 0.8 | 0.8 | 1.3 | 6 | 9 | 10 |

SUPERFORM/V is a machine made for cutting and bending axial taped components for vertical mounting.

Production rate up to 40000 pcs/hr

- 7915.030** Motor Unit for SUPERFORM, 230V - 50/60Hz
- 7915.031** Motor Unit for SUPERFORM, 115V - 50/60Hz
- 7915.182** Feeder CS30 for loose axial components
- 7915.185** Tape Reel Holder arm BR6

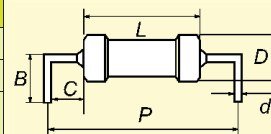
SUPERFORM-A



SUPERFORM/A is a machine made for cutting and bending axial taped components, it is extremely compact and sturdy and its main characteristic is to form components with rheophore up to 1.4 mm. Its tracking wheels are adjustable independently to allow rapid setup at different forms.
Production rate: up to 40000 pcs/hr

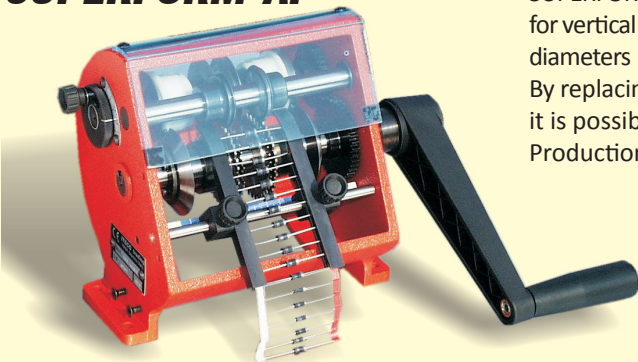
- 7915.030** Motor unit for SUPERFORM, 230V - 50/60Hz
- 7915.031** Motor unit for SUPERFORM, 115V - 50/60Hz
- 7915.180** CS10 feeder for loose axial components
- 7915.185** Tape reel holder arm BR6

| | version | B | | P | | C | D | | d | | L | quick setting |
|-------------------|--|------|------|------|----------|------|------|------|------|------|------------|---------------|
| | | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Max. | | |
| 7915.100 A | standard model | 4 | 13 | 6.5 | 60 (40*) | 1.2 | 16 | 0.4 | 1.3 | 50 | 7915.100AR | |
| 7915.100 D | reinforced bending knives | 5 | 13 | 105 | 60 (40*) | 2.4 | 16 | 0.6 | 1.4 | 50 | 7915.100DR | |
| 7915.100 F | reduced cutting length reduced bending length | 4 | 13 | 5 | 60 (40*) | 0.8 | 10 | 0.4 | 0.8 | 50 | 7915.100FR | |
| 7915.100 G | like "F" + fixed pitch | 4 | 10 | 5 | - | 0.5 | 4 | 0.4 | 0.6 | 3.5 | - | |



(*) maximum P dimension with quick setting

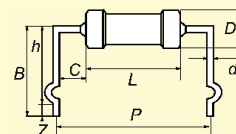
SUPERFORM-AP



SUPERFORM/AP is a machine made for cutting and bending axial taped components for vertical assembling, and shaping a little curl on each lead. The machine handles wire diameters ranging from 1 mm to 1.4mm.
By replacing the 2 "cutting/forming wheels" with 2 "only cutting wheels" (optional) it is possible to obtain an U-shape without curls.
Production rate: up to 20000 pcs/hr

- 7915.030** Motor unit for SUPERFORM, 230V - 50/60Hz
- 7915.031** Motor unit for SUPERFORM, 115V - 50/60Hz
- 7915.180** CS10 feeder for loose axial components
- 7915.185** Tape reel holder arm BR6

| Mod. | version | Z | | | P | | B | | C | L | d | D | | h | | |
|------------------|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| | | Fix. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Min. | Min. | Min. | Max. | Min. | Max. | |
| 7915.102A | standard model | 3.1 | 6.5 | 60 | 10 | 14 | 1.2 | 10 | 50 | 1.3 | 16 | 7 | 11 | | | |
| 7915.102B | reinforced bending knives | 3.1 | 10.2 | 60 | | | | | | | | | | | | 2.4 |
| 7915.102C | standard model | 3.9 | 6.5 | 60 | | | | | | | | | | | | 1.2 |
| 7915.102D | reinforced bending knives | 3.9 | 10.2 | 60 | | | | | | | | | | | | 2.4 |
| 7915.102E | standard model | 5 | 6.5 | 60 | | | | | | | | | | | | 1.2 |
| 7915.102F | reinforced bending knives | 5 | 10.2 | 60 | | | | | | | | | | | | 2.4 |



OPTIONAL ACCESSORIES

SUPERFORM MOTOR UNIT

Equipped with manual speed adjustment and automatic torque control for an easy and fast working of the SUPERFORM machine. The motor unit is supplied only with the machine assembled.

- 7915.030** M230V Motor Unit for SUPERFORM/A-AP-S-V-R-RCP
- 7915.031** 115V Motor Unit for SUPERFORM/A-AP-S-V-R-RCP
- 7915.032** 230V Motor Unit for SUPERFORM/AF-VP
- 7915.033** 115V Motor Unit for SUPERFORM/AF-VP
- 600.023** Foot switch for 7915.030/031/032/033 motors

SUPERFORM Tape Reel Holder BR6

A tape reel holder arm to be fixed on the left side of Superform, to facilitate unwinding of the tape.

- 7815.185** BR6 for all SUPERFORM models

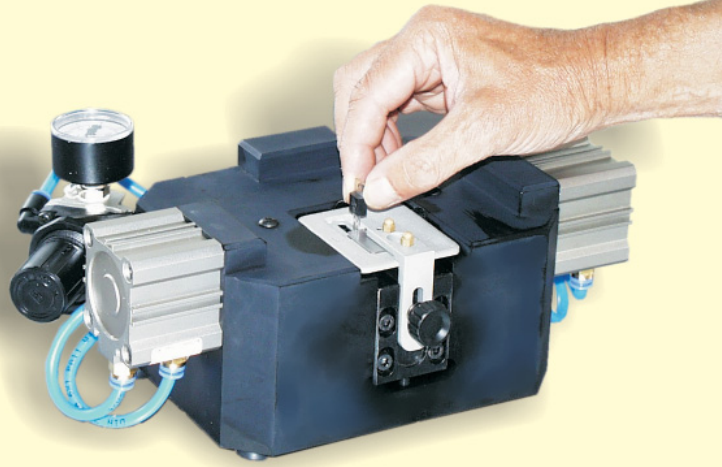


SUPERCUT/RS4

for loose radials

A pneumatic machine designed to cut loose radial component leads. The feed is manual, on the top of the machine. Pressing the footpedal effects cutting and preforming of the leads in a very quick and precise way. A large variety of Dies is available, substitution of the Die assembly is extremely quick and simple. A machine three cylinders equipped, with custom tool, can be supplied for more complex not standard forms.

Production rate: 2000 pcs/hr



7915.166 SUPERCUT/RS without preforming set
16x.xxx Preforming set

| | | | | | |
|--|--|--|--|---|--|
| STAND-OFF LOCK-IN 160600 (7915.166) 180600 (7915.171) | | STAND-OFF LOCK-IN LED 160700 (7915.166) 180700 (7915.171) | | STAND-OFF OUTWARD FORM 160800 (7915.166) 180800 (7915.171) | |
|--|--|--|--|---|--|

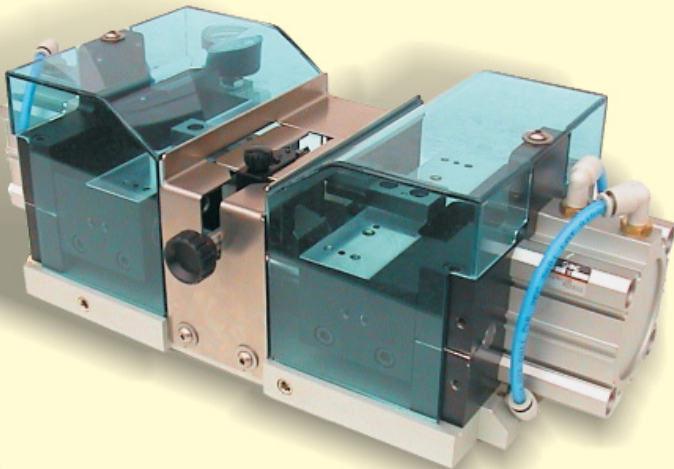
| | | | | | | | | | | | |
|---|--|--|--|---|--|--|--|---|--|--|--|
| LOCK-IN 160.900 (7915.166) 180.900 (7915.171) | | STRAIGHT CUT 161000 (7915.166) 181000 (7915.171) | | DIODE 4 LEADS STAND-OFF INWARD FORM 161100 (7915.166) 181100 (7915.171) | | STAND-OFF LOCK-IN POLARITY FOR LED 161200 (7915.166) 181200 (7915.171) | | 90° BENDING 161300 (7915.166) 181300 (7915.171) | | MONTAGGIO IN SUPERFICIE 161400 (7915.166) 181400 (7915.171) | |
|---|--|--|--|---|--|--|--|---|--|--|--|

| | | | | | | | | | | | |
|--|--|--|--|--|--|---|--|--|--|---|--|
| STAND-OFF INWARD FORM 160.900 (7915.166) 180.900 (7915.171) | | TO SPREAD OUT AND CUT 161700 (7915.166) 181700 (7915.171) | | TO REDUCE PITCH AND CUT 161800 (7915.166) 181800 (7915.171) | | POWER TRANSISTOR CENTER LEAD 2.5 mm OUT 162100 (7915.166) 182100 (7915.171) | | TO220 90° BENDING CENTER LEAD 5mm OUT 163100 (7915.166) 183100 (7915.171) | | TO220 CENTER LEAD SPREAD AND LOCK 162200 (7915.166) 182200 (7915.171) | |
|--|--|--|--|--|--|---|--|--|--|---|--|

| | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|---|--|
| TO220 CENTER LEAD SPREAD 3 LEAD LOCK 160.900 (7915.166) 180.900 (7915.171) | | TO220 STAND-OFF, LOCK-IN 3LEAD IN LINE 162400 (7915.166) 182400 (7915.171) | | TO92 CENTER LEAD 2.5mm OUT 162500 (7915.166) 182500 (7915.171) | | TO92 CENTER LEAD SPREAD AND LOCK 182600 (7915.171) 180900 (7915.171) | | TO92 CENTER LEAD SPREAD, 3 LEAD LOCK 162700 (7915.166) 182700 (7915.171) | | TO92 STAND-OFF LOCK-IN 3 LEAD IN LINE 162800 (7915.166) 182800 (7915.171) | |
|--|--|--|--|--|--|--|--|--|--|---|--|

SUPERCUT/TS1

for loose radials



A pneumatic machine designed to cut loose radial component leads, the feed is manual, on the top of the machine. Pressing the footpedal effects cutting and preforming of the leads in a very quick and precise way. A large variety of Dies is available, substitution of the Die assembly is extremely quick and simple.

- wire holder system available on request
- more powerful cylinders
- stronger and more accurate
- less wear
- very large components processing (max. length 140mm, max. pitch 45mm)
- production rate 2000 pcs/hr

7915.171 SUPERCUT/TS1 without preforming set
18x.xxx Preforming set

SUPERCUT/TOCF for tubed transistors

SUPERCUT/TOCF automatic machine is designed to cut and form tubed radial components type TO220, TO218, TO126.

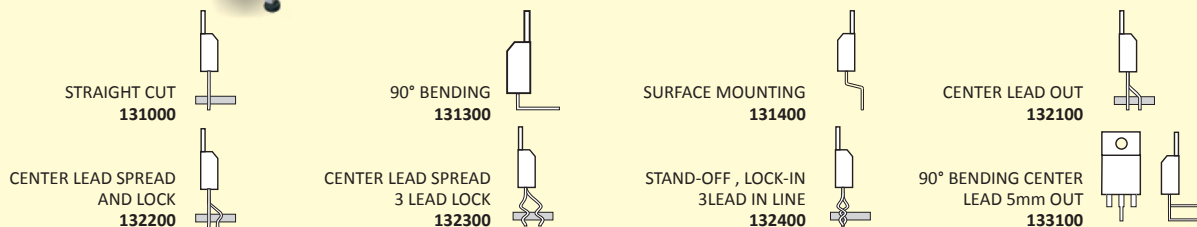
The complete operation is fully automatic and each form needs dedicated die. The full tube is introduced into the upper guide and a pneumatic system allows the component clamping and its positioning in the working point. The leads have before locked by the wire holder and after formed by the sliding die.

Production rate: up to 3000pcs/hr



7915.176 SUPERCUT/TOCF without tools, 115V

7915.177 SUPERCUT/TOCF without tools, 230V

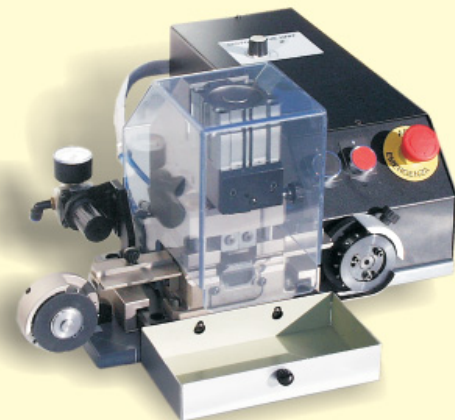


SUPERCUT/RP for taped radials

SUPERCUT/RP is a machine designed to cut and form taped radial component leads, the curl formed by this model allows the components to remain spaced and locked in the PCB, making assembly operations easier.

The machine can be supplied with preforming curl dies different from the standard ones. It is a pneumatic machine, the leads must be introduced into a slot on the front of the machine. The machine use an motorized automatic feeder system for taped components.

Production rate (with feeder): 7000 pcs/hour



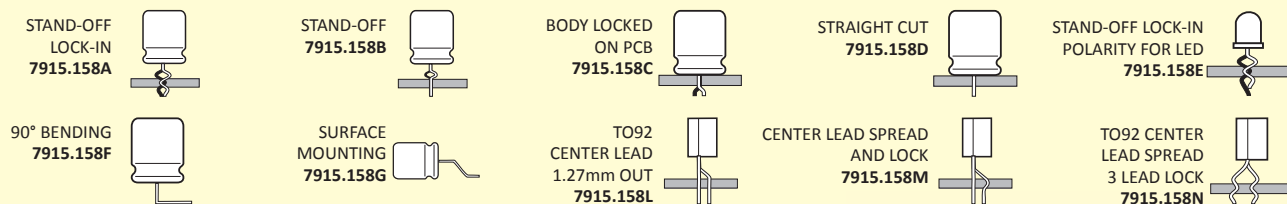
7915.154 Motorized machine SUPERCUT/RP for taped components. P=12.7, 230V. Without preforming set

7915.154A Motorized machine SUPERCUT/RP for taped components. P=12.7, 110V Without preforming set

7915.155 Motorized machine SUPERCUT/RP for taped components. P=15, 230V Without preforming set

7915.155A Motorized machine SUPERCUT/RP for taped components. P=15, 110V Without preforming set

7915.158.. Die block



PINS ALIGNER

Pin aligner suitable for integrated circuits MOS and CMOS, from 4 to 64 pins.

Operation is made by sliding the packaging tube between the 4 metal rollers.

Easy adjustment of the pitch by means of the setting knob.

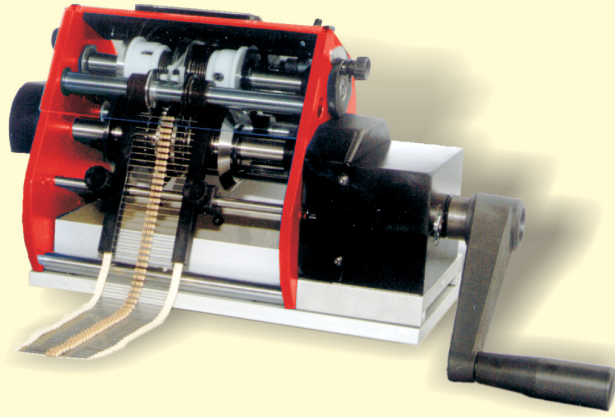
Setting of the pin distance: 7 - 24mm (0.3" - 0.9")

7804.711 PINS Aligner, 7-24mm with press (P)

7804.712 PINS Aligner, 7-24mm without press (P)



SUPERFORM-AF



The SUPERFORM/AF is a 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.

The cutting and bending parameters as well of the position of the preform are fully adjustable. Different forms can be obtained with this machine, through the easy substitution of the two preforming dies.

It is also possible to exclude part of the preforming operation to obtain the cutting and "U" bending only.

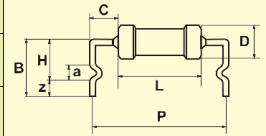
By use of the variable speed Motor Drive Unit working can be automatic and the production rate can be increased.

Production rate: up to 7000 pcs/hour

STAND OFF

Dimensions in mm (* can increase, according to the component diameter)

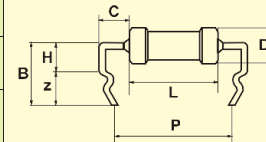
| mod. (assembly die) | version | P | | L | C | | H | | B | | d | | D | z | |
|------------------------|------------------|------|-----|-----|-----|------|-----|------|------|-----|-----|-----|-----|-----|---|
| | | min | max | max | min | min | max | min | max | min | max | max | min | max | |
| 7915.095 (420.800) | standard | 10.5 | 61 | 50 | 1.2 | 6* | 9 | 8* | 11 | 0.5 | 0.8 | 8 | 2.5 | 2 | 4 |
| 7915.095 (420.750) | standard | 10.5 | 61 | 50 | 1.2 | 6.5* | 9.5 | 8.5* | 11.5 | 0.6 | 0.9 | 8 | 3 | 2 | 4 |
| 7915.096 (420.750) | reinforced | 10.5 | 61 | 50 | 1.5 | 7* | 12 | 9* | 14 | 0.8 | 1 | 8 | 3 | 2 | 4 |
| 7915.097 (430.700) | extra reinforced | 13 | 61 | 50 | 2.5 | 11* | 16 | 13* | 18 | 1 | 1.3 | 8 | 4 | 2 | 4 |



STAND OFF - LOCK IN

Dimensions in mm (* can increase, according to the component diameter)

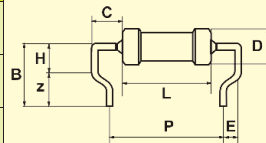
| mod. (assembly die) | version | P | | L | C | | H | | B | | d | | D | z | |
|------------------------|------------|------|-----|-----|-----|------|-----|------|-----|-----|-----|-----|-----|-----|--|
| | | min | max | max | min | min | max | min | max | min | max | max | min | max | |
| 7915.095 (420.850) | standard | 10.5 | 61 | 50 | 1.2 | 4.5* | 8 | 7.5* | 11 | 0.5 | 0.8 | 8 | 3 | 4 | |
| 7915.095 (420.950) | reinforced | 10.5 | 61 | 50 | 1.2 | 4.5* | 8 | 7.5* | 11 | 0.6 | 0.9 | 8 | 3 | 4.5 | |
| 7915.096 (420.950) | reinforced | 10.5 | 61 | 50 | 1.5 | 5.5* | 11 | 8.5* | 14 | 0.8 | 1 | 8 | 3 | 4.5 | |



STAND OFF - REDUCED PITCH

Dimensions in mm (* can increase, according to the component diameter)

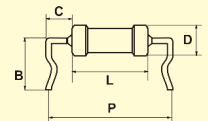
| mod. (assembly die) | version | P | | L | C | | H | | B | | d | | D | z | | E |
|------------------------|------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|---|
| | | min | max | max | min | min | max | min | max | min | max | max | min | max | max | |
| 7915.095 (420.900) | standard | 8 | 59 | 50 | 1.2 | 5* | 9 | 7* | 11 | 0.5 | 0.9 | 8 | 2 | 4 | 1.27 | |
| 7915.096 (420.900) | reinforced | 8 | 59 | 50 | 1.5 | 6* | 12 | 8* | 14 | 0.8 | 1 | 8 | 2 | 4 | 1.27 | |
| 7915.097 (430.900) | extra reinforced | 10.5 | 59 | 50 | 2.5 | 9* | 16 | 11* | 18 | 1 | 1.3 | 8 | 2 | 4 | 1.27 | |



BODY LOCKED ON PCB

Dimensions in mm (* can increase, according to the component diameter)

| mod. (assembly die) | version | P | | L | C | B | | d | | D |
|------------------------|----------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| | | min | max | max | min | min | max | min | max | max |
| 7915.095 (421.000) | standard | 10.5 | 61 | 50 | 1.2 | 5 | 8 | 0.5 | 0.8 | 8 |



- 7915.095 SUPERFORM/AF standard, without preforming die
- 7915.096 SUPERFORM/AF reinforced, without preforming die
- 7915.097 SUPERFORM/AF extra reinforced without preforming die
- 7915.185 Tape Reel Holder arm BR6 for SUPERFORM
- 7915.032 Motor Unit for SUPERFORM/AF, 230V- 50/60Hz
- 7915.033 Motor Unit for SUPERFORM/AF, 115V- 50/60Hz
- 7915.184 Loose Component Feeder CS40 for SUPERFORM/AF

- 420750 STAND-OFF preforming die assembly, curl 3mm
- 420800 STAND-OFF preforming die assembly, curl 2.5mm
- 420850 STAND-OFF/LOCK-IN pref. die assembly (d:0.5 - 0.8)
- 420900 STAND-OFF/REDUCED PITCH pref. die assembly
- 420950 STAND-OFF/LOCK-IN pref. die assembly (d:0.6 - 1)
- 421000 BODY LOCKED ON PCB preforming die assembly
- 430700 STAND-OFF preforming die assembly (d:1-1,3mm)
- 430900 STAND-OFF/REDUCED PITCH (d:1-1,3mm)

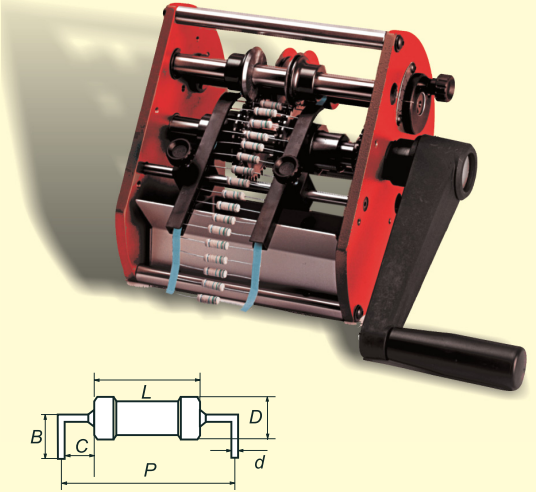
LOW-COST PREFORMING MACHINES

Economic, manual machines, designed for small productions. These machines can not be motorized, the "Tape reel holder" model BR6 (page 7 of the catalog) can be applied

SUPERFORM/A-LC is a machine made for cutting and bending axial taped components, it is extremely compact and sturdy and its main characteristic is to form components with rheophore up to 1.4 mm
Its tracking wheels are adjustable independently to allow rapid setup at different forms.

| mod. | version | B | | P | | C | D | d | | L |
|-----------|---|-----|-----|------|-----|-----|----|-----|-----|-----|
| | | min | max | min | max | | | min | max | |
| 7915.200A | standard | 4 | 13 | 6.5 | 60 | 1.2 | 16 | 0.4 | 1.3 | 50 |
| 7915.200D | reinforced bending knives | 5 | 13 | 10.5 | 60 | 2.4 | 16 | 0.6 | 1.4 | 50 |
| 7915.200F | reduced cutting length reduced bending length | 4 | 13 | 5 | 60 | 0.8 | 10 | 0.4 | 0.8 | 50 |
| 7915.200G | like "F" + fixed pitch | 4 | 10 | 5 | - | 0.5 | 4 | 0.4 | 0.6 | 3.5 |

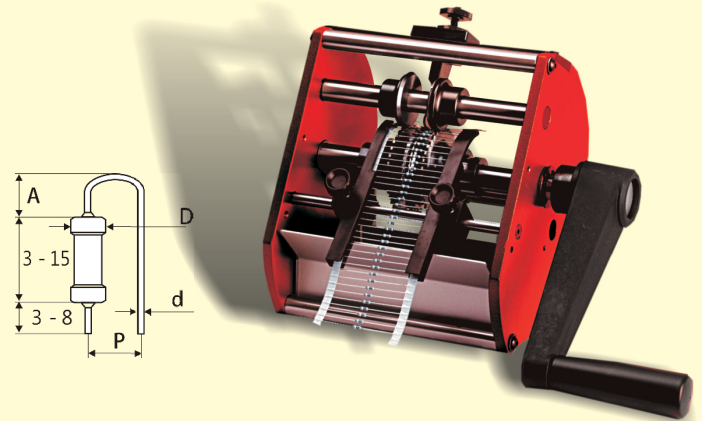
SUPERFORM/A-LC



SUPERFORM/V-LC is a machine made for cutting and bending axial taped components for vertical mounting.

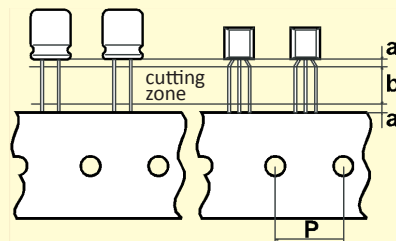
| Mod. | P | | d | | A | | D |
|----------------------|------|-----|-----|-----|-----|-----|---|
| | fix | min | max | min | max | max | |
| 7915.201B (standard) | 2.54 | 0.5 | 0.8 | 2 | 6 | 3 | |
| 7915.201C | 3.8 | 0.5 | 0.8 | 2.5 | 6 | 5 | |
| 7915.201D | 3.8 | 0.5 | 0.8 | 2.5 | 6 | 5 | |
| 7915.201E | 7.62 | 0.5 | 0.8 | 4 | 7 | 10 | |
| 7915.209A | 3.8 | 0.8 | 1.3 | 4 | 9 | 5 | |
| 7915.209B | 5.08 | 0.8 | 1.3 | 5 | 9 | 8 | |
| 7915.209C | 7.62 | 0.8 | 1.3 | 6 | 9 | 10 | |

SUPERFORM/V-LC



SUPERFORM/R-LC is a machine made for cutting radial taped components such as capacitors, transistors and stand-off resistors.

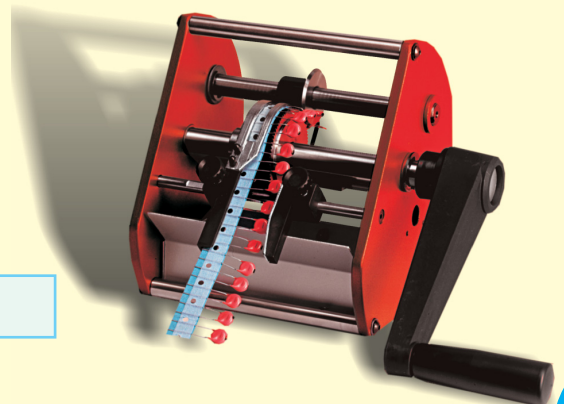
| | a | b | d | D |
|--------|---|---|-----|----|
| Min mm | 2 | - | 0.4 | - |
| Max mm | - | 8 | 1 | 14 |



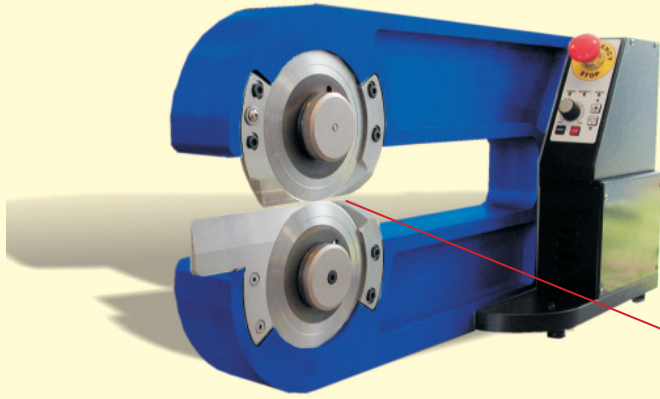
SUPERFORM/R-LC



7915.213A (standard) P=12.7mm
7915.213B P=15mm

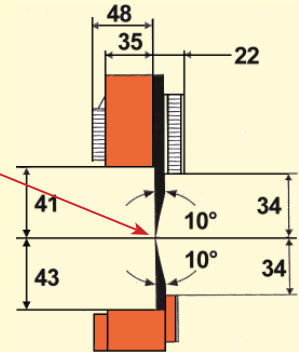


TRACTOR



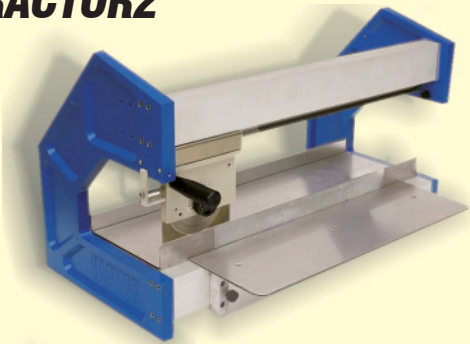
TRACTOR depaneling machine separates the prescored PCB, in a very quick and economic way. The compact and stable aluminium frame requires a minimum space. The assembled PCB panel is shoved between the circular blades and is thereby separated. The circular blades and guides are made of special steel to ensure a long time life. The hand model is suggested only for small productions.

Separation length: up to 350mm
 Thickness of panels: 0.8 - 3.2mm
 Maximum components's height: 34 - 43mm

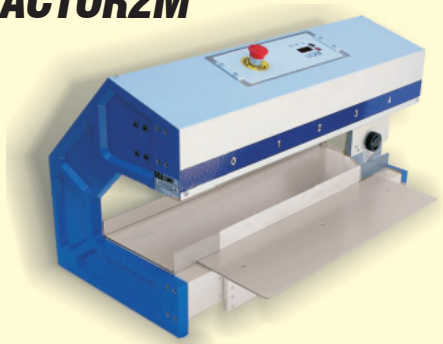


- 7915.580** TRACTOR - PCB Hand depaneling machine
- 7915.582** TRACTOR - PCB Motorized depaneling machine 230V
- 7915.583** TRACTOR - PCB Motorized depaneling machine 230V/Titan blades

TRACTOR2

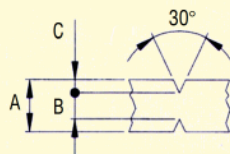


TRACTOR2M

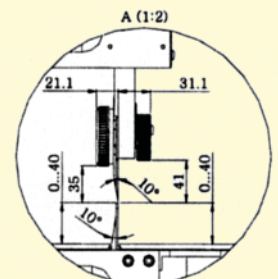
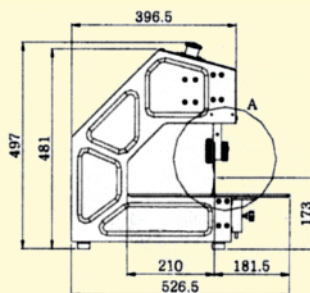
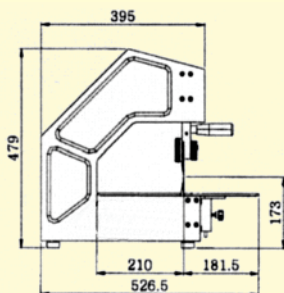
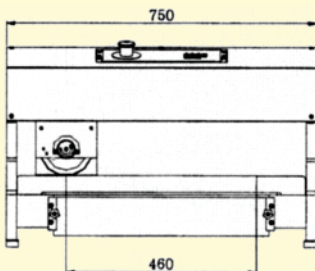


TRACTOR 2 separates both small and large pre-scored PCBs, the maximum separation length is 450mm. The PCB is placed with its pre-scored groove onto the linear blade and the circular blade is then drawn by hand, or by motor, across the PCB. The clearance between the upper circular blade and the lower linear blade is adjustable.

| | a | b | c |
|---------|-----|-----|------|
| Min. mm | 1 | 0.3 | 0.25 |
| Max. mm | 3.2 | 0.8 | - |



A = 1.0 - 3.2 mm
 B = min. 0.3 mm
 max. 0.8 mm
 C = min. 0.25 mm



- 7915.560** TRACTOR 2 - PCB Hand depaneling machine
- 7915.564** TRACTOR 2M - PCB Motorized depaneling machine 230V

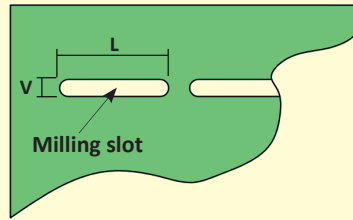
TRACTOR-MILL 2 The Tractor Mill 2 depaneling machine mills the routed tabs with the same quality of an automatic system at a lower costs. The key feature of this machine is the easy and quick change of the milling cutter and the interchangeable rail (patented).

This rail is useful to assist the operator to place and drag the circuit until the cut is complete. The particular shape of the rail avoids any damages to the assembled circuit: if the operator inserts it incorrectly it will not match the eyelet. This rail gives a total protection against possible accidents under safety rules.

This manual depaneling machine has an integrated electric vacuum cleaner system therefore it's easy to place it in every working area. It has been designed and realized to solve stress problems, break or tearing out of the PCB's fibers that often occur using standard blades or manual tools and that are not tolerated with the increasing complexity and miniaturization.

Technical features:

- Aspiration: single phase turbine
- Weight: 55 Kg
- Mains Supply: 230V/50Hz
- Power: 900W
- Depression: -17 kPa (-170 mBar) / -15 kPa (-150 mBar)
- PCB thickness: Max 4mm
- Slot length (L): Min 11mm
- Slot width (V): Standard 1.0 - 3.175mm
- Slots / component distance: min. 1mm
- PCB material: FR4, CEN, (Al - with optional cutter).



TRACTOR-MILL 2

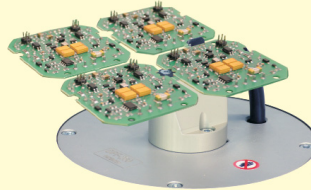


7915.591 TRACTOR-MILL2 depaneling machine with pedal

1- Choose the right mill: 1.5 - 2.5mm
Choose the right rail



2- Move the PCB array towards the mill



3- The mill removes the PCB's tabs



7820.031



GOSMOKE

The GOSMOKE exhaustor is a convenient and economical solution to the fumes associated with soft soldering. Fumes close to the worker are drawn in, filtered and direct towards the ceiling where supplementary ventilation can be eventually provided.

There are two models, both of them are equipped with an axial fan and a cellular activated filter, which filters out some of the colophony, tin and lead vapours contained in the fumes. The filter should be replaced every 100 working hours.

- table model:

This portable suction unit is light, space saving and quiet, by using the adjustable support the exhaustor can be hung above the work table at different heights and tilted at different angles.

- hanging model:

With an adjustable bracket it is a better solution to reach a larger area of the workbench. This model is also available with a halogen lamp .

Technical features:

- Power: 20 W
- Air volume: 130 m³/h
- Noise: 45 dB(A)

All GOSMOKE exhaustors are supplied with 4 spare filters.

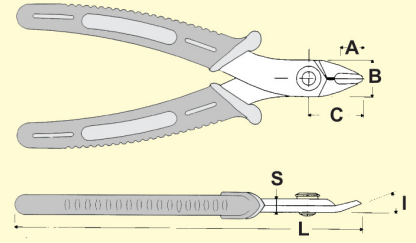
- 7820.001** Exhaustor 230V (table model)
- 7820.003** Set of 4 spare filters
- 7820.004** Adjustable support for table model
- 7820.021** Exhaustor 230V (hanging model)
- 7820.031** Exhaustor 230V (hanging model) with lamp.

Cutting nippers

Specially developed for the electronic, these tools are made out a special carbon steel, with elastic, ergonomic PVC handles, in two versions:

- 1) ESD black ($10^6 - 10^9 \Omega$)
- 2) INSULATING orange

A patented safety clip to prevent the cut lead to spring out dangerously is available.



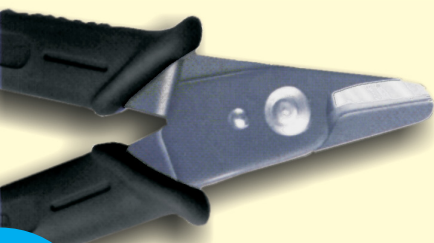
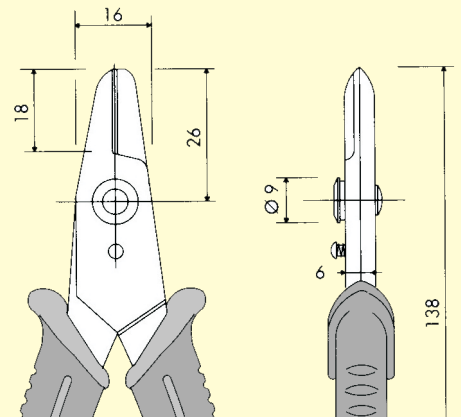
| USE | TYPE OF CUT | WT | dia.max Copper wire | | DIMENSIONS | | | | | | CODE | HANDLES | | SAFETY CLIP |
|---|--------------------|-----|---------------------|----|------------|------|----|---|-----|-----|--|---------|-----------|-------------|
| | | | gr. | mm | AWG | A | B | C | S | L | | I | ESD black | |
| Normal For lead diameter to 1mm | Clean cut | 60 | 1,02 | 18 | 8 | 13,5 | 20 | 5 | 138 | 21° | TRE 03 NB TRE 03 AB TRE 03 NBD TRE 03 ABD | ● ● | ● | ● |
| Normal For lead diameter to 1,3mm | Clean cut | 65 | 1,30 | 16 | 8 | 13,5 | 20 | 5 | 128 | 21° | TR 30 TR 30 A TR 30 D TR 30 AD | ● ● | ● | ● |
| Normal with 45° bending nose for lead diameter to 1,3mm | Clean cut | 65 | 1,30 | 16 | 8 | 13,5 | 20 | 5 | 128 | 45° | TR 2550 TR 2550 D | ● | ● | |
| Normal for lead diameter to 2mm | Clean cut | 75 | 2,05 | 12 | 8 | 13,5 | 20 | 6 | 128 | 21° | TR 58 R TR 58 RA TR 58 RD TR 58 RAD | ● ● | ● | ● |
| Heavy for lead diameter to 2,5mm | Blunt cut | 100 | 2,59 | 10 | 12 | 16,5 | 25 | 6 | 148 | 21° | TRR 58 TRR 58 A TRR 58 D TRR 58 AD | ● ● | ● | ● |
| Micro for lead diameter to 0,8mm | Clean cut | 45 | 0,81 | 20 | 8 | 9,5 | 18 | 4 | 118 | 21° | TR 20 M TR 20 MA TR 20 MD TR 20 MAD | ● ● | ● | ● |
| Micro for lead diameter to 1mm | Clean cut | 60 | 1,02 | 18 | 8 | 10 | 18 | 5 | 128 | 21° | TR 25 P TR 25 PA TR 25 PD TR 25 PAD | ● ● | ● | ● |
| Micro with 48° bending nose for lead diameter to 0,6mm | Clean cut | 45 | 0,64 | 22 | 8 | 9,5 | 18 | 4 | 118 | 48° | TR 2050 M TR 2050 MD | ● | ● | |
| Micro reversed cut with 48° bending nose specially developed for IC leads | Clean back cut | 45 | 0,64 | 22 | 8 | 9,5 | 18 | 4 | 118 | 48° | TR 20 TM TR 20 TMD | ● | ● | |



Shears

An easy-handly shear, designed for the electronic. Copper wire: max. diameter 1,63 mm (14AWG)

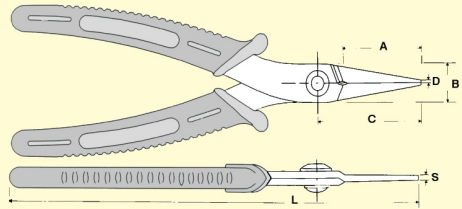
- CS 30 PVC handles
- CS 30 D Black dissipative ESD handles ($10^6 - 10^9 \Omega$)



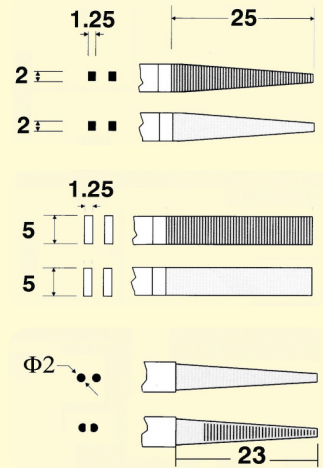


Pliers

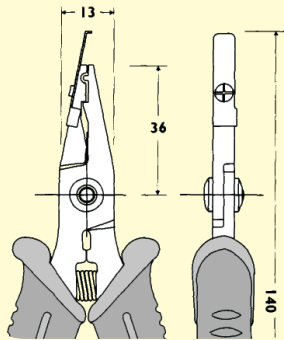
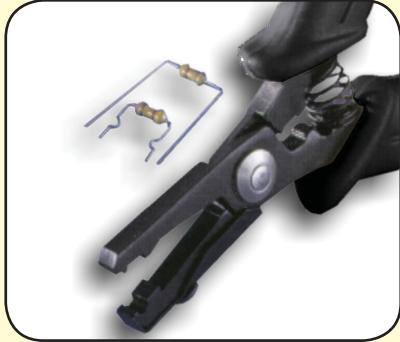
Professional pliers developed for the electronics industry. Short, long, rounded pliers, with smooth or serrated nose. Extension D is for the Black Dissipative PVC handles ($10^6-10^9\Omega$)



| | A | B | C | D | S | L | Peso gr. |
|-------------------------|----|----|----|-----|---|-----|----------|
| PN 5005 PN 5005 D | 25 | 13 | 36 | 1,3 | 2 | 140 | 97 |
| PN 5006 PN 5006 D | 25 | 13 | 36 | 1,3 | 2 | 140 | 97 |
| PN 5007 PN 5007 D | 25 | 13 | 39 | 1,3 | 5 | 140 | 97 |
| PN 5008 PN 5008 D | 25 | 13 | 39 | 1,3 | 5 | 140 | 97 |
| PN 5025 PN 5025 D | 23 | 13 | 32 | 2 | 2 | 138 | 95 |
| PN 5025 Z PN 5025 ZD | 23 | 13 | 32 | 2 | 2 | 138 | 95 |



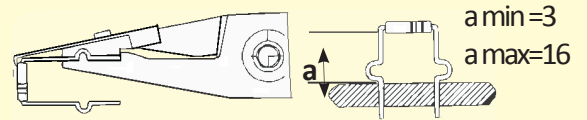
PREFORMING WITH CURL



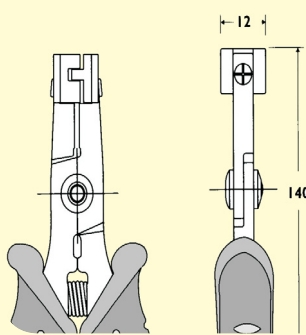
Professional tool specially designed to cut and preform components in a single operation. Variable length by means of an adjustable stop.

Max. diam.: copper lead 1mm/18AWG

PNR5000D black dissipative ESD handles ($10^6-10^9\Omega$)

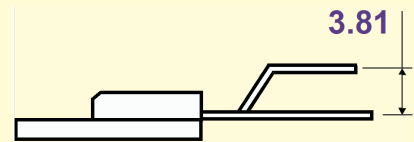


PREFORMING T0220

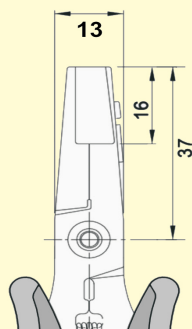


Professional tool specially designed to preform with central lead out of 3.81mm

PN5050/17D black dissipative ESD handles ($10^6-10^9\Omega$)



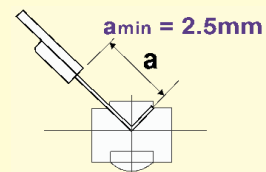
PREFORMING AT 90°



Professional tool specially designed to preform components at 90°.

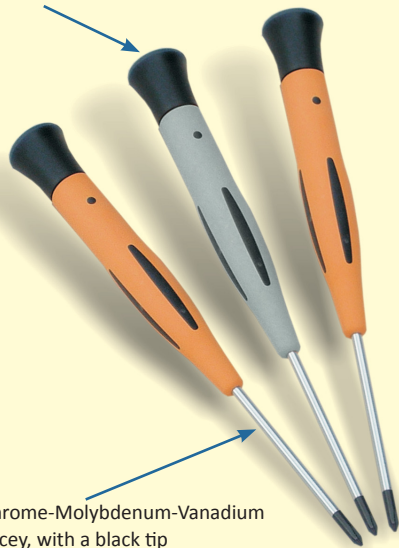
Max. diam.: copper lead 1mm/18AWG

PN5040/7D black dissipative ESD handles ($10^6-10^9\Omega$)



PRECISION SCREWDRIVERS

Free cap rotation



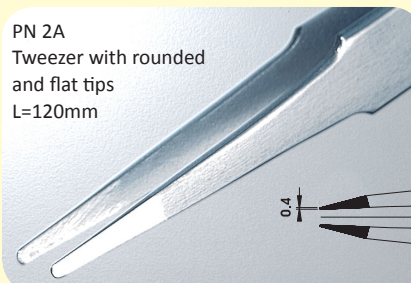
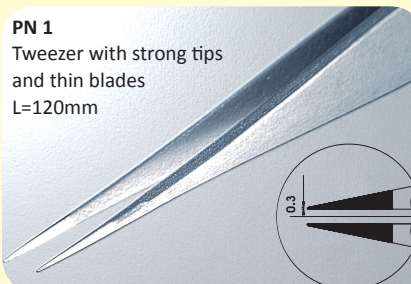
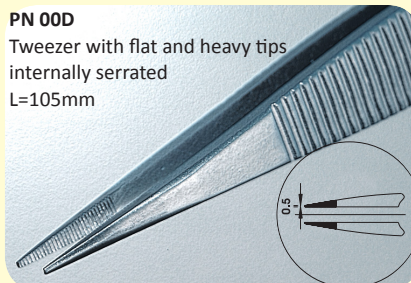
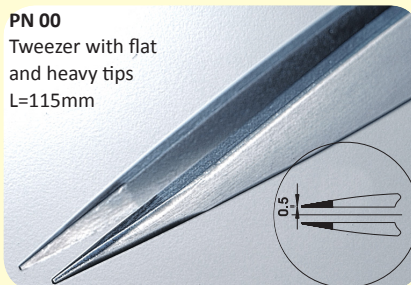
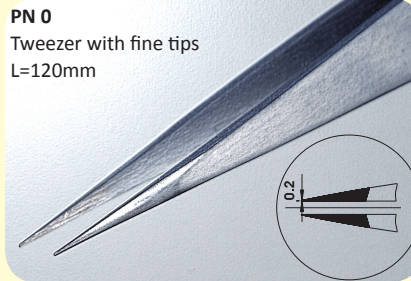
Chrome-Molybdenum-Vanadium alloy, with a black tip

| | PVC | Dissipative | Dimensions |
|---------------|-----------|-------------|--------------|
| SLOT | PG1-0 | PG1-0-D | 1,2x60 |
| | PG1-1 | PG1-1-D | 1,5x60 |
| | PG1-2 | PG1-2-D | 1,8x60 |
| | PG1-3 | PG1-3-D | 2,5x75 |
| | PG1-4 | PG1-4-D | 3,0x100 |
| | PG1-5 | PG1-5-D | 3,0x150 |
| PHILLIPS | PG2-0 | PG2-0-D | PH000 2,5x60 |
| | PG2-1 | PG2-1-D | PH00 2,5x60 |
| | PG2-1/75 | PG2-1/75-D | PH00 2,5x75 |
| | PG2-2 | PG2-2-D | PH0 3,0x60 |
| | PG2-2/75 | PG2-2/75-D | PH0 3,0x75 |
| | PG2-2/100 | PG2-2/100-D | PH0 3,0x100 |
| TORX | PG4-0X | PG4-0X-D | Tx5x50 |
| | PG4-0 | PG4-0-D | Tx6x50 |
| | PG4-1 | PG4-1-D | Tx7x50 |
| | PG4-2 | PG4-2-D | Tx8x60 |
| | PG4-3 | PG4-3-D | Tx9x60 |
| | PG4-4 | PG4-4-D | Tx10x60 |
| TAMPER RESIST | PG5-0X | PG5-0X-D | TRx5x50 |
| | PG5-0 | PG5-0-D | TRx6x50 |
| | PG5-1 | PG5-1-D | TRx7x50 |
| | PG5-2 | PG5-2-D | TRx8x60 |
| | PG5-3 | PG5-3-D | TRx9x60 |
| | PG5-4 | PG5-4-D | TRx10x60 |
| PG5-5 | PG5-5-D | TRx15x60 | |

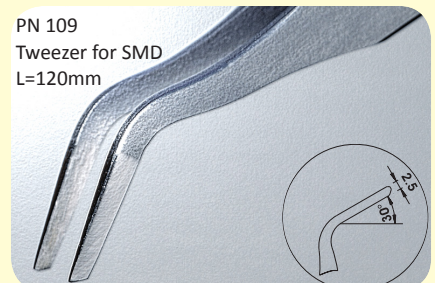
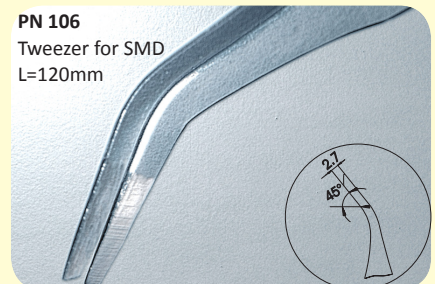
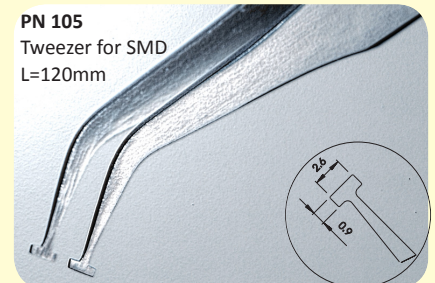
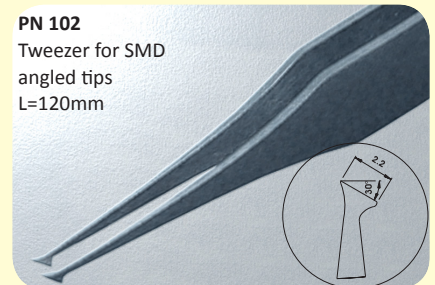
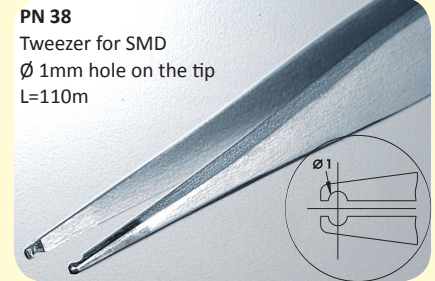
TWEEZER

Precision tweezers made out of high quality steels, meet with the standards of the electronic industry. Further models upon request.

STANDARD



SMD



HIGH TEMPERATURE ADHESIVE TAPES

Polyimide adhesive tape ideal to protect contacts on the boards during the wave soldering, or other high temperature production processes. Silicone adhesive protection without leaving a residue

Length: 33m
Diameter: 75mm
Thickness: 0.06mm (2.3mil)
Temperature: 260°C maximum



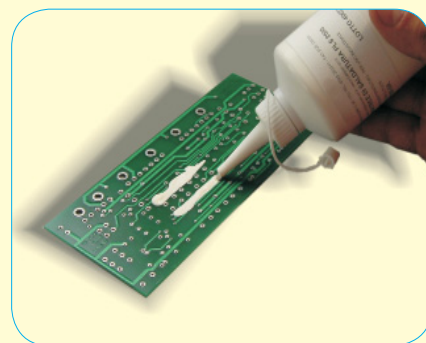
- 7807.185** HIGH TEMP. TAPE 6mm x 33m
- 7807.186** HIGH TEMP. TAPE 9mm x 33m
- 7807.187** HIGH TEMP. TAPE 12mm x 33m
- 7807.189** HIGH TEMP. TAPE 19mm x 33m
- 7807.190** HIGH TEMP. TAPE 25mm x 33m
- 7807.191** HIGH TEMP. TAPE 40mm x 33m
- 7807.192** HIGH TEMP. TAPE ESD 6mm x 33m
- 7807.193** HIGH TEMP. TAPE ESD 9mm x 33m
- 7807.194** HIGH TEMP. TAPE ESD 12mm x 33m
- 7807.196** HIGH TEMP. TAPE ESD 19mm x 33m

SOLDER MASKING PASTE

It is a good quality latex compound, ESD safe, designed to protect parts of the PC boards during the soldering production processes. Once cured, the paste will not lift or separate during soldering, it is exceptionally cohesive, generally peeling off in one piece. It is also suitable for use as a conformal coating.

Mask can be applied using robotic, pneumatic, hand applicators, brush and template screening.

Curing at normal temperature: 40 to 60 min
Curing at 60°C: 15 to 25 min
Colour: white
Smell: light ammonia
Resistance R_s & R_v : $<10^{10} \Omega$
Shelf life at 22°C: 6 months



- 7805.915** Solder masking paste - 250g squeeze bottle
- 7805.918** Solder masking paste - 5kg in plastic

SOLVENT CLEANING



Safe and effective cleaning of electronic and electrical components, screens and stencils, specially designed to remove most flux residues including "no-cleans" after touch-up and rework applications. Safe to use on most plastics and rubber, this solvent dries extremely quickly and leave no residues.

Cleaning: by immersion or with brush
Composition: hydrocarbon solvent blend, aliphatic alcohol and methylal.
Flash point: -21°C (highly flammable)

- 7805.929** Electronic cleaning solvent - 1litre can
- 7805.930** Electronic cleaning solvent - 5litre can



BRUSHES

Conventional brushes can generate high charges in use, they are therefore unsuitable for cleaning ESD sensitive assemblies. Nonetheless it is necessary to remove solder flux and other dirt particularly in SMD assembly where there are high densities of components.

A range of conductive brushes allows thorough cleaning without the risk of generating static charges. The brush consists of a conductive plastic handle and conductive fibres. Resistance from the tip of the brush to the handle is less than $1 \times 10^8 \Omega$.

Brushes should be used by operators who are earthed. Hard brushes are for scrubbing whilst soft ones are for brushing of delicate items such as optics and diskettes.

- 7807.296** Hard brush 20x70mm (open nail type)
- 7807.298** Hard block 40x150mm (closed nail type)
- 7807.301** Hard brush 9x32mm
- 7807.302** Flat hard brush 12mm
- 7807.304** Flat hard brush 25mm
- 7807.306** Round hard brush 3mm dia.
- 7807.308** Flat soft brush 100mm
- 7807.310** Flat soft brush with handle 130mm

STICKY MAT FOR CLEAN ROOMS

Numbered Multilayer Dissipative Sticky Mats, for progressive removal when dirty.

The special adhesiveness ensures collecting of dust and particles of shoe soles and cartwheels by passing over the mat.

It should be placed where cleanness is required.

7807.350 Multilayer Dissipative Sticky Mat with 30 layers
Dimensions: 660x1140mm



SILICON STICKY ROLLER FOR CONTAMINATION REMOVING

The silicon sticky roller is an hand-held device for cleaning films, panels, work surfaces, walls, glass, and it is useful in cleanroom environments too. It will pick up particles from any flat surface without damaging the surface or leaving anything behind. Once the roller has been applied to the surface it is rolled over a special adhesive pad that removes the debris, leaving the roller ready for the next application.

7913.151 Single cleaning roller dim.: 150mm, with small handle
7913.154 Single cleaning roller dim.: 300mm, with small handle
7913.158 Spare cleaning roller dim.: 150mm. no handle
7913.160 Spare cleaning roller dim.: 300mm. no handle
7913.170 DCR-PAD Block of 50 adhesive paper sheets
dim.: 240x333mm, 5 blocks per pad



SELF-ADHESIVE POLYESTER FILM

Transparent static dissipative, self adhesive Polyester film. It includes a special abrasion resistant coating on one side and a release film on the other side. It can be applied on flat, insulative surfaces.

Point to point resistance: $10^9\Omega$

Dissipative Polyester film: 100 μm thickness

Dissipative acrylic adhesive: 12 μm thickness

Release Not ESD film: 23 μm thickness

7809.042 Self-adhesive polyester film 1000mm x 100m roll
Custom size on request



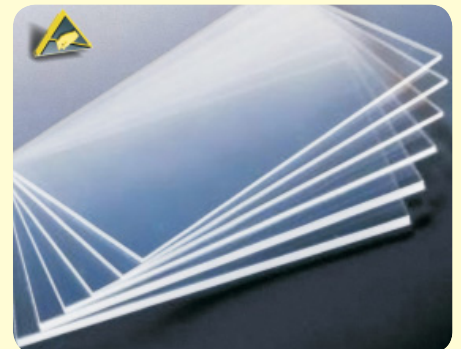
ESD ACRYLIC PANELS

This clear acrylic sheets are surface coated with an extremely thin and highly abrasion resistant dissipative film which keeps the transparency and the working properties of acrylic sheets unvaried. Equipped with a protection film on both sides to avoid damages during transportation and storage.



Protection hoods

7809.010 ACRYLIC PANEL - Transparent, Dissipative, 1m x 2m x 3mm
7809.012 ACRYLIC PANEL - Transparent, Dissipative, 1m x 2m x 5mm
7809.014 ACRYLIC PANEL - Transparent, Dissipative, 1m x 2m x 6mm
7809.016 ACRYLIC PANEL - Transparent, Dissipative, 1m x 2m x 8mm
7809.018 ACRYLIC PANEL - Transparent, Dissipative, 1m x 2m x 10mm
7809.022 ACRYLIC PANEL - Transparent, Dissipative, 1.2m x 2.4m x 20mm



Material: Acrylic
Permanent dissipative coating
Hardcoated surface,
resistant to friction damage
Transparent - Machineable
Rs: 10^8 a $10^{10}\Omega$

HAND ESD VACUUM CLEANER

All parts of the fully ESD safe vacuum cleaner are made out of conductive material. It is compact, light and equipped with a carrying belt for easy handling.

It's Fully EPA compliant to IEC61340-5-1 and equipped with thermal cut-out & RFI/EMC filter.

Model **7913.051** is a "BlowVac" = Blower and vacuum cleaner in one.

Dimensions: 31.5 x 12 x 18.5cm

Weight: 2.2kg

Flexible pipe: 1,3m

Power cord length: 6m

Power supply: 220V – 1300W

Dust capacity: 1.2 liter



7913.050
WITH STANDARD ACCESSORIES



7913.060



7913.062



7913.066

- 7913.050** ESD vacuum cleaner
- 7913.051** ESD vacuum cleaner with electronic speed control
- 7913.060** Set of 10 special filterbags
- 7913.062** Micromotorfilter HEPA combined with Electrostatic charged filtermedia.
- 7913.066** Flexible rubber nozzle, 34cm with removable brush

WASTE PAPER BIN

Waste paper bin made of conductive polypropylene. Rs $10^6 \Omega$

- 7804.406** Waste paper bin, volume 17 litre, ext. dia. 300x330(H)mm
- 7804.405** Waste paper bin, volume 60 litre, ext. 360x360x500(H)mm
- 7804.405C** Cover for waste paper bin 7804.405
- 7804.404** Waste paper bin, volume 120 litre, ext. 400x400x780(H)mm

ANTISTATIC WASTE BAGS (PACKAGE OF 100PCS)

Made of antistatic polyethylene, 40mm thickness. Rs: $10^{11} \Omega$.

Green colour, printed with black ESD logo

- 7804.408** 30 litre bag (package of 100pcs), to fit **7804.406** bin
- 7804.409** 90 litre bag (package of 100pcs), to fit **7804.405** bin
- 7804.410A** 120 litre bag (package of 100pcs), to fit **7804.404**



RING BINDER AND WALLETS

Static safe Ring Binders and Document Holders made from permanently antistatic materials, an excellent means of storing documents, specifications and drawings in any static sensitive environment. Rs: $10^{11} \Omega$ (**7804.400**)

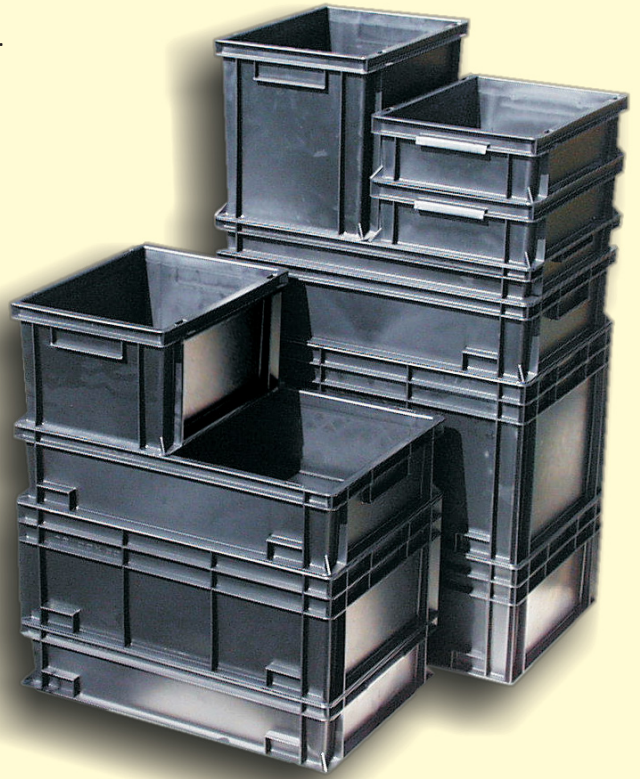
- 7804.413** A4 ESD Opaque Document Pocket with holes (100 pack)
- 7804.414** A4 ESD Crystal Document Pocket with holes (100 pack)
- 7804.423** A3 ESD Document Pocket with holes, portrait (100 pack)
- 7804.400** A4 dissipative Ring Binder - 4 ring 35mm dia., blue



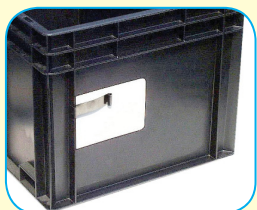
NEWBOX TOTE-BOX

Conductive polypropylene Tote-Boxes, stackable, in EURO format.
R_{sup} < 10⁶ Ω.

| CODE | MODEL | EXT.mm | INT.mm | Vol.It |
|----------|------------|-------------|-------------|--------|
| 7804.705 | NEWBOX 5 | 300x200x120 | 260x160x117 | 5 |
| 7804.706 | NEWBOX 6 | 300x200x147 | 260x160x144 | 6 |
| 7804.709 | NEWBOX 9 | 300x200x220 | 260x160x217 | 9 |
| 7804.690 | NEWBOX 10 | 400x300x120 | 353x260x115 | 10 |
| 7804.687 | NEWBOX 14 | 400x300x170 | 353x260x165 | 15 |
| 7804.688 | NEWBOX 20 | 400x300x220 | 353x260x215 | 20 |
| 7804.704 | NEWBOX 25 | 400x300x270 | 353x260x265 | 25 |
| 7804.689 | NEWBOX 31 | 400x300x320 | 353x260x317 | 30 |
| 7804.692 | NEWBOX 15 | 600x400x075 | 553x353x070 | 14 |
| 7804.694 | NEWBOX 24 | 600x400x120 | 553x353x115 | 23 |
| 7804.693 | NEWBOX 33 | 600x400x150 | 553x353x145 | 29 |
| 7804.698 | NEWBOX 34 | 600x400x170 | 553x353x165 | 33 |
| 7804.699 | NEWBOX 42 | 600x400x220 | 553x353x215 | 42 |
| 7804.696 | NEWBOX 50 | 600x400x236 | 553x353x231 | 45 |
| 7804.695 | NEWBOX 55 | 600x400x280 | 553x353x275 | 54 |
| 7804.697 | NEWBOX 70 | 600x400x336 | 553x353x332 | 65 |
| 7804.685 | NEWBOX 80 | 600x400x420 | 553x353x415 | 80 |
| 7804.713 | NEWBOX 130 | 800x600x320 | 756x556x297 | 130 |



ROLLBOX



7804.923 Label holder



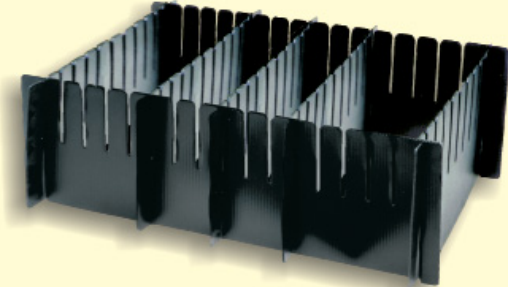
7804.931 Any personalized Logo or specific writings can be applied over the boxes, all colours available. A plastic transparent film is thermally impressed over the box side. The result is excellent, long life, at a low cost.

- 7804.703** 300 x 200 Conductive Cover
- 7804.691** 400 x 300 Conductive Cover
- 7804.700** 600 x 400 Conductive Cover
- 7804.686** Snapping Closure (2 /each cover)
- 7804.701** Rollbox - 600x400 Conductive Trolley
- 7804.702** Rollbox (2 wheels with brake)- 600x400 Conductive Trolley

- 7804.923** Spring label holder
- 7804.931** Logo application
- 7806.300** 10mm Conductive Foam FLAT DIVIDER for 600x400 Newbox
- 7806.306** 10mm Conductive Foam FLAT DIVIDER for 300x400 Newbox
- 7806.200** FLAT DIVIDER - Conductive fibreboard 350X550X5mm for 600x400 Newbox
- 7806.202** FLAT DIVIDER - Conductive fibreboard 350X250X5mm for 300x400 Newbox
- 7806.201** FLAT DIVIDER - Conductive fluted polypropylene LABEPLAST 350x550x2.5mm for 600x400 Newbox
- 7806.203** FLAT DIVIDER - Conductive fluted polypropylene LABEPLAST 350x250x2.5mm for 300x400 Newbox

DIVIPRINT - LABEPLAST DIVIDERS

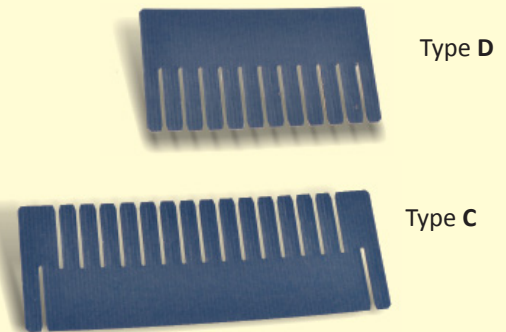
Made from LABEPLAST(extruded conductive polypropylene) sheet, the dividers can be used within CARTONBOX or NEWBOX containers. Other sizes can be made to customer specifications. Our cutting machine cnc knife allows to obtain precise profiles by importing the drawings in cad format (see page 44).



| | | | | | |
|-----------------|-------------------|------------|------------|-------------|----------|
| 7806.180 | LABEPLAST Divider | 555 length | 100 height | 31 pitch , | 17 slits |
| 7806.181 | LABEPLAST Divider | 350 length | 100 height | 30 pitch , | 11 slits |
| 7806.182 | LABEPLAST Divider | 552 length | 155 height | 40 pitch , | 13 slits |
| 7806.183 | LABEPLAST Divider | 350 length | 155 height | 153 pitch , | 3 slits |
| 7806.184 | LABEPLAST Divider | 552 length | 182 height | 104 pitch , | 6 slits |
| 7806.185 | LABEPLAST Divider | 350 length | 182 height | 30 pitch , | 11 slits |
| 7806.186 | LABEPLAST Divider | 552 length | 200 height | 31 pitch , | 17 slits |
| 7806.187 | LABEPLAST Divider | 350 length | 200 height | 30 pitch , | 11 slits |
| 7806.188 | LABEPLAST Divider | 250 length | 200 height | 32 pitch , | 7 slits |
| 7806.192 | LABEPLAST Divider | 552 length | 300 height | 31 pitch , | 17 slits |
| 7806.193 | LABEPLAST Divider | 350 length | 300 height | 30 pitch , | 11 slits |

DIVIPRINT - IN CONDUCTIVE CORRUGATED BOARD

| | | | | | |
|-----------------|----------------|------------|------------|-----------|----------|
| 7806.211 | Type C DIVIDER | length 555 | height 100 | pitch 19, | 28 slots |
| 7806.215 | Type D DIVIDER | length 350 | height 100 | pitch 19, | 17 slots |
| 7806.217 | Type C DIVIDER | length 552 | height 200 | pitch 31, | 17 slots |
| 7806.216 | Type D DIVIDER | length 350 | height 200 | pitch 30, | 11 slots |
| 7806.219 | Type C DIVIDER | length 552 | height 300 | pitch 31, | 17 slots |
| 7806.218 | Type D DIVIDER | length 350 | height 300 | pitch 30, | 11 slots |



DIVIPRINT - PLASTIC DIVIDERS

Economical and versatile way to compartmentalise tote-boxes of various dimensions. Ideal for board transport and storage. Made from conductive polystyrene, DIVIPRINT dividers have one division every 15mm, are easy to cut and modify using ordinary scissors.

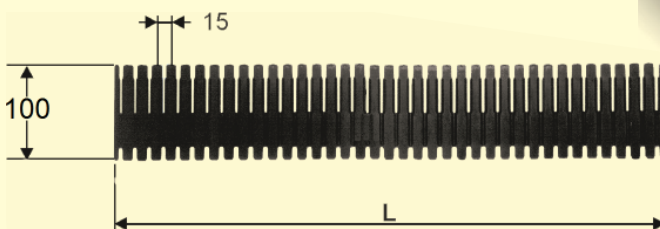
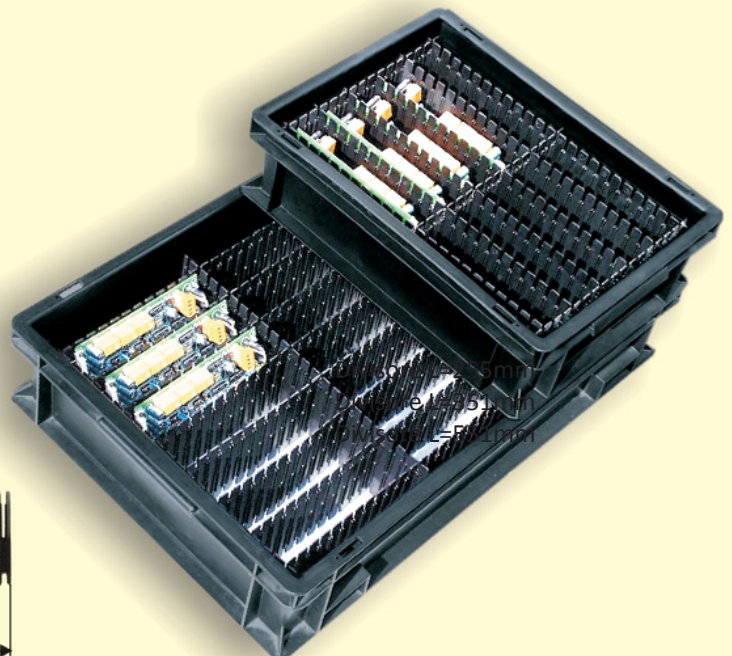
Material: black conductive polypropylene

Rs: $<10^5 \Omega$

Temperature range: from 0 to +55 °C

Slit pitch: 15mm

| | |
|-----------------|--------------------------|
| 7806.412 | Diviprint L=255mm length |
| 7806.410 | Diviprint L=351mm length |
| 7806.400 | Diviprint L=551mm length |



LABERACK - PCBS HANDLING



LABERACK is an adjustable frames that provides a secure method for storage and handling of mounted PCBs or LABEFIX trays.
 Material: Static dissipative polypropylene, $R_s 10^6, 10^8 \Omega$
 Sidewall dimensions: 480 x 290 x 35 mm.
 Intermediate wall dimensions: 470 x 280 x 40 mm.
 Connecting rail: section: 30 x 15 mm.
 Number of storage channels: 79
 Distance between channel centres: 5 mm.
 Maximum PCB thickness: 2.3 mm max.
 Channel depth: 4 mm.
 Stainless-steel stiffening rib.
 Bolts and screws included with sidewalls and intermediate walls.
 To give the exact length of connecting rail add to the board width 20 mm. for each sidewall and 6 mm for intermediate wall

- 7804.007** Sidewall in black dissipative polypropylene +70°C
- 7804.017** Intermediate wall in black dissipative polypropylene +70°C
- 7804.002** Aluminium connecting rail (length cut to max 3m)
- 7804.021** Handle for transport (rail fixing)
- 7804.025** Bag of 40 spare screw and bolts
- 7804.040** Clips for sidewall (with labels)
(package of 100)
- 7804.041** Clips for intermediate wall (with labels)
(package of 100)

MINILABERACK

Safe storage and transport system for PCBs from assembly through testing. Easy snap-together modular system to increase storage capacity. The racks are made from black static dissipative polypropylene

Material: Static dissipative polypropylene, $R_s 10^5, 10^8 \Omega$

Distance between channel centres: 6mm

Maximum PCB thickness: 3.8mm

Channel depth: 3mm

Number of storage channels: 44

Side wall: dimensions: 300 x 170 x 21 mm

Connecting rail: section 37 x 9 mm

Connecting rails cut to length (max. 3m)

To give the exact length of connecting rail add to the board width 18mm for each sidewall

- 7804.052** Sidewall black dissipative
- 7804.060** Aluminium connecting rail
- 7804.072** Flat slide black conductive
- 7804.075** Bag of 40 spare nuts and bolts

DEPOPRINT

Made from black conductive polystyrene, the DEPOPRINT system accommodates various board dimensions throughout storage, production and despatch. Fits plastic containers type Newbox or other 300x400 and 600x400mm standard Euro boxes. Two different sidewall sizes that slide along two parallel aluminium connecting rails 95mm high (length cut to max 3m).

Material: black conductive polystyrene

$R_s < 10^5 \Omega$

Temperature range: from 0 to +55 °C

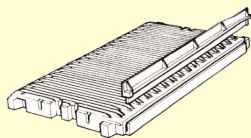
Number of slots: 32

Distance between slot centres: 10mm

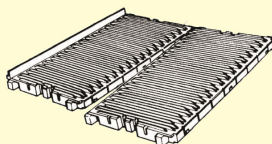
Maximum thickness of the board: 2.3mm

Depth of the slots: 2.3mm

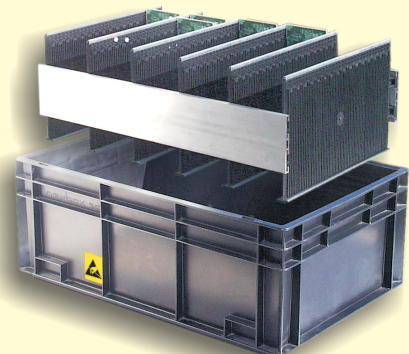
- 7804.751** DEPOPRINT Sidewall 209mm (H)
- 7804.760** Aluminium Connecting Rail 95x553mm
- 7804.762** Aluminium Connecting Rail 95x250mm
- 7804.765** Aluminium Connecting Rail 95mm (H)
- 7804.759** Insertion Stop



Snap-on insertion of back-stop



Snap-on insertion for sidewall



LABESERT 10

Made in conductive polypropylene, LABESERT racks are suitable for automatic PCB insertion machines. Channel pitch: 10mm
Walls and terminal plates made by conductive plastic (60°C)
PCB adjustment: from 40 to 260mm
Side Guide Slot: depth 3.5mm - width 7mm



7804.110

7804.110 LABESERT 10 Rack dim. 315x355x575(H)mm
7804.110R LABESERT 10R Rack dim. 315x355x575(H)mm
(with two lateral stiffening metal plate)

LABEFIX - PCB ASSEMBLY

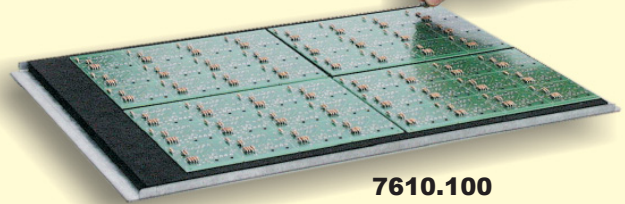
LABEFIX trays are used for component insertion before wave soldering of the PCBs. A special foam gently holds the leads until the PCB is removed for wave soldering. The foam doesn't crumble, or pollute and has a very long life.

Material: zinc plated material base - conductive polyethylene closed cell (cross linked foam density ISO 845 60Kg/m³ thickness 7mm)

Weight: 1Kg

Standard tray 530x330x8mm with foam
(other dimensions on request)

Only foam 500x327x7mm

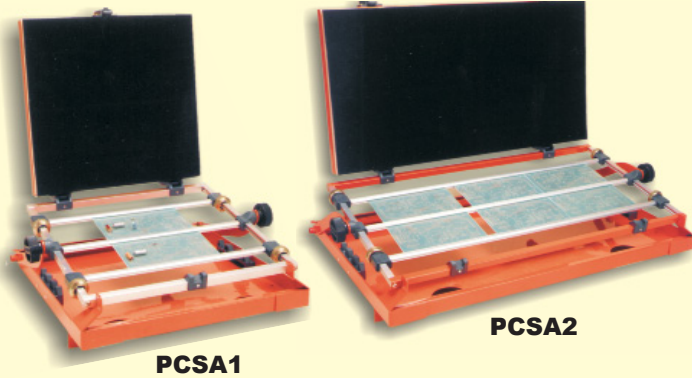


7610.100

7610.100 Standard tray 530x330x8mm with foam
(other dimensions on request)

7610.110D Only foam 500x327x7mm

PCB ASSEMBLY FIXTURES



PCSA1

PCSA2

7915.599 PCSA1 PCB's holder, max. working dimensions 270 x 220mm
7915.601 PCSA2 PCB's holder, max. working dimensions 500 x 220mm
7915.605 PCSA4 PCB's holder, max. working dimensions 500 x 350mm
7915.610 Additional sliding rail for PCSA1
7915.612 Additional sliding rail for PCSA2 and PCSA4

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. After mounting the components on the PCB's , the foam back lid is attached and closed, and the whole assembly is lifted and rotated for soldering.

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.

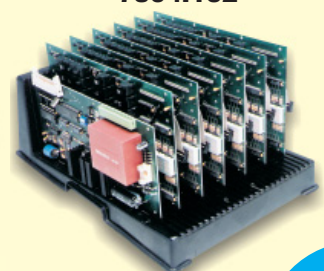
LABETRAY - PCB HOLDERS

Made from black conductive polypropylene, LABETRAY have multiple uses in the static free environment, as holding the PCBs during assembly, testing and rework.

7804.130 Conductive L-shaped LABETRAY dimensions: 208x272x93mm
7804.132 Conductive L-shaped LABETRAY dimensions: 355x268x128mm
7804.134 Conductive flat LABETRAY - 25 slots dimensions: 490x180x50mm



7804.134



7804.132

SMD SPOOL RACKS



ITECO RACK FOR SPOOLS

7805.704

7805.703

7805.703 ITECO rack for spools dia. 180-330mm external dimensions 395 x 250 x 110(H)mm Movable wire dividers (10 pcs included, 20 pcs capacity) moulded in conductive polypropylene black colour

7805.704 Movable wire divider for **7805.703**

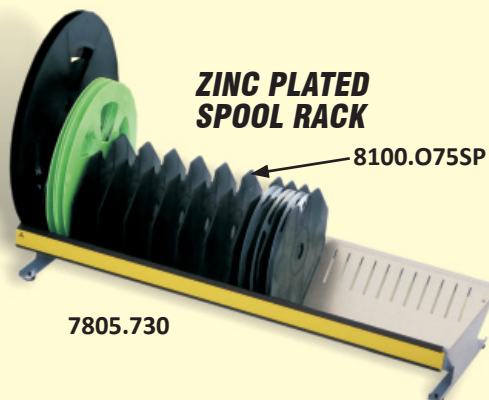


LICEFA RACK FOR SPOOLS

7805.692

7805.692 LICEFA rack for 25 spools max.dia. 220mm external dimensions 450 x 240mm 25 slots with adjustable width ESD vacuum formed, black colour

7805.696 LICEFA rack for 25 spools max.dia. 330mm external dimensions 450 x 310mm 25 slots with adjustable width ESD vacuum formed, black colour



ZINC PLATED SPOOL RACK

8100.075SP

7805.730

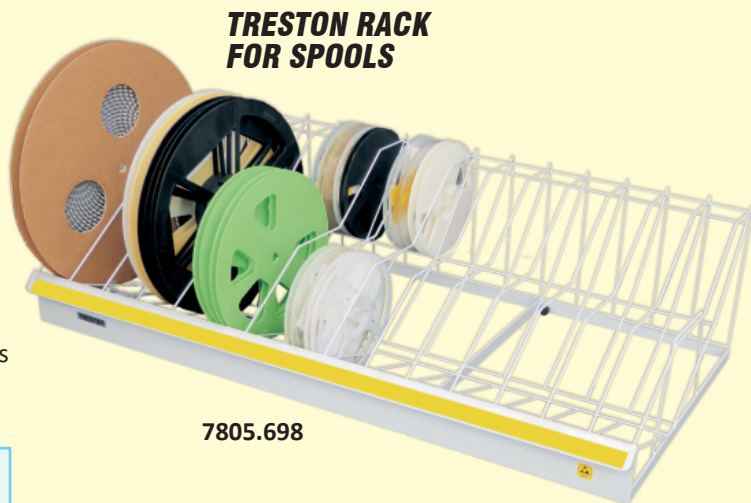
Zinc plated spool rack, with movable dividers, to lay over tables or inside lockers.

It can house reels from 180 to 380mm diameter.

7805.730 Zinc plated spool rack, 180-330mm reels, 29 slots, length 630mm

7805.732 Zinc plated spool rack, 180-330mm reels, 49 slots, length 1000mm

8100.075P Movable plastic divider for 7805.730 - 7805.732



TRESTON RACK FOR SPOOLS

7805.698

7805.698 TRESTON rack for spools \varnothing 180 / 220 / 330 / 380mm Dim. 960x426x254(H)mm 15 wire compartments of 60mm width

F.I.F.O. Made in LABEPLAST the F.I.F.O.(First-In First-Out) boxes are useful to administrate the smd spools, loading in the higher slot and picking up from the lower.

7805.711 FIFO box for 180mm dia. spools, useful height 160mm

7805.710 FIFO box for 180mm dia. spools, useful height 280mm

7805.712 FIFO box for 330mm dia. spools, useful height 280mm

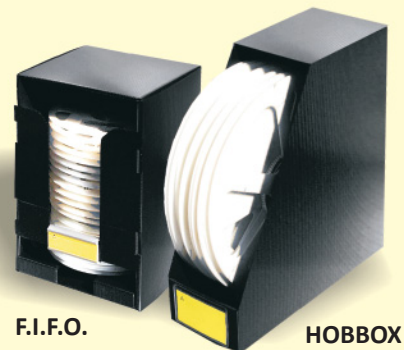
HOBBOX

The hopper-front conductive boxes, made from LABEPLAST (conductive fluted polypropylene), for a quick and easy removal of the spools, are useful to save space on shelving units. All the models are supplied in flat-pack form for assembly on-site, one label holder in the front side is provided.

7805.724 HOBBOX - Hopper front box made from LABEPLAST for 180mm dia. SMD spools, useful width 128mm

7805.725 HOBBOX - Hopper front box made from LABEPLAST for 220mm dia. SMD spools, useful width 128mm

7805.728 HOBBOX - Hopper front box made from LABEPLAST For 330mm dia. SMD spools, useful width 128mm



F.I.F.O.

HOBBOX

CONDUCTIVE BOXES

Made of black conductive polypropylene, $R_s < 10^6 \Omega$.

| | |
|----------|---|
| 7804.460 | BJ removable lid, 1 hard foam, ins. 34x34x12mm |
| 7804.462 | BJ removable lid, 1 hard foam, ins. 25x54x14mm |
| 7804.464 | BJ removable lid, 1 hard foam, ins. 44x56x14mm |
| 7804.466 | BJ removable lid, 1 hard foam, ins. 32x118x14mm |
| 7804.468 | BJ removable lid, 1 hard foam, ins. 44x118x14mm |
| 7804.470 | BJ removable lid, 1 hard foam, ins. 67x117x14mm |
| 7804.471 | BJ hinged lid, 1hard foam, ins. 34x34x10mm |
| 7804.472 | BJ hinged lid, 1hard foam, ins. 73x51x16mm |
| 7804.474 | BJ hinged lid, 1hard foam, ins. 88x63x16mm |
| 7804.476 | BJ hinged lid, 1hard foam, ins. 108x81x16mm |
| 7804.478 | BJ hinged lid, 1hard foam, ins. 228x125x20mm |
| 7804.480 | BJ hinged lid, 1hard foam, ins. 228x125x30mm |
| 7804.482 | BJ hinged lid, 1hard foam, ins. 228x125x39mm |
| 7805.502 | Removable lid, without foam ins. 50x30x16mm |
| 7805.504 | Removable lid, without foam ins. 57x36x17mm |
| 7805.508 | Removable lid, without foam ins. 80x50x27mm |
| 7804.492 | MOS1 hinged lid, 1 hard foam, ins. 50x90x16mm |
| 7804.496 | MOS2 hinged lid, 1 hard foam, ins. 95x160x16mm |
| 7805.500 | Round with cover ins.diam. 27x13mm, black ESD |
| 7805.499 | Round with cover ins.diam. 27x13mm, transparent ESD |



7805.500

7805.499



7805.502



7804.492

7804.496

CONDUCTIVE BOXES (with hinges and metal fasteners)



7805.522 int.288x156x16mm



7805.523 int.288x156x38mm



7805.525 with 54 compartments
each 28x27x15mm

CASES

A complete range of briefcases made from conductive polypropylene. $R_s < 10^6 \Omega$



| | |
|----------|--|
| 8500.200 | internal dimensions 170x130x37mm |
| 8500.210 | internal dimensions 240x170x42mm |
| 8500.220 | internal dimensions 270x185x76mm |
| 8500.240 | internal dimensions 375x265x80mm |
| 8500.201 | with conductive profiled foam int. 170x130x20(about)mm |
| 8500.211 | with conductive profiled foam int. 240x170x25(about)mm |
| 8500.221 | with conductive profiled foam int. 270x185x50(about)mm |
| 8500.241 | with conductive profiled foam int. 375x265x60(about)mm |

CAROUSEL SYSTEM

The basic CAROUSEL system consists of four rotating trays stacked on the top of each other and secured to a stable metal base by a central column. The whole unit can be tilted through 20°. They can be supplied with diameter 450 or 600mm and are available in black dissipative material (Rsup 10⁶-10⁹Ω), or orange non antistatic version. Two different sizes are available: 450mm and 600mm



- 7804.615** Carousel system, 4 trays 450mm dia. Black-ESD
- 7804.620** Carousel system, 4 trays 600mm dia. Black-ESD
- 7804.616** Carousel system, 4 trays 450mm dia. Orange-non ESD
- 7804.621** Carousel system, 4 trays 600mm dia. Orange-non ESD

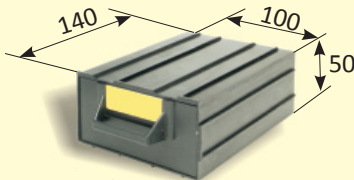
Standards models have 4 trays, but it is easy to assembly carousels with different heights by means of single trays and of the assembly kit. It is possible to mix different diameter trays on the same kit, because the central hanging part is the same

CAB - CABINETS

These cabinets provide systematic storage of small parts of components which are ESD sensitive. Four different bins are combined into one slot-in unit, to make possible various configurations. External dimension of the unit is 50x100x140mm.



CAB 3



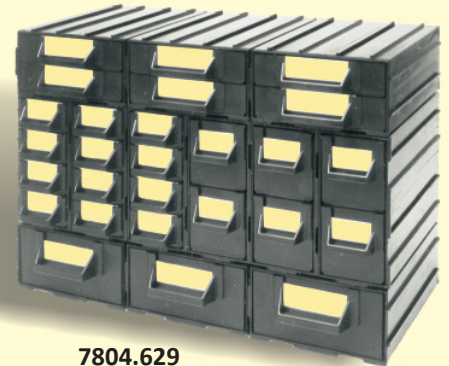
CAB 4



CAB 2



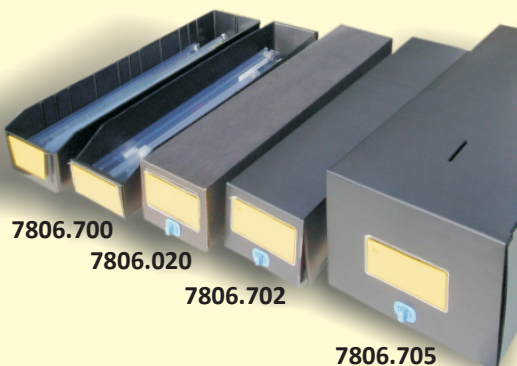
CAB 1



7804.629

- 7804.625** CAB1 with 4 bins (4 x int.40x20x120mm) Combinable with CAB2
- 7804.626** CAB2 with 2 bins (2 x int.40x42x120mm) Combinable with CAB1
- 7804.627** CAB3 with 2 bins (2 x int.87x20x120mm) Combinable with CAB4
- 7804.628** CAB4 with 1 bin (1 x int.87x42x120mm) Combinable with CAB3
- 7804.629** Complete cabinet with 27 bins (see picture) (12 CAB1 + 6 CAB2 + 6 CAB3 + 3 CAB4)

DIP TUBES BIN BOXES



7806.700

7806.020

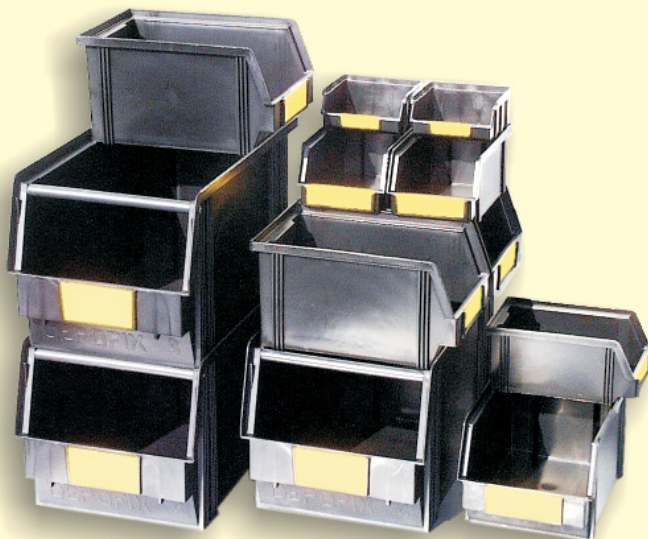
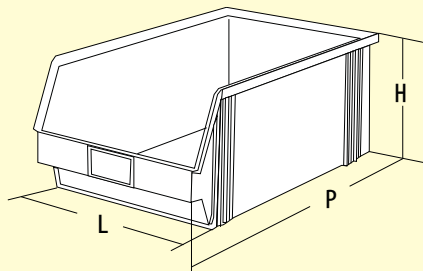
7806.702

7806.705

- 7806.700** Open stick-container made from LABEPLAST, supplied in flat-pack form ext. 620x112x90(H)mm int. 600x106x87(H)mm
- 7806.702** Closed stick-container made from LABEPLAST, supplied in flat-pack form ext. 630x125x100(H)mm int. 620x120x95(H)mm
- 7806.705** Closed stick-container with divider, made from LABEPLAST, supplied in flat-pack form, ext. 630x230x170(H)mm
- 7806.020** Closed stick-container made from conductive fibre board, supplied in flat-pack form, for assembly on-site ext. 630x120x100(H)mm int. 620x110x88(H)mm

TECOFIX - STACKING BINS

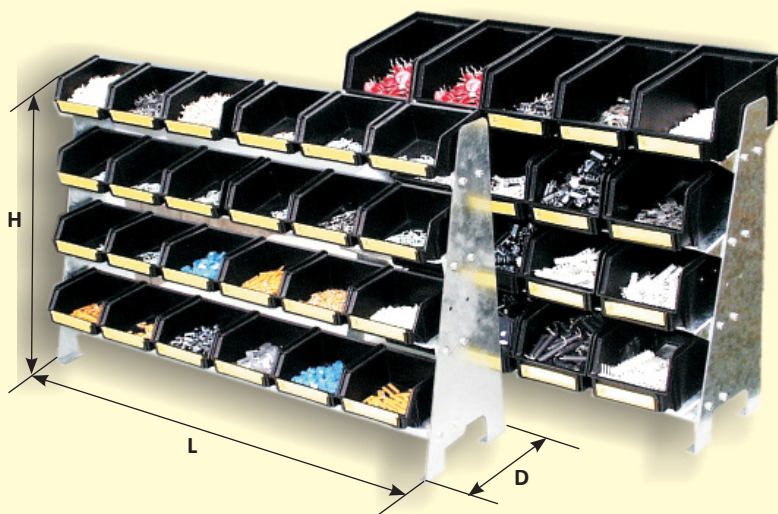
Conductive polypropylene hopper-front containers for storage and distribution of small parts. They are suitable for all known wall rail and for our VISTAFIX assembly stand.



| | | |
|-----------------|--------------------------------|---|
| 7804.715 | Container TECOFIX 6 | Dim.: 95(P)x100(L)x50(H)mm ext. |
| 7804.717 | Container TECOFIX 6D | Dim.: 95x100x50(H)mm ext. with internal partition |
| 7804.719 | Container TECOFIX 5 | Dim.: 175x100x75(H)mm ext. |
| 7804.721 | Container TECOFIX 4 | Dim.: 235x145x125(H)mm ext. |
| 7804.723 | Container TECOFIX 3Z | Dim.: 350x200x145(H)mm ext. |
| 7804.725 | Container TECOFIX 3 | Dim.: 350x200x200(H)mm ext. |
| 7804.727 | Container TECOFIX 2 | Dim.: 500x300x200(H)mm ext. |
| 7804.728 | Yellow label for TECOFIX 6, 6D | Dim.: 79.5 x 15mm |
| 7804.731 | Yellow label for TECOFIX 5 | Dim.: 79 x 22mm |
| 7804.729 | Yellow label for TECOFIX 4,3Z | Dim.: 80 x 31mm |
| 7804.730 | Yellow label for TECOFIX 3, 2 | Dim.: 81 x 40mm |

VISTAFIX - ASSEMBLY STAND

VISTAFIX zinc plated assembly stands are supplied complete of conductive TECOFIX bins. They are especially suited for PCBs assembly and take a little space on the work table.

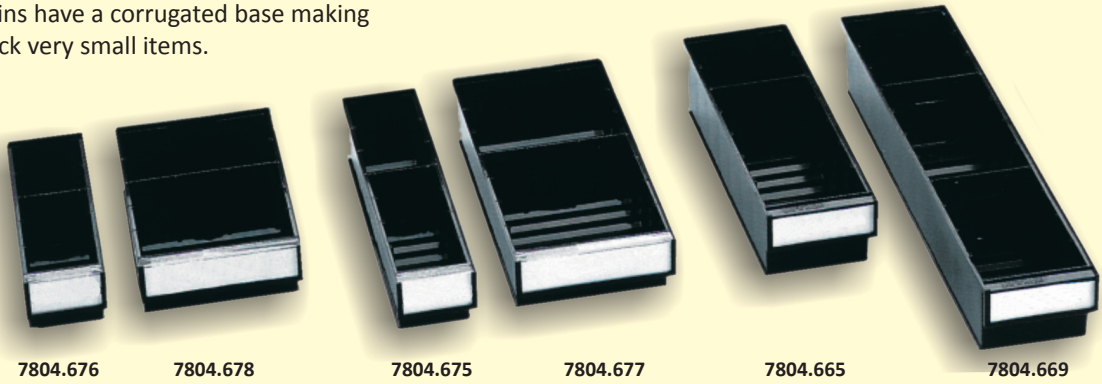


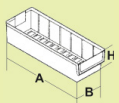

| | | | |
|-----------------|-----------------------|-----------------|---------------------------------------|
| 7804.735 | Assembly VISTAFIX 4 | 12 bins size 4 | Dim.: L = 630mm, D = 260mm, H = 490mm |
| 7804.737 | Assembly VISTAFIX 5 | 20 bins size 5 | Dim.: L = 540mm, D = 230mm, H = 430mm |
| 7804.738 | Assembly VISTAFIX 5/L | 24 bins size 5 | Dim.: L = 650mm, D = 230mm, H = 430mm |
| 7804.739 | Assembly VISTAFIX 6 | 20 bins size 6 | Dim.: L = 540mm, D = 160mm, H = 400mm |
| 7804.740 | Assembly VISTAFIX 6/L | 24 bins size 6 | Dim.: L = 650mm, D = 160mm, H = 400mm |
| 7804.741 | Assembly VISTAFIX 6D | 20 bins size 6D | Dim.: L = 540mm, D = 160mm, H = 400mm |

TRESTON BINS

TRESTON bins made from conductive polypropylene fit all standard shelves with a depth 300,400, 500 and 600mm, some models are also used in the visible storage cabinets.

The storage bins have a corrugated base making it easier to pick very small items.



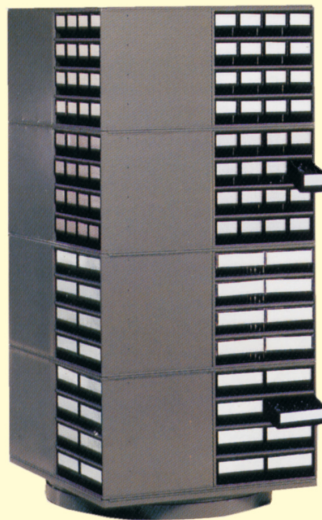
| Bin | | Bottom | Outer dim. mmA x B x H | Inner dim. mmA x B x H | Dividers (optional) | | |
|----------|------|---|---------------------------|---------------------------|---------------------|------|------------------|
| Code | Type | | | | Code | Type | Quantity per bin |
| 7804.676 | 3010 | Corrugated  | 300x92x82 | 257x75x70 | 7804.682 | D-10 | 4 |
| 7804.678 | 3020 | | 300x186x82 | 257x167x70 | 7804.684 | D-20 | 4 |
| 7804.675 | 4010 | | 400x92x82 | 357x75x70 | 7804.682 | D-10 | 6 |
| 7804.677 | 4020 | | 400x186x82 | 357x167x70 | 7804.684 | D-20 | 6 |
| 7804.665 | 4015 | | 400x132x100 | 357x110x90 | 7804.683 | D-15 | 6 |
| 7804.666 | 5010 | | 500x92x82 | 457x75x70 | 7804.682 | D-10 | 8 |
| 7804.668 | 5020 | | 500x186x82 | 457x167x70 | 7804.684 | D-20 | 8 |
| 7804.667 | 5015 | | 500x132x100 | 457x110x90 | 7804.683 | D-15 | 8 |
| 7804.671 | 6020 | | 600x186x82 | 557x167x70 | 7804.684 | D-20 | 10 |
| 7804.669 | 6015 | | 600x132x100 | 557x110x90 | 7804.683 | D-15 | 10 |
| 7804.660 | L61 | Smooth  | 170x68x36 | 150x65x34 | 7804.662 | V-1 | 5 |
| 7804.661 | L64 | | 170x90x59 | 150x86x55 | 7804.664 | V-4 | 3 |

TRESTON STORAGE CARTS AND TURNTABLE ASSEMBLIES

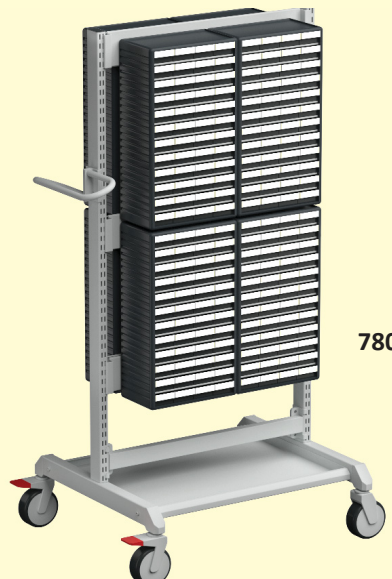
Turntables and carts are supplied empty, the cabinets are ordered separately. Steel parts are of semiconductive epoxy powder coated steel in light gray colour.



7804.648



7804.649



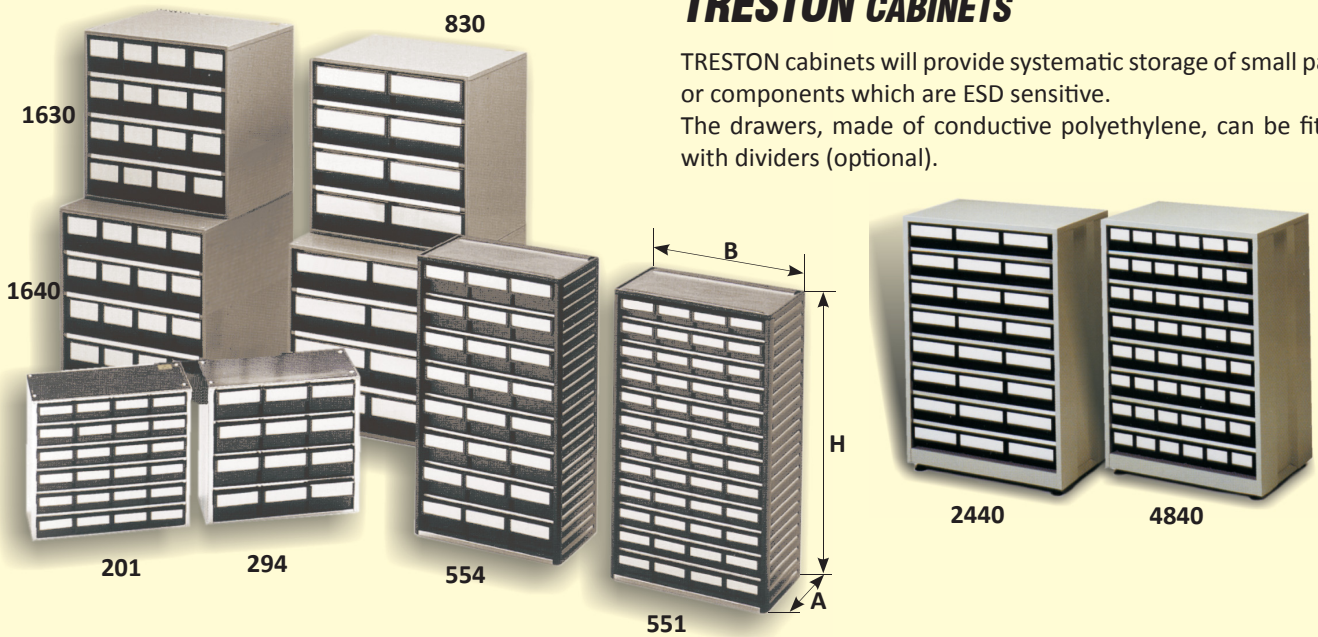
7804.651

| | | |
|-------------------|---|---|
| 7804.648 (12-550) | Turntable 3 layers holds 12 cabinets 551/554. | Dim.500x500x1730(H)mm. Load capacity max. 400kg |
| 7804.649 (16-300) | Turntable 4 layers holds 16 cabinets 0830/1630. | Dim.700x700x1680(H)mm. Load capacity max. 800kg |
| 7804.650 (16-400) | Turntable 4 layers holds 16 cabinets 0840/1640. | Dim.800x800x1680(H)mm. Load capacity max. 800kg |
| 7804.651 (BT-550) | Double stand trolley holds 8 cabinets 551/554. | Dim.600x760x1700(H)mm. Load capacity max. 150kg |

TRESTON CABINETS

TRESTON cabinets will provide systematic storage of small parts or components which are ESD sensitive.

The drawers, made of conductive polyethylene, can be fitted with dividers (optional).



| Code | Type | Frame | Outer dim. A x B x Hmm | Conductive polypropylene bins | Dividers (optional) | |
|----------|------|----------------------------------|---------------------------|-------------------------------------|---------------------|------|
| | | | | | Code | Type |
| 7804.636 | 291 | Moulded conductive polypropylene | 180x300x280 | 24 x L61 | 7804.662 | V-1 |
| 7804.638 | 294 | Moulded conductive polypropylene | 180x300x280 | 12 x L64 | 7804.664 | V-4 |
| 7804.640 | 551 | Moulded conductive polypropylene | 180x310x550 | 48 x L61 | 7804.662 | V-1 |
| 7804.642 | 554 | Moulded conductive polypropylene | 180x310x550 | 24 x L64 | 7804.664 | V-4 |
| 7804.643 | 0830 | Epoxy powder coated steel | 300x400x395 | 8 x 3020 | 7804.684 | D-20 |
| 7804.644 | 1630 | Epoxy powder coated steel | 300x400x395 | 16 x 3010 | 7804.682 | D-10 |
| 7804.645 | 0840 | Epoxy powder coated steel | 400x400x395 | 8 x 4020 | 7804.684 | D-20 |
| 7804.646 | 1640 | Epoxy powder coated steel | 400x400x395 | 16 x 4010 | 7804.682 | D-10 |
| 7804.652 | 2440 | Epoxy powder coated steel | 410x605x870 | 24 x 4020 | 7804.684 | D-20 |
| 7804.654 | 4840 | Epoxy powder coated steel | 410x605x870 | 48 x 4010 | 7804.682 | D-10 |

TRESTON MOVEABLE BENCHES



- 8104.074** ESD Castor set for cabinets 2440 / 4840. 4 castors \varnothing 100mm, 2 with brakes Load capacity 150kg
- 8104.736** ESD Movable bench CONCEPT H: 650-900mm Worktop 500x700mm 4 castors \varnothing 100mm, 2 with brakes Load capacity 150kg
- 8104.730** ESD Movable bench H: 650-900mm Worktop 500x700mm 4 castors \varnothing 100mm, 2 with brakes, max. 150kg
- 8104.731** ESD Moveable bench H: 650-900mm Worktop 700x1000mm 4 castors \varnothing 100mm, 2 with brakes, max. 150kg
- PUSH50** Push 50 ESD mobile table handle (8104.730) depth 500
- PUSH70** Push 70 ESD mobile table handle (8104.731) depth 700

Storage cabinets

LICEFA Cabinets, made of conductive polypropylene, will provide systematic storage of loose SMD components and other small parts. Drawers can be fitted with Vacuum-formed inserts or with cups to give more compartments.

The cabinets, four different sizes, are normally supplied with the following assemblies: mod. **7805.210** with 6 drawers MOD20, mod. **7805.150** with 9 drawers MOD22, mod. **7805.153** with 3 drawers MOD22, mod. **7805.305** with 4 drawers MOD40, mod. **7805.405** with 4 drawers MOD62.

To assemble cabinets with another number of drawers, it is needed one rim-frame for each drawer and one base-foundation for each cabinet. Transparent adhesive labels with exchangeable yellow paper are available in three different size.



7805.210

- 7805.210** Storage cabinet with 6 drawers MOD20 ext.275 x 250 x 190(H)mm
- Accessories / Spare Parts**
- 7805.221** Drawer MOD20, internal 261 x 238 x 20(H)mm
- 7805.230** Rim-frame MOD20
- 7805.236** Base-foundation (1 each cabinet), MOD.20
- 7805.240** Label holder with exchangeable yellow label 15 x 55mm

- 7805.150** Storage cabinet with 9 drawers MOD22 ext.267 x 355 x 305(H)mm
- Accessories / Spare Parts**
- 7805.160** Drawer MOD22, internal 340 x 250 x 22(H)mm
- 7805.170** Rim-frame, MOD22
- 7805.340** Base external 355 x 267mm (1 each cabinet)
- 7805.350** Set of 6 inserts for closing the holes on the top-frame
- 7805.240** Label holder with exchangeable yellow label 15 x 55mm

- 7805.153** Storage cabinet with 3 drawers MOD22 ext.267 x 355 x 105(H)mm
- Accessories / Spare Parts**
- 7805.160** Drawer MOD22, internal 340 x 250 x 22(H)mm
- 7805.170** Rim-frame, MOD.22
- 7805.340** Base external 355 x 267mm (1 each cabinet)
- 7805.350** Set of 6 inserts for closing the holes on the top-frame
- 7805.240** Label holder with exchangeable yellow label 15 x 55mm

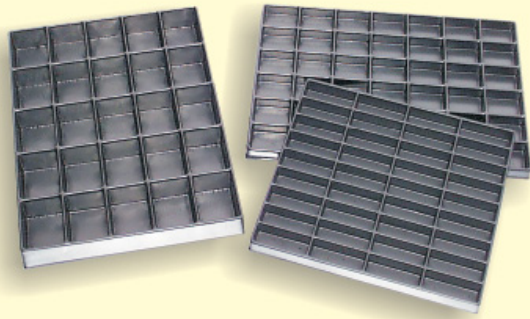


7805.305

- 7805.305** Storage cabinet with 6 drawers MOD40 ext. 267 x 355 x 305(H)mm
- Accessories / Spare Parts**
- 7805.310** Drawer MOD40, internal 340 x 250 x 40(H)mm
- 7805.330** Rim-frame, MOD.40
- 7805.340** Base external 355 x 267mm (1 each cabinet)
- 7805.350** Set of 6 inserts for closing the holes on the top-frame
- 7805.360** Label holder with exchangeable yellow label 15 x 94mm

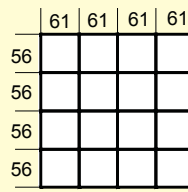
- 7805.405** Storage cabinet with 4 drawers MOD62 ext. 267 x 355 x 310(H)mm
- Accessories / Spare Parts**
- 7805.410** Drawer MOD62, internal 340 x 250 x 62(H)mm
- 7805.430** Rim-frame, MOD.62
- 7805.340** Base external 355 x 267mm (1 each cabinet)
- 7805.350** Set of 6 inserts for closing the holes on the top-frame
- 7805.358** Label holder with exchangeable yellow label 31 x 94mm

STORAGE CABINETS

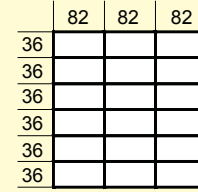


Inserts for drawers 20mm height (storage cabinet mod. 20)

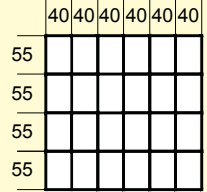
- 7805.252** 16 compartments 61x56 mm
- 7805.254** 18 compartments 82x36 mm
- 7805.256** 24 compartments 40x55 mm
- 7805.258** 36 compartments 60x23 mm
- 7805.260** 42 compartments 34x36 mm
- 7805.262** 42 round compartments \varnothing 27 mm



7805.252



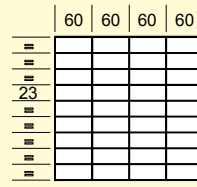
7805.254



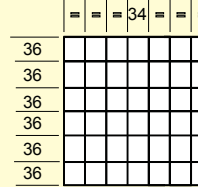
7805.256

Inserts for drawers 22mm height (storage cabinet mod. 22)

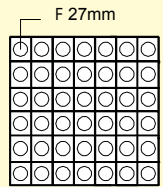
- 7805.180** 16 compartments 56x78 mm
- 7805.184** 25 compartments 44x62 mm
- 7805.188** 42 compartments 36x42 mm
- 7805.179** 12 compartments 75x77 mm



7805.258



7805.260

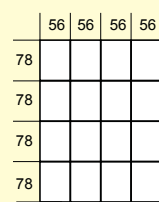


7805.262

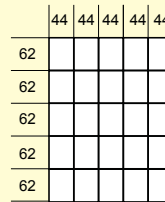
Inserts for drawers 40mm height (storage cabinet mod. 40)

They also can be used in drawers 62mm height

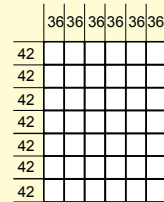
- 7805.362** 3 compartments 80x332 mm
- 7805.364** 6 compartments 80x165 mm
- 7805.366** 9 compartments 78x108 mm
- 7805.368** 12 compartments 78x78 mm
- 7805.370** 16 compartments 57x81 mm
- 7805.372** 19 compartments 50x44 mm
- + 1 compartment 92x50 mm
- + 1 compartment 188x50 mm
- + 1 compartment 237x50 mm
- 7805.374** 25 compartments 46x63 mm
- 7805.376** 30 compartments 44x50 mm



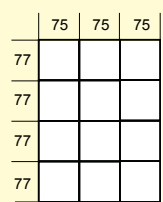
7805.180



7805.184



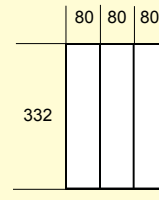
7805.188



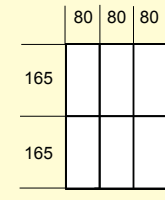
7805.179

Inserts for drawers 62mm height (storage cabinet mod. 62)

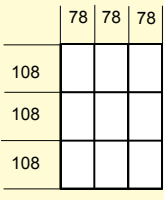
- 7805.440** 4 compartments 116x160 mm
- 7805.442** 6 compartments 75x160 mm
- 7805.444** 9 compartments 75x105 mm
- 7805.445** 12 compartments 71x75 mm



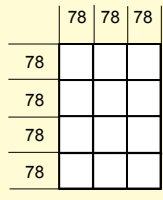
7805.362



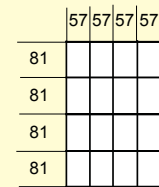
7805.364



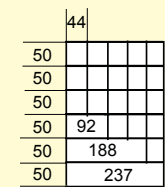
7805.366



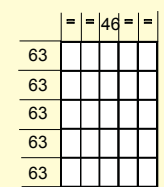
7805.368



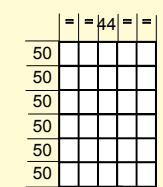
7805.370



7805.372



7805.374



7805.376

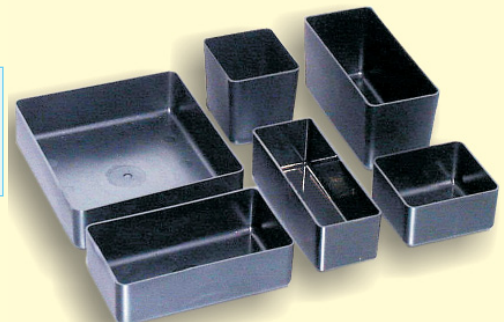
CUPS

Standard Cups for drawers 40mm height (storage cabinet mod. 40)

- 7805.471** Cup 62 x 56 x 36 mm black conductive 24 cups for drawer
- 7805.474** Cup 110 x 42 x 36 mm black conductive 18 cups for drawer
- 7805.473** Cup 112 x 62 x 33 mm black conductive 12 cups for drawer
- 7805.480** Cup 125 x 113 x 33 mm black conductive 6 cups for drawer

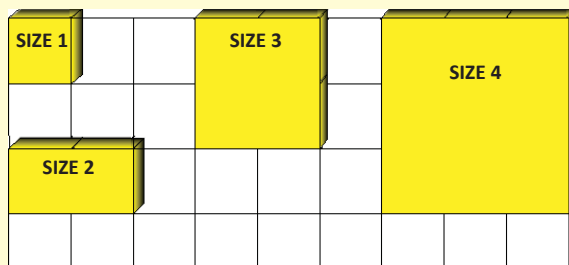
Standard cups for drawers 62mm height (storage cabinet mod. 62)

- 7805.477** Cup 59 x 23 x 60 mm black conductive 58 cups for drawer
- 7805.472** Cup 56 x 50 x 55 mm black conductive 30 cups for drawer
- 7805.478** Cup 113 x 50 x 55 mm black conductive 15 cups for drawer
- 7805.482** Cup 125 x 113 x 55 mm black conductive 6 cups for drawer



SNAPBOX

Boxes for SMD components with sprung lid, four different sizes available, can be joined to each other by means of a dovetail assembly system. The lid is provided with a finger point for easy and quick opening, can remain in open position and closes automatically thanks to spring loading. Black conductive version is normally available from stock, on request (minimum 100 pcs) the colours: red, white, blue, yellow and green. All boxes can be supplied with the transparent cover.



| | | |
|-----------------|---|--|
| 7808.620 | SNAPBOX1 ESD black | SIZE 1 int.16x12x15mm est.20x28x20mm |
| 7808.621 | SNAPBOX1 ESD black, transparent cover | |
| 7808.622 | SNAPBOX1 not ESD various colours | |
| 7808.627 | SNAPBOX1 not ESD various colours, transparent cover | |
| 7808.632 | SNAPBOX2 ESD black | SIZE 2 int.37x12x15mm est.40x28x20mm |
| 7808.633 | SNAPBOX2 ESD black, transparent cover | |
| 7808.634 | SNAPBOX2 not ESD various colours | |
| 7808.635 | SNAPBOX2 not ESD various colours, transparent cover | |
| 7808.644 | SNAPBOX3 ESD black | SIZE 3 int.37x41x15mm est.40x56x20mm |
| 7808.645 | SNAPBOX3 ESD black, transparent cover | |
| 7808.646 | SNAPBOX3 not ESD various colours | |
| 7808.651 | SNAPBOX3 not ESD various colours, transparent cover | |
| 7808.656 | SNAPBOX4 ESD black | SIZE 4 int.57x68x15mm est.60x84x20mm |
| 7808.657 | SNAPBOX4 ESD black, transparent cover | |
| 7808.658 | SNAPBOX4 not ESD various colours | |
| 7808.663 | SNAPBOX4 not ESD various colours, transparent cover | |



SIZE 1



SIZE 2



SIZE 3



SIZE 4

SNAPBOXSET

| | |
|-----------------|---|
| 7808.686 | Storage cabinet with 3 drawers H22 Black ESD With 432 SNAPBOX1 (3 x 144) ESD transparent cover |
| 7808.687 | Storage cabinet with 3 drawers H22 Black ESD With 216 SNAPBOX2 (3 x 72) ESD transparent cover |
| 7808.688 | Storage cabinet with 3 drawers H22 Black ESD With 108 SNAPBOX3 (3 x 36) ESD transparent cover |
| 7808.689 | Storage cabinet with 3 drawers H22 Black ESD With 48 SNAPBOX4 (3 x 16) ESD transparent cover |
| 7805.153 | Storage cabinet with 3 drawers MOD22 ext.267 x 355 x 105(H)mm customizable with the choice of SNAPBOX1-2-3-4 |



7808.687

SMD - VISTABOX

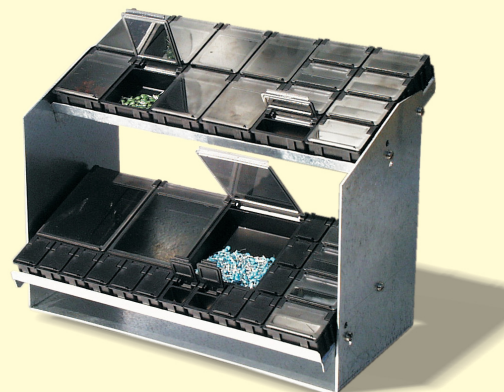
VISTABOX zinc plated assembly stand can house in two shelves an assortment of SNAPBOX containers with different sizes. The VISTABOX is especially suited for assembly and maintenance tables

Material: zinc plated steel

Dimensions: 180 x 260 x 200mm

Capacity: 48 base units (size 1) for shelf

7808.690 Assembly-stand, 2 trays for SNAPBOX (containers excluded)



LABEL HOLDER

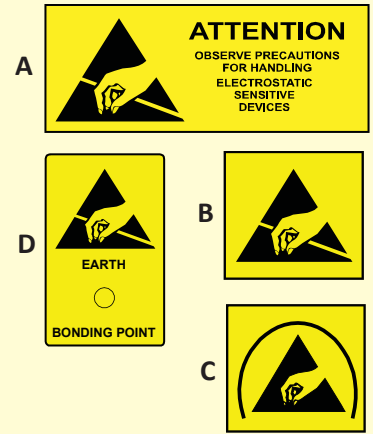
Transparent adhesive label holder with and ESD symbol.

| | |
|-----------------|-------------------------------------|
| 7805.240 | Label Holder, with label 15 x 55mm |
| 7805.360 | Label Holder, with label 15 x 94mm |
| 7805.358 | Label Holder, with label 31 x 94mm |
| 7804.918 | Label Holder, with label 47x100mm |
| 7804.920 | Label Holder, with label 60 x 140mm |



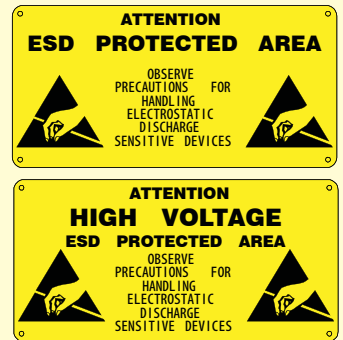
LABELS

| | |
|-----------------|---|
| 7807.100 | "ATTENTION" Adhesive label, ESD (A) 38x16mm(1000pcs.) |
| 7807.102 | "ATTENTION" Adhesive label, ESD (A) 50x25mm(1000pcs.) |
| 7807.104 | "ATTENTION" Adhesive label, ESD (A) 76x38mm(1000pcs.) |
| 7807.110 | ESD "SUSCEPTIBLE" symbol only, Adhesive label (C) 5x5mm(1000pcs.) |
| 7807.112 | ESD "SUSCEPTIBLE" symbol only, Adhesive label (C) 12.5x12.5mm(1000pcs.) |
| 7807.114 | ESD "SUSCEPTIBLE" symbol only, Adhesive label (C) 50x50mm(1000pcs.) |
| 7807.115 | ESD "PROTECTIVE" symbol only, Adhesive label (D) 12.5x12.5mm(1000pcs.) |
| 7807.116 | ESD "PROTECTIVE" symbol only, Adhesive label (D) 50x50mm(1000pcs.) |
| 7807.158 | "EARTH BONDING POINT" Adhesive label (E) 25x45mm(10pcs.) |



SIGNS

| | |
|------------------|--|
| 7807.150 | "AREA PROTETTA ESD" TARGA PVC adesivo 300x150mm |
| 7807.152 | "AREA PROTETTA ESD" TARGA PVC adesivo rigido 300x150mm |
| 7807.154 | "ESD PROTECTED AREA" Inglese PVC rigido 600x300mm |
| 7807.154H | "H.V. ESD PROTECTED AREA" Inglese PVC rigido 600x300mm |
| 7807.155 | "AREA PROTETTA ESD" Italiano PVC rigido 600x300mm |
| 7807.155H | "A.T. AREA PROTETTA ESD" Italiano PVC rigido 600x300mm |
| 7807.156 | "ZONE PROTEGEE CONTRE LES ESD" Francese PVC rigido 600x300mm |
| 7807.157 | "ESD GESCHÜTZTER BEREICH" Tedesco PVC rigido 600x300mm |



Use where there are potentials > 250Vac

EPA RETRACTABLE BELT BARRIER

The patented retractable belt barrier is designed for delimiting an EPA easily and safely. To avoid confusion of visitors when leaving the EPA, the belts are printed just on one side so the indication of EPA can only be seen from outside. To prevent the belt barrier from undercut, the system is also available with two belts.

Wall mounted retractable belt head

Stainless steel head, for wall mounting; includes a wall receiving end, yellow polyester belt with one side print.

Belt barrier post

Powder coated steel post, colour: yellow

Plastic coated steel base colour: black

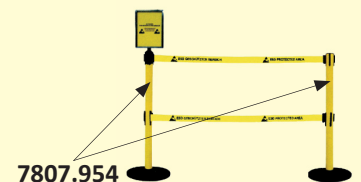
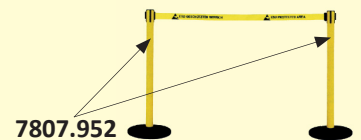
Base diameter: 350mm

Post height: 960mm

Weight: 12,5kg

Sign holder

Stainless steel frame for the belt barrier posts, it is used to locate a warning sign A4 paper.



| | |
|-----------------|---|
| 7807.950 | Wall mounting retractable belt head, belt length 4m |
| 7807.952 | Belt barrier post, single bel, belt length 4m |
| 7807.954 | Belt barrier post, dual belt, belt length 2m |
| 7807.956 | Sign holder A4, for belt barrier post 7807.954 |
| 7807.957 | Sign holder A4, for belt barrier post 7807.952 |



PROTECTIVE CLOTHING

Style 3/4 length, unisex, with two side pockets and one breast pocket.

Features

- Fabric Composition: 70% Cotton , 24% polyester, 6% Conductive carbon fibre
- Lightweight (120g/m²)
- Washable without losing conductive properties.
- Charge decay < 2 Sec.



| | | |
|----------|-----------------------------------|----------|
| 7807.501 | Dissipative Overall, WHITE colour | size XS |
| 7807.502 | Dissipative Overall, WHITE colour | size S |
| 7807.503 | Dissipative Overall, WHITE colour | size M |
| 7807.504 | Dissipative Overall, WHITE colour | size L |
| 7807.505 | Dissipative Overall, WHITE colour | size XL |
| 7807.506 | Dissipative Overall, WHITE colour | size XXL |
| 7807.511 | Dissipative Overall, LIGHT BLUE | size XS |
| 7807.512 | Dissipative Overall, LIGHT BLUE | size S |
| 7807.513 | Dissipative Overall, LIGHT BLUE | size M |
| 7807.514 | Dissipative Overall, LIGHT BLUE | size L |
| 7807.515 | Dissipative Overall, LIGHT BLUE | size XL |
| 7807.516 | Dissipative Overall, LIGHT BLUE | size XXL |

T-SHIRTS / POLO-SHIRTS (unisex)

Features

- Colour: light grey
- Symbol: yellow ESD
- Fabric: 96% cotton, 4% carbon fibre
- Weight: 140g/m²
- Charge decay: < 2 Sec

| T-Shirt | |
|--------------|----------|
| 7807.696 | size XS |
| 7807.698 | size S |
| 7807.700 | size M |
| 7807.702 | size L |
| 7807.704 | size XL |
| 7807.705 | size XXL |
| Polo T-Shirt | |
| 7807.708 | size S |
| 7807.710 | size M |
| 7807.712 | size L |
| 7807.714 | size XL |
| 7807.716 | size XXL |



T-Shirt



Polo T-Shirt

DISPOSABLE COATS

Polypropylene lab coat with elastic wrists, style 3/4 length, unisex, with two side pockets.

| | | |
|----------|---------------------------------------|----------|
| 7807.658 | Disposable coat ESD, white colour | size M |
| 7807.659 | Disposable coat ESD, white colour | size L |
| 7807.660 | Disposable coat ESD, white colour | size XL |
| 7807.661 | Disposable coat ESD, white colour | size XXL |
| 7807.654 | Disposable coat NOT-ESD, white colour | size L |
| 7807.655 | Disposable coat NOT-ESD, white colour | size XL |



ESD FLEECE

Antistatic fleece in soft dissipative static fabric, unisex model with high neck and zip closure. Complete with 2 side pockets and sewed fabric ESD logo. Very warm is perfect for winter season.

Features:

- Color: gray or blue
- Fabric Composition: 97% Polyester, 3% Carbon Fiber
- Fabric weight: 245g/m²



| | | |
|-----------|--------------------------------|----------|
| 7807.736G | Dissipative fleece, LIGHT GREY | size XS |
| 7807.738G | Dissipative fleece, LIGHT GREY | size S |
| 7807.740G | Dissipative fleece, LIGHT GREY | size M |
| 7807.742G | Dissipative fleece, LIGHT GREY | size L |
| 7807.744G | Dissipative fleece, LIGHT GREY | size XL |
| 7807.746G | Dissipative fleece, LIGHT GREY | size XXL |
| 7807.736B | Dissipative fleece, NAVY BLUE | size XS |
| 7807.738B | Dissipative fleece, NAVY BLUE | size S |
| 7807.740B | Dissipative fleece, NAVY BLUE | size M |
| 7807.742B | Dissipative fleece, NAVY BLUE | size L |
| 7807.744B | Dissipative fleece, NAVY BLUE | size XL |
| 7807.746B | Dissipative fleece, NAVY BLUE | size XXL |

DISSIPATIVE BADGE HOLDER

Dissipative badge holders are amine free, colourless transparent and permanent dissipative.

Maximum size of the badge is 89 x 55mm.



7807.901

- 7807.903** Soft Badge holder with clip
- 7807.901** Rigid Badge holder with clip
- 7807.902** Rigid Badge holder with necklace

DISSIPATIVE FINGER COTS

Dissipative latex finger cots, provide excellent tactile sensitivity for handling of ESD sensitive components. Rs: $< 4 \times 10^{10} \Omega$



- 7805.014** Dissipative finger cots size M, 1440 pcs/packing
- 7805.015** Dissipative finger cots size L, 1440 pcs/packing

BAGGY BEAUTY-CASE FOR EPA AREAS

For storage of personal things into an EPA area.

Colour: Grey

Dimensions: 320 x 100 x 150(H)mm

Rs: $< 10^9 \Omega$



- 7807.910** Beauty-case for EPA areas

NITRILE GLOVES

Made in dissipative NITRILE, dust-free, double chlorination, are suitable for use in clean rooms, pharmaceutical, laboratory of analysis. Electrostatic decay time $< 2\text{sec}$.



- 7807.810** Dissipative green NITRILE gloves, (100 pcs) small size
- 7807.811** Dissipative green NITRILE gloves, (100 pcs) Medium size
- 7807.812** Dissipative green NITRILE gloves, (100 pcs) Large size
- 7807.813** Dissipative green NITRILE gloves, (100 pcs) XL size

NYLON GLOVES

Seamless knitted dissipative nylon gloves, with Polyurethane wet coating on each top and double sided are PVC dotted. Rg: $\leq 10^8 \Omega$



- 7804.997** Dissipative nylon gloves, small size
- 7804.998** Dissipative nylon gloves, medium size
- 7804.999** Dissipative nylon gloves, large size
- 7805.000** Dissipative nylon gloves, XL size

VINYL GLOVES

IMade in dissipative VINYL are suitable for use in white chambers . Electrostatic decay time $< 2\text{sec}$.



- 7805.005** Dissipative VINYL gloves small size (100 pcs).
- 7805.007** Dissipative VINYL gloves medium size (100 pcs).
- 7805.009** Dissipative VINYL gloves large size (100 pcs).

POLYESTER GLOVES

Fully launderable lightweight white gloves, made from additived polyester fabric and synthetic rubber. Rg: $\leq 10^8 \Omega$



- 7805.001** Dissipative fabric GLOVES small size
- 7805.002** Dissipative fabric GLOVES medium size
- 7805.003** Dissipative fabric GLOVES large size

DISSIPATIVE FOOTWEARS

Comfortable and aesthetically pleasing shoes and clogs provide a safest, efficient conductive path to ground.

According to the IEC 61340-5-1 2017-01 regulation all operators shall be connected to ground when operating in contact with ESDs.

In case of personnel seated at an ESD protective workstation, they shall be connected to ground via a wrist strap system (Rg between 750kΩ - 35MΩ) .

Standing operators may be grounded via a flooring / footwear system. When only the flooring / footwear system is used to ground it is necessary to wear ESD footwear on both feet and satisfy these 2 conditions:

Total resistance of the system (person, footwear and flooring) to ground: $R_g < 1,0 \times 10^9 \Omega$

Maximum HBV (Human Body Voltage) generation:

HBV < 100V

Rg shall be measured during the product qualification according to IEC 61340-4-5 and HBV shall be checked periodically (note "d" Table 2 of the standard)

For compliance verification the person / footwear system must be checked at a groundable point: $R_{gp} < 1,0 \times 10^8 \Omega$

Rgp person / footwear compliance verification
 $R_{gp} < 1,0 \times 10^8 \Omega$



Wristlab-II (page 72)

HBV (Human Body Voltage) periodic verification

HBV < 100V



Walking Test EVO (page 71)

M-clog

White colour

Non slip polyurethane sole

"MICROSAFE" Synthetic upper shoe

RG from 1×10^6 to $3.5 \times 10^7 \Omega$



8915.935 - 8915.947 White colour, sizes from 35 to 47

JUNIOR

High comfort, high style - White colour

Shock absorbent, anti-slip polyurethane sole

Perforated leather upper shoe

Removable and washable insole

RG from 1×10^6 to $3.5 \times 10^7 \Omega$



7807.427 - 7807.440 Clog, sizes from 35 to 48

6807.420 - 6807.433 Spare innersole, sizes from 35 to 48

TRAINER

High comfort, high style - White colour

Shock absorbent, anti-slip polyurethane sole.

Perforated leather upper shoe

Removable and washable innersole

RG from 1×10^6 to $3.5 \times 10^7 \Omega$



7807.469 - 7807.481 Sizes from 35 to 47

6807.420 - 6807.432 Spare innersole, sizes from 35 to 47

SPRINT

Safety shoe with toecap

Very attractive price
Grey colour
Steel toe cap
Non-slip polyurethane sole
Upper with holes in real suede leather, perspiring lining
Rg from $1 \times 10^6 \Omega$ to $1 \times 10^7 \Omega$



EN 20345 S1



8913.135 - 8913.147 sizes from 36 to 4

Worker

Safety shoe with toecap

Very attractive price
Grey colour
Steel toe cap
Non-slip polyurethane sole
Upper with holes in real suede leather, perspiring lining
RG from $1 \times 10^6 \Omega$ to $1 \times 10^7 \Omega$



EN 20345 S1



8908.036- 8908.047 sizes from 36 to 47



DISPOSABLE SHOE COVERS

Shoe Covers are used in hospital, clean rooms, and other industrial facilities.

Are made by disposable blue polypropylene NOT-ESD material, with white tread for traction and an elastic opening.

7807.840 Light blue NOT-ESD shoe cover, 1000 pcs packing

Are made by disposable blue TNT material, includes carbon conductive cord, cannot be washed. Rg: $10^5 - 10^7 \Omega$

7807.850 Light blue ESD shoe cover, 100 pcs packing



7804.200

7804.201

7804.202

7804.203

HEEL AND TOE GROUNDERS

Made from conductive rubber tape, they are used for earthing personnel where mobility is required such as in storage areas and where static protective flooring or mats have been installed.

Floors with a resistance to ground between 1 and $35 M\Omega$ are preferred. A disposable heel grounder is available, ideal for plant visitors or anyone requiring a temporary grounding device. (expected life of 1 day)

7804.200 Disposable Heel grounder (pack of 100)

7804.201 Disposable Heel grounder Dispenser

7804.202 Heel grounder with $2 M\Omega$ resistance

7804.203 Toe grounder with $2 M\Omega$ resistance

FLOORS

DISSIPATIVE FLOOR COATING

It gives dissipative characteristics to a standard floor, and it is excellent in maintaining the conductive floor in operating rooms, clean rooms and data processing centres. It may also be used to maintain the table mat's dissipative surfaces.

First treatment:

-well wash the floor with the stripper -rinse with clean water.
-when dry apply two thin coats on the floor.
(Yield: 1lt. for approx. 25m² per 2 coats)

Ordinary Maintenance:

-sweep the floor with a wet broom, then wash it with the detergent diluted in water at 1-5% ratio.

Maintenance with spray:

-Dilute the coat in water at 30% ratio, spray it on the floor and then polish by a one-brush machine, provided with a suitable scotch-bride. (Yield: 1lt. for approx. 100m²)

Rs: < 10¹¹ Ω

7805.876 LIQUID COAT, 5 Kilos unit

STRIPPER (Specific for 7805.876)

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. Biodegradable up to over 90%.

Dilution in water 5-10% machine stripping 12-16% manual stripping Lay off the solution and let it act for 5 minutes, then wash with water.

7805.870 FLOOR STRIPPER, 5 Kilos unit



DETERGENT Low foaming-agent detergent with highly concentrated active substances and alkalinity. It is used for cleaning and maintenance of the waxed surface.

Biodegradable: up to over 90% - Dilution in water 1-5%
It may be used to wash by hand and with a one-brush polisher or a washing-drying machine.

7805.873 DETERGENT, 5 Kilos unit

ELECSTAT-112 Dissipative floor detergent

ELECSTAT-112 is a non-toxic, low foaming, static dissipative agent for cleaning, used to enhance the features of the existing ESD floors or make a non-ESD floor static dissipative.

Rs: < 10¹¹ Ω

Biodegradability: over 90%

Dilution in water: 10 to 20%:

Application: for manual or mechanical cleaning.



7805.890 Dissipative agent ELECSTAT-112
5kg plastic can

DISSIPATIVE FLOOR PAINT

A ready to use single pack, dissipative water based paint can be easily applied by brush or roller. The paint has an attractive satin finish and is available in mid grey, nearest to RAL7035. Two coats are recommended for best results and should be applied over a sound, sealed floor, free from dirt, oil or any loose particles.

It is strongly recommended that the paint is not applied directly over bare concrete. Where this occurs the Water Based Primer 7805.856 should be first applied.



7805.854 ELECTROGUARD 40. SINGLE PACK water based static dissipative acrylic paint, 5 litre unit.

Coverage: 10m²/litre per coat (we recommend 2 coats).

Typical resistance to ground Rg: 10⁶ Ω, 10⁸ Ω

7805.856 FLOORPOX EPOXY PRIMER

For bare concrete floor

12 litre unit (6 litres base + 6 litres activator)

Coverage: 16m²/litre per coat (we recommend 2 coats)

FLOOR MARKING TAPE

- Self-adhesive
- 75mm wide, 33m long roll
- PVC laminated with clear PP for durability and washability

7807.172 PVC adhesive tape, ESD Protected Area floor marking

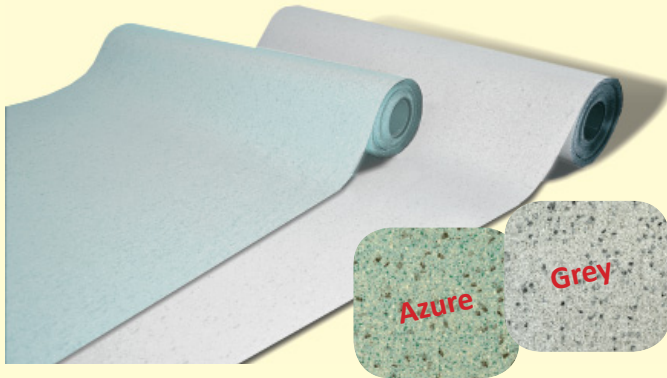


VINYLAB - FLOORS

VINYLAB is a resilient, permanently static-dissipative control flooring developed for facilities where static discharge may cause damage to sensitive electronic devices. The VINYLAB mat meets the requirements for floors in standard IEC61340-5-1, the "Combination Resistance" with appropriate shoes is 35M Ω . It is made by two vinyl layers, the underside layer is black conductive, the top layer, glare free coloured surface, has a 10 $^6\Omega$ typical Rs.

VINYLAB - MAT

- It is required a perfect, smooth permanently dry and sound subfloor.
- Never use conductive primers, since they reduce the subfloor's absorbency.
- Rubber mats should be dry laid first to reach the floor temperature (acclimatise)
- Use conductive adhesive to apply the rubber mat.
- Water dispersion adhesive type ECO V4, easy to apply, is mostly used on absorbent and moisture-stable subfloors.
- Detailed installation procedures available on demand.



7805.820 Mat roll, azure colour 140cm x 2.2mm x 10m.

7805.818 Mat roll, grey colour 140cm x 2.2mm x 10m.

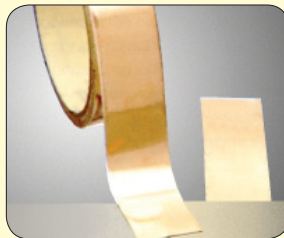
COPPER EARTHING TAPE

Used to ground ESD matting

Self-adhesive

- 0.04mm thickness

- 30m long roll



7805.828 COPPER tape 10mm wide

7805.830 COPPER tape 15mm wide

FLOOR GROUNDING KIT AND TEST POINT

Supplied with two meters long copper earthing type.

Dowels and screws not supplied.



7805.834 GROUNDING KIT

VINYLAB - INTERLOCKING FLOOR TILE

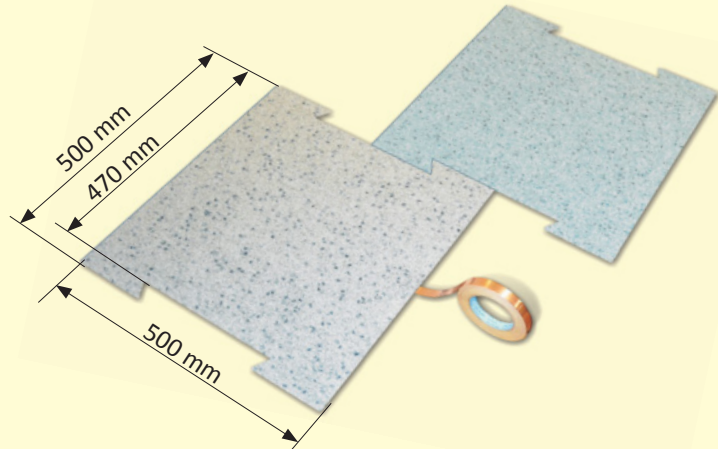
The tiles are clicked together quickly and can be dry laid over any hard and flat base even on damaged, damp or contaminated surfaces.

To have a reliable ground connection create a copper grid under the tiles and ground it.

Dimensions: 500 x 500 x 4 mm

Weight: 6kg/m 2 .

Packages: 20 tiles for package (4.70m 2)



7805.800 Interlocking tile, azure colour

7805.801 Interlocking tile, grey colour

ECO V4 Glue for mats, one component

Conductive glue for sticking mats on benches or on the floor.

Rs: < 3x10 $^5\Omega$

One component,

Color: Grey,

16kg pack,

Useful time 10-15 minutes,

consumption about 350g/m 2 .



7805.840 One component conductive glue

ANTI-FATIGUE ESD MATS

ESD Anti-Fatigue Floor Mats designed to provide comfort and reduce worker fatigue. Provide ergonomic comfort for your feet and create a healthier more productive work environment.

The mats should be used on ESD floors correctly grounded.

-External side in nitrile conductive rubber (10 5 - 10 $^6\Omega$)

-Internal in highly elastic Polyurethane foam



7804.841 Anti-fatigue ESD mat
60 x 90 x 1,6cm

WORKSTATION MATS

Labestat table mats

LABESTAT mats are made from a rugged rubber resistant to hot solder, fluxes and chemicals. The underside layer is black conductive, the top coloured layer, glare free surface, has a R_{surface} from 10⁷ to 10⁹ Ω.



7804.852
grey orange peel

7804.153
sky-blue orange peel

7804.154
beige orange peel

LABESTAT 2 layers dissipative COLOURED / conductive BLACK

- 7804.851** GRAY 60cm x 2mm x 10meters roll
- 7804.152** GRAY 122cm x 2mm x 10meters roll
- 7804.853** GRAY 150cm x 2mm x 10meters roll
- 7804.153** SKY-BLUE 122cm x 2mm x 10meters roll
- 7804.154** BEIGE 122cm x 2mm x 10meters roll

Kostaplan mats

KOSTAPLAN mats are made from a rugged synthetic rubber resistant to hot solder, fluxes and chemicals. The underside layer is black conductive, the top coloured layer, glare free surface, has a R_{surface} from 10⁷ to 10⁹ Ω



7804.140
Black semigloss

7804.148
Grey matt

KOSTAPLAN 1 layer , conductive BLACK

- 7804.140** 60cm x 2mm x 10meters roll
- 7804.139** 90cm x 2mm x 10meters roll
- 7804.145** 120cm x 2mm x 10meters roll

KOSTAPLAN 2 layers , dissipative GRAY / conductive BLACK

- 7804.148** 60cm x 2mm x 10meters roll
- 7804.149** 90cm x 2mm x 10meters roll
- 7804.150** 120cm x 2mm x 10meters roll

Esd workstation kit

600 x 1200 x 2mm, includes one adjustable wrist strap, one ground cord 3m, four snap fasteners installed.

- 7804.830** Two layer KOSTAPLAN mat, GREY / BLACK
- 7804.831** Two layer LABESTAT mat, GREY / BLACK
- 7804.833** Two layer LABESTAT mat, SKY-BLUE / BLACK



Field service kit

The Portable Field Service Kit protects installed electronic components from static damage as a result of normal handling during field maintenance and repair. It has two pockets and one 10mm press stud for Wrist-strap and Grounding cord connection.

- 3 Layer Mat RED/BLACK colour, 600x600mm dim.
- Surface resistance R_s ≤ 10⁹ Ω
- Point to ground resistance R_g ≤ 10⁹ Ω
- 1 adjustable wrist strap + 1 grounding cord 3m length

7804.195 PORTABLE FIELD SERVICE KIT



ELECSTAT-109 ESD CLEANER

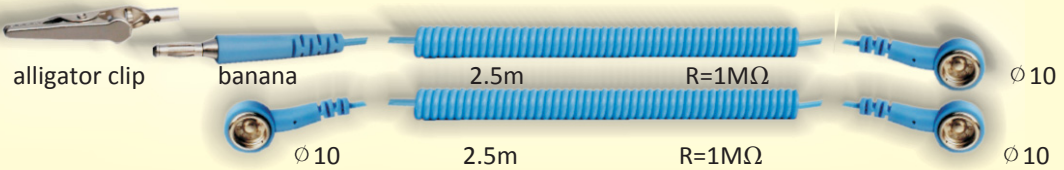
A topical antistatic cleaning solution for use on dissipative and non-ESD surfaces. After it has been applied and the surface dries, an antistatic and protective static dissipative coating is left behind. This enhances existing ESD surfaces and will give electrical properties to insulative surfaces. R_s < 10¹¹Ω

- 7805.895** Bottle, 0.75 litre spray
- 7805.896** 5 litre Can



WRISTSTRAP

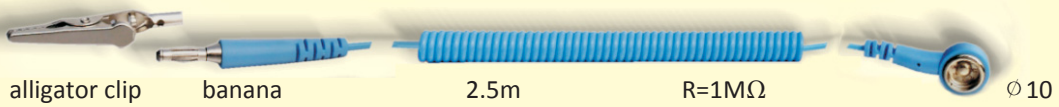
The wrist strap is the most common and effective means of controlling ESD generated from people, it should be worn at all times by anyone at the work station. Our adjustable wrist strap includes an extendible coiled cord fitted with 1M Ω resistor.



- 7804.190** Adjustable wrist strap, blue colour, with coiled cord banana/socket, alligator clip
- 7804.193** Adjustable wrist strap, blue colour, with coiled cord socket/socket
- 6604.804** Spare Wrist-band
- 6604.803** Spare coiled cord, banana/socket
- 7804.885** Spare coiled cord, socket/socket



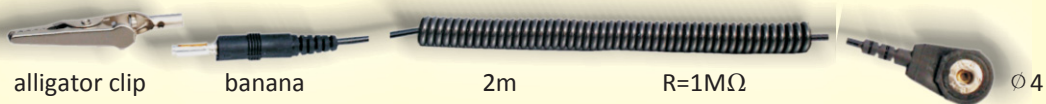
stud 10mm



- 7804.192** ANTI-ALLERGENIC wrist strap with coiled cord
- 6604.805** Spare Wrist-band
- 6604.803** Spare coiled cord



stud 10mm



- 7804.188** Metal wrist strap, with coiled cord
- 6604.808** Spare Wrist-band
- 6604.809** Spare coiled cord



stud 4mm

EARTH BONDING POINT PLUG

EBP plug provides a safe, effective and simple method of using the ring mains earth as ground. Made of yellow ABS, Earth Bonding Plug fits the European CEE(7) VII Schuko sockets.

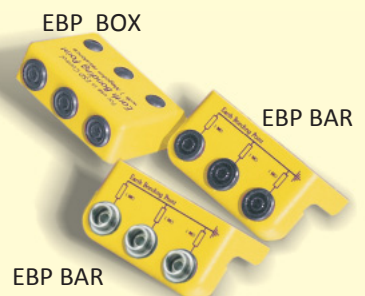
- 7804.874** Earth Bonding Plug with two 4mm plug sockets, one 10mm stud



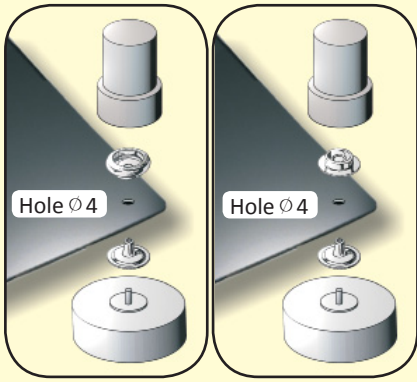
EARTH BONDING POINT

An Earth Bonding Point (EBP) ties together (via cords) several elements of an EPA such as bench surface, floor mat or wrist strap. Each input is fitted with a 1M Ω resistor. EBP is supplied with a 2 meters grounding cord for connecting to the Earth Facility.

- 7804.896** EBP BOX three 4mm shrouded plug sockets
- 7804.898** EBP BAR three 4mm shrouded plug sockets
- 7804.899** EBP BAR three studs \varnothing 10mm



GROUNDING ACCESSORIES



Eyelets manual press
(Without punch and anvil)
Dimensions: 80 x 180 x 280mm
Weight: 3.3 Kg

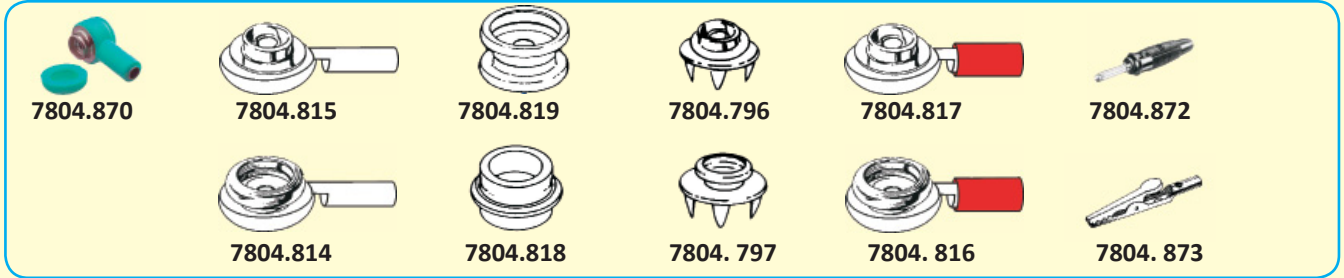
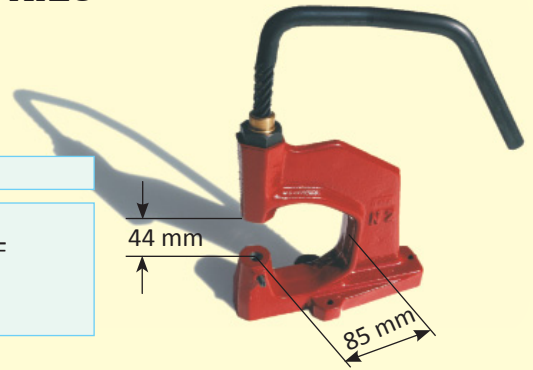
7804.811 Eyelets manual press

7804.803 Ø 10mm socket (2 parts)

7804.809 Punch and Anvil for socket F

7804.804 Ø 10mm stud (2 parts)

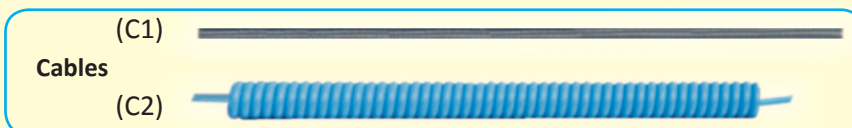
7804.805 Punch and Anvil for stud M



| | |
|-----------------|---|
| 7804.870 | ADAPTOR socket Ø 10mm + stud Ø 10mm + banana plug Ø 4mm |
| 7804.815 | ADAPTOR from socket Ø 10mm to banana plug Ø 4mm |
| 7804.814 | ADAPTOR from stud Ø 10mm to banana plug Ø 4mm |
| 7804.818 | ADAPTOR from socket Ø 10mm to stud Ø 10mm |
| 7804.819 | ADAPTOR from stud Ø 10mm to socket Ø 10mm |
| 7804.796 | Clinch SNAP male, Ø 10mm |
| 7804.797 | Clinch SNAP female, Ø 10mm |
| 7804.816 | Ø 10mm socket crimp terminable on AWG 22-16 wire |
| 7804.817 | Ø 10mm plug crimp terminable on AWG 22-16 wire |
| 7804.872 | BANANA Ø 4mm |
| 7804.873 | Alligator-clip for banana plug Ø 4mm |

GROUNDING CORDS

| | 1° Plug | Cable | 2° Plug |
|-----------------|------------------|------------------|----------------------------|
| 7804.876 | (T1) male 10mm | (C1) 1,8m R=1M Ω | (T1) male 10mm |
| 7804.878 | (T1) male 10mm | (C1) 0,15m R=0 Ω | (T1) male 10mm |
| 7804.880 | (T1) male 10mm | (C1) 4m R=1M Ω | (T4) eyelet Ø 4,2x7mm |
| 7804.882 | (T1) male 10mm | (C1) 4m R=1M Ω | (T5) banana/alligator-clip |
| 7804.883 | (T2) female 10mm | (C1) 3m R=1M Ω | (T5) banana/alligator-clip |
| 7804.866 | (T2) female 10mm | (C1) 3m R=0 Ω | (T5) banana/alligator-clip |
| 7804.884 | (T2) female 10mm | (C1) 3m R=1M Ω | (T4) eyelet Ø 4,2x7mm |
| 6604.803 | (T3) female 10mm | (C2) 2.5m R=1M Ω | (T6) banana/alligator-clip |
| 7804.885 | (T3) female 10mm | (C2) 3m R=1M Ω | (T3) female 10mm |
| 7804.886 | (T7) female 10mm | (C1) 3m R=1M Ω | (T4) eyelet Ø 4,2x7mm |



HARD FOAM CUSTOM CUSHIONING FOR NEWBOX

NEWBOX TOTE-BOX

Conductive polypropylene Tote-Boxes, stackable, $R_s < 10^6 \Omega$.

Available in two EURO format:

400x300mm and 600x400mm

ANTISTATIC HARD PINK FOAM

Use: cushioning purposes

Density: 27Kg/m^3

$R_s < 10^{12}\Omega$



7804.165 1m x 1.5m sheet, thickness 10mm

7804.166 1m x 1.5m sheet, thickness 20mm

FOAM (CUSTOM CUT)

ANTISTATIC SOFT PINK FOAM

Use: cushioning purposes

Density: 30Kg/m^3 , $R_s < 10^{12}\Omega$

7804.161 1m x 1.5m sheet, thickness 6mm

7804.162 1m x 1.5m sheet, thickness 10mm

CONDUCTIVE SOFT BLACK FOAM

Use: cushioning purposes

Density: 30Kg/m^3 , $R_s < 10^6\Omega$

7804.168 1m x 1m sheet, thickness 6mm

7804.170 1m x 1m sheet, thickness 10mm

7806.300 550 x 350mm sheet, thickness 10mm for Euro 600x400 container

7806.306 360 x 260mm sheet, thickness 10mm for Euro 300x400 container

CONDUCTIVE HARD BLACK FOAM

Use: insertion of component leads

Density: 65Kg/m^3 , $R_s < 10^5\Omega$

7804.172 1m x 1m sheet, thickness 6mm

7804.174 1m x 1m sheet, thickness 10mm

CROSS LINKED CONDUCTIVE BLACK FOAM

Use: insertion of component leads high grade, extended life

Density: 60Kg/m^3 , $R_s < 10^6\Omega$

7804.156 1m x 1.78m sheet, thickness 2.5mm

7804.158 1m x 1.78m sheet, thickness 7.5mm

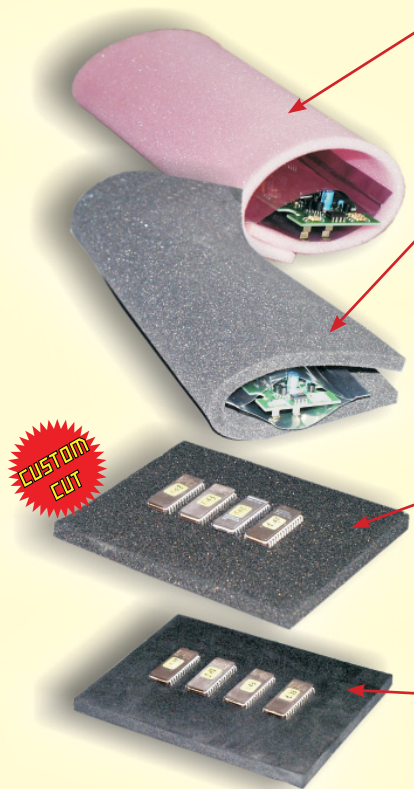
ANTISTATIC HARD PINK FOAM

Use: cushioning purposes

Density: 27Kg/m^3 , $R_s < 10^{12}\Omega$

7804.165 1m x 1.5m sheet, thickness 10mm

7804.166 1m x 1.5m sheet, thickness 20mm



LABEPLAST conductive fluted polypropylene

LABEPLAST is an extruded conductive polypropylene that offers strength, durability and appearance superior to the fiber-board. LABEPLAST sheet has many capabilities such as die-cutting, line bending, riveting and sonic welding.

Rs: $\leq 10^5 \Omega$

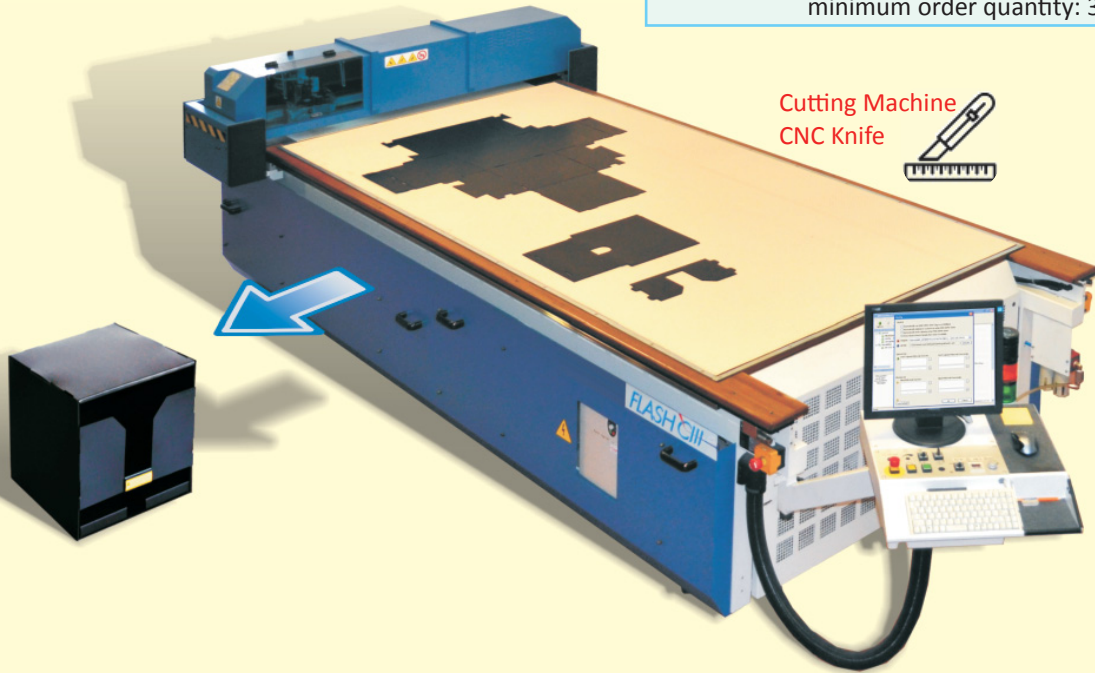
Rv: $\leq 10^5 \Omega$

Color: black

7806.166 LABEPLAST , 1250x1250x2,5mm, 550g/m2 sheets
7806.156 LABEPLAST , 2000x1250x2,5mm, 550g/m2 sheets
 minimum order quantity: 30 pcs

CUSTOM CUT

Cutting Machine
CNC Knife

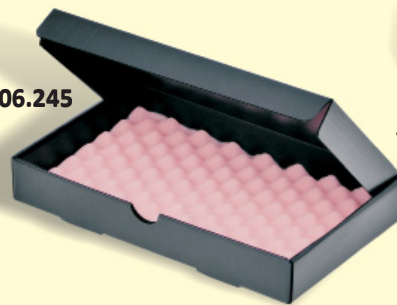
LABBOX

CUSTOM BOXES AND DIVIDERS UNDER REQUEST



LABBOX-S Box with antistatic profiled foam

7806.245



7806.815



7806.815 LABBOX-S Dim. est. 350x145x70mm

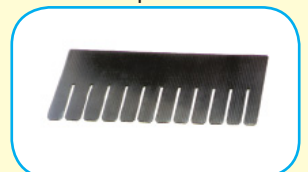
7806.245 LABBOX-S Dim. est. 400x230x60mm

7806.720 LABBOX10 Base container ext.275x400x250(H)mm
7806.724 LABBOX14 Base container ext.430x510x200(H)mm
7806.725 LABBOXC2 Cover for LABBOX14
7806.760 LABBOX30 Base container ext.370x590x140(H)mm
7806.763 LABBOX50 Base container ext.370x590x220(H)mm
7806.766 LABBOXC1 Cover for LABBOX30/50

Fifo



Diviprint



>>> go to page 24

>>> go to page 21

ESD CORRUGATED BOARD

REUSABLE, STURDY CARTONS MADE FROM CONDUCTIVE CORRUGATED BOARD

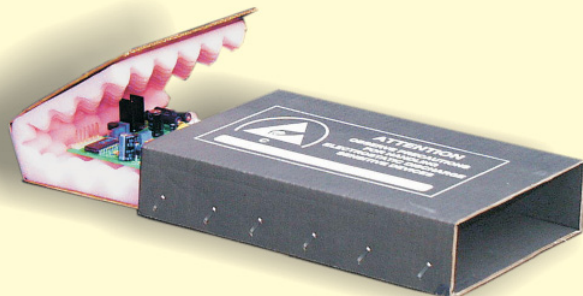
$R_{\text{sup}} \leq 1 \times 10^5 \Omega$

CUSTOM CUT

SLIDING SLEEVE BOXES

Antistatic cushioning FOAM

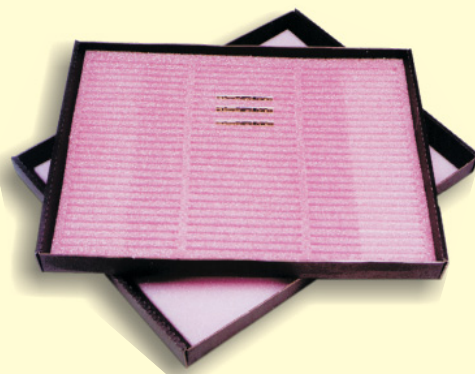
| code | mod. | Esternal dim. mm | Internal Dim. mm |
|----------|-------|------------------|------------------|
| 7806.051 | EUR 1 | 215 x 120 x 55 | 190 x 100 x 30 |
| 7806.056 | EUR 2 | 285 x 180 x 55 | 260 x 165 x 30 |
| 7806.061 | LAB 1 | 325 x 285 x 70 | 285 x 270 x 35 |
| 7806.066 | SAB 1 | 225 x 160 x 100 | 195 x 130 x 75 |
| 7806.078 | SAB 3 | 300 x 200 x 90 | 260 x 185 x 50 |
| 7806.076 | SAB 2 | 350 x 280 x 90 | 310 x 265 x 50 |
| 7806.081 | LAB 2 | 390 x 320 x 70 | 350 x 305 x 35 |



SIMM SHIPPERS

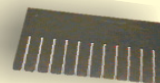
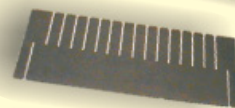
Designed to ship SIMM or DIMM modules, the containers are normally assembled with internal antistatic foams. A hard type on the bottom, a middle foam with the cells, and a soft cushioning foam on the top.

| | |
|----------|---|
| 7806.030 | HYBRID H28 ext 320 x 240 x 28mm - int.294x235x25mm |
| 7806.032 | HYBRID H40 ext.320 x 240 x 40mm - int.294x235x37mm |
| 7806.322 | Antistatic HARD FOAM 235 x 294 x 6 mm |
| 7806.324 | Antistatic HARD FOAM with dividers 81 cells 90x3mm 235x294x6mm |
| 7806.326 | Antistatic HARD FOAM with dividers 108 cells 60x3mm - 235x294x6mm |
| 7806.328 | Antistatic HARD FOAM with dividers 54 cells 60x3mm - 235X154X20mm |
| 7806.320 | Antistatic cushioning FOAM 235 x294 x 6mm |



CARTONBOX

| | |
|----------|---|
| 7806.220 | CARTONBOX 30 int.352x560x130(H)mm without cover, without dividers |
| 7806.226 | CARTONBOX 50 int.352x560x210(H)mm without cover, without dividers |
| 8718.091 | CARTONBOX cover |
| 7806.211 | Type C DIVIDER lenght 555 heigth100 pitch 19, 28 slots (x CARTONBOX 30) |
| 7806.215 | Type D DIVIDER lenght 350 heigth100 pitch 19, 17 slots (x CARTONBOX 30) |
| 7806.217 | Type C DIVIDER lenght 552 heigth200 pitch 31, 17 slots (x CARTONBOX 50) |
| 7806.216 | Type D DIVIDER lenght 350 heigth200 pitch 30, 11 slots (x CARTONBOX 50) |
| 7806.219 | Type C DIVIDER lenght 552 heigth300 pitch 31, 17 slots (x NEWBOX 70) |
| 7806.218 | Type D DIVIDER lenght 350 heigth300 pitch 30, 11 slots (x NEWBOX 70) |



PACKING TAPE

| | |
|----------|--|
| 7807.121 | Antistatic PAPER adhesive tape - yellow with ESD symbol Paper tape with water-based acrylic adhesive - 50mm wide, 50m long roll |
| 7807.170 | PVC adhesive tape yellow with ESD symbol Conventional PVC auto adhesive tape - 50mm wide, 66m long rol |



GREEN POLY ANTISTATIC BUBBLE PACK

Multilayer polyethylene, green colour, amine-free, heat sealable, recyclable. Small strong barrier bubble provides a superior packaging protection with excellent puncture and tear resistance.

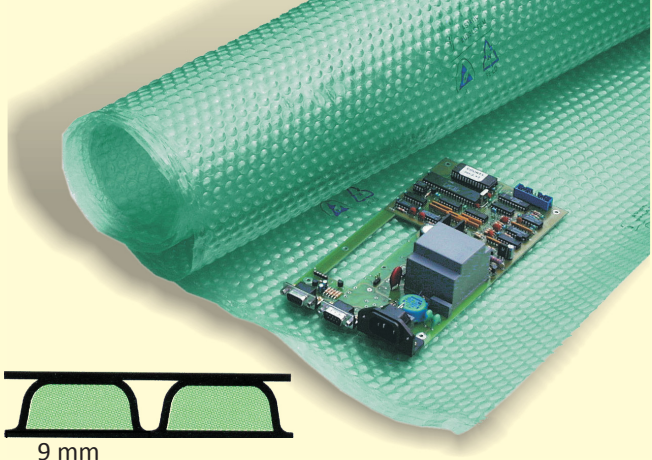
Electrostatic decay: < 2 sec

Rs: < $10^{11} \Omega$

Colour: transparent green

7804.184 Dissipative bubble pack roll
0.5meters x 200meters

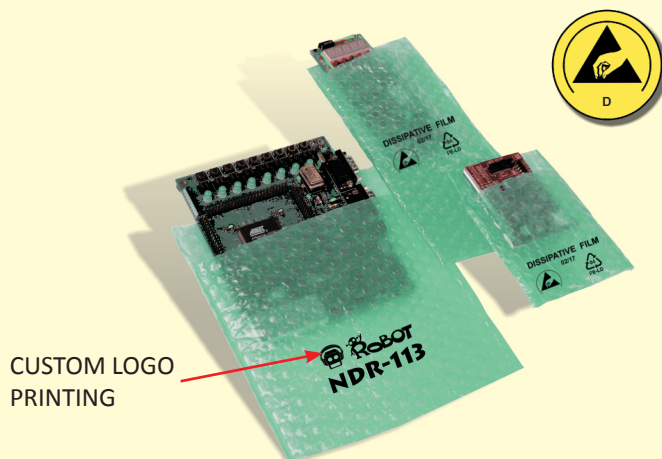
7804.185 Dissipative bubble pack roll
1meter x 200meters



DISSIPATIVE BUBBLE PACK BAGS

Provide superior protection against physical damage during shipping and storage.

| | Opening x depth | Closing pad |
|-----------------|-----------------|-------------|
| 6604.100 | 90 x 100mm | 30mm |
| 6604.101 | 100 x 180mm | 30mm |
| 6604.102 | 130 x 185mm | 30mm |
| 6604.105 | 180 x 230mm | 30mm |
| 6604.107 | 250 x 250mm | NO |
| 6604.110 | 280 x 360mm | 30mm |
| 6604.114 | 300 x 480mm | 30mm |



POLYETHYLENE TUBING

| | | |
|-----------------|-------------------|---------------------------------------|
| 6604.210 | Black CONDUCTIVE | 75 μ m - 100mm width - 500m roll |
| 6604.214 | Black CONDUCTIVE | 75 μ m - 150mm width - 500m roll |
| 6604.218 | Black CONDUCTIVE | 75 μ m - 200mm width - 500m roll |
| 6604.224 | Black CONDUCTIVE | 75 μ m - 250mm width - 500m roll |
| 6604.228 | Black CONDUCTIVE | 75 μ m - 300mm width - 500m roll |
| 6604.230 | Black CONDUCTIVE | 75 μ m - 400mm width - 500m roll |
| 6604.239 | Green DISSIPATIVE | 100 μ m - 75mm width - 250m roll |
| 6604.240 | Green DISSIPATIVE | 100 μ m - 100mm width - 250m roll |
| 6604.244 | Green DISSIPATIVE | 100 μ m - 150mm width - 250m roll |
| 6604.248 | Green DISSIPATIVE | 100 μ m - 200mm width - 250m roll |
| 6604.254 | Green DISSIPATIVE | 100 μ m - 250mm width - 250m roll |
| 6604.258 | Green DISSIPATIVE | 100 μ m - 300mm width - 250m roll |
| 6604.260 | Green DISSIPATIVE | 100 μ m - 400mm width - 250m roll |
| 6604.261 | Green DISSIPATIVE | 100 μ m - 500mm width - 250m roll |
| 6604.264 | SHIELDING | 78 μ m - 100m width - 100m roll |
| 6604.266 | SHIELDING | 78 μ m - 150mm width - 100m roll |
| 6604.268 | SHIELDING | 78 μ m - 200mm width - 100m roll |
| 6604.270 | SHIELDING | 78 μ m - 250mm width - 100m roll |
| 6604.272 | SHIELDING | 78 μ m - 300mm width - 100m roll |
| 6604.275 | SHIELDING | 78 μ m - 400mm width - 100m roll |
| 6604.280 | SHIELDING | 78 μ m - 800mm width - 100m roll |



SHIELDING BAGS (metal-in)

LABESTAT S85 (packages of 100pcs)

Semi-transparent, heat sealable, the metallised shielding bags offer excellent protection for ESD sensitive devices.

A buried layer of metallic film sandwiched between an inner layer of polyethylene and an outer layer of polyester to provide protection against all static damage without exposing metal surfaces.

Thickness of the film: 78 μm

Transparency: 40%

Surface Resistivity:

-inner layer (polyethylene): $< 10^{11} \Omega$

-intermediate layer (metal): $< 10^2 \Omega$

-outer layer (polyester): $< 10^{11} \Omega$

ZIPLOCK (zippered recloseable bags)

| | |
|-----------------|--------------------------|
| 7804.290 | 100 x 150 mm (4" x 6") |
| 7804.296 | 150 x 250 mm (6" x 10") |
| 7804.304 | 250 x 300 mm (10" x 12") |
| 7804.306 | 300 x 400 mm (12" x 16") |



opening x depth

| | |
|-----------------|--------------------------|
| 7804.268 | 76 x 127 mm (3" x 5") |
| 7804.270 | 100 x 150 mm (4" x 6") |
| 7804.272 | 125 x 200 mm (5" x 8") |
| 7804.274 | 150 x 200 mm (6" x 8") |
| 7804.276 | 150 x 250 mm (6" x 10") |
| 7804.278 | 200 x 250 mm (8" x 10") |
| 7804.280 | 200 x 300 mm (8" x 12") |
| 7804.284 | 250 x 300 mm (10" x 12") |
| 7804.285 | 250 x 350 mm (10" x 14") |
| 7804.286 | 300 x 400 mm (12" x 16") |
| 7804.287 | 400 x 500 mm (16" x 20") |
| 7804.288 | 450 x 450 mm (18" x 18") |
| 7804.310 | 400 x 450 mm (16" x 18") |
| 7804.312 | 450 x 680 mm (18" x 27") |

CONDUCTIVE BAGS

LABESTAT C75 (package of 100pcs)

Made from black multilayer polyethylene layflat tubing are available in many sizes. All bags are printed with the ESD logo and text in conformity to IEC61340-5-1. Don't use for packaging PCBs with on-board batteries.

Thickness of the film: 75 μm

Surface Resistivity: $\leq 10^5 \Omega$



opening x depth

| | |
|-----------------|--------------------------|
| 7804.210 | 100 x 150 mm (4" x 6") |
| 7804.212 | 100 x 200 mm (4" x 8") |
| 7804.214 | 150 x 200 mm (6" x 8") |
| 7804.216 | 150 x 250 mm (6" x 10") |
| 7804.218 | 200 x 250 mm (8" x 10") |
| 7804.220 | 200 x 300 mm (8" x 12") |
| 7804.222 | 200 x 350 mm (8" x 14") |
| 7804.224 | 250 x 300 mm (10" x 12") |
| 7804.226 | 250 x 350 mm (10" x 14") |
| 7804.228 | 300 x 400 mm (12" x 16") |
| 7804.230 | 400 x 450 mm (16" x 18") |

DISSIPATIVE BAGS

LABESTAT A100 (package of 100pcs)

Material: Polyethylene, green colour amine-free, heat sealable, recyclable

Print: ESD and Recycle logos, production batch

Thickness: 100 μm

Rs: $< 10^{11} \Omega$



opening x depth

| | |
|-----------------|-------------------------|
| 7804.239 | 76 x 127 mm (3" x 5") |
| 7804.240 | 100 x 150 mm (4" x 6") |
| 7804.242 | 100 x 200 mm (4" x 8") |
| 7804.237 | 100 x 460 mm (4" x 18") |
| 7804.244 | 150 x 200 mm (6" x 8") |
| 7804.246 | 150 x 250 mm (6" x 10") |

opening x depth

| | |
|-----------------|--------------------------|
| 7804.247 | 150 x 300 mm (6" x 12") |
| 7804.248 | 200 x 250 mm (8" x 10") |
| 7804.250 | 200 x 300 mm (8" x 12") |
| 7804.252 | 200 x 350 mm (8" x 14") |
| 7804.254 | 250 x 300 mm (10" x 12") |
| 7804.256 | 250 x 350 mm (10" x 14") |
| 7804.257 | 300 x 350 mm (12" x 14") |
| 7804.258 | 300 x 400 mm (12" x 16") |
| 7804.260 | 400 x 500 mm (16" x 20") |
| 7804.262 | 400 x 600 mm (16" x 24") |
| 7804.267 | 450 x 550 mm (18" x 22") |

CLEAR DISSIPATIVE TAPE



Clear Dissipative Tape used to seal shielding bags or boxes.

Generates low electrostatic charge and can be used in EPA.

Material: Cellulose based tape with rubber based adhesive.

Rs: $10^9 - 10^{11} \Omega$

T1000: 2 sec at 25% rH

7807.180 Clear Dissipative Tape 12mm x 66m

7807.181 Clear Dissipative Tape 24mm x 36m

DRY PACK

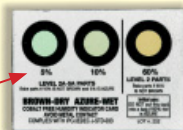
Moisture absorbing desiccant bags

7914.002T Buste Tyvek gr.12 1/3U-DIN (100 pcs)

7914.005 Buste Tyvek gr.34 1U-DIN (300 pcs)

Humidity indicator card

7914.008 3 spot humidity indicator card
5-10-60% (500pcs)

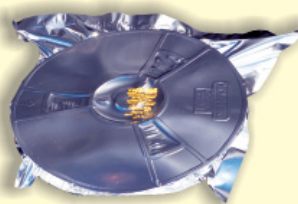


J-STD-033 doesn't require vacuum for dry-pack. Light air evacuation may be used to reduce the packaging bulk and enhance carton packing. Full evacuation shall not be used as it will impede desiccant and HIC performance and possibly lead to MBB puncture.

VacuWeld heat sealers have digital adjustment of vacuum, controlled by an internal vacuum sensor.



MBB with Recommended Light Air Evacuation



MBB with Too Much (Full) Evacuation



VacuWeld >>>
GO TO page 53

Esd moisture barrier bags (metal-in)

Excellent in EMI/RFI and static field shielding, these bags are water vapor proof and grease proof. Heat sealable, Moisture Barrier Bags are made from a multilayer metallized film.

MIL-B-81705C class1 TC1 SBM356

Thickness: 85 μ m

Film complying: MIL-B-81705C class1 TC1 SBM356

Rs: < 1x10¹¹ Ω

Electrostatic decay: < 0,1 sec

EMI shielding (MIL 81705-C): 40dB / 1÷10 GHz

Packaging of 100pcs

JEDEC-STD-033

Thickness: 150 μ m

Film complying: JEDEC-STD-033

Rs: < 1x10¹¹ Ω

Electrostatic decay: < 0,1 sec

EMI shielding (MIL 81705-C): 40dB / 1÷10 GHz

Packaging of 100pcs

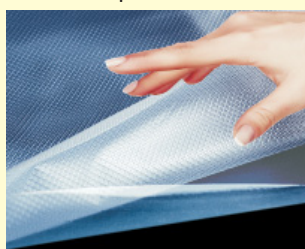
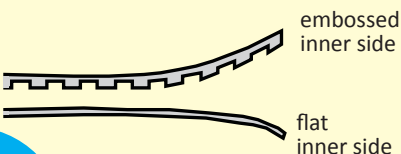
| Opening on the short side (mm) | Thickness 85 μ m |
|--------------------------------|----------------------|
| 100 x 660 | 7804.344 |
| 150 x 660 | 7804.347 |
| 200 x 250 | 7804.348 |
| 250 x 660 | 7804.350 |
| 400 x 400 | 7804.354 |
| 400 x 660 | 7804.353 |
| 450 x 450 | 7804.355 |
| 450 x 660 | 7804.356 |

| Opening on the short side (mm) | Thickness 150 μ m |
|--------------------------------|-----------------------|
| 100 x 660 | 7804.344P |
| 150 x 660 | 7804.347P |
| 200 x 250 | 7804.348P |
| 250 x 660 | 7804.350P |
| 400 x 400 | 7804.354P |
| 400 x 660 | 7804.353P |
| 450 x 450 | 7804.355P |
| 450 x 660 | 7804.356P |

Not-esd moisture barrier bags

SACS BARRIERE GAUFRES (Packaging of 100pcs)

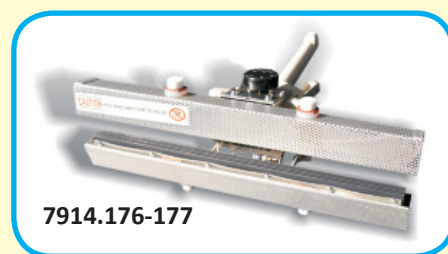
In external aspiration appliances textured bags are the best solution for an easy operation. One of the inner layer is made with small straight rails parallel to the lateral sides that facilitate the output of the air during the aspiration job.



| Opening on the short side (mm) | Embossed 85 μ m | Flat 95 μ m |
|--------------------------------|---------------------|-----------------|
| 150 x 200 | 6604.004 | 6603.923 |
| 150 x 300 | 6604.006 | 6603.925 |
| 200 x 300 | 6604.010 | 6603.928 |
| 250 x 350 | 6604.015 | 6603.932 |
| 250 x 600 | 6604.020 | 6603.936 |
| 300 x 400 | 6604.025 | 6603.940 |
| 400 x 600 | 6604.030 | 6603.945 |
| 200 x 6m Tubing | 6604.052 | - |
| 300 x 6m Tubing | 6604.054 | - |

HAND HELD CRIMPER SEALER

| Model | 7914.172 | 7914.175 | 7914.176 | 7914.177 |
|-------------------------------|--------------|---|---|---|
| Weldable material | polyethylene | cellophane, wax paper, aluminium or moisture barrier bags | cellophane, wax paper, aluminium or moisture barrier bags | cellophane, wax paper, aluminium or moisture barrier bags |
| Soldering length (mm) | 150 | 150 | 300 | 400 |
| Max. soldering thickness (mm) | 2x0,15 | 2x0,15 Aluminium bag | 2x0,15 Aluminium bag | 2x0,15 Aluminium bag |
| Seal width (mm) | 2 | 15 | 12 | 12 |
| Power (W) | 25 | 50 | 320 | 420 |
| Weight (kg) | 0,5 | 1 | 2,5 | 3,5 |
| heating jaws | 1 | 2 | 2 | 2 |
| Finishing | flat | embossed | embossed | embossed |
| Temp. Adjustment | 50-200°C | 50-200°C | 50-200°C | 50-200°C |



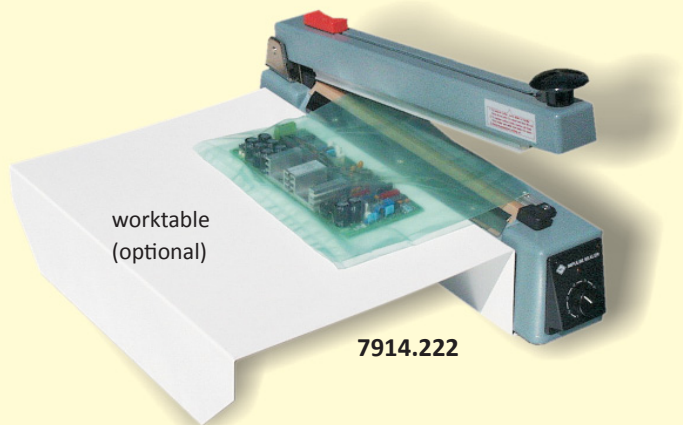
HAND SEALERS

The welding time is adjustable, to match the type and thickness of material. The models with cutting blade can be used to produce bags from tubing or to seal filled bags and to trim the exceeding material.

Seal width: 2mm

Max.Sealable Thickness: 2x0.125mm.

| Model | With cutter blade | Sealing length (mm) | Power (Watts) | Weight (Kg) |
|----------|-------------------|---------------------|---------------|-------------|
| 7914.201 | | 200 | 260 | 4 |
| 7914.211 | x | 200 | 260 | 4 |
| 7914.221 | | 300 | 380 | 5 |
| 7914.222 | x | 300 | 380 | 5 |
| 7914.231 | | 400 | 500 | 6 |
| 7914.232 | x | 400 | 500 | 6 |
| 7914.233 | x | 500 | 550 | 7 |



HAND SEALER (MEDICAL)



Recommended for the health care industry, creates water-tight seals on sterilisation rolls (paper-plastic) and sterilisation tubing (plastic-plastic) materials. The welding time is adjustable, to match the type and thickness of material, an audible beep advises when the seal is complete. Each seal has a deeply embossed texture.

- Soldering width: 10mm (according DIN58953)
- Max.Sealable Thickness: 2x0.2mm

| | Model | Sealing length (mm) | Power (Watts) | Weight (Kg) |
|--|----------|---------------------|---------------|-------------|
| | 7914.215 | 200 | 1000 | 6,5 |
| | 7914.216 | 300 | 1200 | 8 |



WITH HOLDING magnet and cutter

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.
- Uniform set contact pressure.
- Welds all types of thermoplastic films.
- Easy and simple to operate.

Seal width: 5mm

Max seal thickness: 2x0.15mm

Holding Magnet

7914.245

7914.245 Hand Sealer with holding magnet and Cutting Blade Max. seal length: 300mm

7914.246 Hand Sealer with holding magnet and Cutting Blade Max. seal length: 400mm

ACCESSORIES FOR HAND SEALERS

7914.217 Worktable for sealing unit 200mm

7914.227 Worktable for sealing unit 300mm

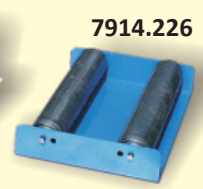
7914.237 Worktable for sealing unit 400mm

7914.226 Holder for tubing roll, maximum width 310mm

7914.236 Holder for tubing roll, maximum width 510mm



7914.217



7914.226

DOUBLE AUTOMATIC HEAT SEALER

Heavy duty, single or double, automatic or manual impulse heat sealer. Seals up to 0.5mm gusseted or regular thermoplastic film.

Separate programmable timers (for sealing, cooling and recycle time when in automatic mode).

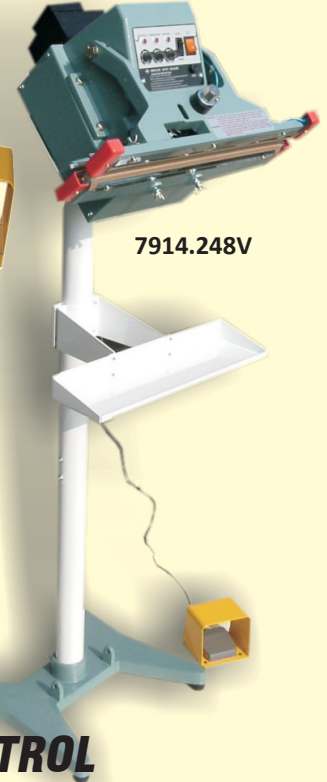
Foot switch included for manual operation.

Seal width: 10mm

Max. seal thickness: 2x0.15mm



7914.247



7914.248V

7914.247 Automatic heat sealer 300mm (2000W - weight 22kg)

7914.247V Automatic heat sealer 300mm with floor support

7914.248 Automatic heat sealer 450mm (2500W - weight 24kg)

7914.248V Automatic heat sealer 450mm with floor support

7914.249 Automatic heat sealer 600mm (3000W - weight 26kg)

7914.249V Automatic heat sealer 600mm with floor support

AUTOMATIC HEAT SEALER WITH TEMPERATURE CONTROL

Heavy duty, constant temperature, magnet hold, automatic or manual impulse heat sealer. The machine is suitable for heavy bags like poly-cello films, aluminum foil or moisture barrier bags. Each seal has a deeply embossed texture.



7914.165

Seal width: 15mm

Max. seal thickness: 2 x 0,25mm

Temperature range: 30 - 199°C

Sealing time: 0,2 - 2,5 sec

Recycle time (automatic mode): 1 - 8 sec

7914.163 Constant automatic heat sealer 200mm (350W - weight 15kg)

7914.165 Constant automatic heat sealer 400mm (520W - weight 19kg)

7914.166 Constant automatic heat sealer 600mm (600W - weight 22kg)

AUTOMATIC BAND SEALERS

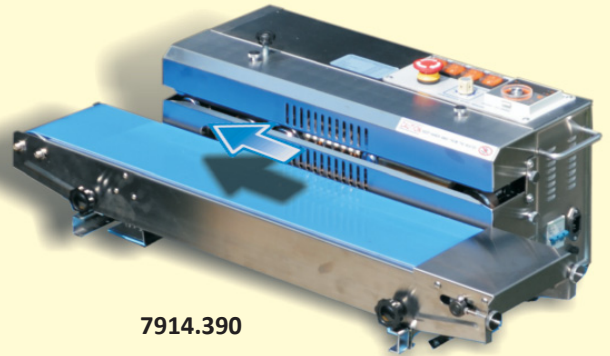


7914.391

These versatile portable band sealers, available in horizontal and vertical feed, are designed for sealing all kinds of plastic materials and bag. The vertical model is ideal for the packaging of bags containing spillable items such as powders or liquids.

Construction: stainless steel
 Seal width: 8mm
 Max. Seal thickness (PE): 800mm
 Max. Length of the bags: 300mm
 Conveyor speed: 0-12m/min
 Max. conveyor load: 6kg
 Temperature range: 30-300°C
 Power: 500W

| | Model | External dimensions (mm) | Conveyor width | Weight (kg) |
|----------|------------|--------------------------|----------------|-------------|
| 7914.390 | horizontal | 805x460x280(H) | 150 mm | 30 Kg |
| 7914.391 | vertical | 805x320x640(H) | 150 mm | 30 Kg |
| 7914.192 | horizontal | 805x610x280(H) | 300 mm | 32 Kg |
| 7914.193 | vertical | 805x370x640(H) | 300 mm | 32 Kg |



7914.390

- 7914.390** Horizontal automatic band sealer, conveyor width 150mm
- 7914.391** Vertical automatic band sealer, conveyor width 150mm
- 7914.192** Horizontal automatic band sealer, conveyor width 300mm
- 7914.193** Vertical automatic band sealer, conveyor width 300mm

SHRINK WRAP SYSTEM



7914.255

- Works on monofolded shrink film (already perforated to let the air flow out).
- Sealing bar with timer, to be used in 2 steps.
- Warming by means of a heating gun, 2 speeds.

| Model | Sealing length (mm) | Sealer Power (Watts) | Heat Gun Power (Watts) |
|----------|---------------------|----------------------|------------------------|
| 7914.255 | 450 (mm) | 350 | 600/1200 |
| 7914.257 | 600 (mm) | 450 | 600/1200 |

VACUUM PACKING MACHINES

VACUTEK - external aspiration (manual / motorized) for EPA area

Vacuthek is an innovative external suction welding machine, an evolution of the previous model Vaculab which has been produced for over 10 years. Vacuthek is available in two versions, manual (7914.340) and motorized (7914.345), which differ only in the automatism that closes the jaws to start the air extraction cycle and subsequent welding of the barrier bags. The 7914.345 motorized Vacuthek is supplied with a foot-pedal. Furthermore, having the 7808.340 model it is always possible to switch to the 7914.345 motorized model using the special 7914.341 upgrade kit.

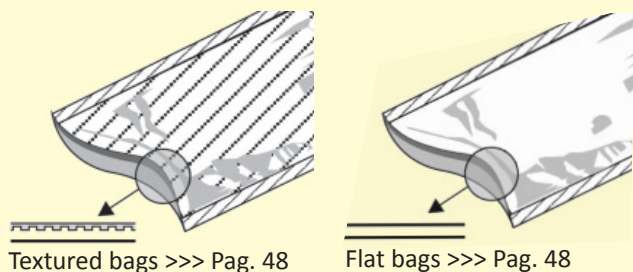


Technical features:

- Seal length: 450 mm
- Soldering jaws: 2 x 6mm
- Vacuum pump: Dry, 5m³/h.
- Noise: <65dB
- External dimensions: 490x390x220mm
- Power supply: 230V/50Hz - 600W

The advantages of Vacuthek are:

1) it is possible to use both flat and textured bags

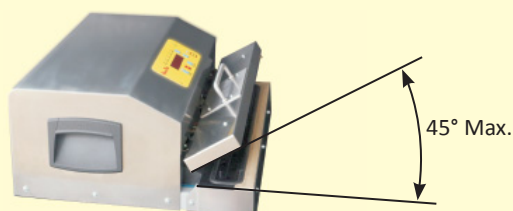


2) No danger for the operator with the motorized version

Unlike other motorized vacuum machines, the pressure exerted by the jaws moving is not sufficient to cause damage to the hands.

3) Wide jaw opening

Excellent visibility when the mouth is open (the jaws open up to 45° in both Vacuthek versions). This allows the operator to insert the bag quickly and accurately.



With these economic and flexible machines it is possible to package every length of bag.

The unit is hand operated or motorized and the degree of vacuum is achieved by the operator's evaluation.

7914.340 Manual vacuum bag sealer, external aspiration.

7914.345 Motorized vacuum bag sealer, external aspiration, Foot pedal included.

7914.341 Upgrade kit from manual to motorized model

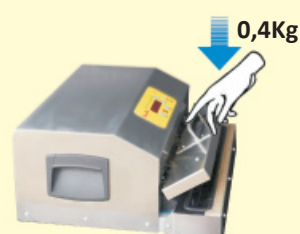
4) Little effort to start the cycle

Both Vacuthek models can start the suction cycle by manually pushing the upper jaw handle down. Once the cycle has started, it is not necessary to continue pushing.

The force to apply on the handle to start the cycle is about 4Kg for the 7914.340 model, while it is about 400g (just use a finger!) for the 7914.345 model.



7914.340



7914.345

5) Starting by pedal. In the motorized version (7914.345) the cycle can also be started by pedal, with the advantage of having hands totally free.



6) No maintenance

The vacuum pump is dry therefore it does not require any maintenance.

VACUWELD - vacuum tank sealers for epa area

The VACUWELD machines have been designed to avoid electrostatic charges, for the use in ESD environments: stainless steel chamber, aluminium cover and conductive wheels. Digital adjustment of vacuum, controlled by an internal vacuum sensor.

VACUWELD - Venturi pump (compressed air)



7914.275

7914.275 Vacuum tank sealer

The use of a compressed air-driven vacuum pump, minimizes noise, vibration and heat generation.

Maximum vacuum level 90% (measured at the sea level)
 Seal bar: 460 x 10mm
 Useful chamber size: 500 x 600 x 100(H)mm
 Air requirements: 6nl/s at 6 ATM
 Power supply: 230V/50Hz 1kW

VACUWELD - Oil pump



7914.279

7914.278 Vacuum tank sealer

7914.279 Vacuum tank sealer, with inert gas injection

The use of an oil pump let the sealer to reach a high vacuum level.

Maximum vacuum level 98% (measured at the sea level)
 Seal length: 450 x 5 mm
 Vacuum pump: Oil bath, 20m³/h.
 Chamber capacity: 450x500x90(H) mm
 Power supply: 230V/50Hz 2kW

Table top vacuum sealers



| Model | 7914.262 | 7914.263 |
|------------------|--------------------------------|--------------------------------|
| Seal length | 400 x 5 mm | 450 x 5 mm |
| Vacuum pump | Oil bath, 20m ³ /h. | Oil bath, 20m ³ /h. |
| Chamber capacity | 410x400x90 mm | 460x450x90 mm |
| Power supply | 230V/50Hz 2kW | 230V/50Hz 2kW |

Wire shelving



Solid CONDUCTIVE shelving, in chrome plated steel, resistant to rust, bumps and scratches.

This system allows an efficient air circulation, a good light penetration and the maximum accessibility.

Easy to assembly on field, it doesn't require any screws, bolts or tools.

Split sleeve assembly device locks shelves in place in 1" increments along height of post.

Levelling bolt compensate for uneven floors.

Every wire shelf system can be made mobil by using conductive castors.

VINYLAB mat optional cover, 2 layers, grey ESD

Load capacity for single shelf: 150 kgs

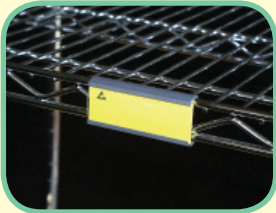
Load capacity for shelving unit: 800 kgs

Composition

The Starter Unit, the first one, is composed by two, three or four shelves by choice, and four posts.

An Add-on Unit, to be attached to the preceding, needs two posts only. This unit connect to the Starter Unit by mean of "S" hooks, two for shelf, easy to fix. In this case two split sleeves for shelf will be enough (For a total of two "S" hooks and two split sleeves for shelf).

(1)



(2)



(3)



(4)



| Shelf Dim. (mm) | Shelf | VINYLAB mat |
|-----------------|----------|-------------|
| 350x910 | 8103.990 | 8104.140 |
| 350x1220 | 8103.991 | 8104.141 |
| 455x910 | 8104.001 | 8104.142 |
| 455x1220 | 8104.002 | 8104.143 |
| 455x1525 | 8104.003 | 8104.144 |
| 455x1830 | 8104.000 | 8104.145 |
| 610x910 | 8104.004 | 8104.146 |
| 610x1220 | 8104.005 | 8104.147 |
| 610x1525 | 8104.006 | 8104.148 |
| 610x1830 | 8104.007 | 8104.149 |



8104.050



- 8104.020 Post H= 864mm
- 8104.021 Post H=1370mm
- 8104.022 Post H=1600mm
- 8104.023 Post H=1890mm
- 8104.108 Esd Document holder A4 - 2 magnets included
- 8104.061 Chromed plastic split sleeve (optional)
- 8104.050 "S" Hooks for Add-on Unit.

Fixed Label-holder (1)

8104.101 Fixed Label-holder 80mm

Divider (2)

8104.110 Shelf Dividers 455x200(H)mm

8104.111 Shelf Dividers 610x200(H)mm

Side and back ledges (3)

Side and back ledges 100mm height to avoid dangerous falls.

8104.130 Ledge 100mm x 455mm

8104.131 Ledge 100mm x 610mm

8104.135 Ledge 100mm x 762mm

SMD reel shelf (4)

8104.012 SMD reel shelf 455 x 910mm

Reel capacity: 70, DIA.180mm x width. max.17mm

8104.013 SMD reel shelf 455 x 910mm

Reel capacity: 13, DIA.330mm x width. max.50mm



Plastic split sleeve included withshelves

8104.061 (optional)
Chromed plastic
ESD split sleeve



Wire trolley

Two version of it: with 2 U-handles or 4 posts. The shelves are the same used in the shelving unit, easy to assembly with split sleeve devices to avoid any tools, screws and bolts. Load capacity: 200 kgs.

Composition A:

2 U-handles, 1 set of castors,
3 shelves and 12 split sleeves

Composition B:

1 handle, 4 posts,
1 set of castors
2 shelves, 12 split sleeves
and 2 VINYLAB mats



- 8104.041** U-handle 455mm width, 876mm height
- 8104.042** U-handle 610mm width, 876mm height
- 8104.046** 8104.046 Handle 455mm
- 8104.047** 8104.047 Handle 610mm
- 8104.070** Set of 4 conductive castors \varnothing 125mm (2 with brake)
- 8104.071** Set of 4 NON-ESD castors \varnothing 125mm (2 with brake)

Stainless steel trolley

Stainless steel carts - AISI304 with solid conductive wheels \varnothing 125mm, 2 with brake.

TWO/THREE SHELF TROLLEY (A)

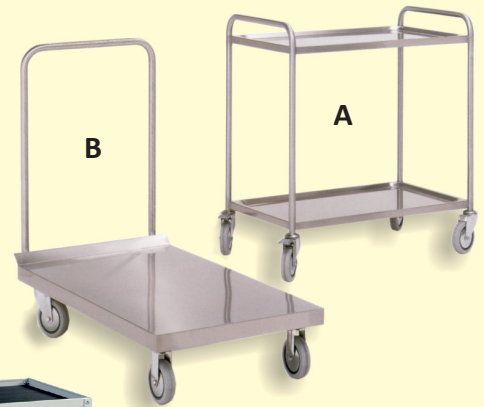
Load capacity for single shelf: 50kg

- 8104.700** 2 U-handle KIT, with conductive wheels
- 8104.706** Shelf - dim. 800 x 500mm
- 8104.708** Shelf - dim. 1000 x 500mm

CART FOR STUFF (B)

Load capacity: 200kg

- 8104.720** Trolley - dim. 1000 x 550mm



TRESTON trolley

TRESTON TROLLEY ESD (C)

Storage trolley is an easy solution for mobile storage, it has an adjustable middle shelf and all shelves are fitted with standard rubber mats.

Set of 4 ESD castors diam. 100mm (2 with brake)

Max load 30 kg per shelf.

- S852773-49** TRESTON TROLLEY ESD 650x450x775mm (C)

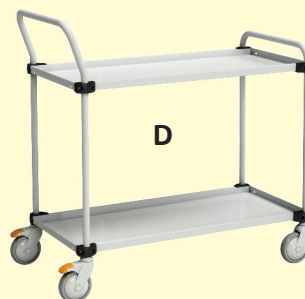
TRTA TROLLEY ESD

The Trolley can be equipped with several accessories to transport and store tools and electronic components.

Set of 4 ESD castors \varnothing 125mm (2 with brake).

The Trolley is available in 2 versions:

- The TRTA / 2 version (figure D) has 2 shelves dim. 800x400. Load max. 150kg.
- The TRTA / 4 version (figure E) has 4 shelves dim. 800x400. Load max. 300kg.



- TRTA4082 ESD** TROLLEY TRTA /2 ESD 890x530x1020mm (D)
- TRTA5104 ESD** TROLLEY TRTA /4 ESD 1090x630x1515mm (E)

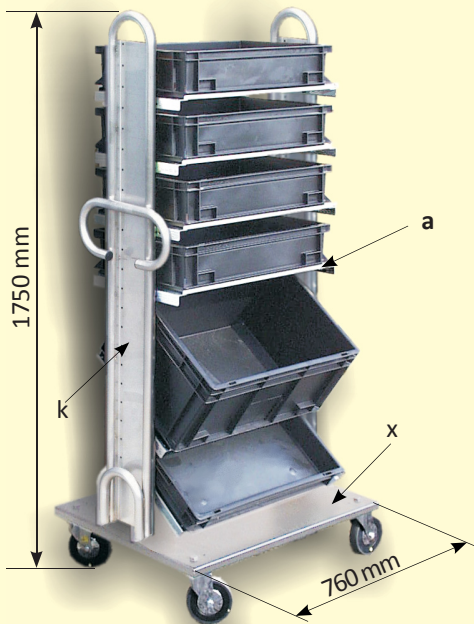
CHARIOTTE - Trolley per newbox

CHARIOTTE conductive trolleys are ideal for efficient handling of tote boxes, circuit board carriers, cabinets and other parts handling containers. The basic unit consist of two lateral support posts on a stable, wide based assembly.

Steel shelves are adjustable in height, depth and tilt angle.

P370 shelf, without fittings, can accomodate one EURO 600x400 or two EURO 300x400 boxes.

In the table below are listed the parts forming the trolley shown left.



Load capacity for single shelf: 50kg

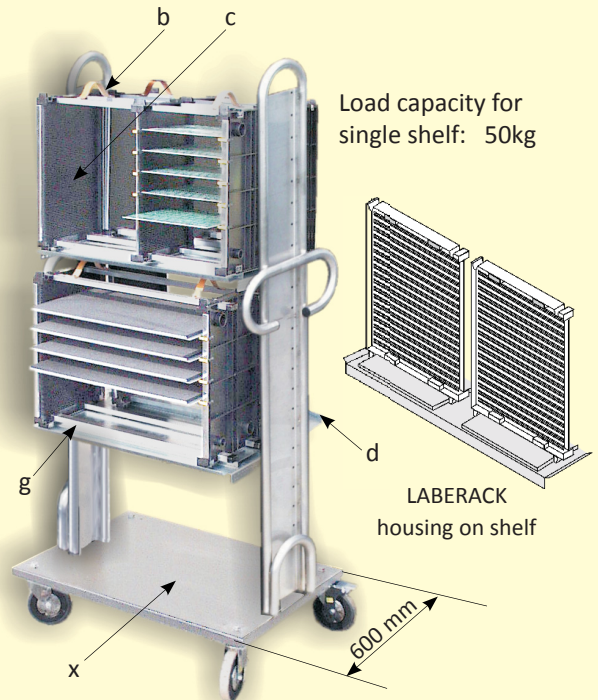
| codice | description | fig. | Qty. |
|----------|--|------|-------------|
| 8100.050 | Stainless steel baseplate with castors | x | 1 |
| 8100.054 | Stainless steel lateral support post | H | |
| 8100.055 | Stainless steel lateral post with handle | K | 2 |
| 8100.056 | A4 document holder | J | |
| 8100.065 | P370 shelf 370x630mm | a | 4 in figure |
| 8100.066 | P600 shelf 600x630mm NEWBOX tote boxes (cat. page 22) | | 2 in figure |

Chariotte - trolley for laberack

CHARIOTTE conductive trolley can be customized to carry Printed Circuit Boards or LABEFIX trays. The trolley shown in figure consists of four LABERACK carriers, securely housed on the two special double support shelves.

In the table below are listed the parts forming the trolley shown right:

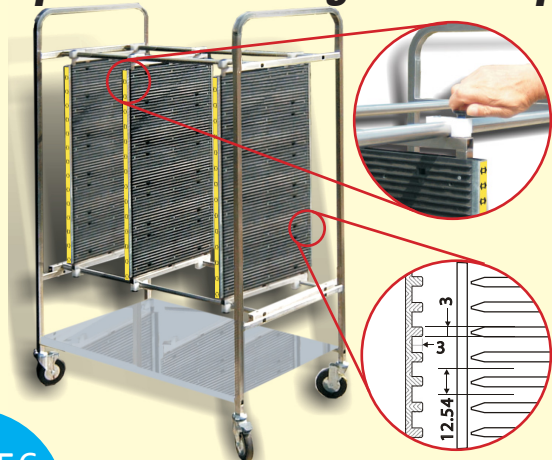
| codice | description | fig. | Qty. |
|----------|---|------|------|
| 8100.050 | Stainless steel baseplate with conductive castors | x | 1 |
| 8100.054 | Stainless steel lateral support post | H | |
| 8100.055 | Stainless steel lateral post with handle | K | 2 |
| 8100.056 | A4 document holder | J | |
| 8100.068 | Double shelf for 2 LABERACK racks | d | 2 |
| 7804.007 | LABERACK wall | c | |
| 7804.017 | LABERACK intermediate wall | | |
| 7804.002 | LABERACK aluminium bar (600mm lenght) | g | |
| 7804.021 | LABERACK handle for transport (rail fixing) | b | rack |



Load capacity for single shelf: 50kg

LABERACK housing on shelf

pc board storage & transport LABECART

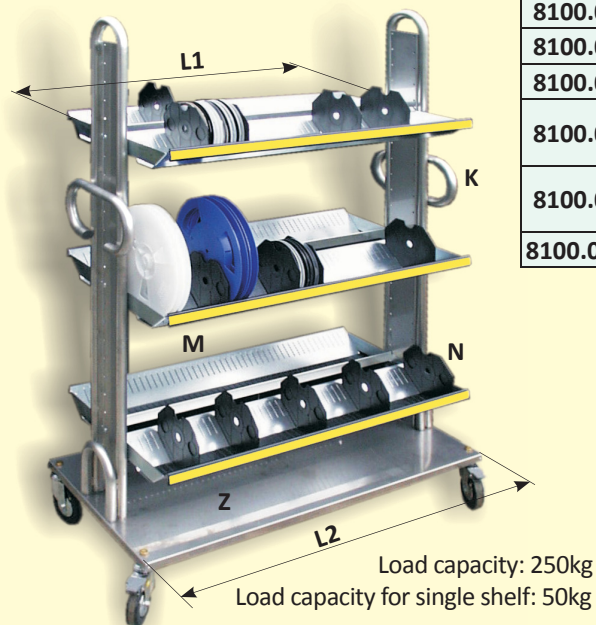


A mobile PCBs' store, ideal for transporting work process and storing large quantities of board. Adjustable panels with horizontal slides feature 12,54mm (1/2") spacing. Made by stainless steel structure and conductive plastic panels. 84 slides per side, accepts boards or trays up to 9mm thickness. Load capacity: 250kg

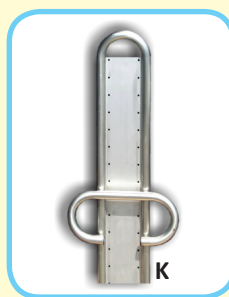
| | |
|----------|--|
| 8104.312 | Stainless steel lateral support post pair |
| 8104.318 | Stainless steel stud \varnothing 25x1000mm (n.6 each cart) |
| 8104.327 | Side wall 1120x510mm / 84 rails |
| 8104.325 | Intermediate wall 1120x510mm / 84 rails each side |
| 8104.330 | Lower stainless steel shelf 660x1000mm |
| 8104.695 | ESD wheel kit, \varnothing 125mm (2 with brake) |
| 8104.696 | NON-ESD wheel kit, \varnothing 125mm (2 with brake) |

CHARIOTTE

Smd reel holder



| | description | ref. | Qnt. |
|-----------|---|------|------|
| 8100.050 | Stainless steel baseplate with castors, 600x760(L2) mm | x | |
| 8100.049 | Stainless steel baseplate with castors, 600x1130(L2) mm | Z | 1 |
| 8100.054 | Stainless steel lateral support post | H | |
| 8100.055 | Stainless steel lateral support post with handle | K | 2 |
| 8100.056 | A4 document holder | J | |
| 8100.073 | Double shelf for SMD reel support L1 = 630mm 29 slits for side, pitch 20mm | | |
| 8100.074 | Double shelf for SMD reel support L1 = 1000mm 49 slits for side, pitch 20mm | M | 3 |
| 8100.075P | Divider for SMD reels | N | |



8100.055



8100.054



8100.056

CHARIOTTE reel holder is designed to prepare and transport the SMD reels to the assembly area, and mainly to make the replacement of empty reels on the automatic machines. The capacity of the trolley is 4 shelves for reel size 330mm and 5 shelves for reel size 220mm. Steel shelves are adjustable in height, the mobile dividers help to compartmentalize the reels. Every shelf is provided with labels.

TRESTON smd reel holder

The adjustable reel holder trolley is compatible with SMD reels, and suitable for transport and stocking of them. The trolley is in powder coated steel, RAL7035 ESD. The reel holder is galvanized.



7805.698

The trolley has four perforated steel shelves depth 460mm. All shelves are individually adjustable.

The load capacity of one shelf is 50kg, and the load capacity of the trolley is 200kg.

8100.020 Trolley with four shelves and wheels (reel holders not included)

7805.698 Reel rack Ø 180 / 330 / 380mm - Dim. 960x426x254(H)mm



8100.020



8104.012



8104.013

Smd reel holder

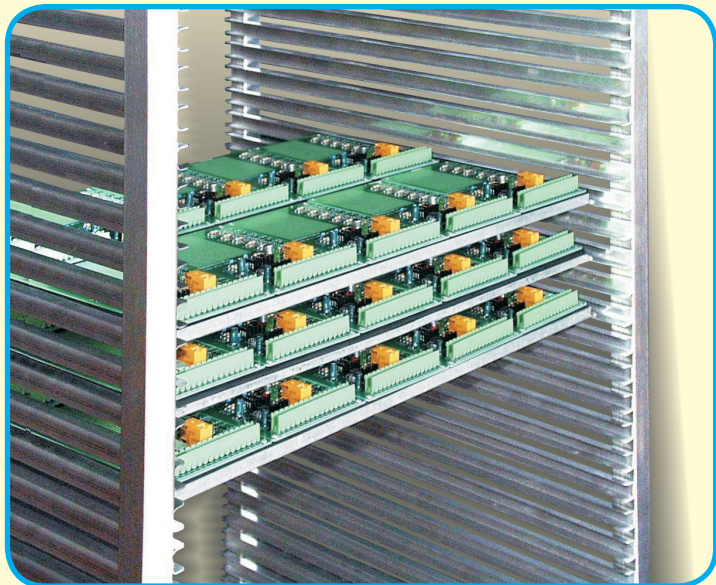
(wire shelving page 54)

The Wire Reel Holders can be combined with the standard wire shelves and posts. (see page 54)

8104.012 WIRE SHELF for 180mm SMD reels - 455x910x95(H)mm. Slot opening 16mm - Reel capacity /shelf: about 70

8104.013 WIRE SHELF for 330/380mm SMD reels - 455x910x108(H)mm. Slot opening 50mm - Reel capacity /shelf: about 13

CHARIOTTE tray trolleys



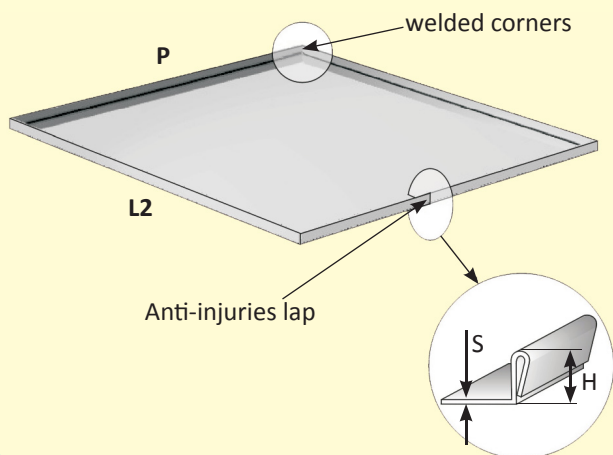
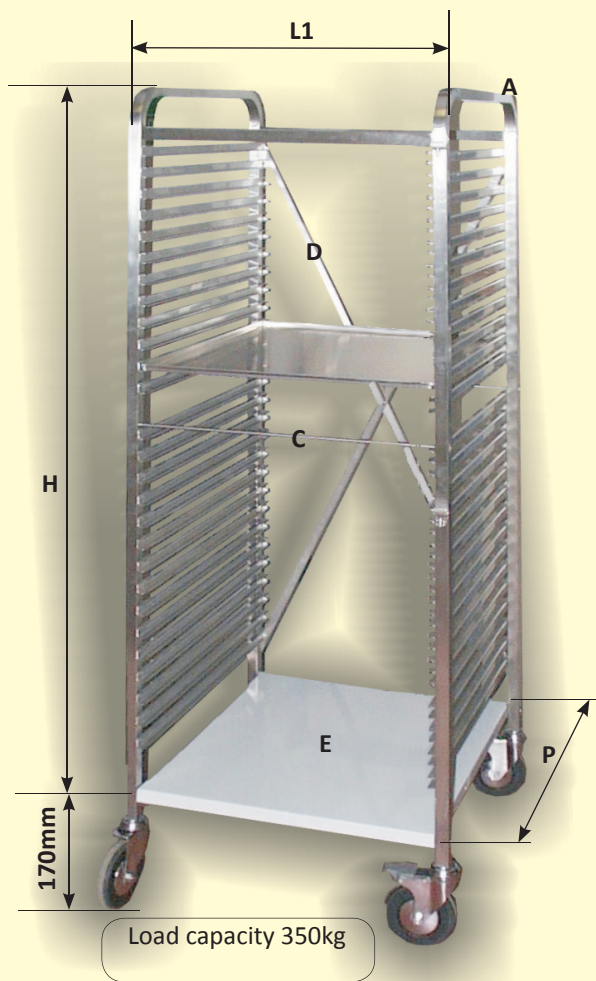
Supporting structure made of tubular AISI 304 stainless steel.

C - shaped tray control guides, made of stainless steel with back stops.

Chariotte trolleys with height of 1520mm shall be equipped with 1 stiffening cross on the back side and 1 central tie rod on front side.

Pivoting conductive wheels, \varnothing 125mm (2 with brakes)
The optional stainless steel shelf, can be placed on the bottom and on the top.

- 8104.605 (A) Lateral support post pair, 20 rails 825(H)x400(P)mm
- 8104.607 (A) Lateral support post pair, 20 rails 825(H)x660(P)mm
- 8104.610 (A) Lateral support post pair, 38 rails 1520(H)x400(P)mm
- 8104.612 (A) Lateral support post pair, 38 rails 1520(H)x660(P)mm
- 8104.650 (B) STRINGER 25 x 25 x 508(L1)mm (need 4)
- 8104.651 (B) STRINGER 25 x 25 x 538(L1)mm (need 4)
- 8104.654 (B) STRINGER 25 x 25 x 808(L1)mm (need 4)
- 8104.660 (C) Central tie rod \varnothing 8X 508(L1)mm
- 8104.661 (C) Central tie rod \varnothing 8X 538(L1)mm
- 8104.664 (C) Central tie rod \varnothing 8X 808(L1)mm
- 8104.685 (D) Stiffening cross 1520(H)x508(L1)mm
- 8104.686 (D) Stiffening cross 1520(H)x538(L1)mm
- 8104.687 (D) Stiffening cross 1520(H)x808(L1)mm
- 8104.670 (E) Inox SHELF 10/10 400(P) x 508(L1)mm (optional)
- 8104.674 (E) Inox SHELF 10/10 660(P) x 508(L1)mm (optional)
- 8104.675 (E) Inox SHELF 10/10 400(P) x 538(L1)mm (optional)
- 8104.676 (E) Inox SHELF 10/10 660(P) x 538(L1)mm (optional)
- 8104.678 (E) Inox SHELF 10/10 400(P) x 808(L1)mm (optional)
- 8104.682 (E) Inox SHELF 10/10 660(P) x 808(L1)mm (optional)
- 8104.695 Conductive wheels KIT, \varnothing 125mm (2 with brakes)
- 8104.696 Set of 4 NON-ESD castors, \varnothing 125mm, (2 with brakes)



Aluminium trays

Flat trays, made of aluminium alloy 3003 with anti-injuries laps. Welded on the corners.

| Code | S | H | L2xP | L1 |
|----------|-----|----|---------|-----|
| 8104.580 | 1.2 | 12 | 500x330 | 508 |
| 8104.582 | 1.2 | 12 | 500x390 | 508 |
| 8104.584 | 1.2 | 15 | 500x650 | 508 |
| 8104.587 | 1.2 | 12 | 535x290 | 538 |
| 8104.588 | 1.2 | 12 | 535x600 | 538 |
| 8104.592 | 1.2 | 15 | 800x330 | 808 |
| 8104.594 | 1.5 | 15 | 800x390 | 808 |
| 8104.596 | 1.5 | 16 | 800x650 | 808 |

Workbenches TP

Ergonomic workbench is suitable for light assembly. Frames are of epoxy powder coated steel in grey RAL7035. The worktops are of 25 mm ESD-laminate. Height adjustment with allen-key between 650 to 900 mm.

| | | |
|-------------------|--------------|-------------------|
| TP 510 ESD | 500 x 1000mm | charge max. 150kg |
| TP 710 ESD | 700 x 1000mm | charge max. 300kg |
| TP 712 ESD | 700 x 1200mm | charge max. 300kg |
| TP 715 ESD | 700 x 1500mm | charge max. 300kg |
| TP 718 ESD | 700 x 1800mm | charge max. 300kg |
| TP 915 ESD | 900 x 1500mm | charge max. 300kg |
| TP 918 ESD | 900 x 1800mm | charge max. 300kg |



Steel cabinet 45

Suitable for TP/TPH/WB benches of 700 mm depth and over, Centrally locked high quality steel cabinet for storage of tools and small components. Mounted under workbenches with brackets (included). Steel cabinets are semiconductive epoxy powder coated in grey paint, RAL 7035. One model 7804.563 available as an independent tool trolley, with wheels 100 mm diameter, two with brakes. Full width drawer handle in anodised aluminium. The drawers are mounted on silent telescopic guides that allow extraction at 100% of the length.

Load capacity: 60 kg/drawer.

Drawers size: 380 x 500 mm (Width x Depth).



| code | 7804.533 | 7804.543 | 7804.553 | 7804.563 | 7804.573 |
|-------------------------|-------------|-------------|----------------|----------------------------|--------------------------|
| drawer outerheight (mm) | 1X100 | 2X100 | 3X100 1X200 | 3X100 1X200 with wheels | 3X100 2X150 with base |
| outer dimensions (mm) | 450x520x140 | 450x520x260 | 450x520x560 | 450x520x700 | 450x520x660 |

WORKBENCHES TPH

Workbench with upright profiles and a laminate shelf, depth 310 mm, height adjustment 1080 to 1550mm
 Worktop height adjustment with allen-key, between 650 - 900mm
 Frames are of epoxy powder coated steel in dark grey RAL 7035.
 The worktops are of 26 mm laminated particle board
 Load capacity 300 kg equipment static u.d.l.




Tecofix
 >>> go to page 27



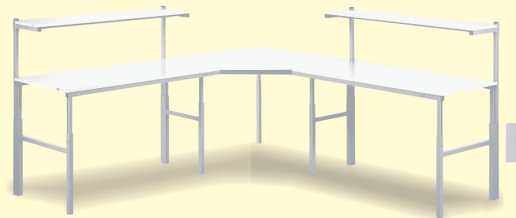
Movable Benches
 >>> go to page 29

- TPH 712 ESD** Workbench top dimensions 700 x 1200mm
- TPH 715 ESD** Workbench top dimensions 700 x 1500mm
- TPH 718 ESD** Workbench top dimensions 700 x 1800mm
- TPH 915 ESD** Workbench top dimensions 900 x 1500mm
- TPH 918 ESD** Workbench top dimensions 900 x 1800mm



CORNER WORKBENCH TPH

- TPH 707 KK ESD** Corner Workbench with top dimensions 1100 x 1100mm
- TPH 909 KK ESD** Corner Workbench with top dimensions 1300 x 1300mm



AUXILIARY SHELF SH

Height adjustable shelf, 25mm ESD laminate
 Load capacity 50kg

- SH 120 ESD** dim.310 x 1200 Suitable for TPH712
- SH 150 ESD** Dim.310 x 1500 Suitable for TPH715/915
- SH 180 ESD** dim.310 x 1800 Suitable for TPH718/918



METAL SHELF TH

For stacking and picking bins Tecofix 5
 Adjustment for depth, height and angle
 Load capacity 30kg

- TH 120 ESD** dim.145 x 1119 Suitable for TPH712
- TH 150 ESD** dim.145 x 1419 Suitable for TPH715/915
- TH 180 ESD** dim.145 x 1719 Suitable for TPH718/918



3D DESIGNER

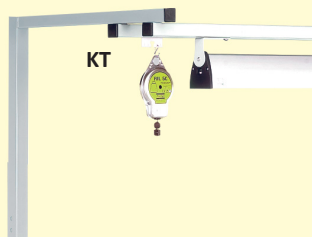


CLICK DESIGN QUOTE



Design your workstation with the 3D Configurator

TOOL AND LIGHTING SUPPORT KT

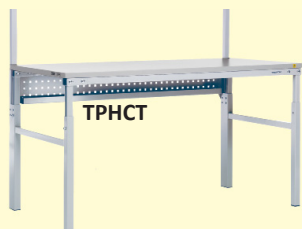


For suspending power tools and lighting units includes one C-profile bar with sliding hook

| | |
|------------------|---|
| KT120 | C-profile bar, for bench 1200mm |
| KT150 | C-profile bar, for bench 1500mm |
| KT180 | C-profile bar, for bench 1800mm |
| CC12 | Cable clip set (5 pcs) |
| CKV400ESD | Swivel arm with tray 210 x 460mm, Load 15kg |



CC12
Cable clip set (5 pcs)



CABLE TIDY TPHCT

Mounted between C-profiles below worktop
Perforated epoxy powder coated steel

| | |
|------------------|---|
| TPHCT 120 | 45 x 205 x 1115 Suitable for TPH712 |
| TPHCT 150 | 45 x 205 x 1415 Suitable for TPH715/915 |
| TPHCT 180 | 45 x 205 x 1715 Suitable for TPH718/918 |



CKV400ESD

CABLE CHANNEL TJK

| | |
|-------------------|--|
| TJK150 SET | with switch and 6 Schuko socket - 1500mm |
| TJK180 SET | with switch and 6 Schuko socket - 1800mm |



TRESTON NATURLITE LED

Lamp with adjustable lighting for work station, with bright and high quality light. The dimming option guarantees that each workstation user gets exactly the amount of light that they need. Adequate lighting even for high-precision technical assembly work. Side lights enable eliminating all shadows from the work area, or creating shadows where they are needed.

FOOTREST ESD

Footrest with an angle adjustment of the padded platform, floor model.

Width: 550 mm
Depth: 350 mm
Height: 100 mm
Max load: kg 30
RAL code: RAL7035



860947-49

S860947-49 Footrest ESD with adjustment



TNL1200

TNL500W

TNL900

| | |
|----------------|--|
| TNL1200 | LED Lamp, 3100 Lux, dimmable, L=1180mm |
| TNL900 | LED Lamp, 2300 Lux, dimmable, L=900mm |
| TNL500W | LED Lamp, 800 Lux, dimmable, L=430mm |

SHELF CABINETS

Designed to store electronic components.

Delivered pre-assembled.

The metal frame is epoxy powder coated with a light grey ESD paint. Shelves can be installed in different position at 80mm pitch distance. There are leveling screws under the cabinet for adjusting the cabinet straight, and the door are key lockable.

The empty cabinet can be lift up with forks.

Maximum load capacity 150 kg./shelf

| | |
|-------------------|--|
| SC10050100 | ESD SHELF CABINET with 2 shelves, 1030x530x1010 mm |
| SC10050200 | ESD SHELF CABINET with 4 shelves, 1030x530x2010 mm |
| S852185-49 | Extra shelf with brackets |



SC10050200



CONCEPT WORKBENCHES

- Suitable for use in demanding assembly environments.
- Adaptable to a large variety of tasks.
- Offering a wide range of accessories to meet any need.

Select the height adjustment method: allen-key, electric or hand-crank. Stepless height adjustment between: allen key 700-1100mm, hand crank 675-1025mm, motor 670-1100mm. The frame is strong and rigid. Steel frame parts are epoxy coated light grey paint, RAL 7035. Worktops are of 25 mm ESD laminate particle board, adjustable feet are provided for fine levelling. Cable tidy is standard with hand-crank and electric adjustable benches.

Load capacity from 200 kg to 500 kg depending on the version.

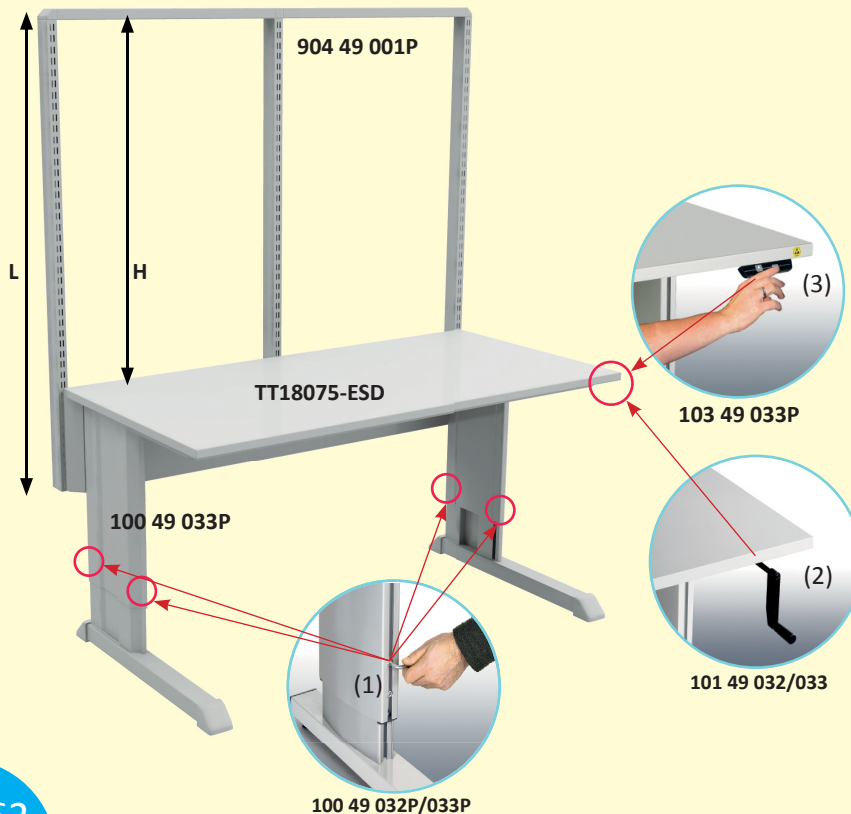


3D DESIGNER

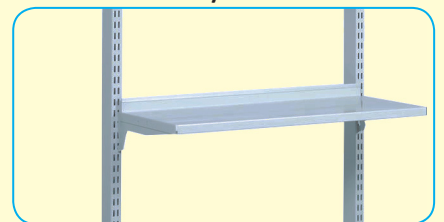
Design your workstation with the 3D Configurator

CLICK DESIGN QUOTE

| | |
|---------------------|--|
| S100 49 032P | Concept workbench frame, allen key adjustable (1). Dim 1500 x 750 mm Max. Load 500 Kg |
| S100 49 033P | Concept workbench frame, allen key adjustable (1). Dim 1800 x 750 mm Max. Load 500 Kg |
| S101 49 032 | Concept workbench frame ESD, hand crank adjustable (2). Dim 1500 x 750 mm. Max. Load 200 Kg |
| S101 49 033 | Concept workbench frame ESD, hand crank adjustable (2). Dim 1800 x 750 mm Max. Load. 200 Kg |
| S103 49 032P | Concept workbench frame ESD, motor adjustable (3) 1500x750. Dim 1500 x 750 mm Max. Load 400 Kg |
| 103 49 033P | Concept workbench frame ESD, motor adjustable (3) 1500x750. Dim 1800 x 750 mm Max. Load 400 Kg |
| TT15075-ESD | Top for ESD bench frame. Dimension 1500 x 750. Color Light grey |
| TT18075-ESD | Top for ESD bench frame. Dimension 1800 x 750. Color Light grey |
| S903 49 001P | Upright tube module ESD L=1359mm, H=1075mm (for bench frame Dim 1500 x 750) |
| S904 49 001P | Upright tube module ESD L=1359mm, H=1075mm (for bench frame Dim 1800 x 750) |

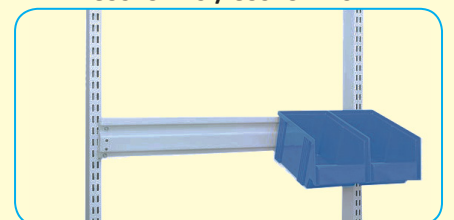


836028-49 / 852283-49
852769-49 / 852770-49



Epoxy powder-coated steel the shelf that can be used either as tilted 20° or in a horizontal position. The shelf has an integrated edge, which can be used either in the front or back of the shelf.

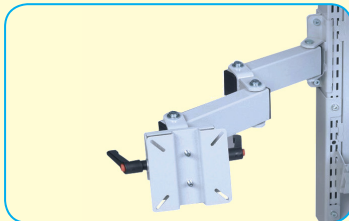
859151-49 / 859152 -49



Space saving bin rails ensure an ergonomic working position

SJK M900 SET / SJK M750 SET

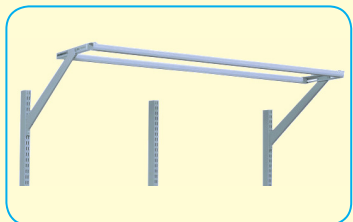
Power supply channel with switch and 6 Schuko socket.

93049002P

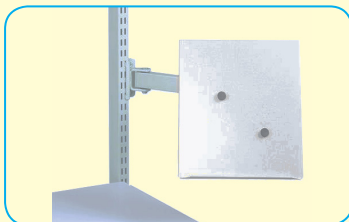
LCD screen holder, suitable for VESA 75 and 100 standards.

CPU

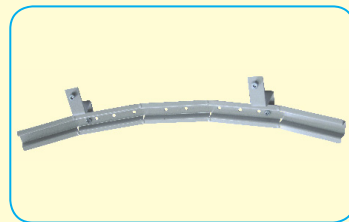
Adjustable support for CPU

91849006P / 91849008P

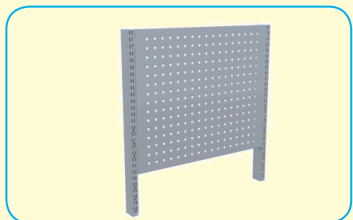
Adjustable rails to mount on the upright tubes. To be used to suspend lighting units and electric tools

92849008P

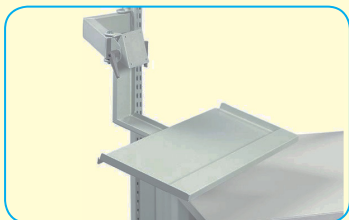
Document holder A4 ESD. Dim. 290x330mm. Max load kg 5.

860911-49P

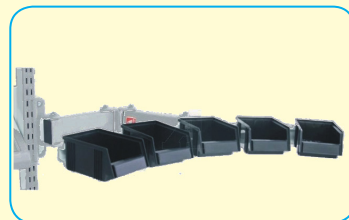
Extension for curved bin rail ESD 770x54 with arm (Space saving bin excluded)

861511-49 / 861516-49

Perforated panels, besides being practical storage supports for instruments and equipment, are efficient space dividers.

860941-49

Holder Keyboard ESD Width mm 480 Depth mm 260 Max load kg 5.

92949002P

Curved bin rail ESD with arm (Space saving bin excluded) Width 770mm, depth 54mm, height 54mm. Max load kg 15

Optional accessories

- S836028-49** Steel shelf ESD Width mm 740 Depth mm 300 Max load kg 50 (for **903 49 001P**)
- S852283-49** Steel shelf ESD Width mm 890 Depth mm 300 Max load kg 50 (for **904 49 001P**)
- S852769-49** Steel shelf ESD Width mm 890 Depth mm 400 Max load kg 50 (for **904 49 001P**)
- S852770-49** Steel shelf ESD Width mm 740 Depth mm 400 Max load kg 50 (for **903 49 001P**)
- S859151-49** Bin rail ESD M750 742x100 (Space saving bin excluded)
- S859152-49** Bin rail ESD M900 895x100 (Space saving bin excluded)
- S860941-49** Keyboard tray ESD 480x260 for LCD holder Width mm 480 Depth mm 260 Max load kg 5
- S861511-49** Perforated back panel Width mm 718 Depth mm 16 Height mm 389
- S861516-49** Perforated back panel Width mm 878 Depth mm 16 Height mm 389
- S91849006P** Adjustable rails to mount on the upright tubes (for frame **90349001P**)
- S91849008P** Adjustable rails to mount on the upright tubes (for frame **90449001P**)
- S92849008P** Document holder A4 ESD dim. 290x330mm, with a double arm of length 200+200 mm. Max load kg 5
- S92949002P** Curved bin rail ESD 770x54 with arm (Space saving bin excluded)
- S860911-49P** Extension for curved bin rail ESD 770x54 with arm (Space saving bin excluded)
- S93049002P** LCD screen holder ESD with double arm. Max load kg 15. Suitable for VESA 75 and 100 standards
- CPU** Adjustable support for PC
- SJK M750 SET** Power supply channel with switch and 6 Schuko socket. 3 m cable is included. L=666mm
- SJK M900 SET** Power supply channel with switch and 6 Schuko socket. 3 m cable is included. L=819mm

CHAIRS

Comfortable static safe chairs designed to improve job efficiency and productivity
 Chrome -plated metal parts - Pneumatic seat height adjustment
 Standard self-braking conductive castors
 Rg to ground $1 \times 10^{10} \Omega$



COMFORT

ESD chairs with durable dissipative fabric, anthracite color. Synchronized seat and backrest mechanism lockable in different positions, anti-return system of the backrest, adjustment of intensity based on the weight of the person.

| code | back rest dimensions (mm) | backrest adjustment | seat dimensions (mm) | seat height (mm) |
|-----------|---------------------------|----------------------|----------------------|------------------|
| 7804.209A | 580 x 400 | synchronous movement | 510 x 480 | 420 ÷ 550 |

CLASSIC / standard

ESD chair with long wearing dissipative upholstery, anthracite colour

| code | back rest dimensions (mm) | back rest angle | seat dimensions (mm) | seat height (mm) |
|-----------|---------------------------|-----------------|----------------------|------------------|
| 7804.204S | 380 x 240 | fix. | 390 x 460 | 480 ÷ 580 |
| 7804.208 | 390 x 360 | adj. | | |



7804.204S

7804.208



7804.204

7804.204R

CLASSIC / high with foot-plate

ESD chair with long wearing dissipative upholstery, anthracite colour

| code | back rest dimensions (mm) | back rest angle | seat dimensions (mm) | seat height (mm) |
|-----------|---------------------------|-----------------|----------------------|------------------|
| 7804.204 | 380 x 240 | fix. | 390 x 460 | 500 ÷ 700 |
| 7804.204R | 390 x 360 | adj. | | |

PU / standard

ESD chair in black dissipative PU foam

| code | back rest dimensions (mm) | back rest angle | seat dimensions (mm) | seat height (mm) |
|----------|---------------------------|-----------------|----------------------|------------------|
| 7807.338 | 400 x 250 | fix. | 450 x 460 | 450 ÷ 580 |
| 7807.345 | 400 x 380 | adj. | | |



7807.338

7807.345

PU / high with foot-plate

ESD chair in black dissipative PU foam



7807.336

7807.341

| code | back rest dimensions (mm) | back rest angle | seat dimensions (mm) | seat height (mm) |
|----------|---------------------------|-----------------|----------------------|------------------|
| 7807.336 | 400 x 250 | fix | 450 x 460 | 500 ÷ 680 |
| 7807.341 | 400 x 380 | adj | | |

YOUNG / standard

ESD chair with long wearing dissipative upholstery, antracite colour

| code | back rest dimensions (mm) | back rest angle | seat dimensions (mm) | seat height (mm) |
|----------|---------------------------|-----------------|----------------------|------------------|
| 7807.315 | 380 x 230 | fix | 450 x 460 | 490 ÷ 590 |
| 7807.317 | 420 x 480 | adj | | |



7807.315

7807.317



7807.320

7807.322

YOUNG / high with foot-plate

ESD chair with long wearing dissipative upholstery, antracite colour

| code | back rest dimensions (mm) | back rest angle | seat dimensions (mm) | seat height (mm) |
|----------|---------------------------|-----------------|----------------------|------------------|
| 7807.320 | 380 x 230 | fix | 450 x 460 | 560 ÷ 720 |
| 7807.322 | 420 x 480 | adj | | |

OPTIONS

On request, other versions of chairs can be done by mounting the options described below, simply add the suffix letter to the code of the chair.

| Suffix | Option |
|--------|---|
| A | Armrest |
| G | Conductive rubber castor(replacing standard castor) |
| P | Glide(replacing standard castor) |



(does not leave marks on the floor)

DISSIPATIVE CHAIR COVER SET

Made of grey conductive woven fabric, the dissipative chair covers are designed to make a conventional padded factory chair more suitable for use in an EPA.

The covers easily fitted on all chair types, are supplied with the cables to connect the back rest to the seat and the seat to the earth (by means of a 1MΩ series resistor)

7804.197 Dissipative CHAIR COVER SET, 2 cables included



LEADER ON THE MARKET

Since 2010 Simco and Ion System, the leaders in the production of Ionization System for the Electronic Industry, belong to the same Group.

It is the beginning of a real and effective partnership. This will sort big benefits for all the End User, which will find a combined offer with the best solution offered by the two producers.

Big benefits too for the Research and Development of new products as they will join and merge knowledge to reach the top level of technology and quality.

IONIZATION SIMCO-ION

- low decay time
- reduced airflow
- clean room compatible
- balanced
- IEC 61340-5-1

ACTIVE PROTECTION SYSTEM

Where grounding of some equipment or parts of equipment through traditional earthing techniques is impractical, where it is impossible to exclude all charging materials from the area, the use of suitable ionizers is highly recommended.

Air ionization systems work by flooding the atmosphere with positive and negative ions.

When the ionized air comes in contact with a charged surface, the surface attracts ions of the opposite polarity.

As a result the static electricity that has built up on products and equipment is neutralized.

Ions do remove small particles or smoke and pollens from the air, and subjective research suggest that people working in ionized area are happier.

The generated ozone is lower than 0.002 ppm after 24 hours accumulation, conform to OSHA requirements.

6422/E point of use ionizing blower

The smallest and most versatile blower available for equipment or local area ionization. It is ideal for use inside or on top of production equipment. Battery operated model is very useful on field service call.

Discharge time: from $\pm 1000V$ to $100V \leq 10s$ at 60cm

Emitter points: Tungsten alloy, internally shielded, 5 year life

Air flow: $15m^3/h$ Power requirement: 24Vac 5W

Dimensions: 11.4 x 8.4 x 5.1 cm

- | | |
|-----------------|-------------------------------------|
| 9265.560 | Point-of-use ionizing blower, 24Vac |
| 9265.577 | Wall transformer 230Vac/24Vac 32W |

6432/E local area ionizing blower

Controls static discharge in mid-sized areas, it is indicated for general workbenches applications, conveyors, equipment.

Discharge time: from $\pm 1000V$ to $100V \leq 7s$ at 60cm

Emitter points: Tungsten alloy, internally shielded, 5 year life

Air flow: $80m^3/h$

Coverage area: 122x46cm

Power requirement: 230Vac / 6W

- | | |
|-----------------|----------------------------|
| 9265.576 | Local area ionizing blower |
|-----------------|----------------------------|

local area ionizing blower AEROSTAT PC2

High performance compact ionizing blower, features an adjustable air flow speed and integrated heater. Suitable for workbenches, conveyors, robotics, packaging.

Decay Time: $\pm 1000V$ to $100V \leq 2s$ at 60cm

Emitter: Patented emitter point cleaner

Air Flow: $220 m^3/h$ at high speed

Coverage Area: 150x30cm

Power requirement: 230Vac

Auto-balance: $0 \pm 10 V$

- | | |
|-----------------|---|
| 9265.582 | Local Area Ionizing Blower AEROSTAT PC2, 230V |
|-----------------|---|



Turbo ionizing blower XC2

The Turbo Blower is designed to achieve full control in any environment, it is ideal to cover large areas. The fan can work at 3 different speed and has heater incorporated to grant a good comfort (heater can be turned on or off). Easy cleaning of the emitters with the "Emitter Clear Button". The decay time is minimum due to the high performance of this ionizer.

Decay Time: $\pm 1000V$ to $100V \leq 3.5s$ at 60cm

Emitter cleaning: "Emitter Clear Button"

Air Flow: 250 m³/h at high speed

Power requirement: 230Vac

Auto-balance: $0 \pm 10 V$



9265.602 Turbo Ionizing Blower XC2, 230V

Overhead ionizing blower GUARDIAN

It is a 3 fan smart ionizer that provides reliable, adaptable performance in the most static-sensitive environment. Designed for mounting over the benches, conveyors, it allows a complete 3D neutralization of the static charges, without compromising space over the table, and in the most comfortable environment. Equipped with 3 fan, adjustable air flow, heater, 13W twin tube fluorescent light, and emitter cleaning system.

Decay Time: $\pm 1000V$ to $100V \leq 6s$ at 45cm

Emitter: Patented emitter point cleaner

Air Flow: 500 m³/h at high speed

Coverage Area: 120x60cm

Power requirement: 230Vac

Auto-balance: $0 \pm 5 V$



9265.610 Overhead Ionizing Blower GUARDIAN, 230V

CR2000 overhead ionizer for clean room

This ionizer has been designed specifically for critical clean room environment, up to Class 10. It is powerful and efficient with a minimum decay time. It is normally used suspended over the benches, conveyors and assembling areas. Equipped with 3 fan, adjustable air flow and emitter cleaning system. Available in 2 version, with 2 or 3 fan.



Decay Time: $\pm 1000V$ to $100V \leq 3s$ at 45cm

Emitter: Patented emitter point cleaner

Air Flow: 450 m³/h at high speed for the 3 fan / 300 m³/h for the 2 fan

Coverage Area: 120x60cm for the 3 fan version / 90x60 cm for the 2 fan

Power requirement: 230Vac

Auto-balance: $0 \pm 5 V$

Clean room: Compatible with Class 10

9265.620 CR2000 overhead ionizing blower for clean room 2 Fan, 230V – length 81cm

9265.622 CR2000 overhead ionizing blower for clean room 3 Fan, 230V – length 109cm

IONIZING GUNS

Ionizing guns neutralize static charges and clean surfaces using compressed air that is ionized. Like all the ionizers they find application in the electronic industry, but they can be useful in many other contest like mechanical industry, painting works, packing areas, displays cover removing, etc... This because the neutralization of static charges simplifies the cleaning works and prevents the risk that airborne particles and dust will be attracted again.

6115 Light anatomic gun

Usable also in clean room, ergonomically designed, light, it is used to blow off charged dust particles from electronic cards and other equipment or materials. Extremely light, anatomic, and with a flexible soft cable (no HIGH voltage passing through this cable)

Gun ergonomic, low-noise, weight 0.34kg
Discharge time: from 1000 to 100V \leq 0.5seconds at 6", 30psi
Emitter points: Machined Titanium, field-replaceable
Gas input: 20-87psi(1.4-6 bar), Clean dry air or Nitrogen
Ozone: 0.005ppm (24 hour accumulation)
Noise: 70dba at 1m, 30psi
Power: requirement 24Vac - 10W

9265.530 Complete kit including hand unit, console, air filter and transformer 220/24Vac

9265.532 Additional Filter pack,(Pack of 3) - 0.1mm 99,99%EFF



Heavy duty TOP GUN

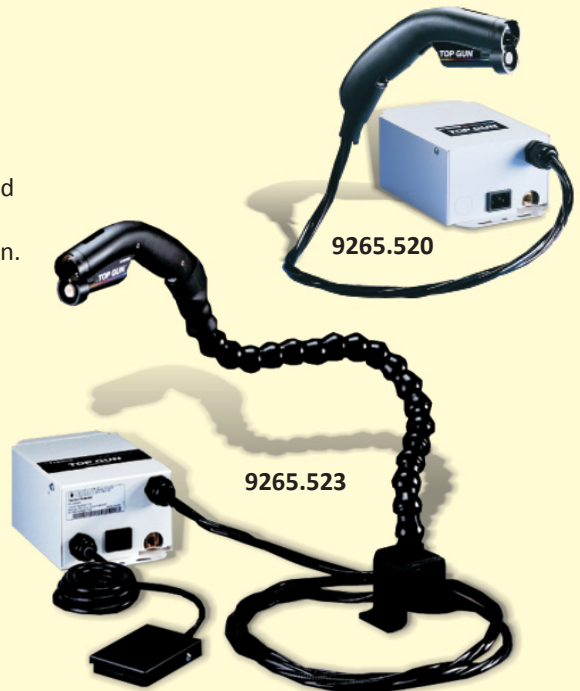
Designed for heavy duty jobs, due to its high performance, reliability and durability.

There is a flow control valve to adjust airflows for the specific application. It is completely ESD and can be used even in clean rooms. The version with sidekick allows "hands free" operation.

Discharge time: from 1000 to 100V \leq 0.5seconds at 5cm at 60 psi
Air Input: adjustable to 100 psi (7 bar) max.
Power requirement: 230Vac
Noise: 76 dBA at 60cm, 30 psi

9265.520 Ionizing Gun TOP-GUN, 230Vac

9265.523 Ionizing Gun TOP-GUN, 230Vac with flexible support and Sidekick (foot pedal switch)



6110A AIR CARTRIDGE

The cartridge can be used either for in-line ionization or as ionizing blow-off gun, adapts to compressed air lines. Two models available, one turns off ionizer when air is not flowing.

Weight: 170g
Power:: 24Vac, 1W, from 9265.544 wall transformer

9265.542 Ionizing cartridge, air flow triggered - 24Vac

9265.544 Transformer 230/24Vac



FREE AIR

VALVE OR SHUT OFF

ATTENTION: the cartridge don't withstand high air pressure. It should be installed downstream from any system valves or shutoffs

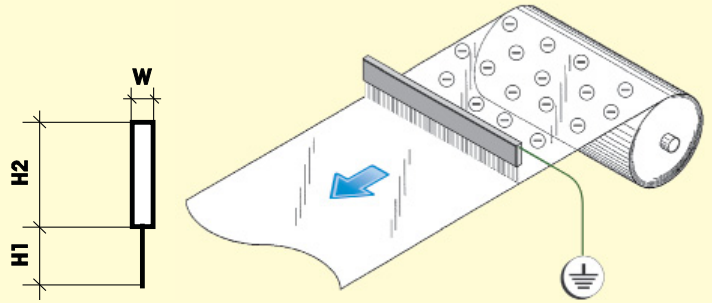
CARBON FIBRE static dischargers

Highly efficient anti-static tools which are used to neutralize static electricity on different types of machines including: paper, texture or plastic film handling, packaging, labeling, coding and printing.

The brushes housed in an aluminium body contain a large number of highly conductive carbon fibre.

The fibre tips are normally positioned a few millimetres from the material to be neutralized.

The aluminium body must be connected to earth by a 5mm² wire. The brushes are available in different sizes and are custom length supplied.



| Code | Length (cm) | W(mm) | H1(mm) | H2(mm) |
|----------|-----------------|-------|--------|--------|
| 9266.001 | from 10 to 100 | 5 | 27 | 35 |
| 9266.003 | from 101 to 250 | 5 | 27 | 35 |
| 9266.009 | from 10 to 110 | 3,5 | 20 | 25 |
| 9266.012 | from 10 to 60 | 3 | 12 | 12,7 |

FIELDLAB electrostatic fieldmeter

The 775 electrostatic meter detects and measures intensity and polarity of electrostatic fields.

Indispensable for checking packaging materials, circuit assemblies, ionized areas; this versatile meter offers:

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



- 9265.501 Electrostatic Field Meter mod. 775, 9V battery included
- 9265.403 Ionizer Verification System (instrument, charger, plate, cables and carrying case)
- 9265.508 ISO9000 Traceable Recalibration Certificate



The 9265.403 is 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



CHARGER EVO

The CHARGER EVO is used to charge insulated plates at a desired voltage.

Settable output: 100V to 1100V (step 1V)

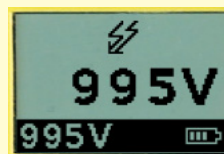
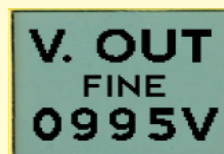
Resolution: 1 Volt

Accuracy: 5%

Dimensions: 124x72x28mm

The additional benefits compared to other chargers are:

- Settable output voltage (step 1V)
- The output voltage is clearly indicated on the LCD and the internal accuracy (5%) allows a roughly check of other ESD instrumentation equipments.
- Low battery and overload are clearly indicated.



- 9265.401 CHARGER EVO with batteries, case, and grounding cord
- 9265.410 Instrument recalibration ISO9000 Traceable Certificate is supplied

TREK520 electrostatic voltmeter

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.
- 9V alkaline battery included (for 8 hours operating time)

9265.099 TREK520-1 Electrostatic Voltmeter 0 to ± 2 kVDC
Resolution: 1V - Accuracy better than 5% of full scale over a probe-to-surface distance of 5 to 25mm.

9265.100 TREK520-2 Electrostatic Voltmeter 0 to ± 2 kVDC
Resolution: 1V - Accuracy better than 5% of full scale over a probe-to-surface distance of 5 to 25mm. Model with Voltage Monitor Output (1/1000 V_{meas})

9265.101 TREK523 Electrostatic Voltmeter 0 to ± 20 kVDC
Resolution 10V - Accuracy better than 5% of full scale over a probe-to-surface (distance of 30 to 60mm)



WALKING TEST SYSTEM

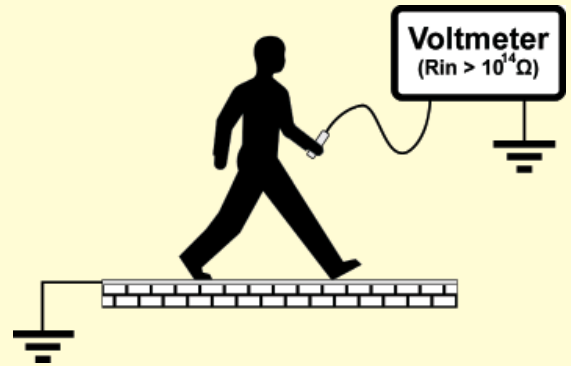
How important is the walking test after the recent update of the IEC EN 61340-5-1 (Rev. 2017-01) "Protection of electronic devices from electrostatic phenomena"?

Here some clarifications

The factory ESD Coordinator, when selecting flooring/footwear system ("personnel standing", without wriststrap connection to ground), often raises the following questions:

"What are the benefits of the Walking Test equipment when I already have a megaohmmeter to measure point-to-point resistance, resistance to ground and surface resistivity? What has changed in the standard IEC 61340-5-1 (Rev. 2017-01) compared to the previous release (Rev. 2007-10)?"

First of all we must note that ESD standards are constantly evolving and that European standard IEC 61340-5-1 is now aligned with the requirements of the American ANSI / ESD 20.20 (2014-7).



While for "personnel sitting" (sitting operators connected to GND with a wriststrap) the rules are known since long time, in the case of "personnel standing" the rules (Table 2: Personnel Grounding Requirements) now focus on the capability to ensure that the maximum electrical potential of the objects they handle is always lower than 100V.

This implies that the electrical potential on the operator's human body (HBV or Human Body Voltage), when walking with ESD footwear on the EPA floor, shall be less than 100V.

Even if the person/footwear system falls within the specifications required by Table 2 ($R_{gp} < 1.0 \times 10^8 \Omega$), the person/ footwear / flooring system may not be able to keep the HBV under 100V.

Periodic monitoring of HBV is specified in the notes in Table 2 of the standard as a condition to avoid the use of the wriststrap when handling ESDS components.

The key feature of the Walking Test tool is to store data at such a resolution that, once exported to a PC, it should be possible to perform a thorough analysis of the 5 peaks required to calculate the average value required by the standard.

WALKING TEST EVO

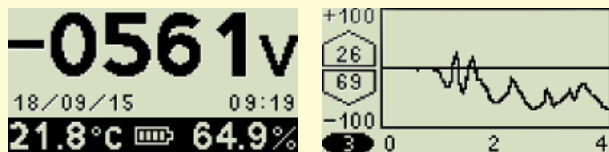
The WALKING TEST EVO is a portable measuring system that allows analysis of charge levels accumulated on the human body according to IEC 61340-5-1 standard.

It's fully portable and doesn't require a PC for data acquisition because all data are measured and logged in the internal memory. The operator can perform all necessary operations without any collaborator, and while he is walking the instrument is attached only with a single cable to a fixed position for the reference to the ground. The graphs of the tests can be displayed on the graphic LCD for a quick evaluation. Then they can be easily exported and analyzed on a PC for a professional documentation.

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

- Range: $\pm 1050V$
- Resolution: 1 Volt
- Accuracy: 5% o $\pm 5V$
- Input resistance: $10^{14} \Omega$
- Humidity: 1 to 95%RH (accuracy: $\pm 2\%RH$)
- Temperature: $-20^{\circ}C$ to $+60^{\circ}C$ (accuracy: $\pm 1^{\circ}C$)
- Display: graphic LCD 128 x 64 pixel, 68x51mm
- Power supply: 6 alkaline batteries, LR6 1, 5V
- Dimensioni: 243x130x60mm (instrument) $\varnothing 35x130mm$ (probe)
- Weight: 650g (instrument) - 250g (probe)

Humidity, Temperature, Date and Time of every test are memorized



MONITOR
(Datalogger OFF)

DATALOGGER
Graph n.3
+Peak=26V
-Peak=-69V

Datalogger

In the internal memory of the instrument can be logged till to 10 graphs.

Sample rate: 200Hz

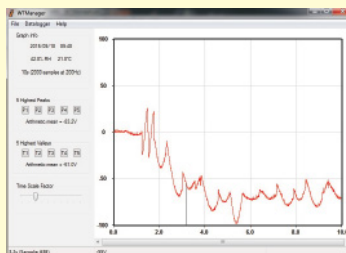
Max total graphs duration: 2minutes and 30 sec

Interface: USB

Software WT Manager (included)

Program to manage the tests recorded in the instrument, compatibile with WIN XP/7/8/10

For each walking measurement, the five highest peaks (P1-P5) and the five highest valleys (T1-T5) are indicated with their arithmetic means.



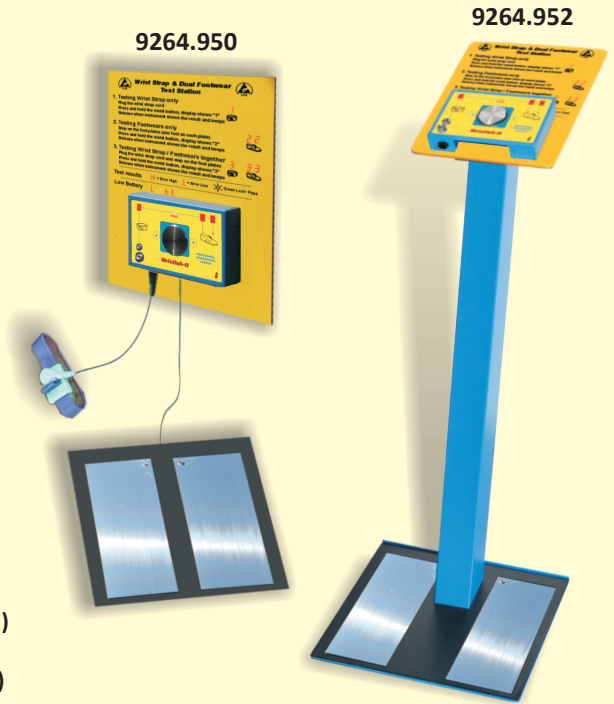
9265.080 WALKING TEST EVO Meter with batteries and case
9265.082 Instrument recalibration ISO9000 Traceable Certificate is supplied

WRIST STRAP AND DUAL FOOTWEAR TEST STATION

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; the test is executed at 50V or 100V to provide more accuracy. A relay output allows access to ESD Protected Area. Internal battery supplied 9V or external 9Vdc. ISO9000 traceable certificate is included.

The personnel grounding test station can work in 4 modes:

- 1) Simultaneous measurement of wrist straps and footwears.
- 2) Wrist straps only measurement
- 3) Footwears only measurement
- 4) HandsFree mode (if the serial measure of the two footwears pass the test then the internal relay enables the gate to the EPA area)



- ERROR (>High Limit)
- OK (In Limit)
- ERROR (<Low Limit)

| | LOW limit | HIGH limit |
|-------------|---------------------------|---|
| Wrist strap | 750KΩ | 35MΩ |
| Footwear | 0 - 100KΩ (selectable) | 10MΩ – 35MΩ – 70MΩ – 100MΩ – 200MΩ (selezionabile) or: 1GΩ for the Atex compliant version |



- 9264.950*** Personnel Grounding Test Station wall mounting including: Wristlab-II instrument, footplate and yellow panel.
 - 9264.952*** Personnel Grounding Test Station on Stand-up support including: Wristlab-II instrument, footplate, yellow panel and stand-up support
 - 9264.960** Wristlab-II instrument
 - 9264.950.1G*** ATEX version for code 9264.950* (Footwear High Limit = 1GΩ)
 - 9264.952.1G*** 9264.952.1G* ATEX version for code 9264.952* (Footwear High Limit = 1GΩ)
 - 9264.960.1G** ATEX version for code 9264.960 (Footwear High Limit = 1GΩ)
 - 9264.955** Instrument recalibration (ISO9000 Traceable certificate is supplied)
- * Aggiungere al codice: I (Italiano), F (Francese), E (Inglese) D (Tedesco), H (Ungherese), S (Spagnolo)

CONTINUOUS MONITOR

This instrument continuously monitors the integrity of the operator and one ESD worksurface. It uses the "wave distortion" technology to avoid false alarms caused by voltage offset, 50Hz fields and other electro-magnetic and electrostatic interference. Screw Terminal to monitor the worksurface's path-to-ground (required $R < 10^7 \Omega$) with cord included.

Wriststrap input: 10mm banana plug / 10mm snap adaptor
Supply: 24Vdc.
Dimensions: 98x53x23mm

9263.652 Continuous Monitor with power 230/24Vac adapter included



TEST STATION EVO

The test station EVO records and documents the parameters of the ESD protection of the personnel (wriststrap and footwears).

It can be used both wall-mounted or in a console configuration to make measurements at the workstations.

Technical features

- Measurement of bracelets and footwears according to IEC61340-5-1
- Up to 1000 different users identified through fingerprint recognition or manual recognition (entering the ID number)
- Fingerprint recognition 1,5 sec
- 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 46mm viewable area
- Beep to indicate clearly PASS or FAIL test of the protections
- Voltage Test selectable to 50V or 100V.
- Programmable thresholds
- Wriststrap measuring range: 50kΩ - 2GΩ
- Footwear measuring range: 50kΩ - 2GΩ
- Footwear measuring range (2 in series): 50kΩ - 2GΩ
- Precision misura: 10%
- ISO9000 Traceable Calibration Certificate included
- Freeware program to manage the data included in the Test Station EVO (compatible with Win XP/7/8/10)

A common USB flash drive can be inserted in the Test Station EVO to:

- import/export all the configuration data (users name and ID number, personnel thresholds values, etc...)
- save a log report of the EPA accesses (date and time, ID and user name, resistance values of wriststrap and shoes, etc...)

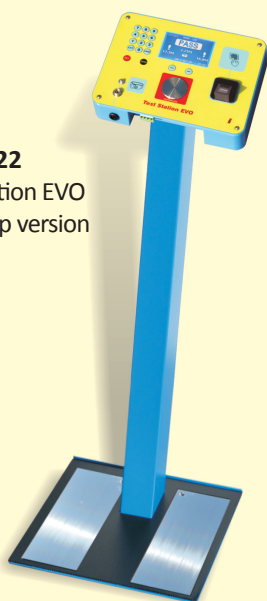


The fingerprint sensor captures a digital image of the fingerprint pattern. The captured image is not stored inside the Test Station EVO, therefore the biometrical data of the users are safe and can't be duplicated.

Only a biometric template (a collection of extracted features) is memorized. The template size is very small: about 400 byte.

The templates are used for a smart and secure identification of the operator.

9264.922
Test Station EVO
Stand-up version



LAN



USB Pendrive



FREWARE

- 9264.920** Test Station EVO USB wall mounting with footplate
- 9264.921** Test Station EVO ETHERNET wall mounting with footplate
- 9264.922** Test Station EVO USB, stand-up version with footplate
- 9264.923** Test Station EVO ETHERNET, stand-up version with footplate
- 9264.925** Test Station EVO USB
- 9264.926** Test Station EVO ETHERNET
- 9264.927** Instrument recalibration (ISO9000 Traceable Calibration Certificate is supplied)

GIGALAB EVO

SHIELDED
CABLE

SHIELDED
PROBE

Shielded measuring system eliminates the usual noise providing ease of operation at very high resistance values

indication of humidity and temperature



The GIGALAB-EVO multi-voltage high resistance meter made by ITECO, 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.

| Vmeas | Range | Accuracy |
|-------|-----------------------------|----------------------------|
| 10V | 1K Ω ÷ 50G Ω | ±5% ±0.6% per G Ω |
| 100V | 100K Ω ÷ 1T Ω | ±5% ±0.06% per G Ω |
| 250V | 500K Ω ÷ 1T Ω | ±5% ±0.045% per G Ω |
| 500V | 1M Ω ÷ 1T Ω | ±5% ±0.03% per G Ω |



programmable
acoustic alarm

100
MEMORY
CELLS

Humidity: 1 a 95%RH (accuracy: ±2%RH)
 Temperature: -20°C to +60°C (accuracy: ±1°C)
 Display: Graphic LCD, 128x64pixel, 68x51mm.
 Power supply: 6 alkaline batteries, LR6 1.5V
 Dimensions: 243x130x60mm
 Weight: 650g

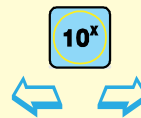
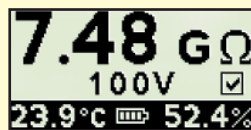
Internal memory where the data of 100 measures can be stored.

The data stored for each measurement are:

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



9265.064



By pressing a dedicated button it's possible to quickly switch between viewing formats natural to exponential and vice versa

- 9265.063 GIGALAB EVO Meter with batteries and case
- 9265.064 GIGALAB EVO Complete kit including meter, 2 probes, batteries and case, Traceable Certificate is supplied
- 9265.065 Cylindrical SHIELDED PROBE 63mm diameter, 2.3Kg weight
- 9265.070 Concentric ring PROBE 63/30mm diameter, 2.3Kg weight
- 9265.042 Instrument recalibration ISO9000 Traceable Certificate is supplied

ESD SURFACE RESISTANCE TESTER 100V

The Labeohm EVO and the Labeohm EASY are instruments that measure the surface resistance and the ground resistance of mats, worktops, floorings and other objects in the EPA area.

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.

Both instruments are pocket-size and use 2 embedded parallel electrodes, in accordance with DIN EN 100015/1.

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: from 10^4 to $10^{12} \Omega$

Test voltage: 10V R<100K Ω , 100V R>100K Ω

Electrodes: Soft conductive rubber

Dimensions: 80x120x27mm

ISO9000 Traceable Certificate is supplied



LABEOHM EASY

programmable acoustic alarm

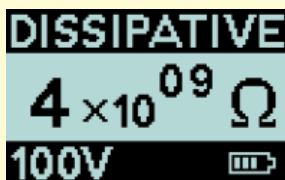


LABEOHM EVO

Display: LCD graphic
102x64pixel, 36x26mm



LABEOHM Kit



- 9265.051 LABEOHM EVO 100V, cable,battery,box included
- 9265.055 LABEOHM EASY 100V, cable,battery,box included
- 9265.065 Cylindrical SHIELDED PROBE 63mm diameter, 2.3Kg weight
- 9265.070 Concentric ring PROBE 63/30mm diameter, 2.3Kg weight
- 9265.056 Portable Kit including 9265.051 tester, two 9265.065, probes and carrying case
- 9265.057 Portable Kit including 9265.055 tester, two 9265.065, probes and carrying case
- 9265.003 Labeohm recalibration ISO9000 Traceable Certificate is included

PROBES FOR GIGALAB AND LABEOHM (Page 76)



9265.065

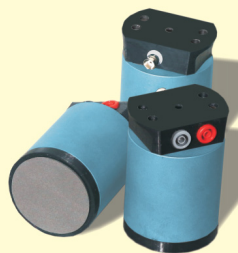


9265.047

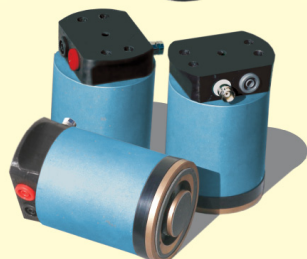


9265.070

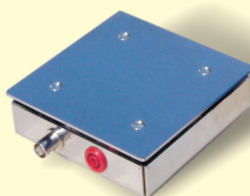
PROBE - OPTIONS



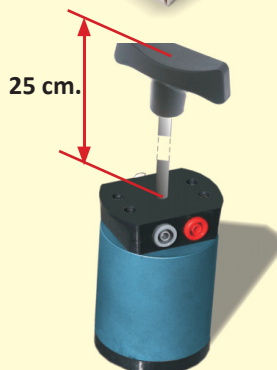
9265.065
CONNECTIONS
Rubber measuring electrode:
BNC int. / red 4mm socket
Shield / Guard:
BNC ext. / gray 4mm socket



9265.070
CONNECTIONS
Inner sensing ring:
BNC int. / red 4mm socket
Outer sensing ring:
BNC ext. / black 4mm socket
Shield / Guard: gray 4mm socket



9265.047
Counter-electrode for cross
resistance measurements
CONNECTIONS
Stainless steel measuring
electrode: BNC int. / red
4mm socket
Shield / Guard: BNC ext.



9265.072
T-handle with thread end M5
H = 25cm to facilitate repetitive
measurements on the floor
(only for 9265.070 and 9265.065)

| | |
|------------------|---|
| 9265.065 | Shielded probe, 63mm, weight 2,3Kg, one BNC socket, two 4mm sockets |
| 9265.070 | Concentric ring probe, 63/30mm, weight 2,3Kg, one BNC socket, three 4mm sockets |
| 9265.047 | Counter-electrode, 150 x 150mm |
| 9265.013B | Cable 1,5m - jack 3,5/ 4mm banana plugs terminated, BLACK (only for 9265.051 and 9265.055) |
| 9265.012B | Cable 1.5m - 4mm banana plugs terminated, BLACK |
| 9265.012R | Cable 1.5m - 4mm banana plugs terminated, RED |
| 9265.008 | Coaxial cable, L=1m, BNC plug / 2x4mm banana plugs |
| 9265.072 | T-handle with thread end M5 H = 25cm (only for 9265.070 and 9265.065) |

CALIBRATION UNIT

It's a resistance decade box made specifically for the calibration of the ESD Test Station (9264.960 Wristlab-II, 9264.925 Test Station EVO, 9265.030 Wristlab and IEC 61340-5-1 compatible testers)

Range: 10Ω - 110MΩ (resolution 10Ω)

Tolerance: 1%

Power: 1W for resistors up to 4MΩ, 0.5W for resistors from 10MΩ to 40MΩ

Operative Voltage: 250Vac max

Dimensions: 14,7 x 11,7 x 5,5cm - Weight: 320g

Detailed instruction manual for calibration procedures of the IEC61340-5-1



| | |
|-----------------|--|
| 9264.980 | Calibration Unit for ESD testers cables and adapters included |
| 9264.982 | Instrument recalibration (ISO9000 Traceable certificate is supplied) |

ESD SURVEY KIT

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)

The Kit can be customized to meet different needs.

The example below shows a typical kit configuration:



| code | description | page |
|-----------------|--------------------------------|------|
| 9265.063 | GIGALAB EVO meter | 74 |
| 9265.070 | Concentric Ring Probe | 76 |
| 9265.065 | Shielded Probe | 76 |
| 9265.047 | Counter-electrode, 150 x 150mm | 76 |
| 9265.080 | Walking Test EVO meter | 71 |
| 7804.190 | Adjustable Wrist Strap | 40 |
| 7804.874 | Earth bonding plug | 42 |

9265.151 ESD Survey KIT - Carrying case with instruments

DRYLOGGER

Precision Temperature/Humidity meter. It is also a datalogger used to collect environmental data of humidity and temperature and to transfer them to a Windows PC.

It is possible to set an alarm that become active when, after a certain period of time, humidity or temperature are above a predetermined maximum threshold.

When the alarm is activated the red LED under the display flashes.

Humidity: 1 to 95%RH, resolution: 0.1%RH

accuracy: $\pm 2\%$ RH

Temperature: -20°C to 60°C , resolution: 0.1°C

Accuracy: $\pm 0.5^{\circ}\text{C}$

Display size: 48 x 11mm

Humidity Alarm: from 1 to 95%

Temperature Alarm: from 0 to 60°C

Alarm activation delay: from 1 to 99 minutes

Memory: 21600 samples

Sampling rates: can be set at 1, 5, 10, 15, 30 seconds

and 1, 5, 10, 15, 30 minutes

Interface: RS232 and USB

Size: 184 x 67 x 44mm



Logmanager

The "LogManager" software, working on Windows PC, used for downloading, displaying, analyzing and reporting your collected humidity and temperature data is included.

9265.302 DryLogger – Humidity/Temperature hand LCD datalogger USB cable and LogManager software to collect data to Windows PC are included.

CK-005 ISO9000 Traceable certificate for DryLogger

TEKMATRIX 32 (humidity/temperature monitoring & alarming & datalogging)

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. When the alarm is active, its output relay can activate an emergency circuitry. 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 "TekManager" software is included). The instrument sensor can be hooked to the display or positioned externally. Can be set to fixed display of RH/T or alternate it with date and time.

Humidity: 1 to 95%RH, resolution: 0.1%RH

accuracy: $\pm 2\%$ RH

Temperature: -20°C to $+60^{\circ}\text{C}$

resolution: 0.1°C

accuracy: $\pm 0.5^{\circ}\text{C}$

LED Display: 190 x 190mm

Memory: 21600 samples

Interface: USB pendrive (**8105.113U**) or ETHERNET (**8105.113E**)

Dimensions: 190 x 190 x 40mm



8105.113U Humidity/Temperature Monitoring & Alarming & Datalogging (USB Interface)

8105.113E Humidity/Temperature Monitoring & Alarming & Datalogging (ETHERNET Interface)

CK-013 ISO9000 Traceable certificate for Tekmatrix



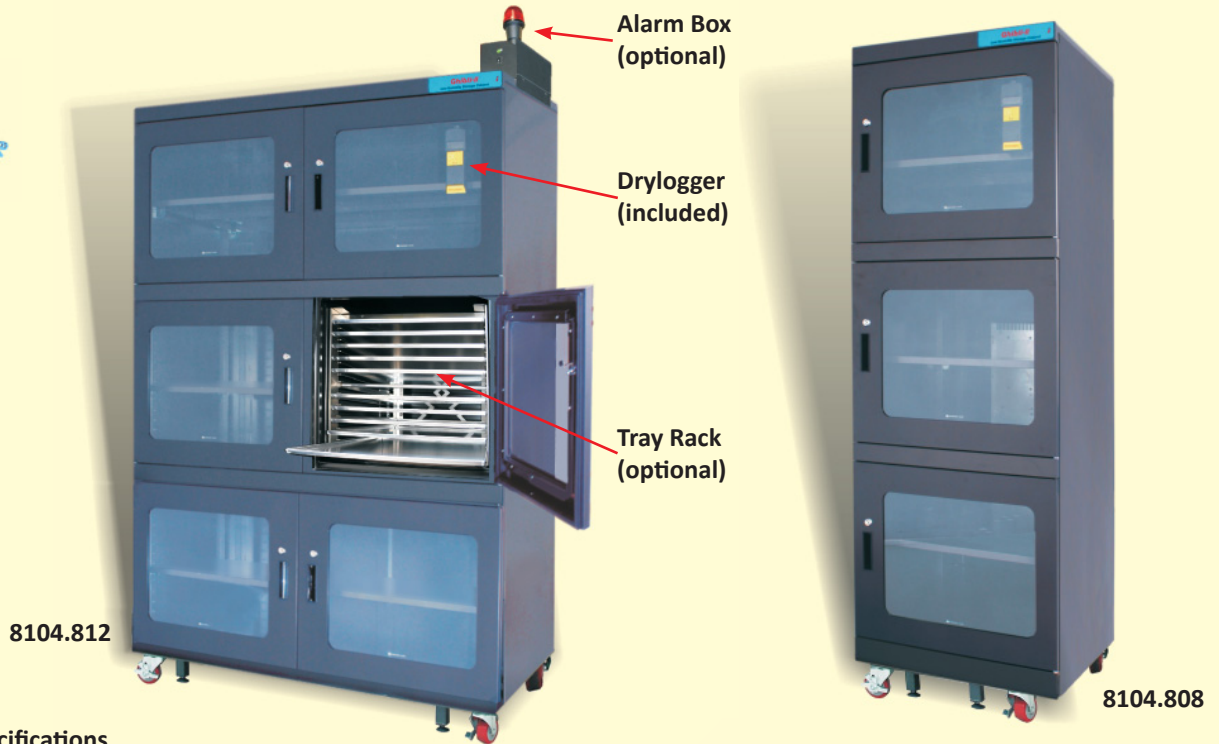
8105.113E

Ghibli-II Dry Cabinet

Moisture Sensitive Devices (MSDs), must be managed correctly because "a single mistake" on a tray or reel of MSD causes "negative impact on the entire production batch".

Electronic components (like QFP, BGA or SOIC for example), LEDs and Printed Circuit Boards, when extracted from their original protective package, absorb humidity from the environment and during the soldering process the trapped moisture can vaporize and exert internal package stress.

GHIBLI-II dry cabinets provides a "safe place" to temporary stock the MSDs removed from their original Dry Pack before soldering process. In fact the J-STD-033 tells that under 5% RH the Floor Life is congealed.



Technical specifications

Humidity range: <5% RH guaranteed , typical 2% RH

Colour: Anthracite

Power supply: 230Vac

Structure: 1mm thick carbon steel with antistatic paint

Door: magnetic handles , magnetic sealers and antistatic glass

Wheel: 4 antistatic 3" wheels, two of them with brakes

Grounding wire: 940mm long

ESD paint: $10^3 - 10^9 \Omega$



DryLogger

(included in every cabinet)

Humidity: 1 to 95% RH resolution: 0.1%RH

Temperature: -20°C to +60°C, resolution: 0.1°C

ALARM for Max.humidity and Max temperature

(see page 77)

Advantages about GHIBLI-II

Easy use:

It's plug and play, just connect it to the main supply without any settings and it will be stable at less than 5%RH (5%RH is guaranteed but the cabinets easily reach 2%).

The dehumidifier units are always active and not controlled by any sensor. This avoid dangerous problems due to malfunction or drift of hygrometers.

Easy calibration:

Inside every cabinet there is a portable Hygrometer (DryLogger **9265.302**) visible through the glass of the upper door. You can return it for calibration anytime without problems: the cabinet still works to the best.

The portable instrument DryLogger can measure RH & Temperature values in several points inside the cabinet, and can record H/T and transfer the data to PC for graphing and analyzing. Made for very low humidity measurement can be used also for applications outside the cabinets.

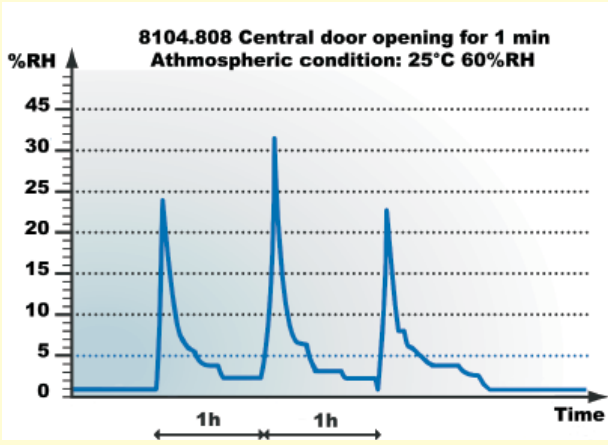
Modular design:

The dehumidifier modules are easy extractable with only a screwdriver. This allow easy reparation and grant the long life of the cabinet, over 20 years, as long as the metal structure last. This is our green policy.

Smart magnetic handles with key lock at every door.

The front of the cabinet is flat.

2 years warranty



Data analysis

With the portable instrument DryLogger and the software LogManager supplied with every cabinet you can calculate the time intervals and percentage that exceed the 10%RH or 5%RH which leads to the estimation of the MSD floor life ("Floor Life" is the allowable time period after removal from a moisture barrier bag, dry storage or dry bake and before the solder process reflow). Another typical data analysis is the graph of the door opening.

40°C Baking

Some cabinets version can do 40°C low baking process of SMD components.

At this temperature the reels are not damaged and can be afterwards inserted into the feeders of the pick and place without problems.

| | | | | | | | |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|--|
| | | | | | | | |
| Code | 8104.800 | 8104.802 | 8104.804 | 8104.808 | 8104.812 | 8104.830 | 8104.832 |
| Model | Ghibli II/200L | Ghibli II/328L | Ghibli II/400L | Ghibli II/600L | Ghibli II/1200L | Ghibli II/600L baking 40°C | Ghibli II/1200L baking 40°C |
| Capacity | 200L | 328L | 400L | 650L | 1280L | 600L | 1180L |
| Ext. Dimensions (mm) | 600x672x610 | 905x452x1045 | 600x672x1255 | 600x672x1805 | 1200x672x1805 | 600x672x1805 | 1200x672x1805 |
| Shelves | 2 | 3 | 3 | 5 | 5 | 5 | 5 |
| Shelf Size (mm) | 555x530x20 | 860x310x20 | 555x530x20 | 555x530x20 | 1155x530x20 | 555x530x20 | 1155x530x20 |
| Average power | 28W | 56W | 56W | 56W | 56W | 56W without baking 456W with baking | 56W without baking 856W with baking |
| Maximum power | 210W | 420W | 420W | 420W | 420W | 420W without baking 1220W with baking | 420W without baking 2020W with baking |
| Weight | 55kg | 64kg | 64kg | 81kg | 134kg | 91kg | 144kg |

8104.840 Additional shelf 555x530x20mm , Ghibli-II 200L, 400L, 600L

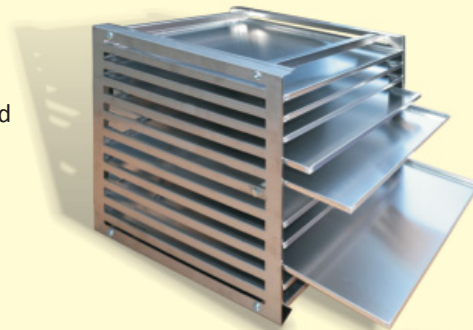
8104.841 Additional shelf 1155x530x20mm , Ghibli-II 1200L

Tray rack

Professional tray rack made of stainless steel that can be placed on the trays of the Ghibli-II dry cabinets.

8104.865 GHIBLI-II - RACK 10 trays store

8104.583 Aluminium tray 530 x 530 x 12mm



ALARM BOX

With this option it's possible to set an alarm that become active when, after a certain period of time, humidity or temperature are above a predetermined maximum threshold. The Alarm Box has a warning light and a buzzer that can be silenced from a switch on the panel.

8104.856 Alarm Box for Ghibli-II cabinets



Sahara - baking ovens

Forced ventilation oven available in two models: with temperature control only (Sahara) and also with humidity control (Sahara Dry). They are designed to perform the following works:

1) Baking of the PCBs, according IPC-1601 standard, should be done at 105-125°C for 4-6 hours into a forced ventilation oven. All our ovens are equipped with timer, programmable start-up, and countdown mode that is helpful to make sure you do the baking of PCBs only for 4-6 hours, avoiding the risk of an unnecessary oxidation of the printed board circuits.

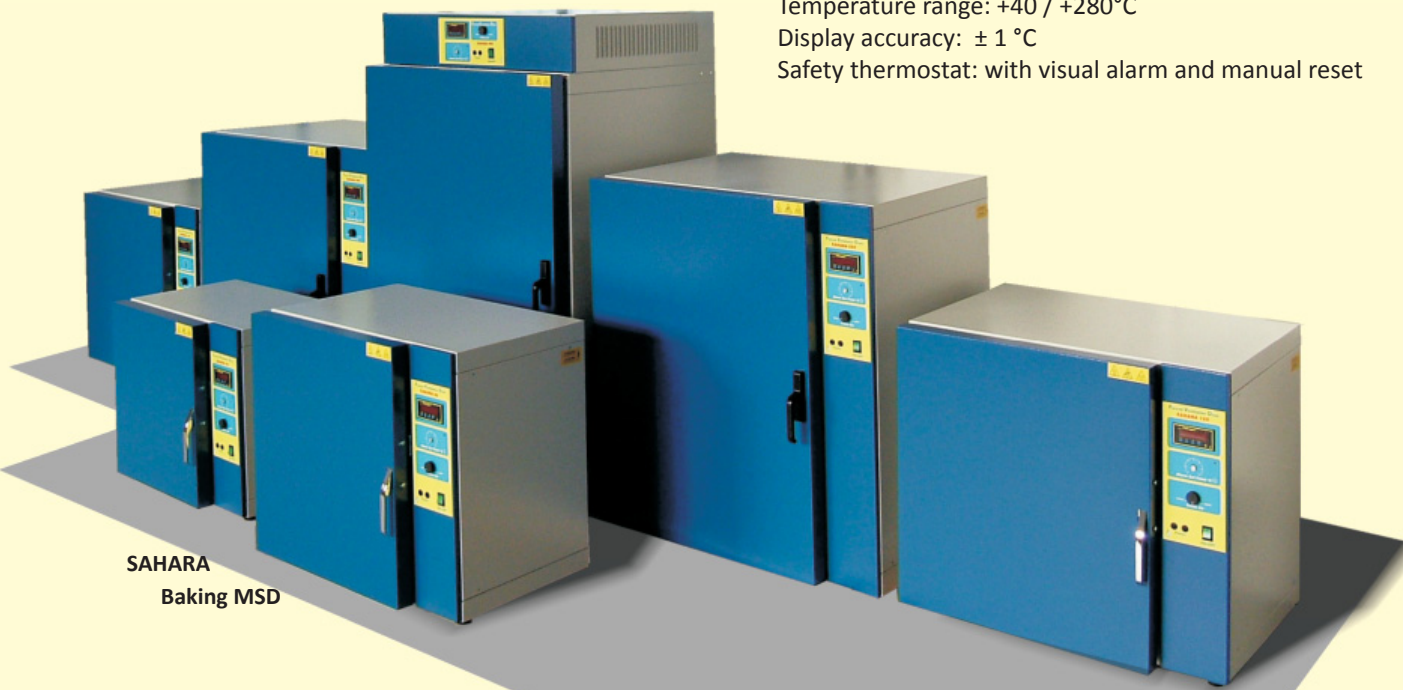
2) Baking of SMD components according to J-STD-033 that specify three temperatures: 40°C, 90°C and 125°C. To ensure <5% RH when baking at 40°C or 90°C is recommended the use of the Sahara Dry that are ovens equipped with humidity control. How long to bake depends on the moisture sensitive level and package type and body thickness.

In the worst case is 79 days for 40°C baking, 10 days for 90°C baking and 96 hours for 125°C baking. Once baked MSDs have their Floor Life restored to the initial value. It's important to bake in ovens equipped with a programmable timer command like all the ovens in the Sahara line.

3) Thermal cycle. All the Sahara ovens can execute thermal program (easy editable on a PC) useful for testing and for heating/cooling with settable temperature gradient

Technical specifications:

- Outer body: steel coated in epoxy anti-acid paint.
- Inner structure: in stainless steel AISI304
- Heating elements: not in contact with the internal chamber
- Thermal insulation: with natural mineral fibre
- Internal grid shelves: can be placed at different height
- Ventilation opening: with manual flow control
- Temperature range: +40 / +280°C
- Display accuracy: ± 1 °C
- Safety thermostat: with visual alarm and manual reset



SAHARA
Baking MSD

Sahara ovens

Oven with temperature control only



- Temperature Control
- Safety thermostat
- Ventilation opening

Compliance with:
IPC-1601
Baking PCB

Sahara dry ovens

Oven with temperature control and humidity control (<5%RH)



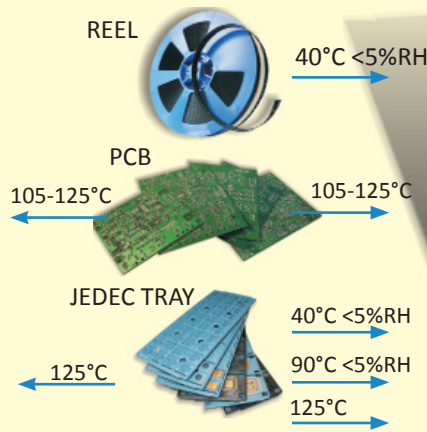
- Ventilation opening
- Safety thermostat
- Humidity Control

Compliance with:
J-STD-033 Baking SMD
IPC-1601 Baking PCB

Dehumidification at <5% RH is reached by blowing dry air. The Sahara Dry ovens, unlike Sahara models, are equipped with a air-tightness improved internal chamber so as to keep the dry environment achieved without having to continually blow dry air.



SAHARA



SAHARA DRY

Temperature Control

(Included both on Sahara and Sahara Dry models)



Temperature electronic control with PID regulator and multifunction timer.

Temperature Range: 40-280°C

Accuracy: $\pm 1.5^\circ\text{C}$

Resolution: $\pm 1^\circ\text{C}$

The digital controller has an internal clock with back-up that can keep the right clock for a week without power supply. This is useful to minimize the damage caused by any black-out when the oven is working in "Countdown", "Programmed start-up" or "Thermal programmer" mode.

The Sahara ovens can work in 4 modes:

1) SetPoint:

The oven reaches a setpoint temperature and stays steady.

2) Countdown:

It's like the SetPoint mode but with a time limit. After the countdown time is expired the oven stops. Time limit can be set from 1 minute to 999 hours and 59 minutes.

3) Programmed start-up:

It's useful when you want to start-up the oven on a precise date/time (for example at 6:30 on monday after the weekend the oven start-up to SetPoint 200°C)

4) Thermal programmer:

It's possible to edit on a PC and then download to the digital controller up to 10 programs with 100 steps each. In every step you can set: the temperature setpoint, the maximum gradient to reach it and the duration.

To set the thermal programmer it is necessary to have the **8107.215** option, comprehensive of the PidManager software and the special USB cable (see page on the right)

Humidity Control

(Included on Sahara Dry models only)



Humidity electronic control

Humidity control: $<5\% \text{RH}$ when $40^\circ\text{C} \leq T \leq 100^\circ\text{C}$

Humidity range: 1-95%RH

Accuracy: $\pm 2\% \text{RH}$ (10%RH~90%RH)

$\pm 3\% \text{RH}$ (1%RH~10%, 90%RH~95%)

Resolution: $\pm 0.1\% \text{RH}$

It can work in 2 modes:

Fast: dehumidification occurs at the maximum possible speed.

Eco: dehumidification is proportional adjustment to optimize the consumption of compressed air. This mode is for a more rational use of compressed air, in fact, the low level of humidity is reached for subsequent cycles and not in a direct way.

The Sahara Dry Ovens must be fed with dry air from 3 to 8 atm.

How much should be dry the air supply?

Normally, centralized systems of compressed air are already equipped with dehumidification system good enough to work properly with this humidity control.

For example, a compressed air system to 7 bar with a dew point of less than 3°C is usually sufficient.

How much is the compressed air consumption?

The dry air is blown into the inner chamber very slowly and only when necessary.

Max consumption: 100 nl per minute

Average consumption: 30 nl per minute

Can be used the nitrogen and what advantages there are?

Yes. The baking in inert environment reduces oxidation of the PCBs and SMD components..

| | | | Int. Dimensions | Ext. Dimensions | Power | Weight |
|----------|--------------------------------|----------------|-----------------|-----------------|-----------|--------|
| | SAHARA MODEL | (included/max) | (LxPxH) | (LxPxH) | W | kg |
| 8107.103 | Sahara 40 litre | 1/7 | 348x312x367 | 686x515x575 | 800/230V | 35 |
| 8107.105 | Sahara 60 litre | 2/7 | 408x372x422 | 746x570x605 | 1200/230V | 40 |
| 8107.107 | Sahara 80 litre | 2/8 | 458x372x472 | 796x570x680 | 1200/230V | 45 |
| 8107.109 | Sahara 120 litre | 2/9 | 498x477x512 | 836x680x720 | 1600/230V | 50 |
| 8107.111 | Sahara 250 litre | 2/14 | 593x522x797 | 956x730x1025 | 3200/230V | 90 |
| 8107.113 | Sahara 400 litre (with wheels) | 2/18 | 693x607x980 | 901x815x1487 | 3200/230V | 140 |
| 8107.108 | Sahara DRY 80 litre | 2/8 | 458x372x472 | 796x570x680 | 1200/230V | 45 |
| 8107.110 | Sahara DRY120 litre | 2/9 | 498x477x512 | 836x680x720 | 1600/230V | 50 |
| 8107.112 | Sahara DRY250 litre | 2/14 | 593x522x797 | 956x730x1025 | 3200/230V | 90 |

ACCESSORIES

| | | |
|----------|--|-------------------|
| 8107.150 | Additional shelf for Sahara 40 litre | (max. 7 shelves) |
| 8107.152 | Additional shelf for Sahara 60 litre | (max. 7 shelves) |
| 8107.154 | Additional shelf for Sahara and Sahara DRY 80 litre | (max. 8 shelves) |
| 8107.156 | Additional shelf for Sahara and Sahara DRY 120 litre | (max. 9 shelves) |
| 8107.158 | Additional shelf for Sahara and Sahara DRY 250 litre | (max. 14 shelves) |
| 8107.160 | Additional shelf for Sahara 400 litre | (max. 18 shelves) |

OPTIONS

| | |
|-----------|--|
| 8107.1xxW | Door with inspection window, 200x200mm |
| 8107.1xxH | Lateral hole for cables, Ø 50mm |

DATALOGGER



All our ovens are equipped with a data logger for traceability and you can print/save graphs of temperature (for sahara ovens) and temperature/humidity (for Sahara DRY ovens)

To analyze the logged data and to set the thermal programmer is required the **8107.215** option which include the PidManager software and USB specific cable.

The software is compatible with Windows XP/7/8/10.

Sample rate: 1, 5, 10, 15,30 sec 1, 5, 10, 15, 30 min

Duration (T) Sahara from 6 hour(1sec) to 450 day(30min)

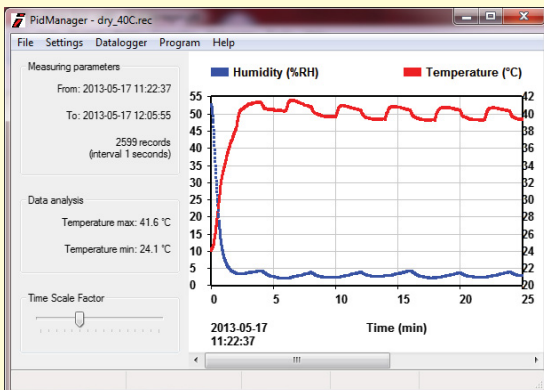
Duration (T+RH%) Sahara Dry: from 3 hour(1sec) to 225 day(30min)



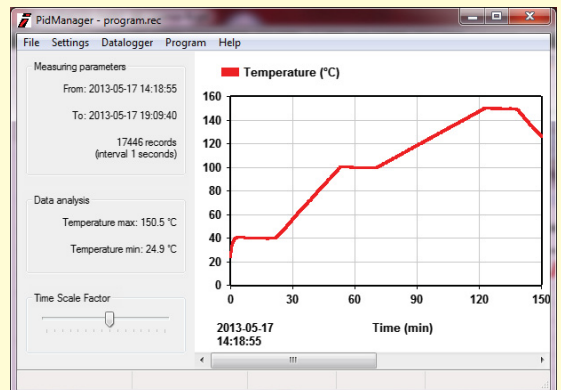
8107.215 PIDManager software and specific USB cable to set the thermal programs and to download and view datalogger records

Thermal Program :

- 1 SETPOINT 40°C / gradient MAX.
- 2 WAIT 20min @40°C
- 3 SETPOINT 100°C / GRADIENT<2°C/min
- 4 WAIT 20min @100°C
- 5 SETPOINT 150°C / GRADIENT<1°C/min
- 6 WAIT 20min @150°C



SAHARA DRY 80L 40°C < 5% RH



SAHARA 80L Thermal Program

PRODUCT INDEX

0..9

6110A **68**
6115 **68**
6422/E **66**
6432/E **66**

A

A3 (Ring binders) **19**
A4 (Ring binders) **19**
Acrylic panels **18**
AEREOSTAT PC2 **66**
Alarm box **79**
Anti-fatigue ESD mats **39**

B

Badge holder **35**
BAGGY **35**
Bags **46**
Baking MSD **80**
Barcode **4**
Beauty case for EPA areas **35**
Belt barrier **33**
Bins **26, 27, 28**
Brushes **17**

C

CAB **26**
Calibration Unit **76**
Carbon Fibre Static Discharger **69**
Cardboard (ESD) **45**
Carousel system **26**
CARTONBOX **45**
Carts **55**
Cases **25**
Cesioie **14**
Chairs **64**
CHARGER EVO **69**
CHARIOTTE **56**
CLASSIC (Chairs) **64**
Cleaner **40**
Clear dissipative tape **47**
Clothing **34**
COMFORT (Chairs) **64**
Component counting **2**
Concentric ring probe **76**
CONCEPT (Workbenches) **62**
Conductive bags **47**
CONTINUOUS MONITOR **72**
Copper earthing tape **39**
Counters **2**
COUNTY EVO **2**
COUNTY-S EVO **3, 4**
CR2000 (Ionizers) **67**

D

DEPOPRINT **22**
Detergent for floors **38**
Dissipative bags **47**
DIVIPRINT **21**
Drawers **26, 29**
Dry cabinet **78**
Dry Cabinet **78**
DRYLOGGER **77**
Dry Pack **48**

E

EBP **41**
EBP plug **41**
ECO V4 **39**
ELECSTAT-109 **40**
ELECSTAT-112 **38**
ELECTROGUARD **38**
Electrostatic voltmeter **70**
ESD fleece **34**
ESD instrumentation **69**
ESD Shelf Cabinets **61**

ESD SURVEY KIT **76**

Exhausters **13**

F

FIELDLAB **69**
Fieldmeter **69**
Field service kit **40**
FIFO **24**
Finger cots **35**
Floor coating **38**
Floors **38**
Foam **43**
Footwears **36**

G

GHIBLI-II **78**
GIGALAB EVO **74**
Gloves **35**
GOSMOKE **13**
Grounding Accessories **42**
Grounding Cords **42**
Guanti **35**
GUARDIAN **67**

H

Heat sealers **49**
Heel and toe grounders **17**
High temperature adhesive tapes **37**
HOBBOX **24**
Hygrometers **77**

I

Ionizers **66**

J

JUNIOR (calzature) **36**

K

KOSTAPLAN **40**

L

LABBOX **44**
LABECART **56**
LABEFIX **23**
Label holder **33**
Labels **33**
LABEOHM **75**
LABEPLAST **44**
LABERACK **22**
LABESERT **10 23**
LABESTAT **40**
LABETRAY **23**
Lamp with adjustable lighting **61**

M

Mats for floor **39**
Mats for workbenches **40**
M-CLOG **36**
Meghommeter **74**
MINILABERACK **22**
Moveable benches **29**

N

NATURLITE LED **61**
NEWBOX **20**
Nippers **14**

O

Oven **80**

P

Packing **44**
Packing tape **45**
Paint **38**
PCB Assembly Fixtures **23**
PCB Depaneling machines **12**
PCB racks **22**
PCSA **23**
Piastrella Autobloccante **39**

Pins aligner **9**

Pinze professionali **15**

Pliers **15**

Polo-shirts **34**

Portaschede LABSET **23**

Preforming machines **5**

Printer **4**

PTH Counting **2**

PU (Chairs) **64**

R

Racks **22**

Ring binders **19**

Rollbox **20**

S

SAHARA **80**
Screwdrivers **16**
Self-Adhesive Polyester film **18**
Shielded probe **76**
Shielding bags **47**
Shoe covers **37**
Shoes **36**
Signs **33**
Silicon sticky roller **18**
SMD boxes **25**
SMD spool racks **24**
SNAPBOX **32**
SNAPBOXSET **32**
Solder masking paste **17**
Solvent cleaning **17**
SPRINT **37**
STICKY-MAT **18**
Sticky roller **18**
Stripper **38**
SUPERCUT **5**
SUPERCUT-LN5 **6**
SUPERCUT/RP **9**
SUPERCUT/RS4 **8**
SUPERCUT/T51 **8**
SUPERCUT/TOCF **9**
SUPERFORM/A **7**
Superform/AF **10**
SUPERFORM/A-LC **11**
SUPERFORM/AP **7**
SUPERFORM/R **5**
SUPERFORM/R-LC **11**
SUPERFORM/V **6**
SUPERFORM/V-LC **11**
Surface resistivity tester **75**

T

Tavoli mobili **29**
TECOFIX **27**
TEKMATRIX **32 77**
TEST STATION **72**
TEST STATION EVO **73**
Thermohygrometers **77**
Tiles **39**
TOP GUN **68**
Tote-boxes **20**
TPH (Workbenches) **60**
TP (Workbenches) **59**
TRACTOR **12**
TRAINER **36**
Trasporto schede **22**
TREK520 **70**
Tronchesine **14**
T-shirts **34**
Tubing **46**
Tweezer **16**

V

VACUTEK **52**
Vacuum cleaners **19**
VACUWELD **53**

VINYLAB **39**

VISTABOX **32**

VISTAFIX **27**

W

WALKING TEST EVO **71**

Waste bags **19**

Waste paper bin **19**

Wire shelving **54**

Workbenches **59**

WORKER **37**

WRISTLAB-II **72**

Wriststrap **41**

X

XC2 (Ionizer) **67**

Y

YOUNG (Chairs) **65**



ISO9001:2015



Via Paisas n.1 - 10094 GIAVENO (TO) ITALY

<https://www.iteco.it> mail: mail@iteco.it Tel: +39 011.93.63.013 Fax: +39 011.93.65.631