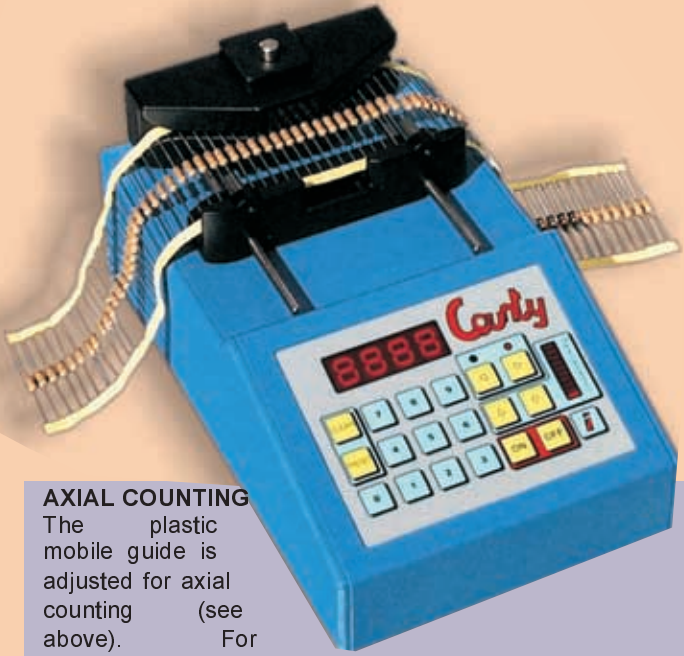# COUNTY

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

TECHNICAL FEATURES

Counting in both directions (left or right)

Divider from 1 to 19

TOTALIZER mode counting

PRESET mode counting (with an audible alarm when the desired component number is reached)

Calibration test and self diagnostic procedure

Last counting value and condition memory

Rechargeable model available (8301.072 and .074)

Relay output

Maximum counting value:	899999 counts
Minimum lead diameter:	0.4 mm
Axial component bandolier width:	55 - 110 mm
Radial component bandolier width:	max 18 mm
Maximum component diameter:	14 mm
Display:	4 digits 13 mm height
Dimensions:	240 x 130 x 110 mm
Weight:	1.8kg

AXIAL COUNTING

The plastic mobile guide is adjusted for axial counting (see above). For bandolier counting the 8301.023 support is available, with an easily inserted 8301.025 handle (see figure on right).

RADIAL COUNTING

The plastic mobile guide is adjusted for radial counting (see figure on the right).Before counting it is necessary to select the lead component number by setting the divider.

SMD COUNTY ADAPTOR

The County adaptor for counting taped SMD components is an optional accessory for the County Component Counter.

The maximum tape height is 56mm and the number of hole per component is min 0.5 - max 19.

Mounting the adaptor does not require any tools and it is locked in place by snap action.
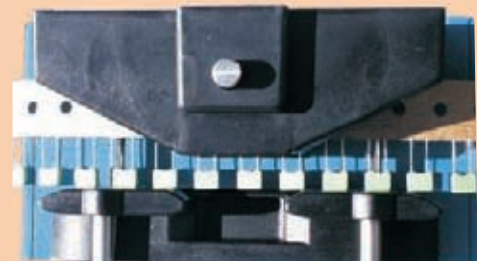
Component counting is achieved by counting the punched holes on the SMD tapes.

8301.028 rotating SMD supports and 8301.030 SMD bandolier handle are optional items.

SUPPORT FOR ROLLED BANDOLIER

LABEL PRINTER

RADIAL COUNTING

8301.051	COUNTY 220 V 50-60 Hz
8301.072	COUNTY 220 V 50 - 60 Hz
	with accumulator, auxiliary relay, printer output, watch
8301.053	COUNTY 110 V 50 - 60 Hz
8301.074	COUNTY 110 V 50 - 60 Hz
	with accumulator, auxiliary relay, printer output, watch
8301.023	Complete support for rolled bandolier(1 pcs)
8301.025	Bandolier handle
8301.018	SMD County Adaptor
8301.028	SMD support for rolled bandolier
8301.030	SMD bandolier handle
8301.350	ISO9000 Traceable® Certificate

COUNTY-S

For taped SMD component counting. This machine works in a simple way by counting the holes on the tape.

It can operate in two different ways:

TOTALIZER: components are counted from a zero reference, tape feed is motorized and the counter automatically stops at the tape end, to prevent loss of the total.

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

Step number indication (division factor) is always present, showed on a two digit display.

8301.110

EMPTY REEL
aluminium made
inner 150 / outer 350mm diameter
easily chargeable
height of the tape from 8 to 56mm

TECHNICAL FEATURES

Display:	6 digits high efficiency leds
Maximum counting speed:	100 pc/sec (1 piece per hole)
Accuracy:	±1 piece
Holes per component:	from 0.5 to 99 (factor division)
Maximum tape height:	56 mm
Maximum reel diameter:	400 mm

UP/DOWN counting
Partial counting memory
PRESET mode
Variable feeding speed
Step by step (1 component at a time)
RS232C serial output for host computer or thermal label printer.

8301.101	**COUNTY-S**	220/240V 50-60Hz
8301.103	**COUNTY-S**	110V 50-60Hz
8301.110		Empty reel
8301.350		ISO9000 Traceable® Certificate

THERMAL LABEL PRINTER

8301.090 **thermo-adhesive label printer**, can be fitted to COUNTY (8301.072/074) and COUNTY-S counters for the printing of the following data:

date, hour, total quantity in text format

date and quantity in bar code format

ac adaptor 110-230vac and data cable included.

8301.091 **thermo-adhesive roll paper** 30m length. it is possible to obtain from 300 to 500 labels, depending on the printed data.

COUNTER-PEN™

Counter-Pen™ is a combination marker and digital counter designed for the lab and plant. Each time a black mark is made with the felt-tipped pen, it automatically sounds a beep, and LCD displays the counts. It is very useful to count components, packages and during inventory

Durable ABS plastic unit provides audio/visual counts to 99999 with reset button, on/off switch, and pen cap.

8301.120
COUNTER-PEN digital counter
8301.122
Replacement pen cartridge

NEW!

COUNTY-W   COUNTING SCALES

System: strain gauge
Display: 3 groups of 14mm backlighted LCDs
Main: 110-120-220-240Vac 50/60Hz
Battery: Internal rechargeable
Operating temperature: 0 +40°C
RS232C serial output option
Optional printer interface

basic

| 8301.215 | 750g |
| 8301.217 | 3Kg |

| Display resolution: | 1/15,000 |
| Internal resolution: | 1/300,000 |

8301.215

8301.217

8301.190

high resolution

8301.190	3Kg
8301.191	6Kg
8301.192	15Kg
8301.193	30Kg

| Display resolution: | 1/30,000 |
| Internal resolution: | 1/480,000 |

professional

| 8301.200 | 6Kg |

| Display resolution: : | 1/30.000 |
| Internal resolution: | 1/600.000 |
- Auto-Calibration: software
- 50 unit weight memory cells

8301.200

MODEL	CAPACITY	DISPLAY RESOLUTION	INTERNAL RESOLUTION	MINIMUM UNIT WEIGHT	PLATTER SIZE
8301.215	300g	0,02g	0,005g	0,04g	Ø 150 mm
	750g	0,05g	0,01g	0,08g	
8301.217	1500g	0,1g	0,02g	0,2g	235 x 178 mm
	3000g	0,2g	0,04g	0,4g	
8301.190	3000g	0,1g	0,01g	0,1g	334 x 245 mm
8301.191	6000g	0,2g	0,02g	0,2g	334 x 245 mm
8301.192	15000g	0,5g	0,05g	0,5g	334 x 245 mm
8301.193	30000g	1g	0,1g	1g	334 x 245 mm
8301.200	6000g	0,2g	0,01g	0,1g	320 x 240 mm

8301.197 RS232C serial output option (to be installed before shipment),	for models **8301.215/217**
8301.198 Optional printer interface (to be installed before shipment),	for models **8301.215/217**
8301.195 RS232C serial output option (to be installed before shipment),	for models **8301.190/191/192/193**
8301.196 Optional printer interface (to be installed before shipment),	for models **8301.190/191/193/193**
8301.202 RS232C serial output option (to be installed before shipment),	for models **8301.200**
8301.203 Optional printer interface (to be installed before shipment),	for models **8301.200**
8301.355 ISO9000 Traceable® Certificate	

Precision Balance

Precision electronic balance with anti-dust and anti-wind covers for to minimise the mistakes caused by the environment. Normal weighting, piece counting, and percentage counting modes.

Weighing units:	13 selectable (Gram, Carat, Ounce, etc.)
Pan size:	Ø 125mm (4.9 inches)
Scale dimensions:	220 x 180 x 160(H)mm
Measuring system:	Strain Gauge Load Cell
Display:	liquid crystal 14mm, with backlight
Set up:	can be configured by the customer
Display resolution:	1 / 30,000
Internal resolution:	1 / 150,000
Interface:	Uni-direction RS232C

Power: AC/DC adaptor operated by 220 or 110Vac (specify in the order) with 4 alkaline batteries size C(UM-2), 100 hours operation

8301.230

Model	Capacity	Display resolution	Internal resolution
8301.230	150g	0.005g	0.001g
8301.231	300g	0.01g	0.002g
8301.232	600g	0.02g	0.004g

8301.223

Platform Counting Scale

Accurate and efficient industrial model, with two capacities selectable by software 60 and 150Kgs.

Measuring system:	strain gauge
Pan size:	510 x 420mm (16 x 20inches)
Total height:	1m
Calibration:	by software
Display:	liquid crystal 14mm, with backlight
Display resolution:	1/15.000 - 4g@60Kg - 10g@150Kg
Internal resolution:	1/75.000 - 0,8g@60Kg - 2g@150Kg
Set up:	can be configured by the customer
Power:	110-120-220-240Vac 50/60Hz
Internal rechargeable battery:	120 hours operation
8301.225	Platform counting scale 60 / 150Kgs
8301.221	Optional RS232C interface

THERMAL LABEL PRINTER

8301.223 THERMO-ADHESIVE LABEL PRINTER, can be fitted to COUNTY-W counters for the printing of the following data:
total weight, unit weight
total quantity.
WARNING: optional printer interface must be added to the scale.
AC Adaptor 110-230Vac and Data Cable included.

8301.091 THERMO-ADHESIVE ROLL PAPER 30m length. It is possible to obtain about 500 labels.

SERIES CRANE SCALE

For medium capacity industrial applications such as under-hook crane load weighing and material testing, suitable for indoor and outdoor use.
Infrared remote control included. (Distance approx. 15 m)
6V/10AH rechargeable battery, recharge time about 10 hours. Data-Hold function.

| Model	Capacity	Res.	Weight	Dimensions mm			
				A	B	C	D
8301.245	1000kg	500g	13kg	56	30	500	560
8301.247	3000kg	1kg	20kg	56	30	500	560
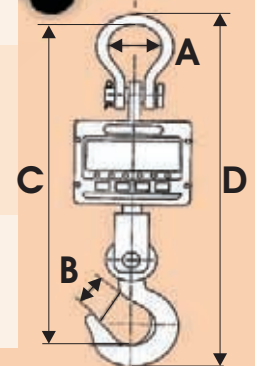
NEW!

Test Weights

All counting scales can be calibrated using the internal software, and a certified test weight. To achieve optimum accuracy from the balance, it should be adjusted in the locality where it is used, because the latitude and longitude affect the calibration and the strain gauge cell could go out of adjustment during the transportation.

8301.296	Test Weight	0.02Kg	F1 class - case - DKD certificate
8301.300	Test Weight	0.1Kg	F1 class - case - DKD certificate
8301.303	Test Weight	0.5Kg	F1 class - case - DKD certificate
8301.305	Test Weight	1Kg	F1 class - case - DKD certificate
8301.310	Test Weight	2Kg	F1 class - case - DKD certificate
8301.315	Test Weight	10Kg	F1 class - case - DKD certificate

7820.021

7820.001

TECHNICAL FEATURES
power: 20 W
air volume: 130 m³/h
noise: 45 dB(A)
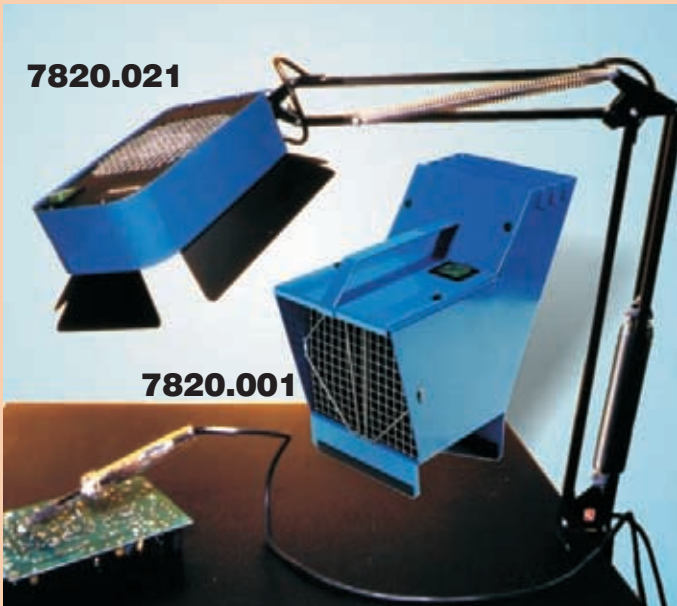
GOSMOKE

The GOSMOKE exhauster 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 exhauster 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 .

7820.001	Exhauster 220V (table model)
7820.003	Set of 4 spare filters
7820.004	Adjustable support for table model
7820.021	Exhauster 220V (hanging model)
7820.031	Exhauster 220V (hanging model) with lamp.

All GOSMOKE exhausters are supplied with 4 spare filters.

MASTERFILTER

The MASTERFILTER set is a good way of dealing with hazardous fumes associated with circuit board soldering, consisting of a filtering unit connected two table aspirators.

The filtering unit consists of two distinct and separated aspirators: the first one is a mechanical filter providing a progressive filtering action on the fumes and the second one, an active charcoal filter absorbing vapours and smell.

The air intake of the aspirator unit is an adjustable semirigid plastic pipe (70mm dia.).

ASPIRATOR UNIT	**8012.001**
Mains:	220V 50 Hz 130W
Air volume:	230 m³/h
Noise:	60 dB(A)
Dimensions:	260 x 160 x 300 mm
Weight:	6 kg

FLEXIBLE CONNECTING PIPE	**8012.003**

To connect the aspirator to the filtering unit 100 mm dia.
(max. length 6 m)

FILTERING UNIT	**8012.002**
Mechanical filter:	with folded construction, progressive action
Active charcoal filter:	absorbing filter with 1.8 Kg amorphous active charcoal
Dimensions:	600 x 220 x 270 mm
Weight:	8,5 kg

SPARE PARTS	
Spare mechanical filter	**8012.004**
Spare charcoal filter (bag with 1.8 Kg)	**8012.005**

SEP3

SEP3 separates milled PCBs, the off-cut material is smoothly and precisely removed.

7915.530	Off-Cut Remover SEP3 (without blades)

STANDARD "L" BLADE - L=5mm

7915.531	Thickness 1.4	- for 1.5mm slots
7915.532	Thickness 1.9	- for 2mm slots
7915.533	Thickness 2.4	- for 2,5mm slots
7915.534	Thickness 2.9	- for 3mm slots

REINFORCED "L" BLADE - L=9mm

7915.541	Thickness 1.4	- for 1.5mm slots
7915.542	Thickness 1.9	- for 2mm slots
7915.543	Thickness 2.4	- for 2,5mm slots
7915.544	Thickness 2.9	- for 3mm slots

STANDARD "T" BLADE - L=4,75mm

|		
7915.551	Thickness 1.4	- for 1.5mm slots
7915.552	Thickness 1.9	- for 2mm slots
7915.553	Thickness 2.4	- for 2,5mm slots
7915.554	Thickness 2.9	- for 3mm slots

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.
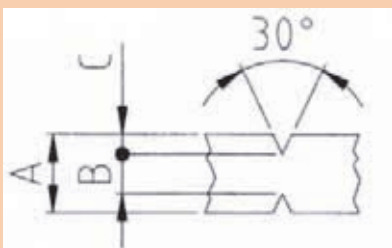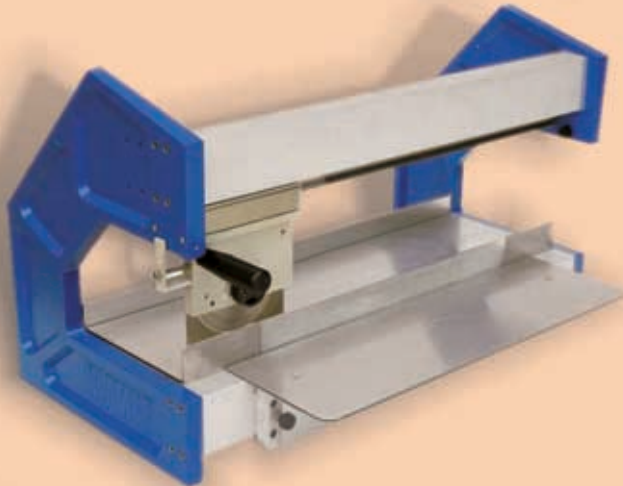
The hand model is suggested only for small productions and prototype series.
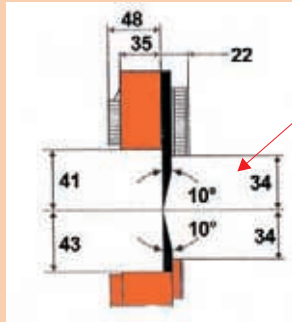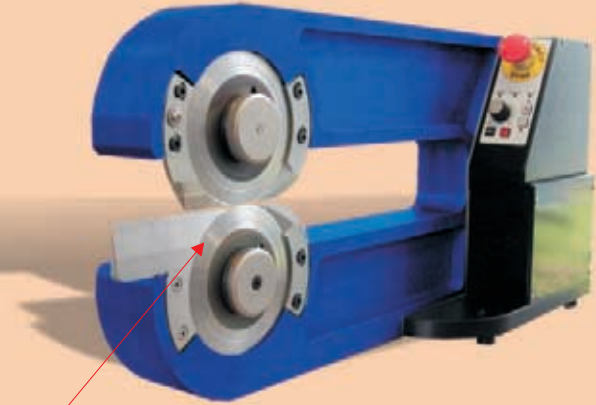
Separation lenght:	up to 350mm
Thickness of panels:	0.8 - 3.2mm
Maximum components's height:	34 - 43mm

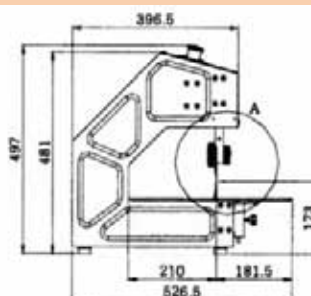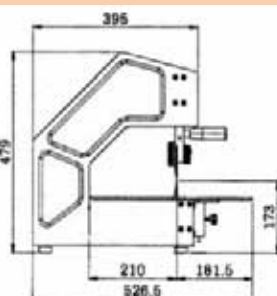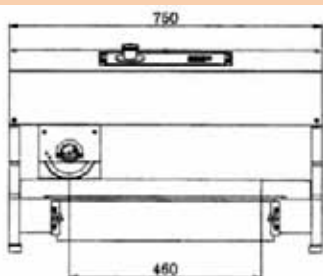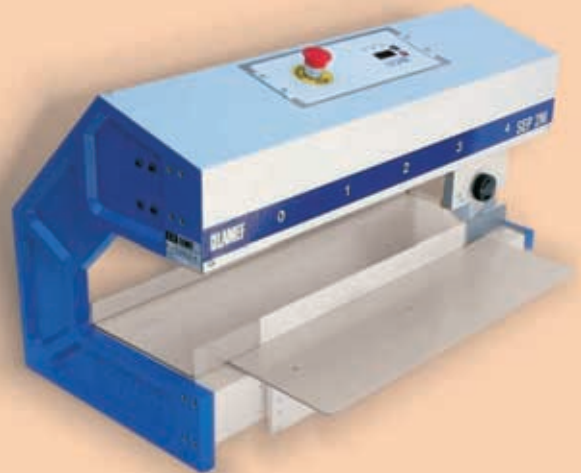|	
7915.580	TRACTOR - PCB Hand depaneling machine
7915.582	TRACTOR - PCB Motorized depaneling machine **220VAC**
7915.584	TRACTOR - PCB Motorized depaneling machine **110VAC**

TRACTOR 2

TRACTOR 2M

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

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

7915.560	TRACTOR 2 - PCB Hand depaneling machine
7915.564	TRACTOR 2M - PCB Motorized depaneling machine **220VAC**
7915.568	TRACTOR2M - PCB Motorized depaneling machine **110VAC**

SUPERCUT

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 adjustements .

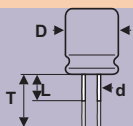There is an optional adapter for radial taped components.

TECHNICAL FEATURES

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

7915.147N	Motorized cutting machine SUPERCUT, **110V** - 50/60Hz
7915.148N	Motorized cutting machine SUPERCUT, **220V** - 50/60Hz
7915.160	Tape Reel Holder BR3, P=12.7mm
7915.159	Tape Reel Holder BR3, P=15mm

	L	d	D
Min mm	3	0.4	1
Max mm	12	0.8	15

T (original lenght) > L + 6mm

BR3

SUPERCUT/LN5

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.
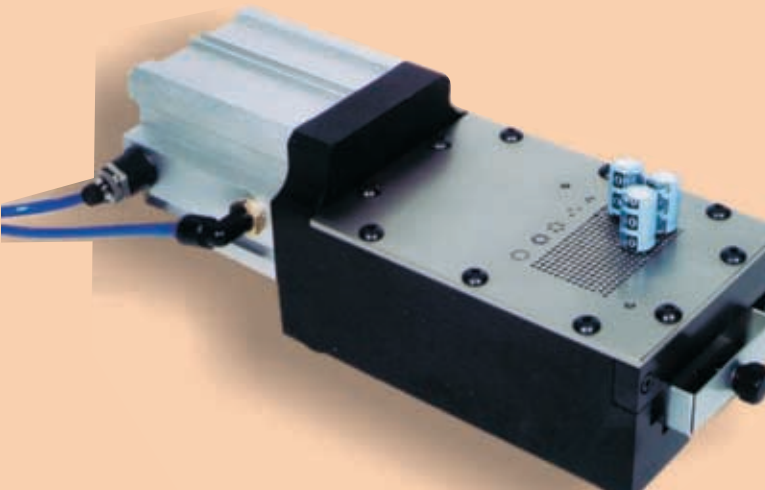
TECHNICAL FEATURES

|	
Production rate:	up to 3000 pcs/hr
Dimensions:	140 x 210 x 110 mm
Supply:	6 ATM
Weight:	6 Kg
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)
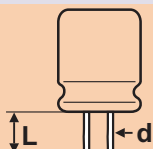
	L	d
Min mm		0.3
Max mm		1.3
Fix mm	3.2	

Standard plate hole layout
SUPERCUT/LN5

Standard plate hole layout
SUPERCUT/LN5L
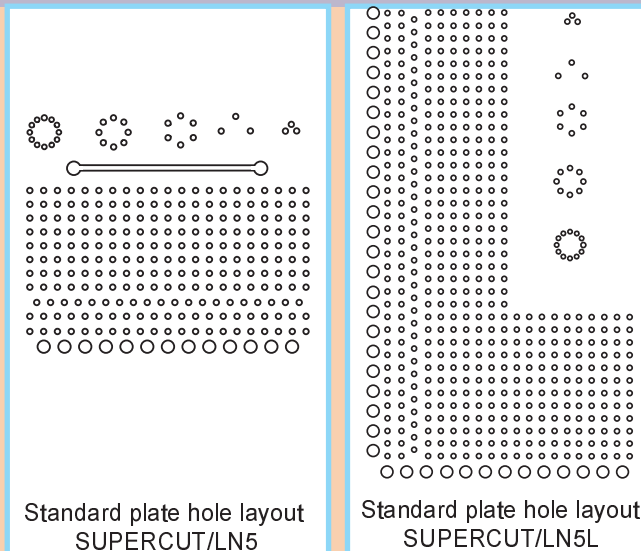
SUPERFORM-R

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

7915.113A (standard)   SUPERFORM/R   P=12.7mm   (.5")
7915.113B   SUPERFORM/R   P=15.0mm (.59")
7915.030   Motor Unit for SUPERFORM, 220V - 50/60Hz
7915.031   Motor Unit for SUPERFORM, 110V - 50/60Hz
7915.185   Tape Reel Holder arm BR6

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

cutting zone
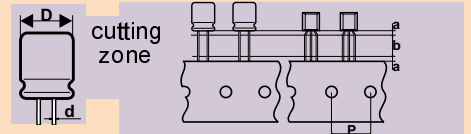
SUPERFORM/V

	P	d		A		D
	fix	min	max	min	max	max
7915.101 B standard model	2.54	0.5	0.8	2	6	3
7915.101 C	3.8	0.5	0.8	2.5	6	5
7915.101 D	5.08	0.5	0.8	3	7	8
7915.101 E	7.62	0.5	0.8	4	7	10
7915.091 A	3.8	0.8	1.3	4	9	5
7915.091 B	5.08	0.8	1.3	5	9	8
7915.091 C	7.62	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, 220V - 50/60Hz
7915.031   Motor Unit for SUPERFORM, 110V - 50/60Hz
7915.182   Feeder CS30 for loose axial components
7915.185   Tape Reel Holder arm BR6
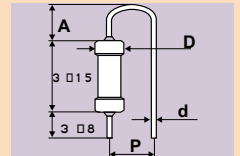
SUPERFORM/VP

SUPERFORM/VP is a machine made for cutting and bending axial taped components for vertical assembling, and shaping a little curl on each reophore.

Production rate:up to 7000 pcs/hr

	P	d		A		D
	fix	min	max	min	max	max
7915.108 A standard model	2.54	0.5	0.8	2.8	5	4
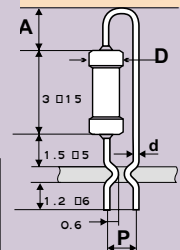
7915.032   Motor Unit for SUPERFORM/VP, 220V - 50/60Hz
7915.033   Motor Unit for SUPERFORM/VP, 110V - 50/60Hz
7915.185   Tape Reel Holder arm BR6

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 prefoming 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
16xxxx	Preforming set

160600 180600	160700 180700	160800 180800
STAND-OFF LOCK-IN	STAND-OFF LOCK-IN LED	STAND-OFF OUTWARD FORM

160900 180900	161000 181000	161100 181100	161200 181200	161300 181300	161400 181400
LOCK-IN	STRAIGHT CUT	DIODE 4 LEADS STAND-OFF INWARD FORM	STAND-OFF LOCK-IN POLARITY FOR LED	90° BENDING	SURFACE MOUNTING

161500 181500	161700 181700	161800 181800	162100 182100	163100 183100	162200 182200
STAND-OFF INWARD FORM	TO SPREAD OUT AND CUT	TO REDUCE PITCH AND CUT	POWER TRANSISTOR CENTER LEAD 2.5 mm OUT	TO220 90° BENDING CENTER LEAD 5mm OUT	TO220 CENTER LEAD SPREAD AND LOCK

162300 182300	162400 182400	162500 182500	162600 182600	162700 182700	162800 182800
TO220 CENTER LEAD SPREAD 3 LEAD LOCK,	TO220 STAND-OFF LOCK-IN 3LEAD IN LINE	TO92 CENTER LEAD 2.5mm OUT	TO92 CENTER LEAD SPREAD AND LOCK.	TO92 CENTER LEAD SPREAD, 3 LEAD LOCK	TO92 STAND-OFF LOCK-IN 3 LEAD IN LINE

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 prefoming 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
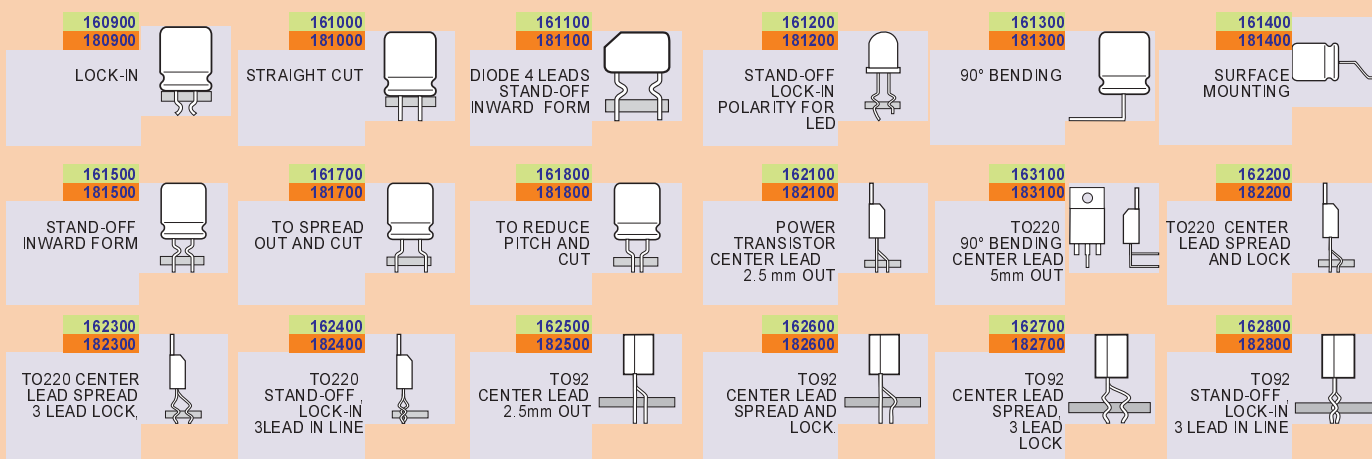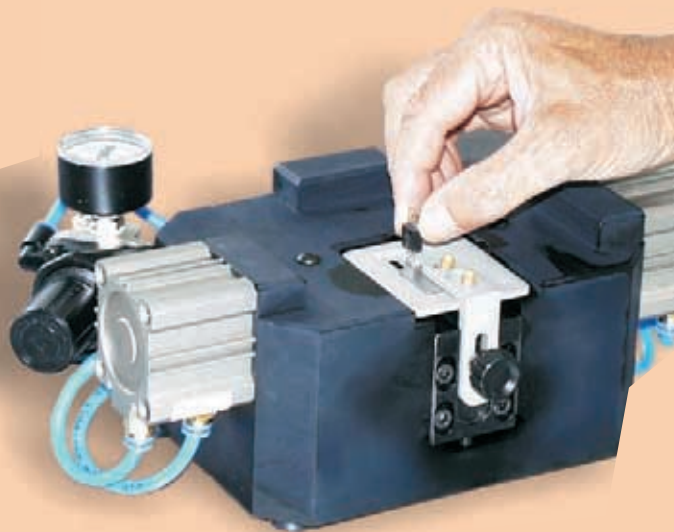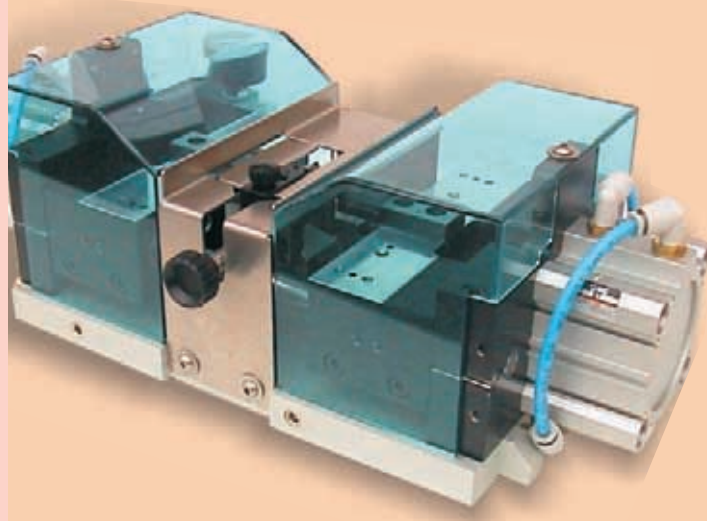
7915.171	SUPERCUT/TS1 without preforming set
18xxxx	Preforming set

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.
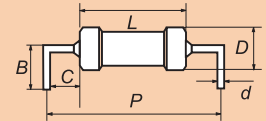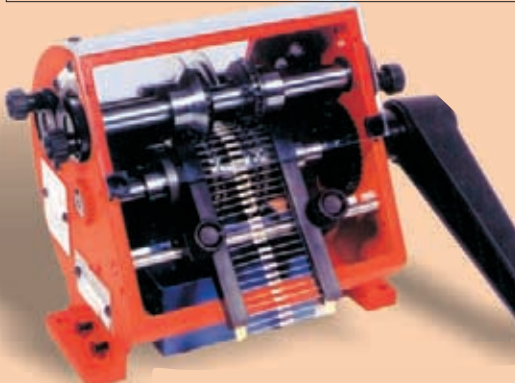
Production rate: up to 40000 pcs/hr

7915.030	Motor unit for SUPERFORM, 220V - 50/60Hz
7915.031	Motor unit for SUPERFORM, 110V - 50/60Hz
7915.180	CS10 feeder for loose axial components
7915.185	Tape reel holder arm BR6

	B		P		C	D		d		L	
	min	max	min	max	min	max		min	max	max	
7915.100A standard model	4	13	6.5	60 (40*)	1.2	16		0.4	1.3	50	**7915.100AR** quick setting
7915.100D reinforced bending knives	5	13	10.5	60 (40*)	2.4	16		0.6	1.4	50	**7915.100DR** quick setting
7915.100F reduced cutting length reduced bending length	4	13	5	60 (40*)	0.8	10		0.4	0.8	50	**7915.100FR** quick setting
7915.100G 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, 220V - 50/60Hz
7915.031	Motor unit for SUPERFORM, 110V - 50/60Hz
7915.180	CS10 feeder for loose axial components
7915.185	Tape reel holder arm BR6

	P		B		C		L	d		D	h		z
	min	max	min	max	min	max	max	min	max	max	min	max	fix
7915.102A standard model z=3.1	6.5	60	10	14	1.2	10	50	1	1.3	16	7	11	3.1
7915.102B z=3.1 reinforced bending knives	10.2	60			2.4				1.4				3.1
7915.102C standard model z=3.9	6.5	60			1.2				1.3				3.9
7915.102D z=3.9 reinforced bending knives	10.2	60			2.4				1.4				3.9
7915.102E standard model z=5	6.5	60			1.2				1.3				5
7915.102F z=5 reinforced bending knives	10.2	60			2.4				1.4				5
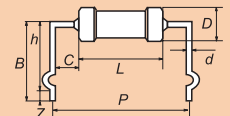
OPTIONAL ACCESSORIES

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 | 220V Motor Unit for SUPERFORM/A-AP-S-V-R-RCP |
7915.031	110V Motor Unit for SUPERFORM/A-AP-S-V-R-RCP
7915.032	220V Motor Unit for SUPERFORM/AF-VP
7915.033	110V 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.

| 7915.185 | BR6 for all SUPERFORM models |

BR6

11
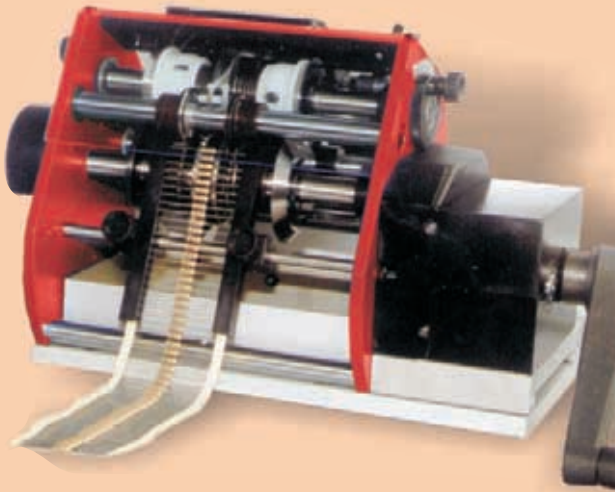
SUPERFORM/AF

The SUPERFORM/AF is a machine designed to cut, bend and preform axial components with a lead diameter ranging from 0.5 to 0.8mm.

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.
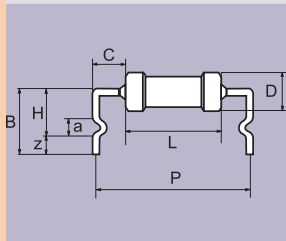
It is also possible to exclude part of the preforming operation to obtain the cutting and "U" bending only.
By use of the variable speed Motor Drive Unit working can be automatic and the production rate can be increased.
Production rate: up to 7000 pcs/hour

STAND OFF

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

model	P min	P max	L max	C min	H min	H max	B min	B max	d min	d max	D max	a	z min	z max
7915.095 (standard) with 420.800 assembly die	10.5	61	50	1.2	6*	9	8*	11	0.5	0.8	8	2.5	2	4
7915.095 (standard) with 420.750 assembly die	10.5	61	50	1.2	6.5*	9.5	8.5*	11.5	0.6	0.9	8	3	2	4
7915.096 (reinforced) with 420.750 assembly die	10.5	61	50	1.5	7*	12	9*	14	0.8	1	8	3	2	4
7915.097 (extra reinforced) with 430.700 assembly die	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)
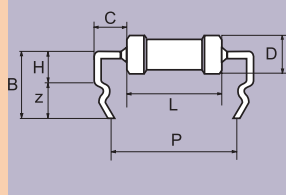
model	P min	P max	L max	C min	H min	H max	B min	B max	d min	d max	D max	z min	z max
7915.095 (standard) with 420.850 assembly die	10.5	61	50	1.2	4.5*	8	7.5*	11	0.5	0.8	8	3	4
7915.095 (standard) with 420.950 assembly die	10.5	61	50	1.2	4.5*	8	7.5*	11	0.6	0.9	8	3	4.5
7915.096 (reinforced) with 420.950 assembly die	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)
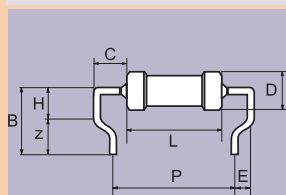
model	P min	P max	L max	C min	H min	H max	B min	B max	d min	d max	D max	z min	z max	E
7915.095 (standard) with 420.900 assembly die	8	59	50	1.2	5*	9	7*	11	0.5	0.9	8	2	4	1.27
7915.096 (reinforced) with 420.900 assembly die	8	59	50	1.5	6*	12	8*	14	0.8	1	8	2	4	1.27
7915.097 (extra reinforced) with 430.900 assembly die	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)
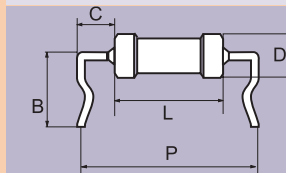
model	P min	P max	L max	C max	B min	B max	d min	d max	D max
7915.095 (standard) with 421.000 assembly die	10.5	61	50	1.2	5	8	0.5	0.8	8

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, 220V- 50/60Hz
7915.033   Motor Unit for SUPERFORM/AF, 110V- 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)
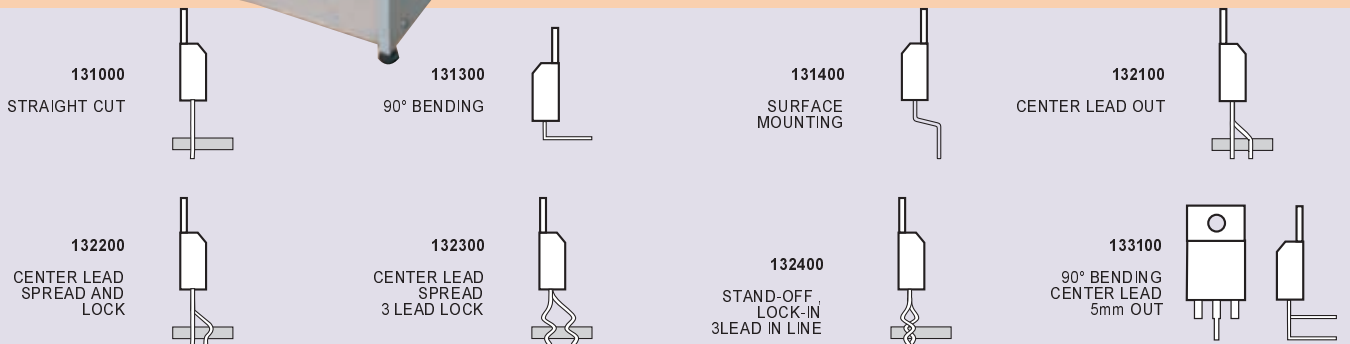430900   STAND-OFF/REDUCED PITCH (d:1-1,3mm)

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, 110Vac
7915.177	SUPERCUT/TOCF without tools, 220Vac

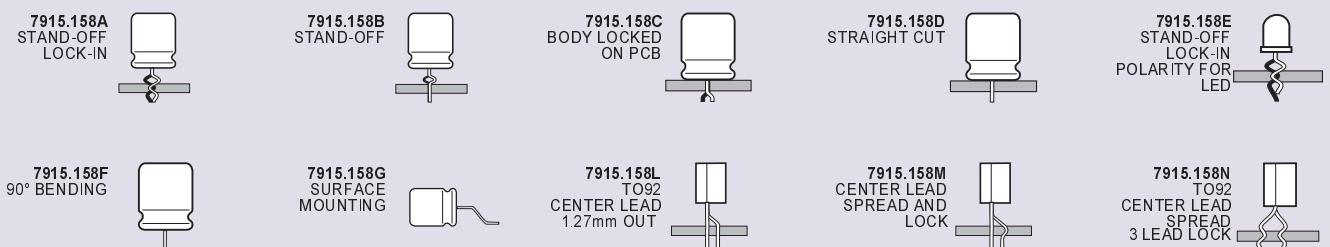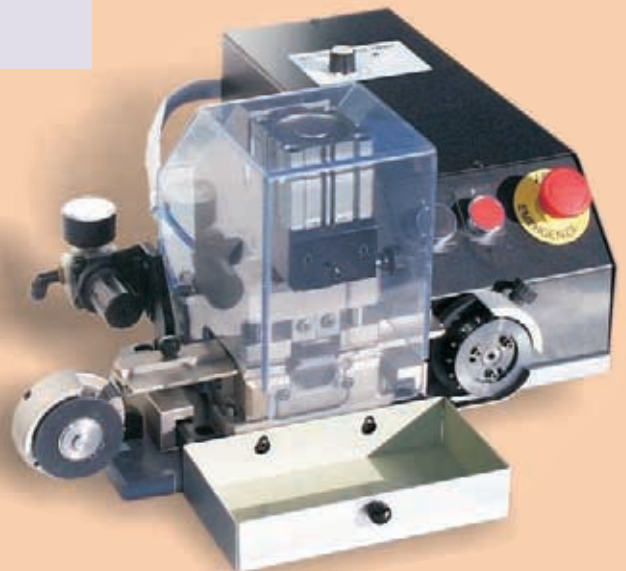| **131000** STRAIGHT CUT	**131300** 90° BENDING	**131400** SURFACE MOUNTING	**132100** CENTER LEAD OUT
132200 CENTER LEAD SPREAD AND LOCK	**132300** CENTER LEAD SPREAD 3 LEAD LOCK	**132400** STAND-OFF LOCK-IN 3LEAD IN LINE	**133100** 90° BENDING CENTER LEAD 5mm OUT

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. Taped components may be manually fed into the machine whilst the foot pedal is pressed.

An automatic feeder system for taped components is available.

Production rate (with feeder):	7000 pcs/hour

7915.153	Manual machine SUPERCUT/RP without preforming set
7915.156	Feed system for taped components, tape P=12.7, 110Vac
7915.156A	Feed system for taped components, tape P=15, 110Vac
7915.157	Feed system for taped components, tape P=12.7, 220Vac
7915.157A	Feed system for taped components, tape P=15, 220Vac
7915.158	Die block

7915.158A STAND-OFF LOCK-IN	**7915.158B** STAND-OFF	**7915.158C** BODY LOCKED ON PCB	**7915.158D** STRAIGHT CUT	**7915.158E** STAND-OFF LOCK-IN POLARITY FOR LED
7915.158F 90° BENDING	**7915.158G** SURFACE MOUNTING	**7915.158L** TO92 CENTER LEAD 1.27mm OUT	**7915.158M** CENTER LEAD SPREAD AND LOCK	**7915.158N** TO92 CENTER LEAD SPREAD 3 LEAD LOCK

SUPERFORM-LC   *low-cost series*

Economic, manual machines, designed for small productions. These machines can not be motorized, the "Tape reel holder" model BR6 (page 15 of the catalog) can be applied
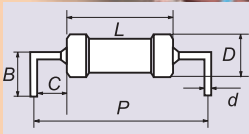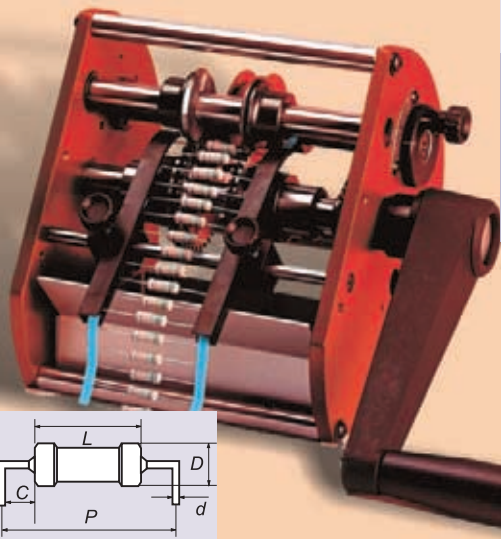
SUPERFORM/A-LC

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.

	B		P		C	D		d		L
	min	max	min	max	min	max		min	max	max
7915.200A standard model	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/V-LC
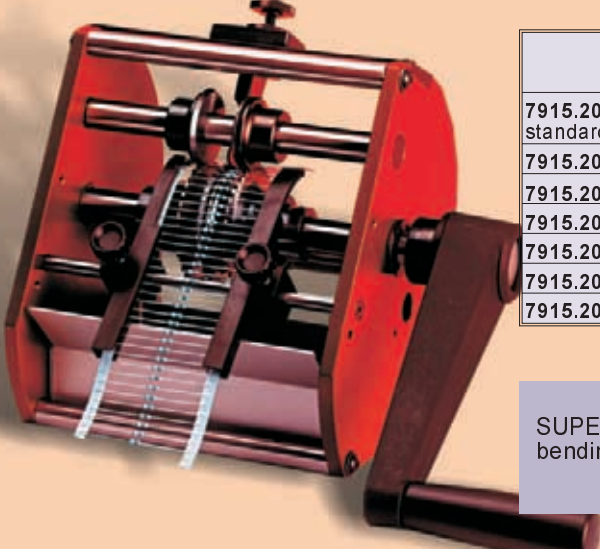
	P	d		A		D
	fix	min	max	min	max	max
7915.201 B standard model	2.54	0.5	0.8	2	6	3
7915.201 C	3.8	0.5	0.8	2.5	6	5
7915.201 D	5.08	0.5	0.8	3	7	8
7915.201 E	7.62	0.5	0.8	4	7	10
7915.209 A	3.8	0.8	1.3	4	9	5
7915.209 B	5.08	0.8	1.3	5	9	8
7915.209 C	7.62	0.8	1.3	6	9	10

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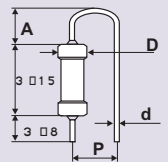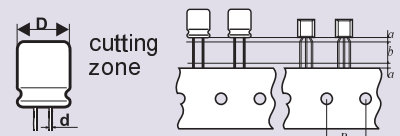
SUPERFORM/R-LC
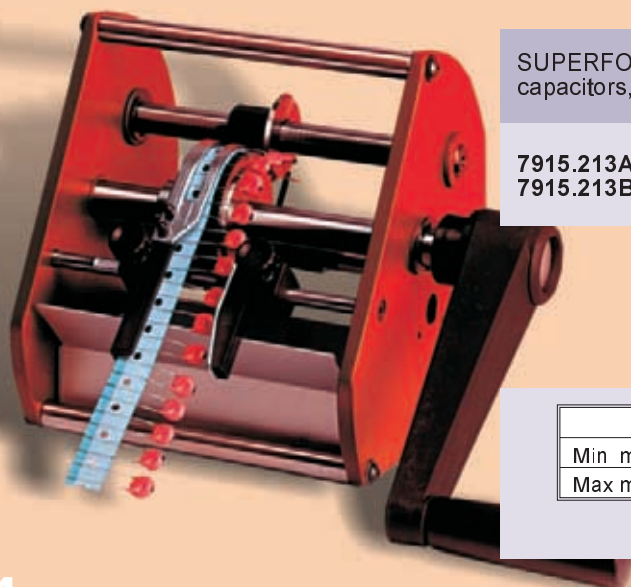
SUPERFORM/R is a machine made for cutting radial taped components such as capacitors, transistors and stand-off resistors.

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

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

cutting zone

14

PRECISION SCREWDRIVERS

SLOT

PHILLIPS

TORX

TAMPER RESISTANT

Chrome-Molybdenum-Vanadium accey, with a black tip

PVC	Dissipativo	Misure		PVC	Dissipativo	Misure
PG1-0	PG1-0-D	1,2x60		PG4-0X	PG4-0X-D	Tx5x50
PG1-1	PG1-1-D	1,5x60		PG4-0	PG4-0-D	Tx6x50
PG1-2	PG1-2-D	1,8x60		PG4-1	PG4-1-D	Tx7x50
PG1-3	PG1-3-D	2,5x75		PG4-2	PG4-2-D	Tx8x60
PG1-4	PG1-4-D	3,0x100		PG4-3	PG4-3-D	Tx9x60
PG1-5	PG1-5-D	3,0x150		PG4-4	PG4-4-D	Tx10x60
PG2-0	PG2-0-D	PH000 2,5x60		PG4-5	PG4-5-D	Tx15x60
PG2-1	PG2-1-D	PH00 2,5x60		PG5-0X	PG5-0X-D	TRx5x50
PG2-1/75	PG2-1/75-D	PH00 2,5x75		PG5-0	PG5-0-D	TRx6x50
PG2-2	PG2-2-D	PH0 3,0x60		PG5-1	PG5-1-D	TRx7x50
PG2-2/75	PG2-2/75-D	PH0 3,0x75		PG5-2	PG5-2-D	TRx8x60
PG2-2/100	PG2-2/100-D	PH0 3,0x100		PG5-3	PG5-3-D	TRx9x60
PG2-2/150	PG2-2/150-D	PH0 3,0x150		PG5-4	PG5-4-D	TRx10x60
				PG5-5	PG5-5-D	TRx15x60

AUTOMATIC FORMING TOOLS
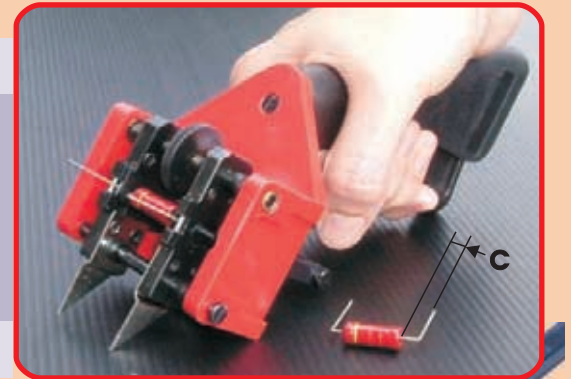
This tool is hand operated, adjustable, useful to obtain a U-form for axial components.

Adjustable pitch from 12 to 28mm.

Max. Body diameter :	11mm.
Max. Lead diameter :	01mm
Min bending distance from body "C"	2.5mm

7915.593   U-form plier - mod.PR/3
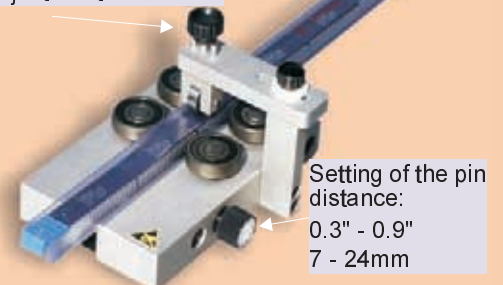

C

PINS ALIGNER

Down pressure of vertical bearing adjustment.

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.

7804.711 PINS Aligner

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

PCB ASSEMBLY FIXTURES

PCSA2

PCSA1

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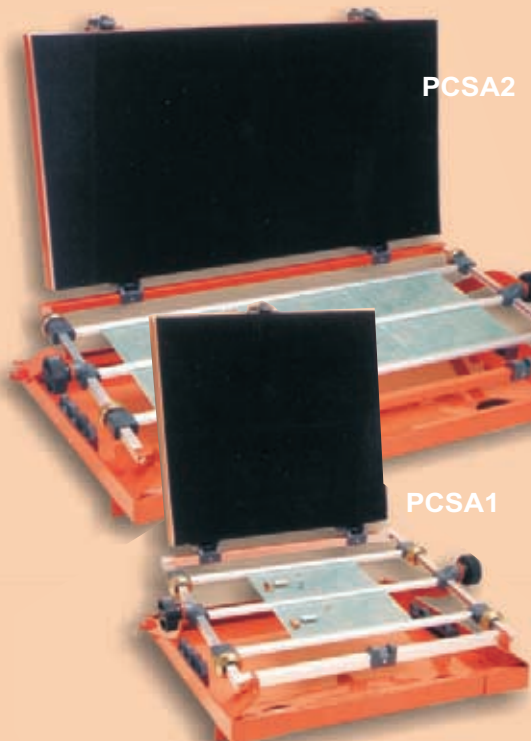
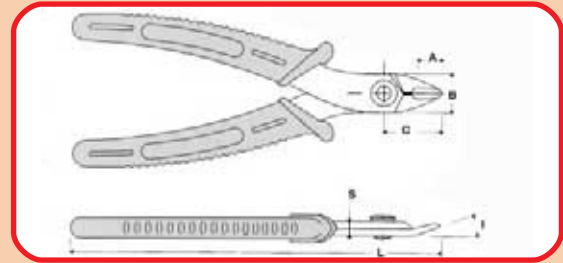|		
7915.599	PCSA1	PCB's holder, max. working dimensions 270 x 220mm
7915.601	PCSA2	PCB's holder, max. working dimensions 500 x 220mm
7915.605	PCSA4	PCB's holder, max. working dimensions 500 x 350mm
7915.610		Additional sliding rail for PCSA1
7915.612		Additional sliding rail for PCSA2 and PCSA4

CUTTING - NIPPERS

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

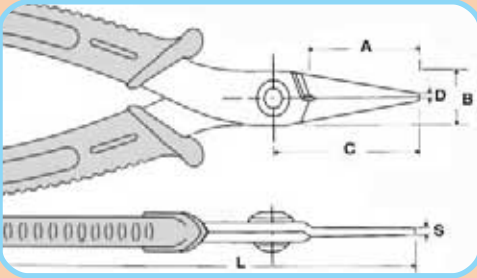ESD black (10^6 - 10^9 Ω)
INSULATING blue

A patented safety clip to prevent the cut lead to spring out dangerously is available.
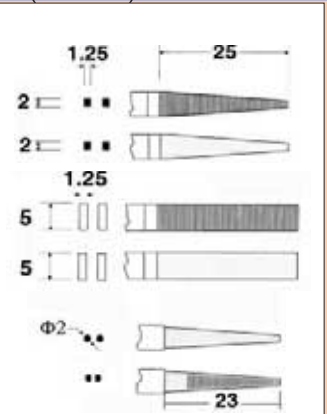
| USE	TYPE OF CUT	WT	dia.max Copper wire		DIMENSIONS						CODE	HANDLES		SAFETY CLIP
		gr.	mm	AWG	A	B	C	S	L	I		ESD black	ISOLANT blue	
normal For lead diameter to 1mm	Clean cut	60	1,02	18	8	13,5	20	5	138	21°	TRE 03 NB TRE 03 AB TRE 03 NBD TRE 03 ABD	• •	• •	• •
normal For lead diameter to 1,3mm	Clean 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	•	•	

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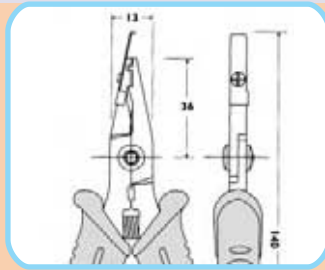
Professional tool specially designed to cut and preform components in a single operation.
Variable lenght by means of an adjustable stop.

PNR5000 PVC blue handles
PNR5000D black dissipative ESD handles
(10^6-$10^9\Omega$)

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

$a_{min} = 3$
$a_{max} = 16$
1.5

PREFORMING TO220
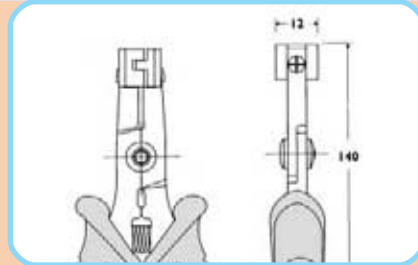
Professional tool specially designed to preform with central lead out of 3.81mm.

PN5050 PVC blue handles
PN5050D black dissipative ESD handles
(10^6-$10^9\Omega$)

3.81
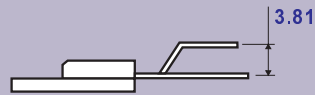
PREFORMING AT 90°
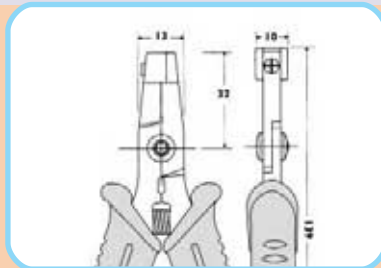
Professional tool specially designed to preform components at 90°.

PN5040 PVC blue handles
PN5040D black dissipative ESD handles
(10^6-$10^9\Omega$)

$a_{min} = 5mm$
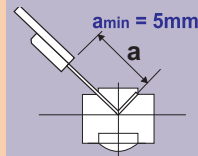
Max. diam.: copper lead 1mm/18AWG

SHEARS
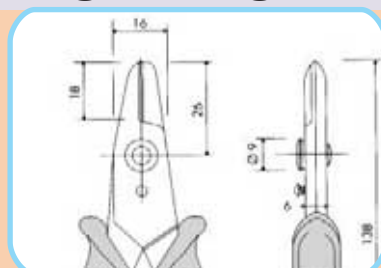
An easy-handly shear, designed for the electronic.

Copper wire: max.diameter 1.63mm(14AWG)

CS 30 PVC blue handles

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

TWEEZER

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

NEW!

PN 0
Tweezer with fine tips
L=120mm

0.2
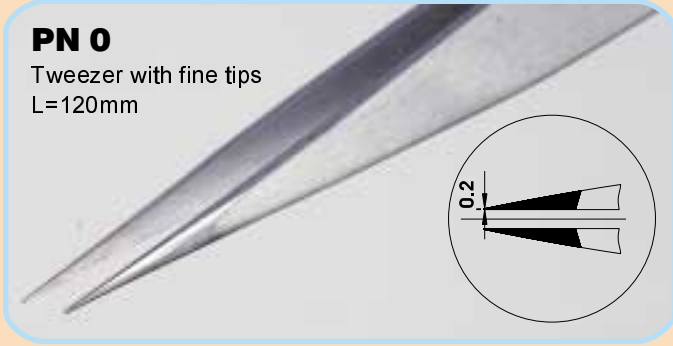
PN 38
Tweezer for SMD
Ø 1mm hole on the tip
L=110mm

Ø 1
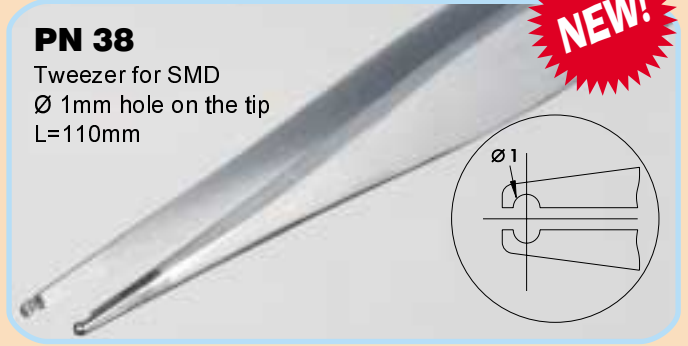
PN 00
Tweezer with flat
and heavy tips
L=115mm

0.5
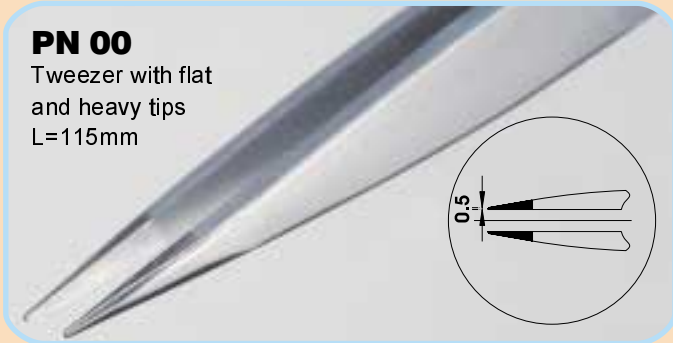
PN 102
Tweezer for SMD
angled tips
L=120mm

2.2
30°

PN 00D
Tweezer with flat and heavy tips
internally serrated
L=105mm

0.5
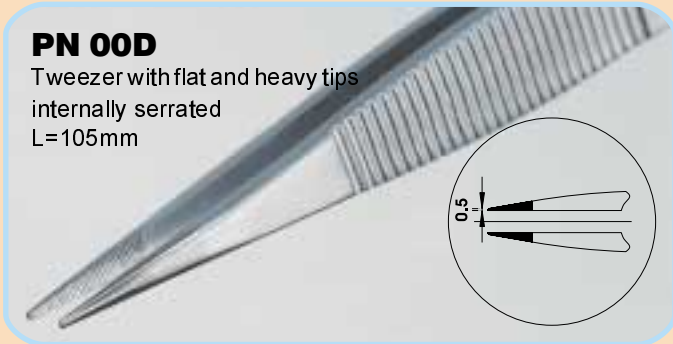
PN 105

Tweezer for SMD
L=120mm

2.6
0.9
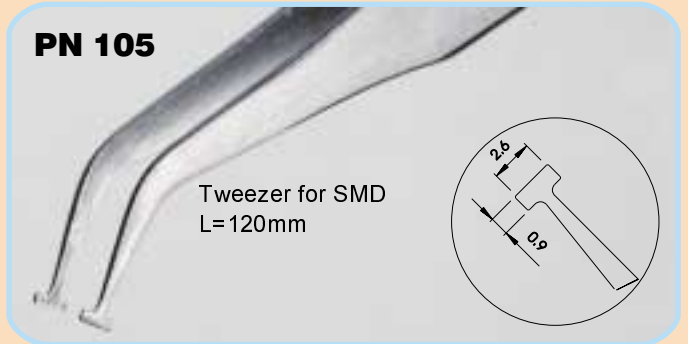
PN 1
Tweezer with strong tips
and thin blades
L=120mm

0.3
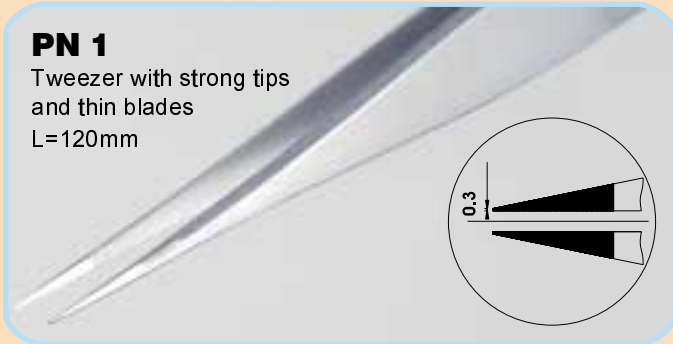
PN 106

Tweezer for SMD
L=120mm

2.7
45°
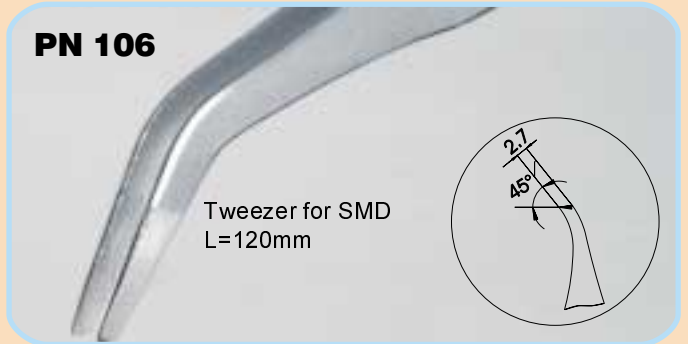
PN 2A
Tweezer with rounded
and flat tips
L=120mm

0.4
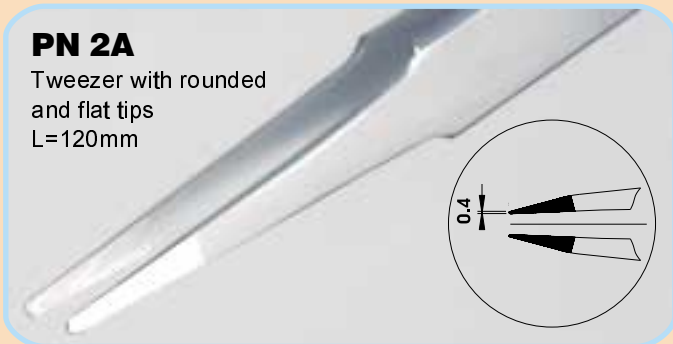
PN 109

Pinzette per SMD
L=120mm

2.5
30°
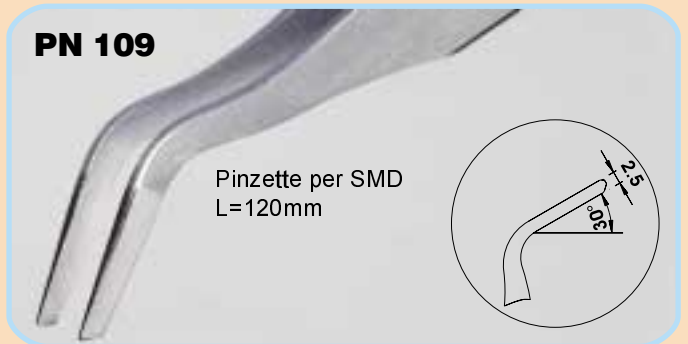
SOLDER MASKING PASTE

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 Rs & Rv	$<10^{10}\,\Omega$
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)

|	
7805.930	Electronic cleaning solvent - 5litre can

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	10^6 to $10^8\Omega$
Dissipative Polyester film	100μm thickness
Dissipative acrylic adhesive	12μm thickness
Release Not ESD film	23μm thickness

7809.040	Self-adhesive polyester film 1300mm x 100m roll
	Custom size on request

NEW!
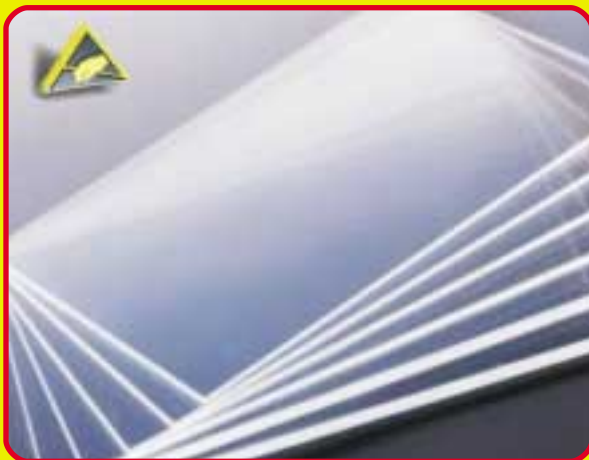
ESD ACRYLIC PANELS

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.

Material: Acrylic
Permanent dissipative coating
Hardcoated surface, resistant to friction damage
Transparent
Machineable
Rs: 10^6 to $10^8\Omega$

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

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.

The belts are printed bilingual: English and German.

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 belt	belt length 4m
7807.954	Belt barrier post, dual belt	belt length 2m
7807.956	Sign holder A4, for belt barrier post	

NEW!
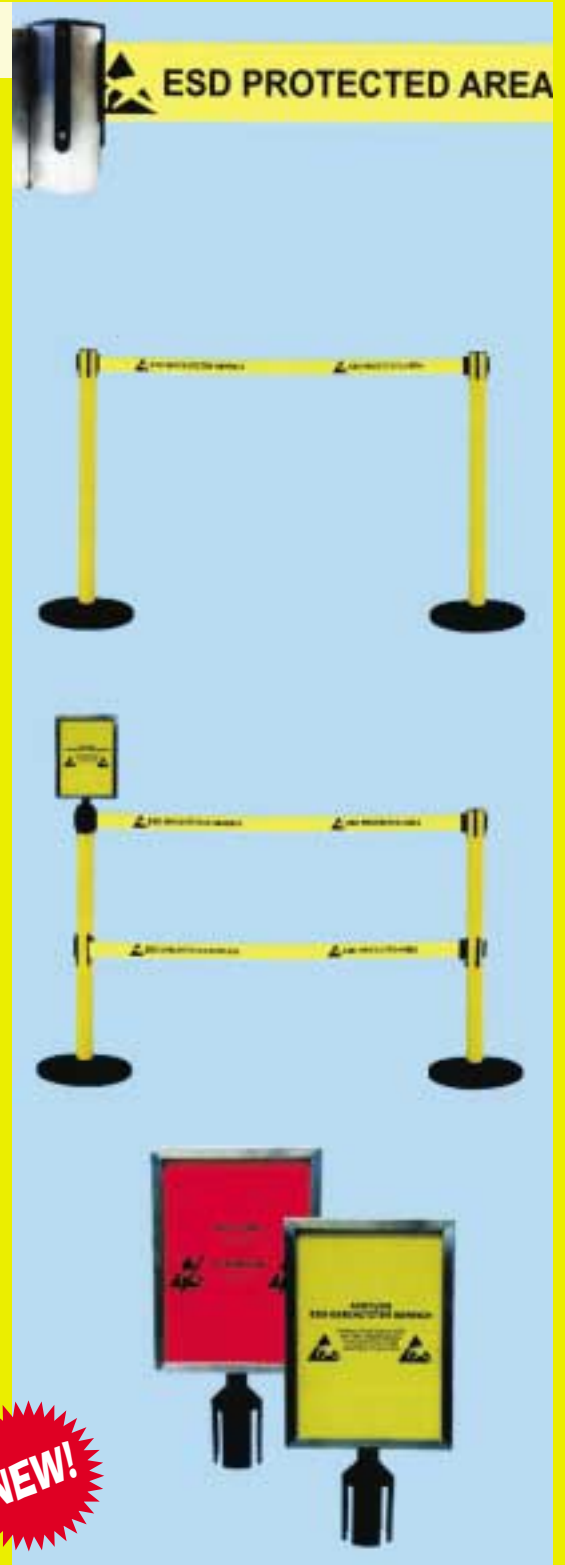
HIGH TEMPERATURE ADHESIVE TAPES

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

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.)
7807.105	"ATTENTION" Adhesive label, ESD (A)	127x50mm(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.)

ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES — A

C

D

E — EARTH BONDING POINT

ATTENTION ESD PROTECTED AREA
OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

ATTENTION HIGH VOLTAGE ESD PROTECTED AREA
OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES
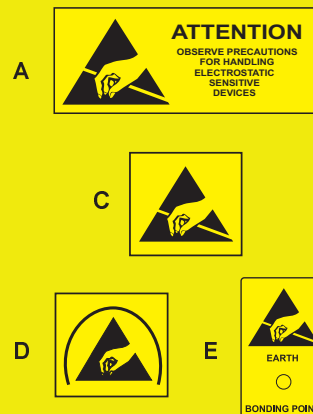
Use where there are potentials > 250Vac

SIGNS

7807.148	"ESD PROTECTED AREA" self-adhesive yellow PVC			300x150mm
7807.149	"ESD PROTECTED AREA" rigid yellow PVC			300x150mm
7807.154	"ESD PROTECTED AREA"	English	rigid PVC	600x300mm
7807.154H	"H.V. ESD PROTECTED AREA"	English	rigid PVC	600x300mm
7807.155	"AREA PROTETTA ESD"	Italian	rigid PVC	600x300mm
7807.155H	"A.T. AREA PROTETTA ESD"	Italian	rigid PVC	600x300mm
7807.156	"ZONE PROTEGEE CONTRE LES ESD"	French	rigid PVC	600x300mm
7807.157	"ESD GESCHÜTZTER BEREICH"	German	rigid PVC	600x300mm
7807.159	"ESD SUOJATTU ALUE"	Finnish	rigid PVC	600x300mm

FLOOR MARKING TAPE

7807.172   PVC adhesive tape, ESD Protected Area floor marking
- Self-adhesive
- 75mm wide, 33m long roll
- PVC laminated with clear PP for durability and washability

COPPER EARTHING TAPE

Used to ground ESD matting
7805.828   COPPER adhesive earthing tape
- Self-adhesive - 0.05mm thickness, 10mm wide, 30m long roll
7805.830   COPPER adhesive earthing tape
- Self-adhesive - 0.05mm thickness, 15mm wide, 30m long roll

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 roll

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
7807.180B	High quality blue clear Dissipative Tape 12mm x 66m
7807.181	Clear Dissipative Tape 24mm x 36m

21

NEWBOX TOTE-BOX

Conductive polypropylene Tote-Boxes, stackable, in EURO format,
$Rs < 10^6\ \Omega$.

CODE	MODEL	EXT.mm	INT.mm	Vol.lt
7804.690	NEWBOX 10	400x300x120	353x253x117	10
7804.687	NEWBOX 14	400x300x170	353x253x167	15
7804.688	NEWBOX 20	400x300x220	353x253x217	20
7804.689	NEWBOX 31	400x300x320	353x253x317	30
7804.692	NEWBOX 15	600x400x075	553x353x071	14
7804.694	NEWBOX 24	600x400x120	553x353x116	23
7804.693	NEWBOX 33	600x400x150	553x353x146	29
7804.698	NEWBOX 34	600x400x170	553x353x166	33
7804.699	NEWBOX 42	600x400x220	553x353x216	42
7804.696	NEWBOX 50	600x400x236	553x353x232	45
7804.695	NEWBOX 55	600x400x280	553x353x276	54
7804.697	NEWBOX 70	600x400x336	553x353x332	65
7804.685	NEWBOX 80	600x400x420	553x353x415	80

7804.923

Label Holder

Logo Application over NEWBOX

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

ACCESSORIES

7804.691	300 x 400 Conductive Cover
7804.700	600 x 400 Conductive Cover
7804.686	Snapping Closure (2 /each cover)
7804.923	SPRING LABEL HOLDER
7804.701	Rollbox - 600x400 Conductive Trolley
7804.702	Rollbox (2 wheels with brake)- 600x400 Conductive Trolley
7806.300	10mm Conductive Foam for 600x400 Newbox
7806.306	10mm Conductive Foam 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 350x5502.5mm for 600x400 Newbox
7806.203	FLAT DIVIDER - Conductive fluted polypropylene LABEPLAST 350x250x2.5mm for 300x400 Newbox
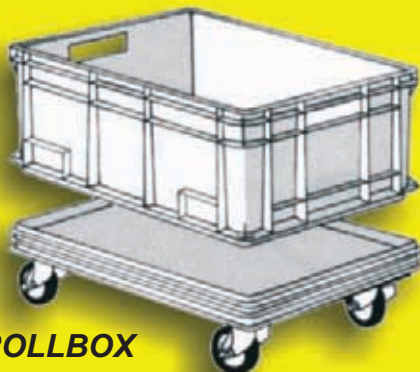
ROLLBOX

NEWBOX CASE

A complete range of conductive cases, ideal for PCB storage in transit, tool boxes or instrumentation, for use in the field service environment, $Rs < 10^6\ \Omega$.

8500.510 - PC10	ext.400x300x133mm	1 handle on long side
8500.512 - PC20	ext.400x300x233mm	1 handle on long side
8500.514 - PC31	ext.400x300x333mm	1 handle on long side
8500.516 - PC15	ext.600x400x88 mm	1 handle on long side
8500.518 - PC24	ext.600x400x133mm	1 handle on long side
8500.522 - PC50	ext.600x400x249mm	2 handles on short side
8500.524 - PC55	ext.600x400x293mm	2 handles on short side
8500.526 - PC70	ext.600x400x349mm	2 handles on short side

DEPOPRINT

Made from black conductive polystyrene, the **DEPOPRINT** system accomodates 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 (lenght cut to max 3m).

Material:	black conductive polystyrene
Rs:	$<10^5\ \Omega$
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 2** Sidewall 209mm (H)
7804.752	**DEPOPRINT 3** Sidewall 312mm (H)
7804.765	Aluminium Connecting Rail 95mm (H)
7804.759	Insertion Stop
7804.773	Hexagonal spanner for assembling sidewall

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 polystyrene
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
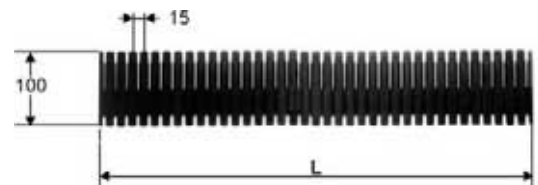
Polypropylene conductive Pallet

These conductive pallets are particularly suitable for the electronic and pharmaceutical industry. Rigid and dimensionally stable due to its "honeycomb structure"; they are also lightweight, nestable, washable, and easy to handle.

colour	black
material	conductive polypropylene
Dimensions	800 x 1200 x 150(H)mm
weight	9 kg
fork entry	4 way
static load	4,000 kg
dynamic load	1,200 kg (on a forklift)
Rs	$10^6\ \Omega$
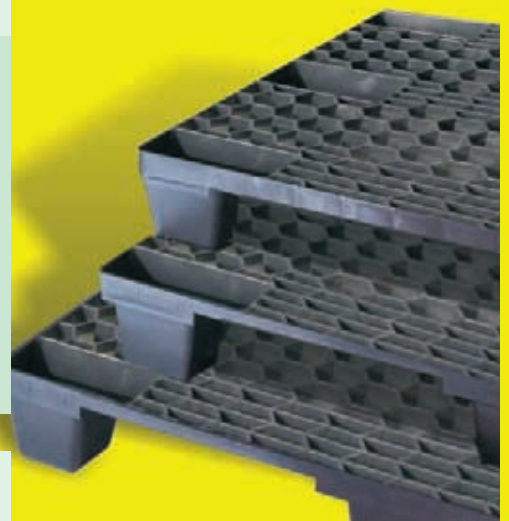
7803.700	Polypropylene coductive Pallet, 800 x 1200 x 150(H)

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, Rs $10^6 \div 10^8 \ \Omega$
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.

7804.002   Aluminium connecting rail(length cut to max 3m)
To give the exact length of connecting rail add to the board width 20 mm for each sidewall and 6 mm for intermediate wall

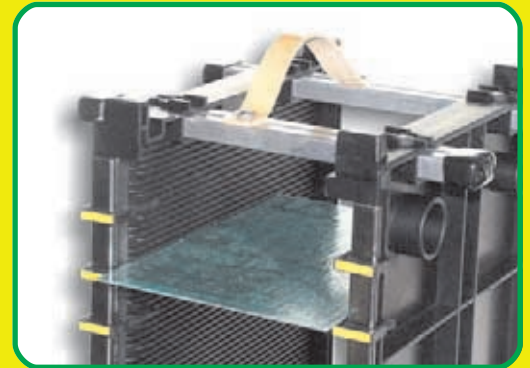|	
7804.007	Sidewall in black dissipative polypropylene +70°C
7804.017	Intermediate wall in black dissipative polypropylene +70°C
7804.021	Handle for transport (rail fixing)
7804.025	Bag of 40 spare screw and bolts
7804.040	Clips for sidewall (with labels) - package of 100
7804.041	Clips for intermediate wall (with labels) - package of 100

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
                                         - conduttivo polyethylene closed cell
                                          (cross linked foam density ISO 845
                                               60Kg/m^3 thickness 7mm)
Weight: 1Kg

7610.100   Standard tray 530x330x8mm with foam
                                        (other dimensions on request)
7610.110D   Only foam 500x330x7mm
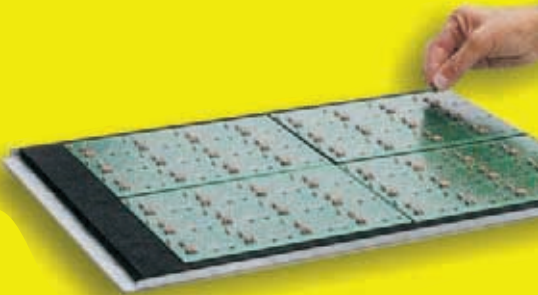
LABETRAY *pcb holders*

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

7804.132

7804.134

An effective alternative to LABETRAY is the DESK HOLDER 7804.120 . It is possible to make an adjustable rack by assembling 2 Desk Holders with 4 threaded bars.

7804.120   Black conductive Desk Holder
                                         dim.: 200x240x20mm

7804.125   Kit of four 330mmxM8 threaded bars and nuts

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, Rs $10^5 \div 10^8$ Ω
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 3 m).
To give the exact length of connecting rail add to the board width 18mm for each sidewall

Snap-on insertion of back-stop

Snap-on insertion for 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)

MODULINE

The MODULINE adjustable circuit board holders have multiple uses in the static-free environment. At workstations they hold PCBs during insertion, assembly, testing, burn-in and rework.

TECHNICAL FEATURES
material: static dissipative polypropylene, black colour
Dimensions: 285x145x80mm

7610.011	Dissipative PCB holder with 1 clamp and 2 clips
7610.012	Dissipative adjustable clamp
7610.013	Dissipative board supporting clips
7610.014	Dissipative PCB holder without clamp

Adjustable clamp Width extension Board supporting clips Length extension Stacking holders
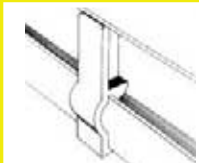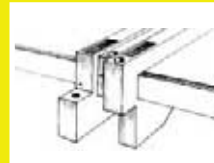
7804.110

LABESERT 10

Made in conductive polypropylene, LABESERT racks are suitable for automatic PCB insertion machines. Channel pitch: 10mm

7804.090

7804.110
LABESERT 10-2 Rack dim. 315x355x575(H)mm
Walls and terminal plates made by conductive plastic (60°C)
PCB adjustement: from 40 to 260mm
Side Guide Slot: depth 3.5mm - width 7mm

7804.090
LABESERT 10-4 Rack dim. 460x535x570(H)mm
Conductive plastic walls, metal terminal plates (60°C)
PCB adjustement: from 50 to 390mm
Side Guide Slot: depth 3.5mm - width 5mm

7805.692

SMD SPOOL RACKS

7805.690	LICEFA rack for 25 spools max.dia. 220mm external dimensions 450 x 240mm 25 slots with adjustable width not ESD vacuum formed, gray colour
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
7805.694	LICEFA rack for 25 spools max.dia. 330mm external dimensions 450 x 310mm 25 slots with adjustable width not ESD vacuum formed, gray 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
7805.703	ITECO rack for spools dia. 180-330mm external dimensions 400 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

7805.704

7805.703

8100.758

Zinc plated spool rack, with movable dividers, to lay over tables or inside lockers.
It can house reels from 180 to 330mm diameter

7805.730	Zinc plated spool rack, 29 slots, length 630mm
7805.732	Zinc plated spool rack, 47 slots, length1000mm
8100.075P	Movable plastic divider

7805.730
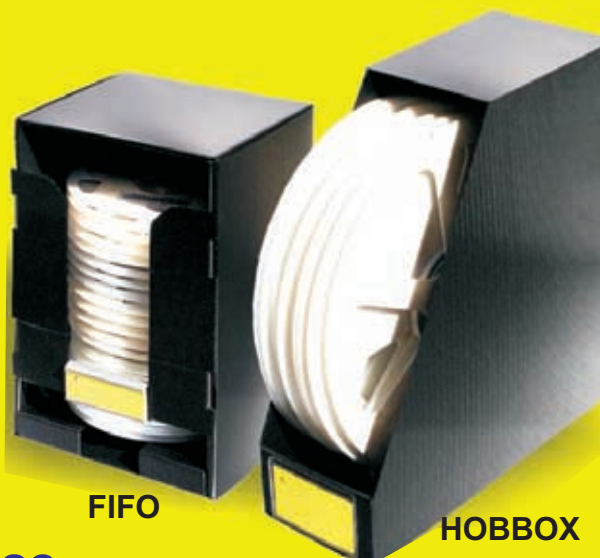
Made in LABEPLAST the F.I.F.O.(First-In First-Out) boxes are useful to administrate the smd spools, loading in the higher slot and picking up from the lower.

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.

7805.711	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
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

FIFO

HOBBOX

Conductive BOXES

Made of black conductive polypropylene, Rs < $10^5 \Omega$.

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
7805.506	Removable lid, without foam ins. 73x42x17mm
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

7805.502

7805.512   int.183x108x30mm

7805.500

7805.499

7804.496   **7804.492**

Conductive BOXES with hinges and metal fasteners

7805.522   int.288x156x16mm

7805.523   int.288x156x38mm

7805.525   with 54 folds
each 28x27x15mm

CASES

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

8500.200	internal dimensions 170x130x37mm
8500.210	internal dimensions 240x170x42mm
8500.220	internal dimensions 270x185x76mm
8500.230	internal dimensions 340x250x53mm
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
8500.231	with conductive profiled foam int. 340x250x35(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 10^6-$10^9\Omega$), or orange non antistatic version.

Two different sizes are available: 450mm and 600mm

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 hunging part is the same.

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

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.

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)

CAB4 CAB3 CAB1 CAB2
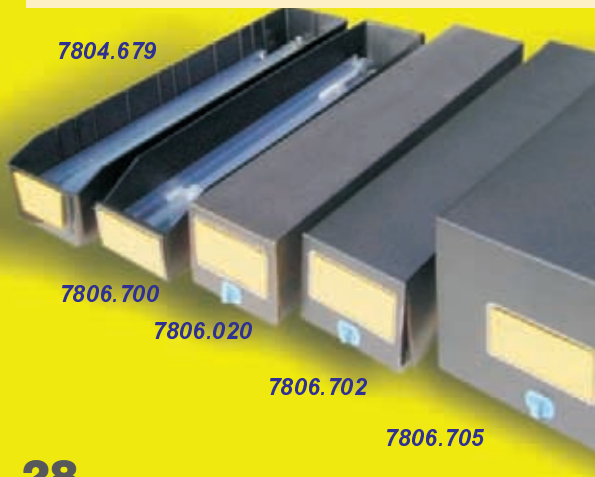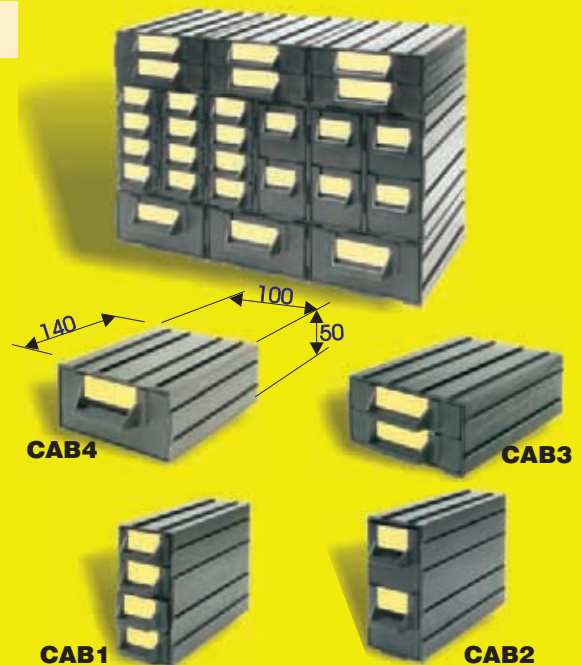
DIP TUBES BIN BOXES

7804.679	Open stick-container, very strong, conductive polystyrene moulded, ext. 625x140x90(H)mm int. 610x130x85(H)mm
7804.680	Control divider for 7804.679, zinc plated material
7806.700	Open stick-container made from LABEPLAST, supplied in flat-pack form, for assembly on-site 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. 605x115x88(H)mm

7804.679

7806.700

7806.020

7806.702

7806.705

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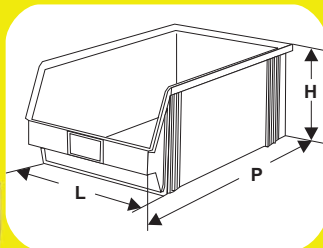
FUTURA - stacking bins

3 ergonomic shape
3 stronger than TECOFIX
3 stackable
3 hungable on most types of rails and louvred panels (FUTURA 5- 4)
3 conductive polypropylene
3 $Rs < 10^6\Omega$
3 dimensions compatible with the TECOFIX models

7804.745	Container **FUTURA 5**,	ext.165(**P**)x100(**L**)x75(**H**)mm
7804.746	Container **FUTURA 4**,	ext.235x147x125(H)mm
7804.747	Container **FUTURA 3Z**,	ext.360x210x145(H)mm
7804.748	Container **FUTURA 3**,	ext.360x210x200(H)mm
7804.749	Container **FUTURA 2**,	ext.508x310x200(H)mm

9993.956	Yellow label for FUTURA 5	15x54mm
9993.975	Yellow label for FUTURA 4	25x74mm
9993.962	Yellow label for FUTURA 3Z	31x96mm
9993.969	Yellow label for FUTURA 3-2	47x100mm

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
	L = 630mm, D = 260mm, H = 490mm	
7804.737	Assembly **VISTAFIX 5**	20 bins size 5
	L = 540mm, D = 230mm, H = 430mm	
7804.738	Assembly **VISTAFIX 5/L**	24 bins size 5
	L = 650mm, D = 230mm, H = 430mm	
7804.739	Assembly **VISTAFIX 6**	20 bins size 6
	L = 540mm, D = 160mm, H = 400mm	
7804.740	Assembly **VISTAFIX 6/L**	24 bins size 6
	L = 650mm, D = 160mm, H = 400mm	
7804.741	Assembly **VISTAFIX 6D**	20 bins size 6D
	L = 540mm, D = 160mm, H = 400mm	

Bins
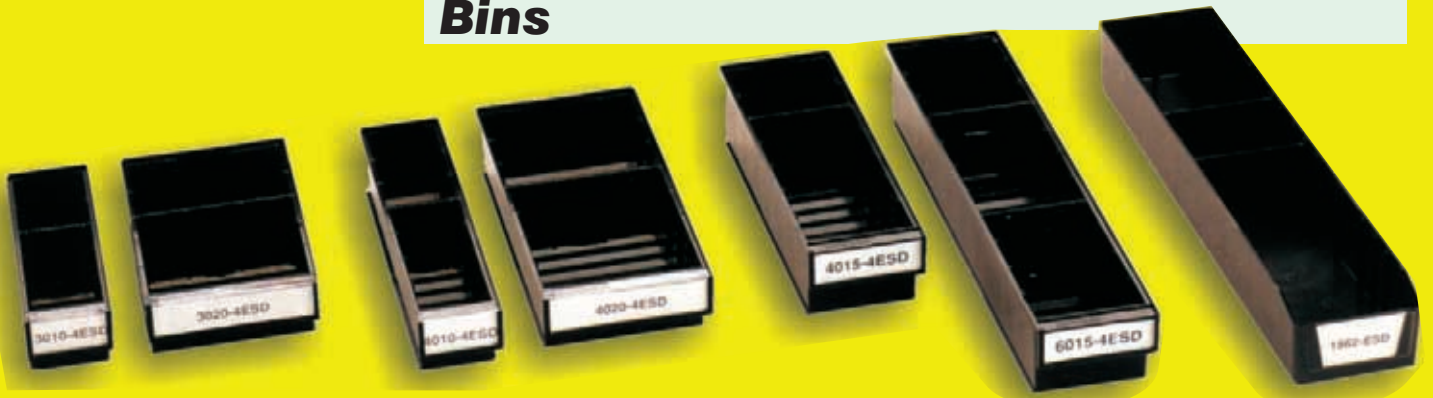
TRESTON bins made from conductive polypropylene fit all standard shelves with a depth 300,400, 500 and 600mm, some models are also used in the visible storage cabinets.
The storage bins have a corrugated base making it easier to pick very small items.

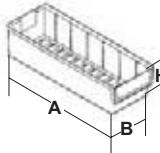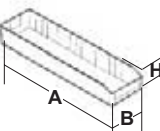| Bin		Fondo	Outer dim. mm A x B x H	Inner dim. mm A x B x H	Dividers (optional)		
Code	Type				Code	Type	Quantity per bin
7804.676	3010	Corrugated	300x92x82	257x75x70	**7804.682**	D-10	4
7804.678	3020		300x186x82	257x167x70	**7804.684**	D-20	4
7804.675	4010		400x92x82	357x75x70	**7804.682**	D-10	6
7804.677	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
7804.679	1562		625x140x90	613x134x84	**7804.681** (corto)	V-15	11
					7804.680 (lungo)	V-60	1

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.

7804.651
(BT-550)
Double stand trolley
holds 8 cabinets 551/554
dim.600x760x1700(H)mm
load capacity max. 150kg

7804.648
(12-550)
Turntable 3 layers
holds 12 cabinets 551/554
dim.500x500x1730(H)mm
load capacity max. 400kg

Turntable 4 layers
load capacity max. 400kg
7804.649 holds 16 cabinets 0830/1630
(16-300)   dim.700x700x1680(H)mm
7804.650 holds 16 cabinets 0840/1640
(16-400)   dim.800x800x1680(H)mm

30

Cabinets

Labels in image: 1630, 830, 1640, 551, 840, 294, 291, 554, 2440, 4840
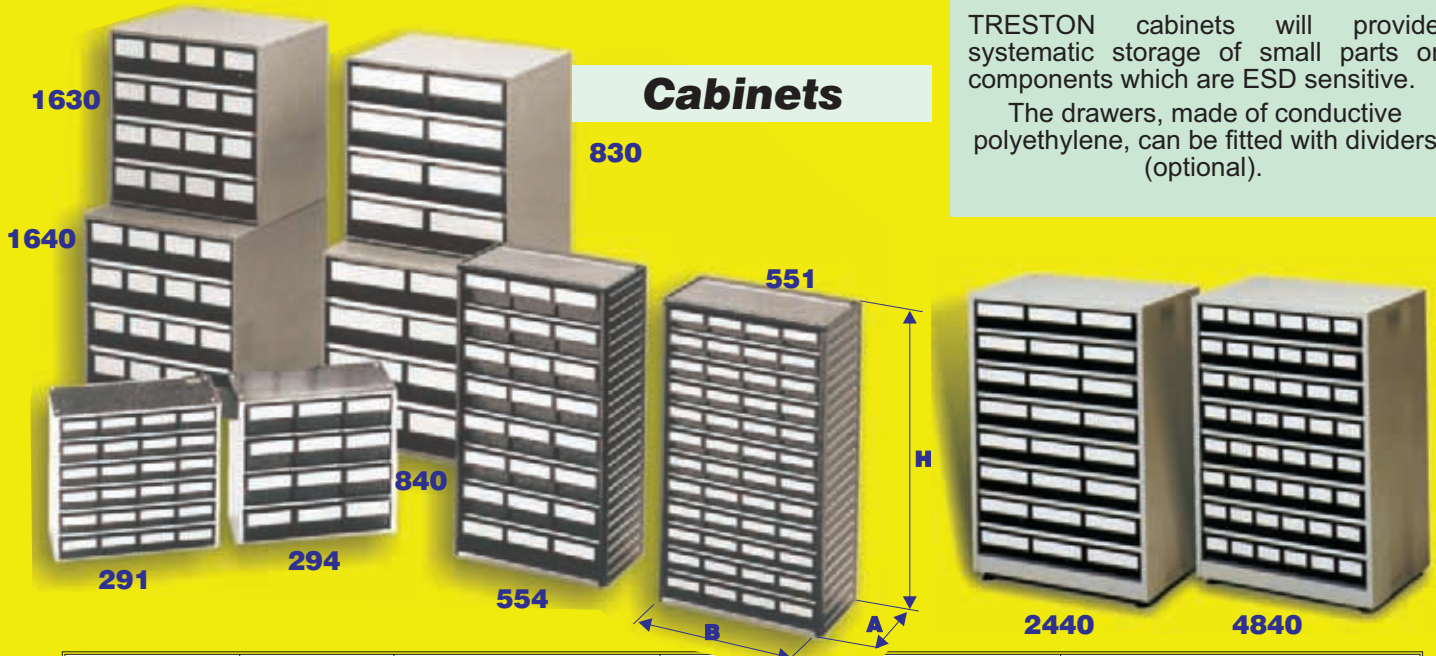
TRESTON cabinets will provide systematic storage of small parts or components which are ESD sensitive.
The drawers, made of conductive polyethylene, can be fitted with dividers (optional).

Code	Type	Frame	Outer dim.A x B x H mm	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

Moveable benches

8104.074　ESD Castor set for cabinets 2440 / 4840.
4 castors Ø 100mm, 2 with brakes
Load capacity 150kg

8104.735　ESD Moveable bench
H: 690-990mm Worktop 500x700mm
4 castors Ø 100mm, 2 with brakes
Load capacity 75kg

8104.730(SAP507)ESD Moveable bench
H: 650-900mm Worktop 500x700mm
4 castors Ø 100mm, 2 with brakes
Load capacity 150kg
8104.731(SAP710)ESD Moveable bench
H: 650-900mm Worktop 700x1000mm

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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

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 < 10^5 Ω (7804.399) – Rs 10^{11} Ω (7804.400)

7804.414	A4 Document Pocket with holes (100 pack)
7804.420	A3 Document Pocket with holes (100 pack)
7804.399	A4 conductive Ring Binder - 4 ring 35mm dia., black
7804.400	A4 dissipative Ring Binder - 4 ring 35mm dia., blue

WASTE PAPER BIN

Waste paper bin made of conductive polypropylene.
Rs < 10^5 Ω

7804.406	Waste paper bin, volume 17 litre, ext. dia. 300x330(H)mm
7804.407	Waste paper bin, volume 60 litre, ext. dia. 420x560(H)mm

Antistatic waste BAGS

Made of antistatic polyethylene, 40µm thickness.
Rs 10^{11} Ω

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 7804.407 bin

BAGGY - beauty-case for EPA areas
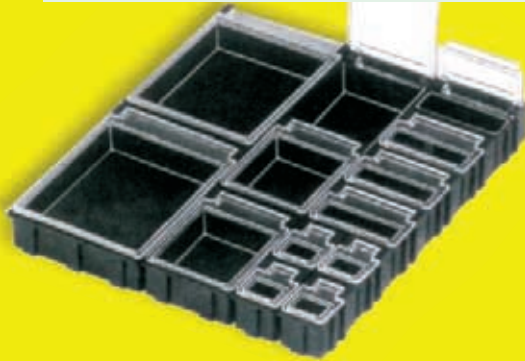
For storage of personal things into an EPA area.

Colour:	Black
Dimensions:	320 x 100 x 150(H)mm
Rs	< 10^9 Ω

|	
7807.910	**Beauty-case per aree EPA**

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.

SIZE 1   SIZE 3

SIZE 4
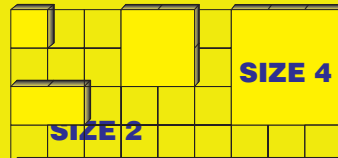
SIZE 2

SIZE 1

7808.620	SNAPBOX1 ESD black	int.16x12x15mm
7808.621	SNAPBOX1 ESD black, transparent cover	ext.20x28x20mm
7808.622	SNAPBOX1 not ESD various colours	
7808.627	SNAPBOX1 not ESD various colours, transparent cover	

SIZE 2

7808.632	SNAPBOX2 ESD black	int.37x12x15mm
7808.633	SNAPBOX2 ESD black, transparent cover	ext.40x28x20mm
7808.634	SNAPBOX2 not ESD various colours	
7808.635	SNAPBOX2 not ESD various colours, transparent cover	

SIZE 3

7808.644	SNAPBOX3 ESD black	int.37x41x15mm
7808.645	SNAPBOX3 ESD black, transparent cover	ext.40x56x20mm
7808.646	SNAPBOX3 not ESD various colours	
7808.651	SNAPBOX3 not ESD various colours, transparent cover	

SIZE 4

7808.656	SNAPBOX4 ESD black	int.57x68x15mm
7808.657	SNAPBOX4 ESD black, transparent cover	ext.60x84x20mm
7808.658	SNAPBOX4 not ESD various colours	
7808.663	SNAPBOX4 not ESD various colours, transparent cover	

SIZE 1

SIZE 2

SIZE 4

SIZE 3

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.

7808.690	Assembly-stand, 2 trays for SNAPBOX (containers excluded)
Material:	zinc plated steel
Dimensions:	180 x 260 x 200mm
Capacity:	48 base units (size 1) for shelf

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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. 20 /6 drawers, mod. 22 /9 drawers, mod. 40 /6 drawers, mod. 62 /4 drawers.

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	**Storage cabinet with 6 drawers ext.275 x 250 x 190(H)mm**	**MOD. 20** (drawer int. height 20mm)
7805.221	Drawer, internal 261 x 238 x 20mm	
7805.230	Rim-frame, MOD.20	
7805.236	Base-foundation (1 each cabinet), MOD.20	
7805.150	**Storage cabinet with 9 drawers ext.267 x 355 x 305(H)mm**	**MOD. 22** (drawer int. height 22mm)
7805.153	**Storage cabinet with 3 drawers ext.267 x 355 x 105(H)mm**	**MOD. 22** (drawer int. height 22mm)
7805.160	Drawer, internal 340 x 250 x 22mm	
7805.170	Rim-frame, MOD.22	
7805.305	**Storage cabinet with 6 drawers ext. 267 x 355 x 305(H)mm**	**MOD. 40** (drawer int. height 40mm)
7805.310	Drawer, internal 340 x 250 x 40mm	
7805.330	Rim-frame, MOD.40	
7805.405	**Storage cabinet with 4 drawers ext. 267 x 355 x 310(H)mm**	**MOD. 62** (drawer int. height 62mm)
7805.410	Drawer, internal 340 x 250 x 62mm	
7805.430	Rim-frame, MOD.62	
7805.340	Base external 355 x 267mm (1 each cabinet)	MOD. 22 / 40 / 62
7805.350	Set of 6 inserts for closing the holes on the top-frame	MOD. 22 / 40 / 62
7805.240	Label holder with exchangeable yellow label 15 x 55mm	MOD. 20 / 22
7805.360	Label holder with exchangeable yellow label 15 x 94mm	MOD. 40
7805.358	Label holder with exchangeable yellow label 31 x 94mm	MOD. 62
7805.308	Cabinet Holder for transport in iron wire	MOD. 22 / 40 / 62

7808.686

7808.688

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)
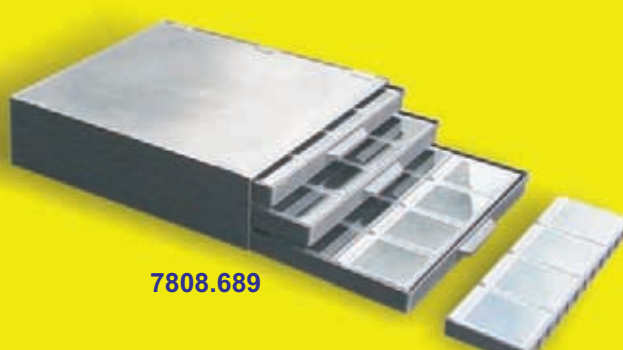ESD transparent cover

7808.688
Storage cabinet with 3 drawers H22
Black ESD
With 108 SNAPBOX3 (3 x 36)
ESD transparent cover

7808.689
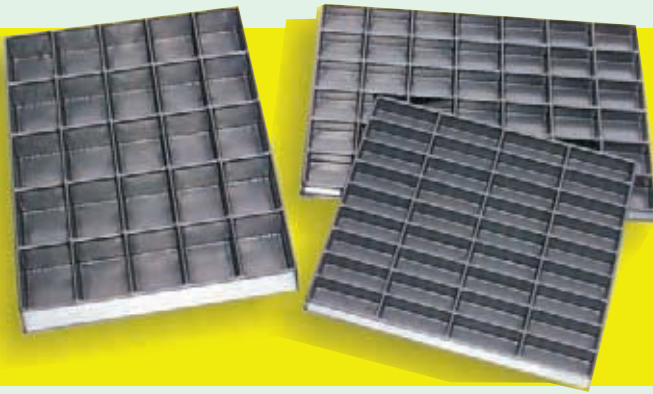Storage cabinet with 3 drawers H22
Black ESD
With 48 SNAPBOX4 (3 x 16)

7808.687

7808.689

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

7805.252	16 compartments 61x56 mm
7805.254	18compartments 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 Ø 27 mm

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

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

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
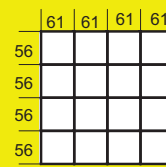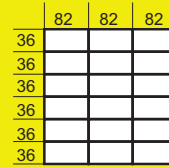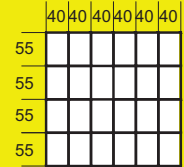
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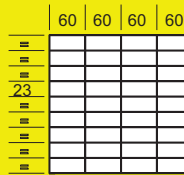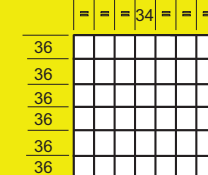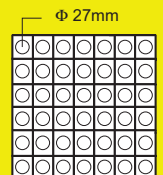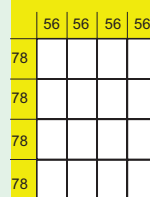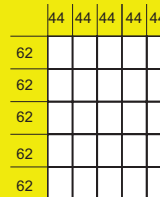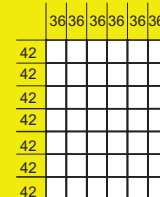
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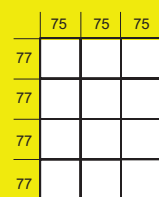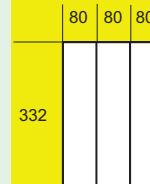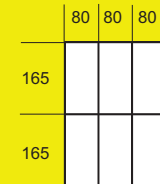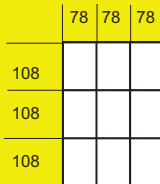
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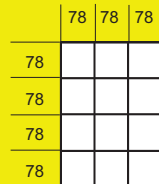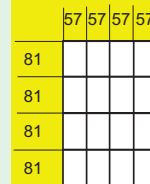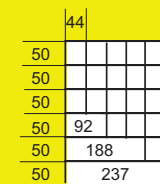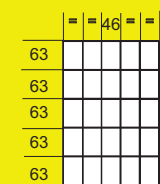
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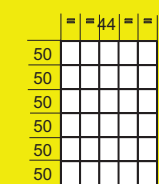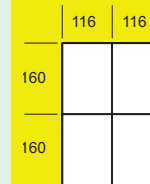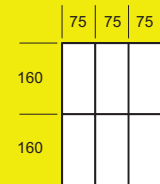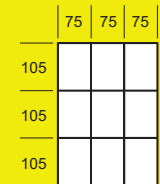
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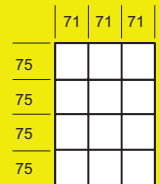
Cups

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

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 < $10^{10} \Omega$

Cheaper models for EPA workstation, made in fabric covering, without armrests and back angle adjustment.
Video terminal models made in fabric covering, with armrest and back angle adjustment.
Clean room models made from conductive, fire retarding, expanded polyurethane.

7804.204
7804.205

7804.204S
7804.205S

7804.204R
7804.205R

7804.204RB

7804.207
7804.207P

7804.208
7804.208P

7807.336
7807.337

7807.338
7807.339

7807.341
7807.343

36

	7807.345 (wheels)	7807.347 (feet)
	7807.325 (wheels)	7807.326 (feet)
	7807.327 (wheels)	7807.328 (feet)

code	back rest angle		back rest		material			foot-plate	seat height adjust. mm		armrest	wheels	feet
	fix.	adj.	short	high	fabric	polyurethane	wood		450/580	500/700			
7804.204	x		x		x			x	x			x	
7804.205	x		x		x			x	x				x
7804.204S	x		x		x				x			x	
7804.205S	x		x		x				x				x
7804.204R		x		x	x			x	x			x	
7804.205R		x		x	x			x	x				x
7804.204RB		x		x	x			x	x		x	x	
7804.207		x		x	x				x		x	x	
7804.208		x		x	x				x			x	
7804.207P		x		x	x				x		x		x
7804.208P		x		x	x				x				x
7807.336	x		x			x		x	x			x	
7807.337	x		x			x		x	x				x
7807.338	x		x			x			x			x	
7807.339	x		x			x			x				x
7807.341		x		x		x		x	x			x	
7807.343		x		x		x		x	x				x
7807.345		x		x		x			x			x	
7807.347		x		x		x			x				x
7807.325		x		x			x		x			x	
7807.326		x		x			x		x				x
7807.327		x		x			x	x	x			x	
7807.328		x		x			x	x	x				x

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

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LABEPLAST Conductive Fluted Polypropylene

2.5mm

LABESTAT 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: $\leq 10^5 \Omega$

Thickness:	2.5mm
Weight:	550g/m^2
Color:	black
7806.164	LABEPLAST , 1250 x 600x2.5mm sheets
7806.166	LABEPLAST , 1250x1250x2.5mm sheets

DIVIPRINT - LABEPLAST dividers

Made from LABEPLAST sheet, the dividers can be used within CARTONBOX or NEWBOX containers. Other sizes are available on request.

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

LABBOX - LABEPLAST Kitting Totes

100mm

620mm

422mm

LABBOX21 A very efficient means of preparing and transporting the components to the assembly area. The version without the short dividers, can be used to transport or store the Dip Tubes up to 600mm length.

7806.750	Base container
7806.752	Cover
7806.754	Long divider (max.3)
7806.756	Short divider (max.5)
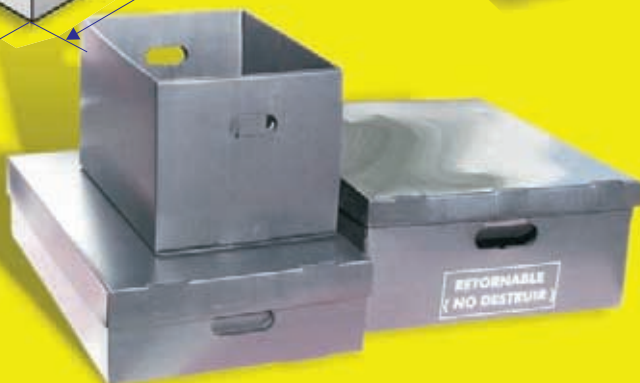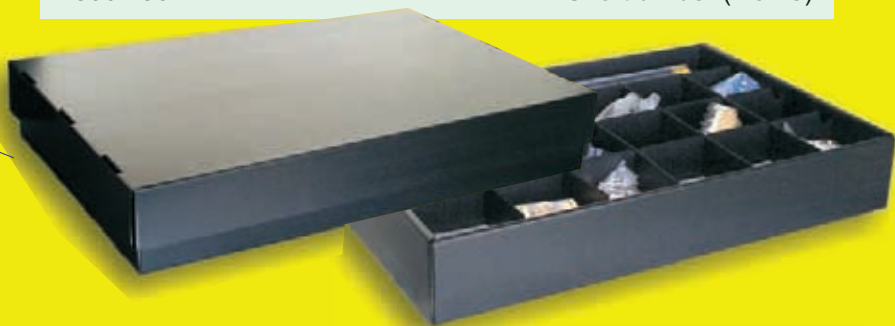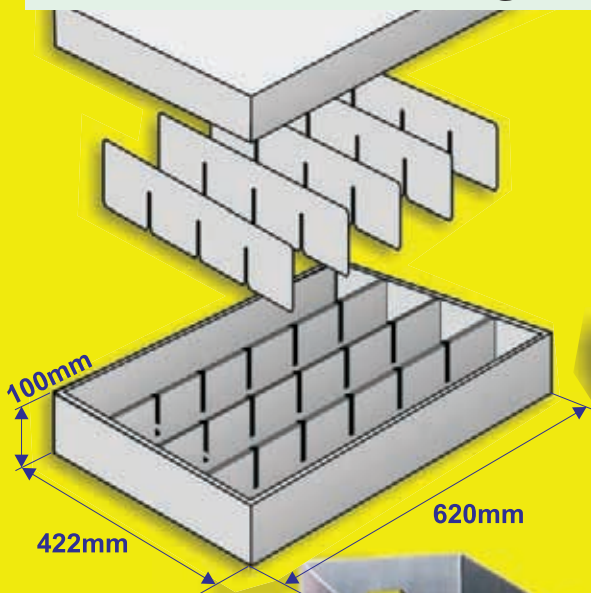
7806.720	**LABBOX10** Base container ext.275x400x250(H)mm	**7806.760**	**LABBOX30** Base container ext.370x590x140(H)mm	**7806.815**	**LABBOX-S** Box with antistatic profiled foam ext. 350x145x70mm
7806.724	**LABBOX14** Base container ext.430x510x200(H)mm	**7806.763**	**LABBOX50** Base container ext.370x590x220(H)mm	**7806.245**	**LABBOX-S** Box with antistatic profiled foam ext. 410x240x60mm
7806.725	**LABBOXC2** Cover for LABBOX14	**7806.766**	**LABBOXC1** Cover for LABBOX30/50		

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PACKING

REUSABLE, STURDY CARTONS MADE FROM CONDUCTIVE CORRUGATED BOARD $R_s \leq 10^5\ \Omega$
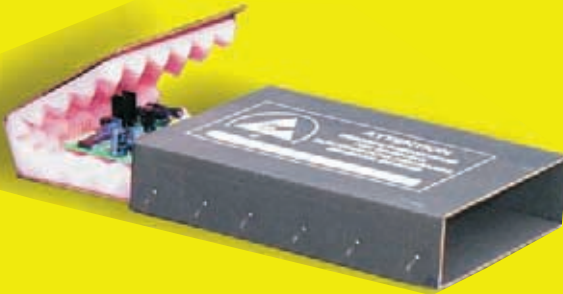
SLIDING SLEEVE BOXES
Antistatic cushioning FOAM

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 - 235 x 294 x 6 mm

7806.320 Antistatic cushioning FOAM   235 x294 x 6mm
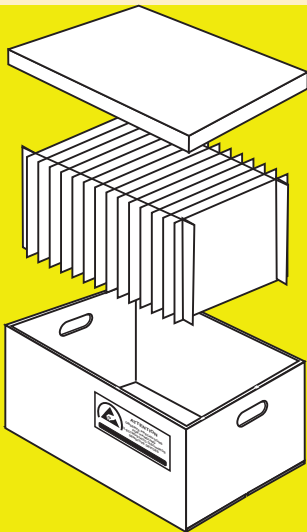
CUSTOM BOXES UNDER REQUEST

7806.112

12 cells - int.225x225x25mm
ext.270x430x240(H)mm
with cover
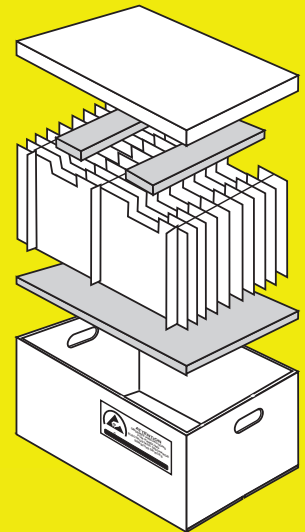
CARTONBOX

7806.220	CARTONBOX 30	int.352x560x130(H)mm	without cover, without dividers, with 1 plate
7806.226	CARTONBOX 50	int.352x560x210(H)mm	without cover, without dividers, with 1 plate
7806.232	CARTONBOX 70	int.352x560x310(H)mm	without cover, without dividers, with 1 plate

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 CARTONBOX 70)
7806.218   Type D DIVIDER   lenght 350 heigth300 pitch 30, 11 slots (x CARTONBOX 70)

C

D

DISSIPATIVE FOOTWEAR

iStatShoes

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

The standard IEC 61340-5-1 prescribes that the Resistance to ground "R_G" should be between 50KΩ and 100MΩ. When the footwear / floor system is used as the primary means of grounding personnel, the resistance of the combination shall be between 750KΩ and 35MΩ.

The electrical resistance must be measured between the operator's hand and a metal plate where he stands with both feet . **Wear the new shoes at least 30 minutes before making the first test. For successive tests it is enough 5 minutes.**

W-CLOG

White colour
Non slip polyurethane sole
"MICROSAFE" Synthetic upper shoe
R_G from 1×10^6 to $3.5 \times 10^7 \Omega$

8914.934-8914.942   sizes from 34 to 42

M-CLOG

White colour
Non slip polyurethane sole
"MICROSAFE" Synthetic upper shoe
R_G from 1×10^6 to $3.5 \times 10^7 \Omega$

8915.935-8915.947   sizes from 35 to 47

NEW LANDER

High comfort, high style
White colour
Non slip polyurethane sole
Breathable leather upper shoe
R_G from 1×10^6 to $3.5 \times 10^7 \Omega$

8912.935-8912.947   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
R_G from 1×10^6 to $3.5 \times 10^7 \Omega$

7807.427 - 7807.440   Clog, sizes from 35 to 48
6807.400 - 6807.413   Spare innersole, sizes from 35 to 48

Original LAVA

EN20345 S1

S-CLOG

"Hi-Tech" safety shoes are soft,resistant and perspirant.
White colour
Synthetic toe cap
Non slip polyurethane sole
Synthetic upper shoe "TEXFIBER"
R_G from 1×10^6 to $3,5 \times 10^7 \Omega$
8920.935-8920.947   sizes from 35 to 47

TRAINER

High comfort, high style
White colour
Shock absorbent, anti-slip polyurethane sole.
Perforated leather upper shoe
Removable and washable innersole
R_G from 1×10^6 to $3.5 \times 10^7 \Omega$

| 7807.469 - 7807.481 | sizes from 35 to 47 |
| 6807.400 - 6807.412 | Spare innersole, sizes from 35 to 47 |

CLASSIC

High comfort, high style
Black colour
Shock absorbent, anti-slip nitrile rubber sole, carbonium additivated.
Leather upper shoe
R_G from 1×10^6 to $3.5 \times 10^7 \Omega$

| 8906.037-8906.046 | sizes from 37 to 46 |

CLASSIC-Punched

High comfort, high style
Black colour
Shock absorbent, anti-slip nitrile rubber sole, carbonium additivated
Perforated leather upper shoe
R_G from 1×10^6 to $3.5 \times 10^7 \Omega$

| 8907.037-8907.046 | sizes from 37 to 46 |

WORKER
SAFETY SHOE WITH TOECAP

Very attractive price
Black colour
Steel toe cap
Non-slip polyurethane sole
Leather upper shoe
R_G from 1×10^6 to $3.5 \times 10^7 \Omega$

| 8908.035-8908.047 | sizes from 35 to 47 |

EN20345 S2

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

| 8913.835-8913.847 | sizes from 35 to 47 |

EN20345 S1

PROTECTIVE CLOTHING

- Style 3/4 length, unisex, with two side pockets and one breast pocket.
- 70% Cotton , 24% polyester, 6% Conductive carbon fibre.
- Lightweight (120g/m^2)
- Washable without losing conductive properties.
- Charge decay < 2 sec

7807.501	Dissipative Overall, WHITE colour	size XS
7807.502	Dissipative Overall, WHITE colour	S
7807.503	Dissipative Overall, WHITE colour	M
7807.504	Dissipative Overall, WHITE colour	L
7807.505	Dissipative Overall, WHITE colour	XL
7807.506	Dissipative Overall, WHITE colour	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)

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

T-shirt		T-shirt with breast pocket		Polo-shirt	
7807.696	XS				
7807.698	S	7807.718	S	7807.708	S
7807.700	M	7807.720	M	7807.710	M
7807.702	L	7807.722	L	7807.712	L
7807.704	XL	7807.724	XL	7807.714	XL
7807.705	XXL	7807.726	XXL	7807.716	XXL

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

Made in dissipative **VINYL** are suitable for use in white chambers . Electrostatic decay time <2Sec.

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).

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

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

Dissipative BADGE HOLDER

Dissipative badge holders are amine free, colourless transparent and permanent dissipative. Maximum size of the badge is 89 x 55mm.

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

DISPOSABLE COATS

DISPOSABLE COATS

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

7807.654	Disposable coat, white colour, size L
7807.655	Disposable coat, white colour, size XL

DISPOSABLE SHOE COVERS

DISPOSABLE SHOE COVERS

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

Are made by disposable blue polypropylene material, with white tread for traction and an elastic opening for a snug fit around the ankle.

7807.840	Light blue shoe cover 1000 pcs packing

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 35MΩ are preferred.

7804.200	Disposable Heel grounder (pack of 100)
7804.201	Disposable Heel grounder Dispenser
7804.202	Heel grounder with 2 MΩ resistance
7804.203	Toe grounder with 2 MΩ resistance

KOSTAPLAN MATS

LABESTAT 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 10^7 to 10^9 Ω.

KOSTAPLAN 1 layer , conductive BLACK

7804.140	60cmx2mmx10meters roll
7804.139	90cmx2mmx10meters roll
7804.145	120cmx2mmx10meters roll

KOSTAPLAN   2 layers , dissipative GRAY / conductive BLACK

7804.148	60cmx2mmx10meters roll
7804.149	90cmx2mmx10meters roll
7804.150	120cmx2mmx10meters roll

7804.140
black
semigloss

7804.148
grey
matt

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 10^7 to 10^9 Ω.

LABESTAT   1 layer
conductive BLACK

7804.151	122cmx1.5mmx10meters roll

LABESTAT   2 layers
dissipative COLOURED / conductive BLACK

7804.152	GRAY	122cmx2mmx10meters roll
7804.153	SKY-BLUE	122cmx2mmx10meters roll
7804.154	BEIGE	122cmx2mmx10meters roll

7804.151
black
orange peel

7804.152
grey
orange peel

7804.153
sky-blue
orange peel

7804.154
beige
orange peel

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

PERSONAL COMPUTER TOUCH MAT

500 x 600 x 2mm, includes one 4m ground cord with a 4mm plug and a crocodile clip.

7804.820	Two layer KOSTAPLAN mat , GREY colour.

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 temporary electrical properties to insulative surfaces.
Rs < $10^{11}\Omega$

7804.906	Bottle, 1 litre spray
7804.909	5 litre Can/e

All mats can be supplied either by length or as standard size mats, complete with press studs for connecting ground cords, or as mats cut to the customer specification.

The mats are cut on a computer controlled cutting table that offers several benefits:

·high repeatibility
·accurate dimensions
·truer edges and angles
·small quantities feasibility

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 two 10mm press studs for Wrist-strap and Grounding cord connection.

-Two Layer Mat RED/BLACK colour, 600x650mm dim.
- Red layer: R_s : 10^8 Ω
- Black layer: R_s : $10^3\Omega$
- Two 10mm male studs + 1 adjustable wrist strap + 1 grounding cord 3m length

7804.194	PORTABLE FIELD SERVICE KIT

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 1MΩ resistor.
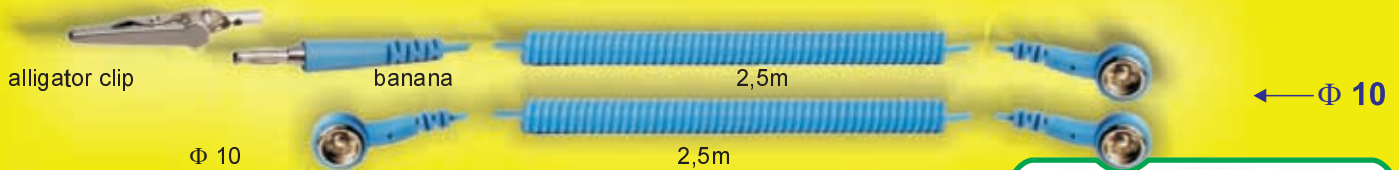
alligator clip   banana   2,5m Φ 10

Φ 10   2,5m

7804.190	**Adjustable wrist strap**, blue colour, with coiled cord banana/socket
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

alligator clip   banana   2.5m Φ 10
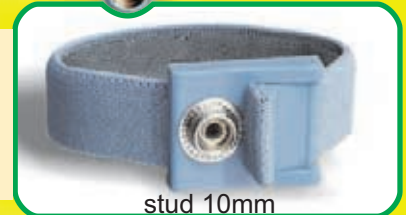
7804.192	**ANTI-ALLERGENIC** wrist strap with coiled cord
6604.805	Spare Wrist-band
6604.803	Spare coiled cord

fast-fit

quick release

stud 10mm

coccodrillo   banana   2m Φ 4

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

stud 4mm

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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. 25m^2 per 2 coats)

Ordinary Maintenance:
-sweep the floor with a wet broom, then wash it with the **cleaner** 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. 100m^2)　　　　　　　　Rs: < 10^{11} Ω

7805.876 LIQUID COAT, 5 Kilos unit

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.

DETERGENT
7805.873 DETERGENT, 5 Kilos unit

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.

STRIPPER
7805.870 FLOOR STRIPPER, 5 Kilos unit

ELECSTAT-C Static Dissipative Agent

ELECSTAT-C 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: < 10^{11} Ω
Biodegradability:　　　　　　　　　　　　　over 90%
Dlution in water:　　　　　　　　　　　　　1 to 5 %:
Application:　　　　　　　　　　for manual or mechanical cleaning.

7805.885 Dissipative agent ELECSTAT 5kg plastic can

DISSIPATIVE FLOOR PAINT

ELECTROGUARD 30 is a two pack water based epoxy coating which can be simply applied to existing concrete floors without the need for specialist flooring contractors.
It is normally applied with two coats by brush or roller.
Electroguard 30 has an attractive satin gloss finish, easy to clean and is available in grey colour.
Number of coats : 2　　　　　Yield:　　　　approx. 8m^2/litre
Rs: 10^9 Ω - Rg: 10^9 Ω

7805.853 ELECTROGUARD 30 medium gray, 5 litre unit
(4 litres base, 1 litre activator)

7805.856 FLOORPOX EPOXY PRIMER
for bare concrete floor
12 litre unit (6 litres base + 6 litres activator)
Number of coats : 2
Yield:　　　　　　　　　　approx. 16m^2/litre

FLOOR MARKING TAPE

7807.172 **PVC adhesive tape,** ESD Protected Area floor marking
- Self-adhesive
- 75mm wide, 33m long roll
- PVC laminated with clear PP for durability and washability

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FLOORS

Flooring solution for runners and workstations *(without glue)*

A two layer rubber, glare free surface, for connection to a conductive backing.

Resistance to ground: $Rg < 10^7 - 10^8 \Omega$

NORASTAT   2 layers
dissipative GRAY / conductive BLACK
can be laid loose without adhesive
7804.181   122cmx2.5mmx10meters roll

NEW!

Floor mat for complete area installation *(with glue)*

floor grounding point

copper grounding strips should be about 6 meters from each other

mat 2 layers

copper grid (made by copper adhesive tape)
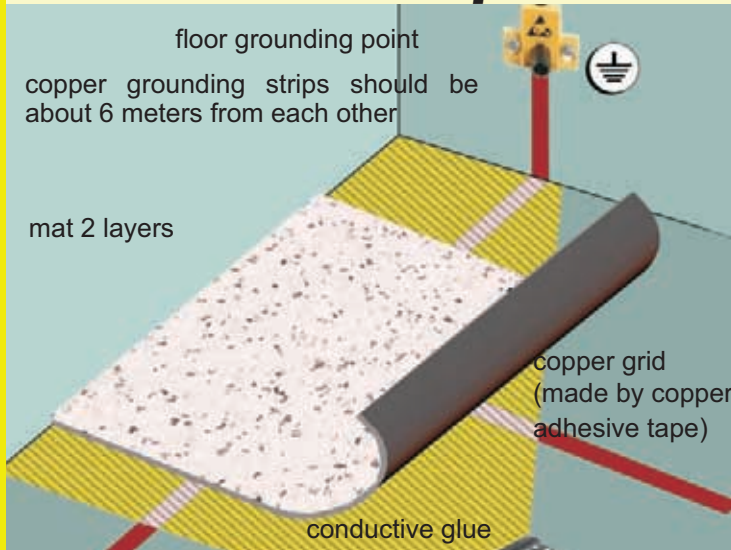
conductive glue

- 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)
- Create a copper grid, and connect it to the ground.
- 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.

NORAPLAN   2 layers , $Rg = 10^6 - 10^7 \Omega$
dissipative GRAY / conductive BLACK
for heavy duty appliances, to be glued
7804.180   122cmx2mmx12meters roll

ECO V4 glue for mats, one component

Conductive glue for sticking mats on benches or on the floor.
Rs.: $< 3x10^5 \Omega$

7805.840   One component conductive glue, black color , 16Kg can
                                Useful time 10-15 minutes, consumption about 350g/m^2

Interlocking PVC ESD-TILE

7mm thick interlocking tiles manufactured from PVC with millions of tiny stainless steel fibres distributed evenly throughout the tile to provide a permanent anti-static floor.
The tiles are dry laid over any hard and flat base even on damaged, damp or contaminated surfaces.
The tiles are clicked together quickly and simply by means of dovetail joints.
Resistance to ground $<10^6 \Omega$

7805.805   Interlocking PVC ESD-TILE, RAL7031, 49 x 49cm
7805.812   Interlocking ramp 49 X 14cm, RAL7001, NOT ESD

COPPER EARTHING TAPE

Used to ground ESD matting
Self-adhesive - 0.05mm thickness - 30m long roll

7805.828   COPPER adhesive earthing tape 10mm wide
7805.830   COPPER adhesive earthing tape 15mm wide

FLOOR GROUNDING KIT

7805.834
GROUNDING KIT

Supplied with one meter long copper earthing type. Dowels and screws not supplied.

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ASTATICTILE

Single layer tiles for indoor and outdoor flooring, produced by means of the vacuum-packing process with vibro-compaction. Made of a high concentration of stone materials bonded together with a white special cement these tiles have permanent dissipative caracteristics.

Laying:

Create a copper grid, and connect it to the ground.

Bond the tiles using a good cementitious adhesive blended with a 10% of conductive additive

Resistance to ground $< 10^8 \Omega$
Finishing: laid, rectified on all 4 sides, chamfered edges
Resistance to fire   class 0

7805.760	ASTATICTILE 40 x 40 x 1,5cm (colour on request)
7805.765	ASTATICTILE 40 x 40 x 2cm (colour on request)
7805.780	Cementitious adhesive Keraflex class C2TE box with 4 holders (5kg each)
7805.781	Conductive additive Mapelectric CP1 2,5kg can

NEW!

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
7807.351	Support for STICKY MAT 7807.350
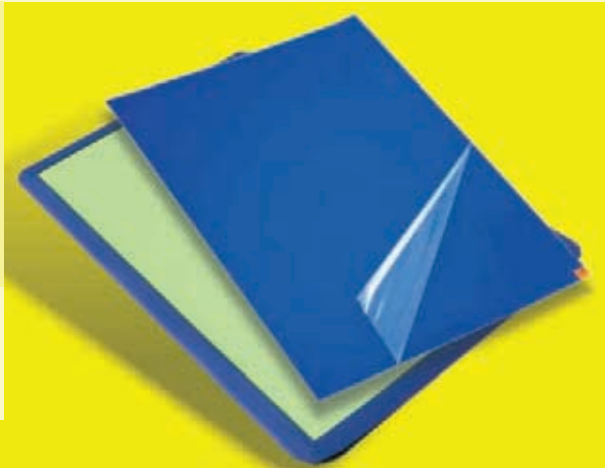
SILICON STICKY ROLLER FOR CONTAMINATION REMOVING

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
7913.156	Single cleaning roller dim.: 500mm with long handle for floor
7913.158	Spare cleaning roller dim.: 150mm. no handle
7913.160	Spare cleaning roller dim.: 300mm. no handle
7913.162	Spare cleaning roller dim.: 500mm. no handle
7913.170	DCR-PAD Block of 50 adhesive paper sheets dim.: 240x333mm, 5 blocks per pad

NEW!

DCR-PAD

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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.

Dimensions:	31,5 x 12 x 18,5cm
Weight :	2,2kg
Flexible pipe :	2,5m
Power cord length :	6m
Power supply:	220V – 1300W
Dust capacity:	1,2liter

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.

**7913.050
WITH STANDARD ACCESSORIES**

7913.060   7913.062   7913.066

ESD CLEANROOM VACUUM CLEANER

Made of conductive polypropilene, enables the suction of coarse pollution as well as small particles. It's very strong with silent motor (overheating protected)

Dimensions:	40cm dia x 35cm height
Weight :	6,3kg
Hose length :	1,3m
Power cord length :	10m
Power supply:	220V – 1300W
Dust capacity:	9 liters

7913.080	ESD cleanroom vacuum cleaner
7913.083	ESD cleanroom vacuum cleaner, with electronic speed control
7913.090	Paper bag set (10 each set)
7913.092	Filter cartridge standard grade black
7913.096	Filter cassette standard grade black

**7013.080
WITH STANDARD ACCESSORIES**

7913.090   7913.092   7913.096

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)
7805.930	Electronic cleaning solvent - 5litre can

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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 1MΩ 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 Φ 10mm

EBP BOX

EBP BAR

EBP BAR

GROUNDING CORDS
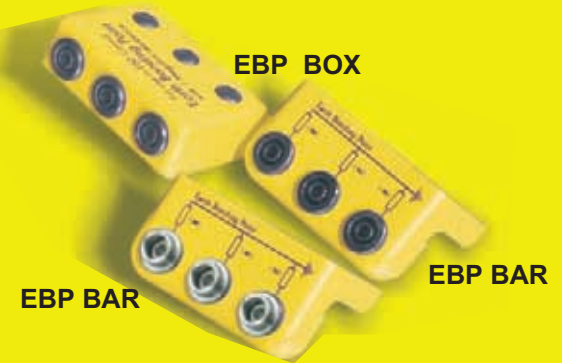
Code	Left end	Length	Resistance	Right end
7804.876	male 10mm	1,8m	R=1MΩ	male 10mm
7804.878	male 10mm	0,15m	R=0 Ω	male 10mm
7804.880	male 10mm	4m	R=1MΩ	eyelet Φ 4.3x7mm
7804.882	male 10mm	4m	R=1MΩ	banana alligator-clip
7804.883	female 10mm	3m	R=1MΩ	banana alligator-clip
7804.866	female 10mm	3m	R=0Ω	banana alligator-clip
7804.884	female 10mm	3m	R=1MΩ	eyelet Φ 5x7mm
7804.885	female 10mm	3m	R=1MΩ	female 10mm
7804.886	female 10mm	3m	R=1MΩ	eyelet Φ 5.3x8mm

TIPICAL APPLICATIONS

7804.896

7804.189

7804.882

6604.804

7804.885

7804.884

2x7804.804

7804.886
7804.804

7804.189

GROUNDING ACCESSORIES

Mat — Φ mm hole

Mat — Φ mm hole

44

95
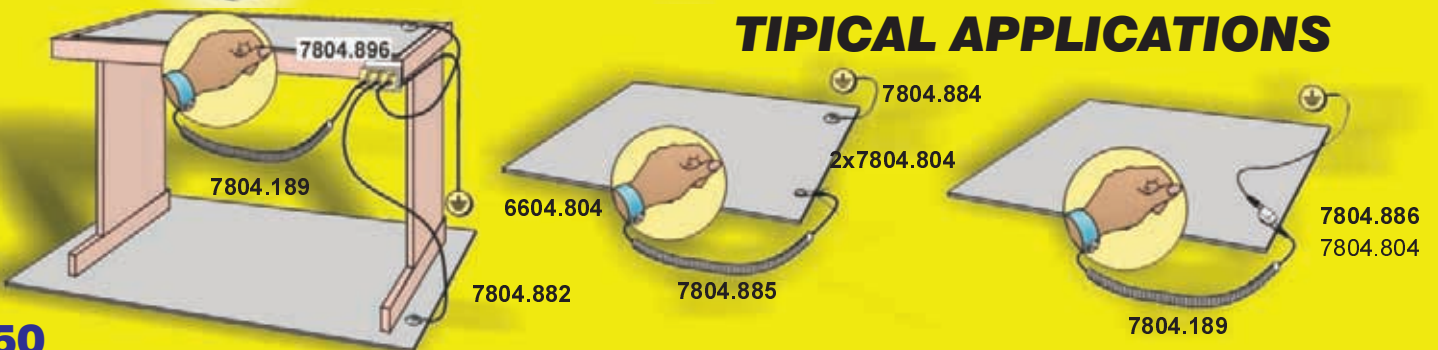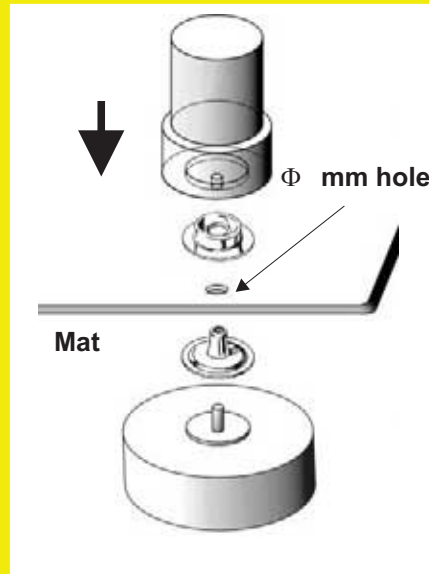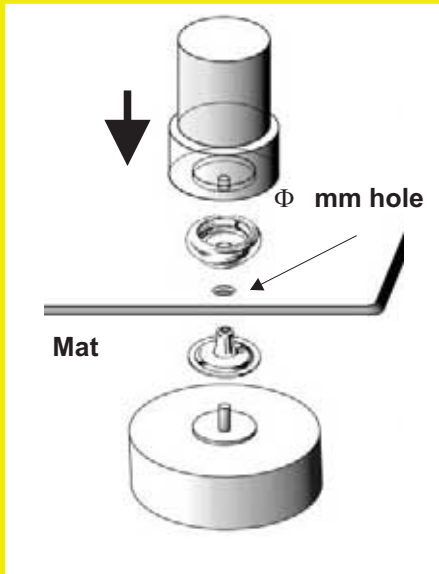
7804.803	Φ10mm socket (2 parts)
7804.809	Punch and Anvil for socket F
7804.804	Φ10mm stud (2 parts)
7804.805	Punch and Anvil for stud M

7804.811	Eyelets manual press (Without punch and anvil)
Dimensions:	90 x 180 x 320mm
Weight:	3 Kg

7804.870

7804.815 — Stud Φ 10mm

7804.814 — Socket Φ 10mm

7804.818 — Stud / Stud

7804.819 — Socket / Socket

7804.796 — Stud

7804.797 — Socket

7804.816

7804.817
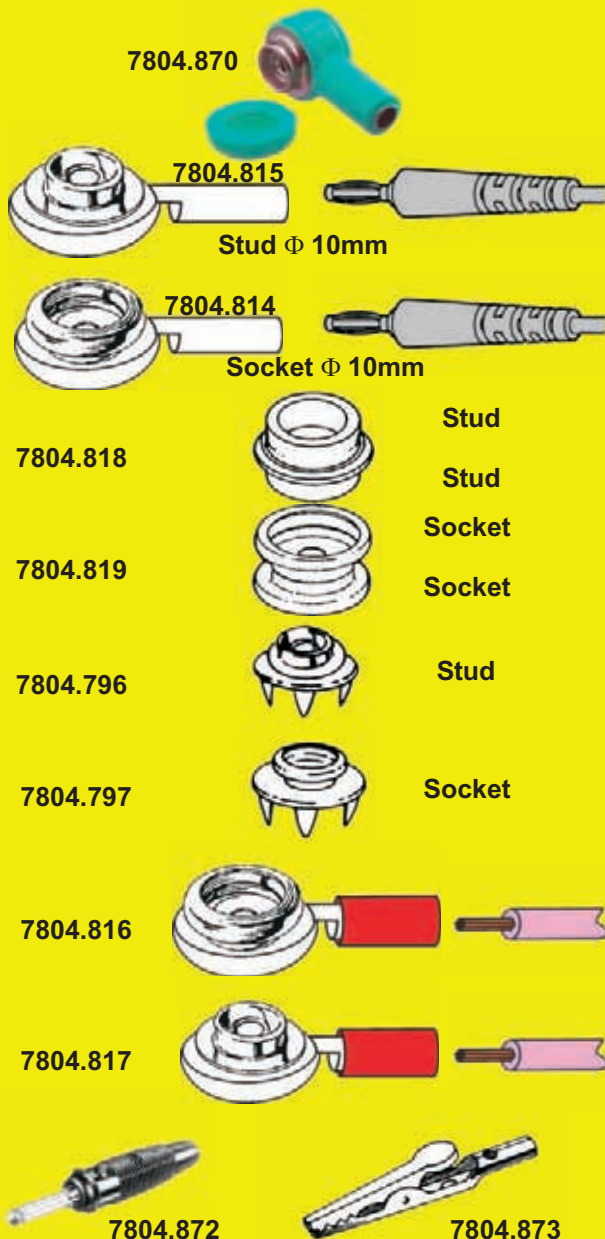
7804.872

7804.873

7804.870	ADAPTOR socket Φ 10mm + stud Φ 10mm + banana plug Φ 4mm
7804 815	ADAPTOR from socket Φ 10mm to banana plug Φ 4mm
7804 814	ADAPTOR from stud Φ 10mm to banana plug Φ 4mm
7804 818	ADAPTOR from socket Φ 10mm to stud Φ 10mm
7804 819	ADAPTOR from stud Φ 10mm to socket Φ 10mm
7804 796	Clinch SNAP **male**, Φ 10mm
7804 797	Clinch SNAP **female**, Φ 10mm
7804 816	Φ 10mm socket crimp terminable on AWG 22-16 wire
7804 817	Φ 10mm plug crimp terminable on AWG 22-16 wire
7804 872	BANANA Φ 4mm
7804 873	Alligator-clip for banana plug Φ 4mm

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):	$< 10^{11} \Omega$
Surface Resistivity intermediate layer (metal):	$< 10^{2} \Omega$
Surface Resistivity outer layer (polyester):	$< 10^{11} \Omega$

Code		Size	Code	Size
7804.268	opening x depth	76 x 127 mm (3" x 5")	7804.287	400 x 500 mm (16" x 20")
7804.270		100 x 150 mm (4" x 6")	7804.288	450 x 450 mm (18" x 18")
7804.274		150 x 200 mm (6" x 8")	7804.310	400 x 450 mm (16" x 18")
7804.276		150 x 250 mm (6" x 10")	7804.312	450 x 680 mm (18" x 27")
7804.278		200 x 250 mm (8" x 10")	**ZIPLOCK (zippered recloseable bags)**	
7804.280		200 x 300 mm (8" x 12")	7804.290 opening x depth	100 x 150 mm (4" x 6")
7804.284		250 x 300 mm (10" x 12")	7804.296	150 x 250 mm (6" x 10")
7804.285		250 x 350 mm (10" x 14")	7804.304	250 x 300 mm (10" x 12")
7804.286		300 x 400 mm (12" x 16")	7804.306	300 x 400 mm (12" x 16")

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 EN 100 015. Don't use for packaging PCBs with on-board batteries.

Thickness of the film:	75 μm
Surface Resistivity	$\leq 10^{5} \Omega$

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

Permanent Dissipative BAGS

LABESTAT A100
(package of 100pcs)

Material:	multilayer polyethilene, green colour amine-free, heat sealable, recyclable
Print:	ESD and Recycle logos, production batch
Thickness	100μm
Rs	$< 10^{11} \Omega$

Code		Size	Code	Size
7804.239	opening x depth	76 x 127 mm (3" x 5")	7804.254	250 x 300 mm (10" x 12")
7804.240		100 x 150 mm (4" x 6")	7804.256	250 x 350 mm (10" x 14")
7804.242		100 x 200 mm (4" x8")	7804.257	300 x 350 mm (12" x 14")
7804.244		150 x 200 mm (6" x 8")	7804.258	300 x 400 mm (12" x 16")
7804.246		150 x 250 mm (6" x 10")	7804.260	400 x 500 mm (16" x 20")
7804.247		150 x 300 mm (6" x 12")	7804.262	400 x 600 mm (16" x 24")
7804.245		150 x 350 mm (6" x 14")	7804.267	450 x 550 mm (18" x 22")
7804.248		200 x 250 mm (8" x 10")		
7804.250		200 x 300 mm (8" x 12")	**ZIPLOCK (zippered recloseable bags)**	
7804.252		200 x 350 mm (8" x 14")	7804.330 opening x depth	100 x 150 mm (4" x 6")

DISSIPATIVE BUBBLE PACK BAGS

Provide superior protection against physical damage during shipping and storage.

Code	Description
6604.100	Dissipative green bubble bags 90 x 100mm
6604.101	Dissipative green bubble bags 100 x 180mm
6604.102	Dissipative green bubble bags 130 x 185mm
6604.105	Dissipative green bubble bags 180 x 230mm
6604.107	Dissipative green bubble bags 250 x 250mm
6604.110	Dissipative green bubble bags 280 x 360mm)
6604.114	Dissipative green bubble bags 300 x 480mm)
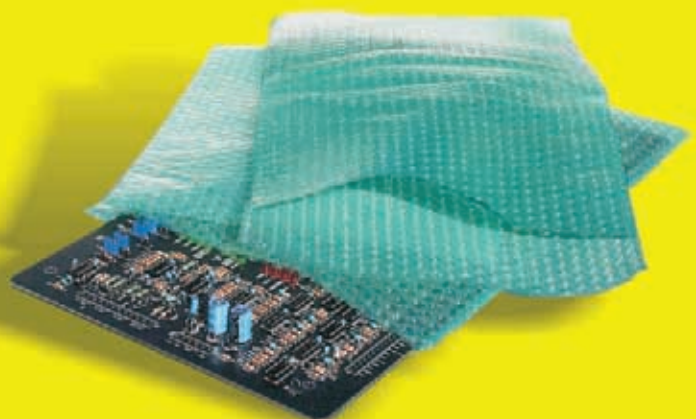
POLYETHYLENE TUBING

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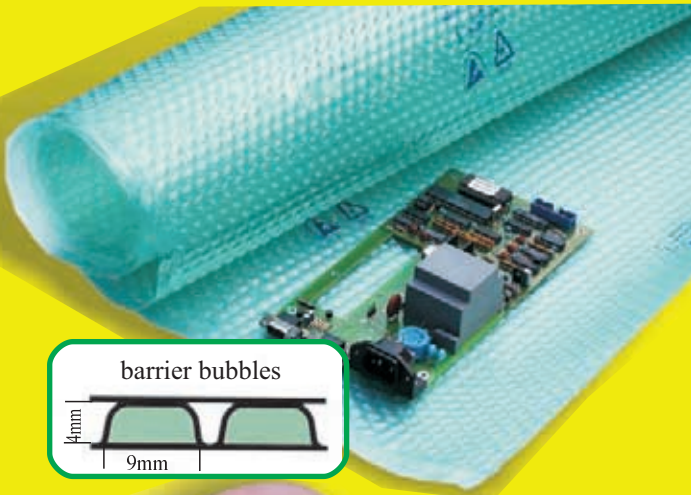
GREEN POLY ANTISTATIC BUBBLE PACK

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} Ω
Colour:	transparent green

7804.184	Dissipative bubble pack roll 0.5meters x 200meters
7804.185	Dissipative bubble pack roll 1meter x 200meters

barrier bubbles
4mm
9mm

FOAM (custom cut)

ANTISTATIC SOFT PINK FOAM
Use:	cushioning purposes
Density:	30 Kg/m^3, Rs <10^{12} Ω
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:	30 Kg/m^3, Rs <10^6 Ω
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, Rs < 10^5 Ω
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, Rs < 10^6 Ω
7804.157	1m x 0.5m sheet, thickness 7.5mm
7804.158	1m x 1.78m sheet, thickness 7.5mm

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 exceding material.

Seal width :			2mm
Max.Sealable Thickness :			2x0.125mm

Model	sealing lenght	Power (Watts)	Weight (Kg)
7914.201	200	260	4
7914.211 with cutter blade	200	260	4
7914.221	300	380	5
7914.222 with cutter blade	300	380	5
7914.231	400	500	6
7914.232 with cutter blade	400	500	6
7914.233 with cutter blade	500	550	7

LARGEST HAND SEALER

- Easy to operate, short distance from your working table, only 2.8cm
- Super longer seal length (600mm)
- Impulse sealing with electronic control, heating time from 0-2sec
- with handle easy to carry
- Soldering width: 2mm
- Max.Sealable Thickness : 2x0.125mm

7914.252	Largest hand sealer, 450 x 2mm (600W - peso 6kg)
7914.253	Largest hand sealer, 600 x 2mm (800W - peso 8kg)
7914.254	Largest hand sealer, 800 x 2mm (800W - peso 9kg)

HAND SEALER (medical)

10mm seal with beeper and cutter

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.

7914.215 MEDICAL Hand Sealer with Cutting Blade

Max. seal length: 200mm
Seal width: 10mm
(according DIN58953 regulations)
Max. seal thickness: 2x0.25mm
Power 1000W - Weight 6,4kg

SHRINK WRAP SYSTEM

- 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	Max. sealing lenght	Sealer Power (Watts)	Heat Gun Power (Watts)
7914.255	450	350	600/1200
7914.257	600	450	600/1200

HAND HELD CRIMPER SEALER

Soldering lenght:	150mm
Max. soldering thickness :	2x0.15mm

7914172	Hand held crimper sealer for polyethylene film Teflon covered heating resistance Seal width 2mm
7914175	Hand held crimper sealer for cellophane or wax paper Double 15mm wide heating jaws Vertical line embossed seal

HAND SEALER 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:	2x0.150mm
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

Holding Magnet

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

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 material thickness, congealing and operating cicle.

Foot switch included for manual operation.

Seal width	**10mm**
Max. seal thickness	0.5mm

7914.247	Automatic constant heat sealer 300mm (2000W - weight 22kg)	**7914.247V**
7914.248	Automatic constant heat sealer 450mm (2500W - weight 24kg)	**7914248V**
7914.249	Automatic constant heat sealer 600mm (3000W - weight 26kg)	**7914249V**
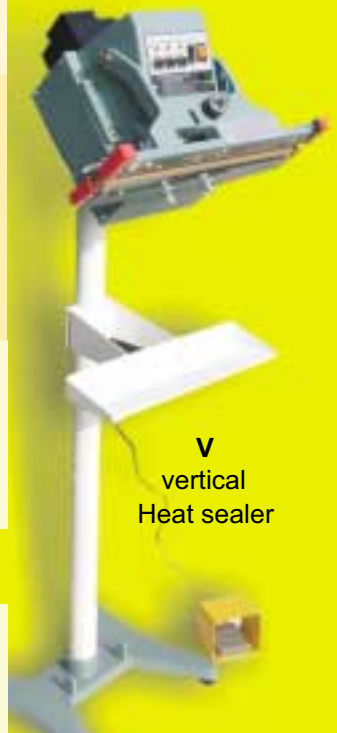
V
vertical
Heat sealer

AUTOMATIC BAND SEALERS

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. Standard embossing attachment allows to print date and lot coding on the bag (till to 39 numbers)

NEW!

Construction	stainless steel
Seal width	8mm
Max. Seal thickness	800μm
Max. Length (height) of the bags	300mm
Conveyor speed	0-12m/min
Temperature range	0-300°C
Power	500W
Weight	35kgg

7914.190	Horizontal automatic band sealer
7914.191	Vertical automatic band sealer

NEW!

55

GHIBLI-II   Dry Cabinets

The GHIBLI II dry cabinets are ideal to provide low humidity and moisture-proof storage for MSD (Moisture Sensitive Devices) like IC packages, for example. They are complying with IPC/JEDEC J-STD-033B.1, ESD safe, easy to use (no need to set any panel button at all), and every cabinet include a portable humidity/temperature meter (DryLogger 9265.300, details on page 65) with datalogging function.

NEW!

DryLogger

8104.812

8104.808

Dehumifier

8104.800

8104.804

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

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 9265.300) 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.
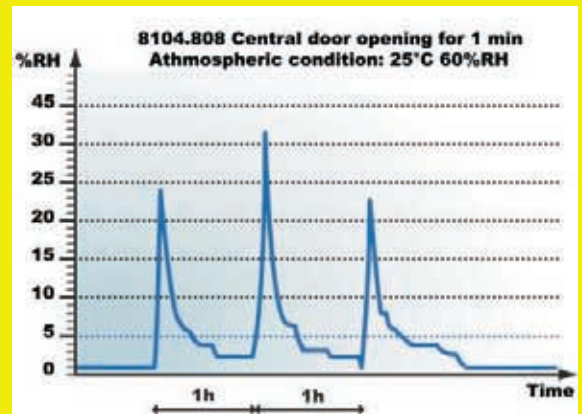
	8104.800 Ghibli II/200L	8104.804 Ghibli II/400L	8104.808 Ghibli II/600L	8104.812 Ghibli II/1200L	8104.830 Ghibli II/600L baking 40°C	8104.832 Ghibli II/1200L baking 40°C
Capacity	200L	400L	650L	1280L	600L	1180L
External Dimensions(mm)	600x672x610	600x672x1255	600x672x1805	1200x672x1805	600x672x18055	1200x672x1805
Shelves	2	3	5	5	5	5
Shelf Size (mm)	555x530x20	555x530x20	555x530x20	1155x530x20	555x530x20	1155x530x20
Average power	28W	56W	56W	56W	56W without baking, 456W with baking	56W without baking, 856W with baking
Maximum power	210W	420W	420W	420W	420W without baking, 1220W with baking	420W without baking, 2020W with baking

Humidity/Temperature Monitoring & Alarming & Datalogging

It monitors simultaneously humidity, temperature and time 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. Datalogging capacity is 30,000 records and the instrument is supplied with the software needed to analize the environmental data.

Humidity: 5 to 95%RH   resolution: 0.1%RH
accuracy: ±2%RH (at 25°C, 35%RH~80%RH)
     ±2.5%RH (at 25°C, 10%RH~35%RH, 80%RH~90%RH)
     ±5%RH (at 25°C, <10%RH, >90%RH)
Temperature: -20°C to +60°C   resolution: 0.1°C
accuracy: ±1°C (-5°C~40°C), other ±2°C
LED Display: 214x120mm
Memory: 30000 samples
Interface: USB
Dimensions: 260 x 178 x 47mm
Weight: 1Kg

NEW!

8105.103   Humidity/Temperature Monitoring & Alarming & Datalogging

BAKING OVENS

Professional forced ventilation oven ideal for all thermostatic applications where a specific precision is needed.

Drying the MSD components
to reset the floor life clock.

Drying the PCBs
(Printed Circuit Boards) before the assembly

Drying the PBAs
(Printed Boards Assembled) before the rework or repair.

Pre-heating of the PCBs / PBAs
to reduce the delta T °C before rework or repair

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   from +50°C to +280°C.
Temperature control with digital PID thermo regulator.
Display accuracy   +/-1°C
Safety thermostat with visual alarm and manual reset.

Code	Internal Volume L	Included Shelves	Dimensions INT.(LxPxH)	Dimensions EXT.(LxPxH)	Power W	Weight kg
8107.103	40	1	348x312x367	686x515x575	800/230V	35
8107.105	60	2	408x372x422	746x570x605	1200/230V	40
8107.107	80	2	458x372x472	796x570x680	1200/230V	45
8107.109	120	2	498x477x512	836x680x720	1600/230V	50
8107.111	250	2	593x522x797	956x730x1025	2500/230V	90
8107.113	400	2	693x607x980	901x815x1487	3200/230V	140
8107.115	700	3	693x607x1470	901x815x1977	6000/400V	180

8107.150	Additional shelf for	lt.40 owen	(max. 7 shelves)
8107.152	Additional shelf for	lt.60 owen	(max. 7 shelves)
8107.154	Additional shelf for	lt.80 owen	(max. 7 shelves)
8107.156	Additional shelf for	lt.120 owen	(max. 9 shelves)
8107.158	Additional shelf for	lt.250 owen	(max. 11 shelves)
8107.160	Additional shelf for	lt.400 owen	(max. 11 shelves)
8107.162	Additional shelf for	lt.700 owen	(max. 11 shelves)

NEW!

MOISTURE BARRIER BAGS   (100 pcs)

Excellent in EMI/RFI and static field shielding, these bags are water vapor proof and grease proof. Used as packaging of electrostatic/humidity sensitive parts, disk drives, flat pack etc. Heat sealable, Moisture Barrier Bags are made from a multilayer metallized film.
We suggest to place inside the barrier bags a Moisture Desiccant Bag to eliminate the residual moisture.
Film complying: MIL-B-81705C class1 TC1 SBM356
Rs: $< 1x10^{12} \Omega$
Electrostatic decay: < 2 sec

Opening on the short side	Thickness 80um	Thickness 150um
100 x 660 mm	7804.344	7804.344P
150 x 660 mm	7804.347	7804.347P
200 x 250 mm	7804.348	7804.348P
250 x 660 mm	7804.350	7804.350P
400 x 400 mm	7804.354	7804.354P
400 x 660 mm	7804.353	7804.353P
450 x 450 mm	7804.355	7804.355P
450 x 660 mm	7804.356	7804.356P

Moisture absorbing desiccant bags

7914.002 bags gr.12 1/3U-DIN (100 pcs)
7914.005 bags Tyvek gr.34 1U-DIN(300 pcs)

7914.008   3 spot humidity indicator card 5-10-60% (500pcs)
7914.009   3 spot humidity indicator card 5-10-15% (200pcs)
7914.010   4 spot humidity indicator card 10-20-30-40% (200pcs)

EXTERNAL ASPIRATION VACUUM SEALERS
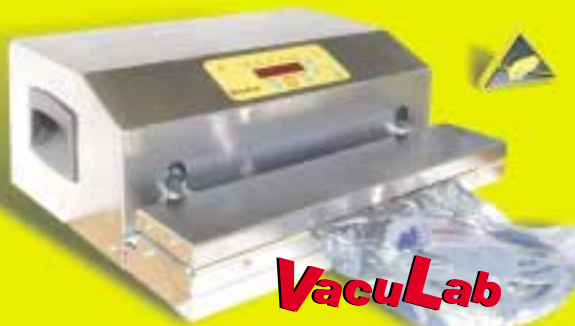
External Aspiration

With these economic and flexible machines is possible to package every length of bag. The unit is hand operated and the degree of vacuum is achieved by the operator's valuation. The air is strongly sucked out from the bag's opening, so it is needed to use specific bags or to unfold the sides of the bags, so to provide two little way out for the aspiration. (see drawing)
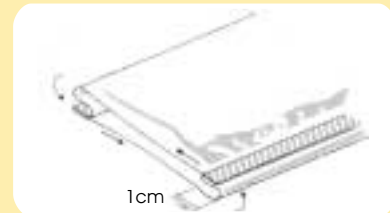
1cm

VacuLab

7914.359	Vacuum bag sealer, external aspiration, 450mm
Seal length:	450 mm
Soldering jaws:	2 x 6mm
Vacuum pump:	Dry , 3m^3/h.
Noise:	<65dB
External dimensions:	490x390x220mm
Power supply:	230V/50Hz - 600W

TEXTURED BARRIER BAGS *NON ESD*
FOR EXTERNAL ASPIRATION MACHINES

6604.010	200 x 300mm
6604.015	250 x 350mm
6604.020	250 x 600mm
6604.025	300 x 400mm
6604.030	400 x 600mm
6604.052	Tubing 200mm
6604.054	Tubing 300mm

VACUUM TANK SEALERS

7914.262	Vacuum tank sealer
Seal length	400 x 5 mm
Vacuum pump	Oil bath, 20m^3/h.
Chamber capacity	410x400x90 mm
Power supply:	230V/50Hz 2kW

7914.263	Vacuum tank sealer
Seal length	450 x 5 mm
Vacuum pump	Oil bath, 20m^3/h.
Chamber capacity	460x450x90 mm
Power supply:	230V/50Hz 2kW

VacuWeld

These are professional and automatically operated models, with degree of vacuum set on the front panel by the operator. External aspiration system cause the bag to wrinkle, fold, and distort under vacuum pressure before sealing, possibly leaving small holes that affect the integrity of the vacuum. Vacuum Thank models eliminate this problem by creating the seal before the bag's distortion.

VacuWeld 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.

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.
Digital adjustment of vacuum, controlled by an internal vacuum sensor.

Maximum vacuum level	**98%** (measured at the sea level)
Seal length	450 x 5 mm
Vacuum pump	Oil bath, 20m^3/h.
Chamber capacity	450x500x90(H) mm
Power supply:	230V/50Hz 2kW

7914.278

7914.275   **Vacuum tank sealer**

The use of a compressed air-driven vacuum pump, minimizes noise, vibration and heat generation.
Digital adjustment of vacuum, controlled by an internal vacuum sensor.

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:	6l/s at 6ATM
Power supply:	230V/50Hz 1kW

VacuWeld

7914.275

59

IONIZATION **ION SYSTEMS**

- low decay time
- reduced airflow
- clean room compatible
- balanced

IEC 61340-5-1
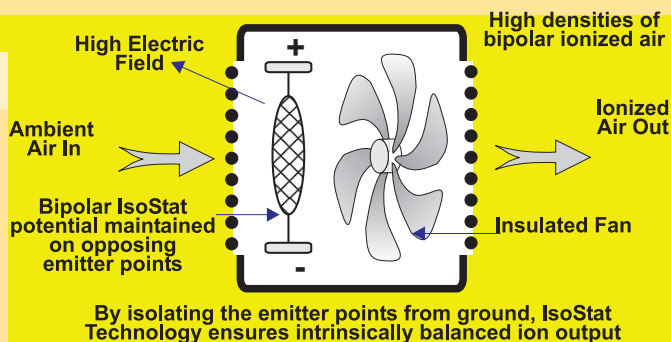
ACTIVE PROTECTION SYSTEM

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 0.005ppm after 24 hours accumulation, conform to OSHA requirements.

"STEADY STATE DC" IONIZERS

Normally the ions are produced by a phenomenon called "corona discharge" where a high voltage (AC or DC) is applied to a sharp point. ION SYSTEM uses the Steady-State DC system, the most efficient ionization method for applications requiring fans or compressed gases to deliver ions. With this method, separate emitter points are provided for each polarity. Steady -State DC ionizers provide higher ion outputs with low recombination between them, operates effectively at lower air flows, and produce fewer particles than AC ionizers.

High densities of bipolar ionized air

High Electric Field

Ambient Air In

Bipolar IsoStat potential maintained on opposing emitter points

Ionized Air Out

Insulated Fan

By isolating the emitter points from ground, IsoStat Technology ensures intrinsically balanced ion output

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 ±1000V to 100V ≤ 10s at 60cm
Emitter points	Tungsten alloy, internally shielded, 5 year life
Air flow:	15m³/h
Power requirement	24VAC 5W
Dimensions:	11.4 x 8.4 x 5.1 cm
9265.560	Point-of-use ionizing blower, 24VDC
9265.577	Wall transformer 230/24VDC 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 ±1000V to 100V ≤ 7s at 60cm
Emitter points	Tungsten alloy, internally shielded, 5 year life
Air flow:	80m³/h
Coverage area	122x46cm
Power requirement	24VAC/DC 50/60Hz
9265.576	Local area ionizing blower 24VAC 6W transformer 230VAC included

6442 THREE SPEED IONIZING BLOWER

High performance ionizing blower features an adjustable two speed fan for varying applications as workbenches, conveyors, robotics, packaging.

Discharge time	from ±1000V to 100V ≤ 4.5s at 60cm
Emitter points	Tungsten alloy, internally shielded, 2 year life
Air flow:	70m³/h
Coverage area	122x61cm
Power requirement	24VAC 50/60Hz, 7W
9265.586	Full-featured ionizing blower 24VAC 230/24vac transformer included

OVERHEAD IONIZING BLOWER 6460

It is the smart ionizer that provides reliable, adaptable performance in the most static-sensitive environments. Designed for mounting over the benches or conveyors, it allows a complete 3D neutralisation of the static charges, without compromising space over the table, and in the most comfortable environment.

Discharge time:	from ±1000V to 100V 10s at 60cm
Emitter Point:	Tungsten alloy, internally shielded, 2 years life
Ion Balance:	±15V measured 46cm under the blower
Protected Area:	90x120cm
Air Speed:	Adjustable on High/Off/Low settings
Air Flow:	140m³/h maximum
Power requirement:	100-230Vac 50-60Hz, 30 Watt max.

9265.592	Overhead Blower, 2 fan, length 813mm

"ISOSTAT" TECHNOLOGY

TURBO IONIZING BLOWER 6480

NEW "WIRE AC" TECHNOLOGY

The Turbo Blower designed to achieve full control in any environment, is ideal to cover large ionisation areas. The built-in heater provides comfortable working environment for operators.

The new "Wire AC" self-balancing technology means: better discharge times and fewer maintenance cycles.

Discharge time:	1,5s at 30cm (1 feet) 2,5s at the corners
Ion Emission:	Wire AC self-balancing
Ion Balance:	+/- 20V, maximum
Protected Area	60 x 130cm
Air Flow:	560mc/h max
Power requirement:	100-240Vac 50-60Hz, 30Watt max.

9265.582	Turbo Ionizing Blower, 3-fan, length 650mm

6115 AIR FORCE BLOW-OFF 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.

Gun	ergonomic, low-noise, weight 0.34Kg
Discharge time	from 1000 to 100V ≤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) - 0.1μm 99,99%EFF

"ISOSTAT" TECHNOLOGY

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 220/24Vac

AIR FLOW

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

"ISOSTAT" TECHNOLOGY

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 - 9V battery included
9265.503	Periodic Verification System (instrument, charger, plate, cables and carrying case)

The 775PVS is a Periodic 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

TREK156 CHARGED-PLATE MONITOR

The model 156 instrument tests the efficiency of an air ionizer's ion production by measuring how long it takes air ions produced to discharge a floating ion collecting plate that has been precharged to either a positive or negative charge level.

Mode selector switch for:	+Decay, -Decay, or Float Mode
Voltage Monitor output	
·3 ½ digit LED display	
Test / Reset control	
Monitored Voltage Range:	0 to ±1100VDC or peak AC
Plate self discharge:	less than 12V/minute (unpolarized)
Power :	Rechargeable Battery supplied

9265.110	CHARGED-PLATE MONITOR without plate and AC adapter
9265.115	AC adapter, 90-260Vac
9265.120	6"x6" plate

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 ±2kVDC
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 ±2kVDC
Model with Voltage Monitor Output(1/1000 Vmeas)

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

GIGALAB   Digital mega-ohmmeter

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

SHIELDED CABLE

SHIELDED PROBE

The GIGALAB 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.

Alphanumeric liquid crystal display 10mm height

Measuring range:	10V	1KΩ to 20GΩ
	100V	100KΩ to 200GΩ
	500V	1MΩ to 1TΩ
Accuracy:		
10V	±5%	±3% per GΩ
100V	±5%	±0.3% per GΩ
500V	±5%	±0.06% per GΩ

Fully settable
acoustic alarm

KIT 9265.044

9265.043	GIGALAB Meter with batteries and case
9265.044	GIGALAB Complete kit including meter, 2 probes, batteries and case, Traceable Certificate is supplied
9265.045	Shielded probe 63mm / 2,3kg
9265.042	Instrument recalibration ISO9000 Traceable Certificate is supplied

PROBES

| 9265.004B | Cylindrical probe, one 4mm socket, BLACK |
9265.004R	Cylindrical probe, one 4mm socket, RED
9265.012B	Cable 1.5m - 4mm banana plugs terminated, BLACK
9265.012R	Cable 1.5m - 4mm banana plugs terminated, RED
9265.014	POINT TO POINT MINIATURE PROBE, two miniature conductive rubberpoints at a distance 15mm
9265.015	MINIATURE 10 X 10mm Square PROBE, performs measurements on areas too small to measure with other standard probes.
9265.005	Concentric ring probe, BLACK one BNC socket, 9265.008 cable included
9265.045	Shielded probe, one BNC socket, two 4mm sockets
9265.047	Counter-electrode 150x150mm
9265.008	Coaxial cable, 1m length, BNC plug / 2 x 4mm banana plugs

9265.014

9265.015

B

R

9265.004

9265.047

9265.045

SIG HV

SIG HV

SIG HV

Rs

Rg

Rv
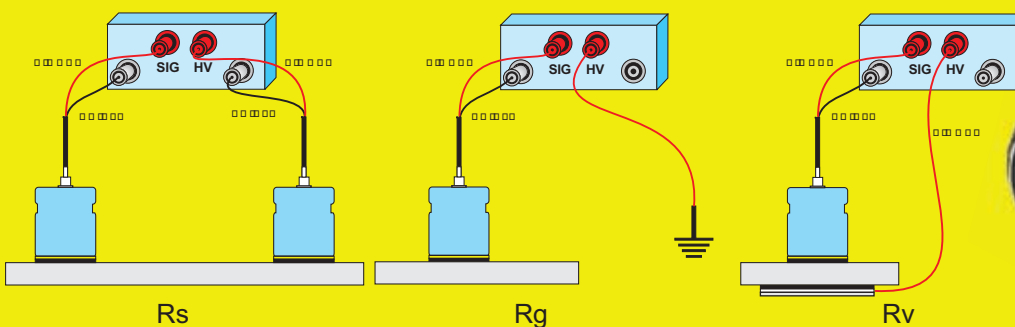
9265.005

WRISTLAB *personnel tester 24V*

The WRISTLAB personnel circuit tester is indispensable to check the conditions of wrist band, skin contact of wrist band and coiled cord. Associated with an optional foot plate(code 9265.025) it also allows testing of conductive footwear and heel straps.
Visual and audible alarm.
The test is performed in accordance with IEC 61340-5-1.
The tester operates on a 9V battery but the test voltage is 24V for greater accuracy. All wrist-straps should be checked every day.
ISO9000 Traceable Certificate is supplied

9265.030	WRISTLAB personnel tester, 9V battery included
9265.030R	WRISTLAB personnel tester, relay output (PASS=CLOSE)
9265.031	Instrument recalibration
	ISO9000 Traceable Certificate is supplied

Personnel test station 24V

The station incorporates a WRISTLAB tester, a foot plate and a striking yellow PVC panel.
On the panel there is a mounting for the tester and also clearly written operating instructions.

ISO9000 Traceable Certificate is supplied

|	
9265.022*	TEST STATION including:
	WRISTLAB, Conductive rubber footplate and yellow panel
9265.023*	TEST STATION including:
	WRISTLAB, Stainless steel footplate and yellow panel
9265.024	Stainless Steel Footplate with connecting cord
9265.025	Conductive Rubber Footplate with connecting cord
9265.026*	Yellow support panel, 300x600mm
	with operating instructions in English
9265.030	WRISTLAB personnel tester, 9V battery included

* add to code: **I**(italian) **F**(french) **E**(english) **D**(german) **H**(Hungarian)
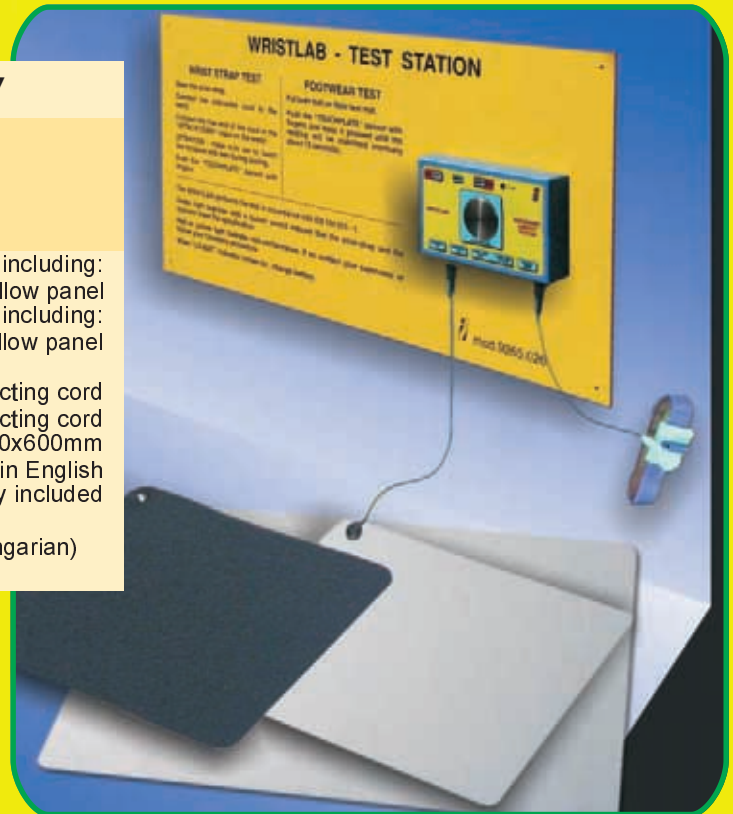
LABEOHM *surface resistivity tester 100V*

LABEOHM surface resistivity tester is designed to measure the resistivity and resistance to ground of mats, workbenches, floors and other components of an ESD controlled area.
Without the grounding cord connection, LABEOHM measures the surface resistivity; with the grounding cord connected, LABEOHM measures the resistance to the ground.
Allows use of two external electrodes.

Range: from 10^4 to 10^{12} Ω
Test voltage: 10V from 10^4 to 10^5 Ω, 100V from 10^6 to 10^{12} Ω
Electrodes: rubber covered
ISO9000 Traceable Certificate is supplied

9265.002	LABEOHM 100V, cable, battery, box included
9265.000	LABEOHM 100V with acoustic alarm when R<1x$10^9\Omega$
9265.003	Labeohm recalibration
9265.004B	Cylindrical PROBE 63mm diameter, 2.3Kg weight, BLACK
9265.004R	Cylindrical PROBE 63mm diameter, 2.3Kg weight, RED
9265.005	Concentric ring PROBE 63/30mm diameter, 2.5Kg weight
9265.006	Portable Kit including 9265.002 tester, two 9265.004 probes and carrying case
9265.007	Portable Kit including 9265.000 tester, two 9265.004 probes and carrying case

HUMIDITY / TEMPERATURE PEN

Pen continuously and simultaneously displays both RH and °F/°C with dual-recall memories. Handy pocket clip makes it easy to carry. Memory displays highest and lowest humidity/temperature readings

Temperature:	0 to +50°C	Resolution 0,1°C
		Accuracy ±1°C
Relative humidity:	2 to 98%	Resolution 1%
		Accuracy ±5%

An individually serial-numbered ISO9000 Traceable® Certificate is supplied

9265.200   Humidity / temperature pen

BASIC HUMIDITY/TEMPERATURE METER

Light weight, pocket-sized design, large LCD display for simultaneous readings of temperature and humidity, backlight function.

Humidity: 1 to 99%RH   resolution: 0.1%RH
accuracy: ±2.5%RH (at 25°C, 30%RH~80%RH)
    ±3.0%RH (at 25°C, 20%RH~30%, 80%RH~90%RH), other 5%
Temperature: -20°C to 60°C   resolution: 0.1°C
accuracy: ±0.8°C
LCD Display: 42 x 32 mm
Size: 200 x 55 x 38mm   Weight: 165g

9265.235   BASIC HUMIDITY/TEMPERATURE METER

NEW!

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

Humidity: 1 to 95%RH   resolution: 0.1%RH
accuracy: ±2%RH (at 25°C, 10%RH~90%RH)
                    ±3%RH (at 25°C, 1%RH~10%, 90%RH~95%RH)
Temperature: -20°C to 60°C   resolution: 0.1°C
accuracy: ±1°C
LCD Display: 48 x 11 mm
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

NEW!

MINILOGGER

It's an accurate and compact humidity and temperature datalogger . Designed to be placed in refrigerators, cold transport and storage (it works down to -40°C), or in any industrial sector where you need to track the humidity and temperature conditions.
The "LogManager" software, working on Windows PC, is used for downloading, displaying, analyzing and reporting your collected humidity and temperature data. (9265.312)

Temperature: -40°C to +60°C,   resolution: 0.1°C
Humidity: 1 to 95%RH,   resolution: 0.1%RH
Dimensions: 89 x 56 x 23mm
Battery: Lithium battery with life of 10 years at 1 min sampling rate
Memory: 21600 samples   Interface: USB

9265.300 DryLogger – Humidity/Temperature hand LCD datalogger. USB cable and LogManager software to collect data to Windows PC are included.
9265.310 MiniLogger– Humidity/Temperature datalogger. Specific USB cable and LogManager software to collect data to Windows PC are not included.
9265.312 Specific USB cable and LogManager software to collect data from MiniLogger to Windows PC.
**CK-005** ISO9000 Traceable certificate for DryLogger or MiniLogger

PRECISION HUMIDITY/TEMPERATURE METER

Highly accurate humidity measurement up to ±1%RH, light weight, pocket-sized design. It takes accurate measurement for humidity, temperature, wet bulb and dew point.Large LCD display for simultaneous readings of temperature and humidity. Backlight function, alarm for Hi and Low limit of RH/T, real time clock with calendar, datalogger capacity of 30,000 records. Quick-response capacitance sensor with twist-open protective cover wired with 1meter long cable.

Humidity: 1 to 99%RH   resolution: 0.1%RH
accuracy: ±1%RH (at 25°C, 15%RH~90%RH)
                    ±2%RH (at 25°C, 1%RH~15%, 90%RH~99%RH)
Temperature: -20°C to 60°C   resolution: 0.1°C
accuracy: ±0.5°C (0°C~40°C), other ±2°C
LCD Display: 42 x 32 mm
Memory: 30000 samples   Interface: USB
Size: 130 x 54 x 38mm
Weight: 250g

9265.230   PRECISION HUMIDITY/TEMPERATURE METER

NEW!

1750mm

760mm

K

a

x

350Kg Max.
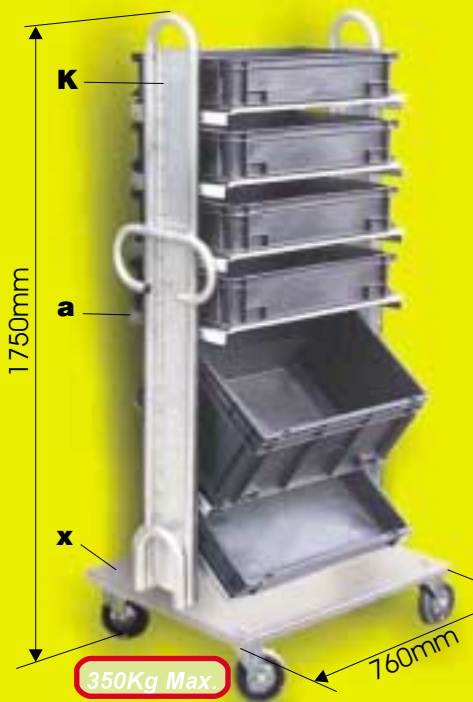
CHARIOTTE trolley for NEWBOX

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.

| code	description	ref.	Qnt.
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	6 in figure
8100.066	P600 shelf 600x630mm		
	NEWBOX tote boxes (cat. page 20)		6 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
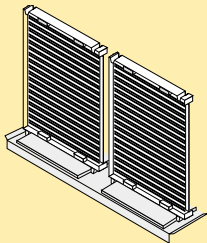
particolare del piano doppio per LABERACK

code	description	ref.	Qnt.
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

b

c

g

x

d

600mm

350Kg Max.

w

e

x

350Kg Max.

Φ 125mm
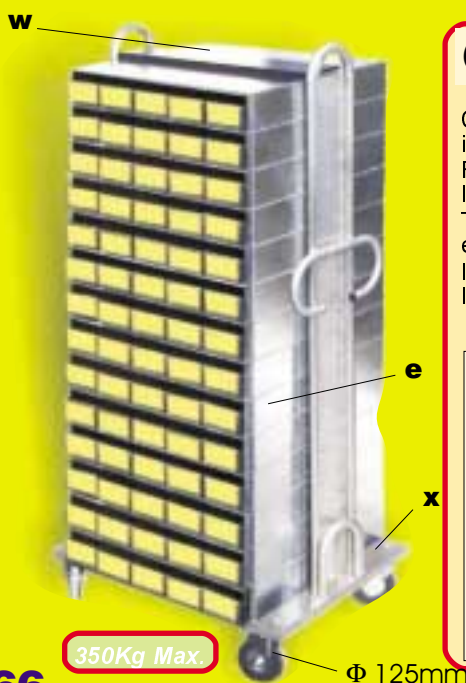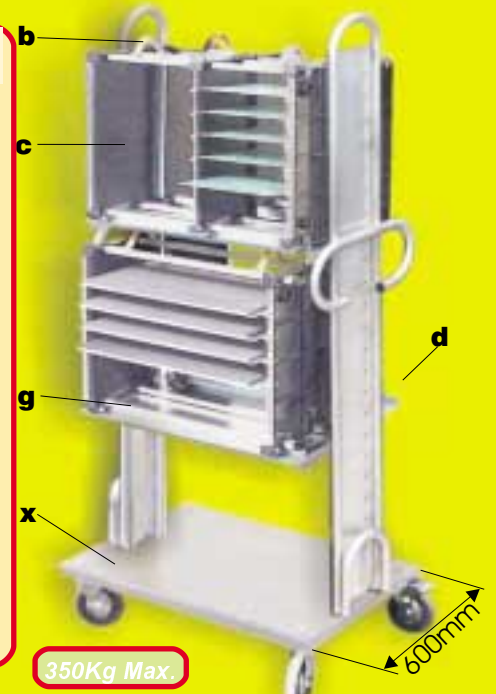
CHARIOTTE trolley for I.C. dip tubes

CHARIOTTE conductive trolley can be a movable and safe storage of integrated circuits in tubes.

Fast and easy to mount, simply placing the frames from the bottom, one upper other, and locking the building by means of the upper tie.

Two different bins are available: in injection moulded conductive Polypropylene and in extruded double wall conductive Polypropylene sheet (LABEPLAST) shipped flat.

In the table below are listed the parts forming the mobile dip tube storage cabinet, shown left.

code	description	ref.	Qnt.
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
8100.058	Upper tie	w	1
8100.090	Frame for dip tube bin	e	14
7804.679	Dip tube conductive bin (Injection-molded)(4 per shelf)		56
7806.700	Dip tube conductive bin in LABEPLAST (shipped flat)(5 per shelf)		70

600mm

108mm
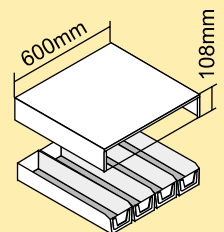
frame for bins

CHARIOTTE feeder cart

Load capacity 350Kg

The SMD feeder trolley use the standard CHARIOTTE structure with specific feeder shelves 630mm length. It is available the specific feeder trolley shelf for the most popular surface mounting machines. For other models it is necessary to receive one sample of the feeder to design it.

8100.201
630mm shelf for
FUJI CP6
Feeder

8100.205
630mm shelf for
FUJI IP3-QP2
Feeder

8100.230
630mm shelf for
UNIVERSAL GSM
Feeder

8100.255
630mm shelf for
PHILIPS CSM
FV/GEM
Feeder

J
8100.056

K
8100.055

H
8100.054

CHARIOTTE
SMD reel holder

L1

K

M

N

Z

L2

Load capacity 350Kg

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.

* AVAILABLE IN 2 LENGTHS *

code	description	ref.	Qnt.
8100.050	Stainless steel baseplate with castors, 600 x 760(L2) mm	x	
8100.049	Stainless steel baseplate with castors, 600 x 1130(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	

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.

Load capacity for single shelf: 200 Kgs
Load capacity for shelving unit: 1000 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).
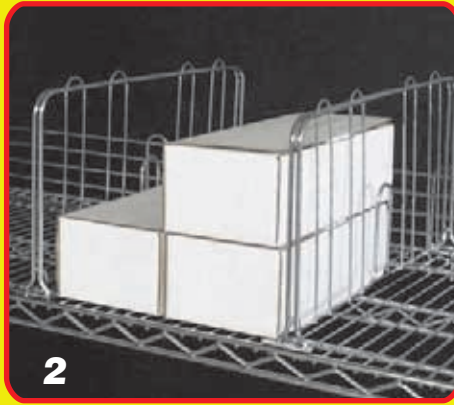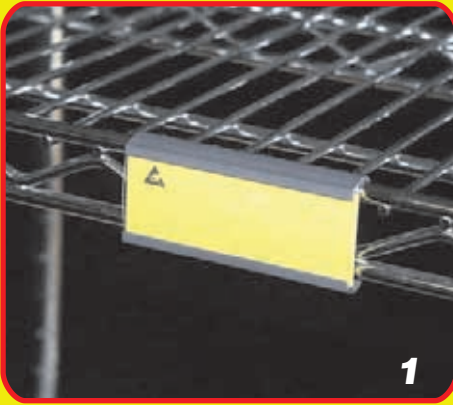
8103.990	Shelf Dim. 350mm x 910mm
8103.991	Shelf Dim. 350mm x 1220mm
8104.001	Shelf Dim. 455mm x 910mm
8104.002	Shelf Dim. 455mm x 1220mm
8104.003	Shelf Dim. 455mm x 1525mm
8104.000	Shelf Dim. 455mm x 1830mm
8104.004	Shelf Dim. 610mm x 910mm
8104.005	Shelf Dim. 610mm x 1220mm
8104.006	Shelf Dim. 610mm x 1525mm
8104.007	Shelf Dim. 610mm x 1830mm
8104.020	Post H=864mm
8104.021	Post H=1370mm
8104.022	Post H=1600mm
8104.023	Post H=1890mm

Plastic split sleeve included with shelves

8104.060
Aluminium split sleeve (optional)

8104.108	Esd Document holder A4 - 2 magnets included

8104012
SMD reel shelf 455 x 910mm
Reel capacity: 78
DIA.180mm x width. max.17mm

8104013
SMD reel shelf 455 x 910mm
Reel capacity: 15
DIA.330mm x width. max.50mm

For the safe and tidy storage of SMD-reels, there are different wire shelves that can be combined in any order with any other wire shelves.

8104.050	"S" Hooks for Add-on Unit.

Fixed Label-holder *(1)*
8104.101   Fixed Label-holder

Divider *(2)*
8104.110   Shelf Dividers 455mm. length
8104.111   Shelf Dividers 610mm. length

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

WIRE CARTS

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 :300 Kgs

8104.041   U-handle 455mm width, 876mm height
8104.042   U-handle 610mm width, 876mm height
8104.070   Set of 4 conductive castors diameter 125mm
8104.071   Set of 4 NON-ESD castors diameter 125mm

Composition: 2 U-handles, 1 set of castors ,
                          2/3 shelves and 8/12 split sleeves
                          Or 4 posts, 1 set of castors
                          2/4 shelves and 18/6 split sleeves

8104.046
Handle 455mm

8104.047
Handle 610mm

STAINLESS STEEL CARTS

Stainless steel carts - AISI304 with solid conductive wheels Ø125mm, 2 with brake.

TWO/THREE SHELF CART (A)
8104.700   2 U-handle KIT, with conductive wheels
8104.706   Shelf - dim. 800 x 500mm
8104.708   Shelf - dim. 1000 x 500mm
Load capacity for single shelf: 50 Kgs

CART FOR STUFF (B)
8104.720   Trolley - dim. 1000 x 550mm
Load capacity :   250 Kgs

CHARIOTTE TRAY TROLLEYS

Supporting structure made of tubular AISI 304 stailless steel.

$\sqsubset$ - 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 , Φ 125mm (2 with brakes)

The optional stainless steel shelf, can be placed on the bottom and on the top.

TRAY DIMENSION
P x (L - 8mm)

Code		Description
8104.605	(A)	Lateral support post pair, 20 rails 825(H) x 400(P)mm
8104.607	(A)	Lateral support post pair, 20 rails 825(H) x 660(P)mm
8104.610	(A)	Lateral support post pair, 38 rails 1520(H) x 400(P)mm
8104.612	(A)	Lateral support post pair, 38 rails 1520(H) x 660(P)mm
8104.650	(B)	STRINGER 25 x 25 x 508(L)mm
8104.651	(B)	STRINGER 25 x 25 x 538(L)mm
8104.654	(B)	STRINGER 25 x 25 x 808(L)mm
8104.660	(C)	Central tie rod Ø 8X 508(L)mm
8104.661	(C)	Central tie rod Ø 8X 538(L)mm
8104.664	(C)	Central tie rod Ø 8X 808(L)mm
8104.685	(D)	Stiffening cross 1520(H)x508(L)mm
8104.686	(D)	Stiffening cross 1520(H)x538(L)mm
8104.687	(D)	Stiffening cross 1520(H)x808(L)mm
8104.670	(E)	Inox SHELF 10/10 400 (P) x 508(L)mm (optional)
8104.674	(E)	Inox SHELF 10/10 660 (P) x 508(L)mm (optional)
8104.675	(E)	Inox SHELF 10/10 400 (P) x 538(L)mm (optional)
8104.676	(E)	Inox SHELF 10/10 660 (P) x 538(L)mm (optional)
8104.678	(E)	Inox SHELF 10/10 400 (P) x 808(L)mm (optional)
8104.682	(E)	Inox SHELF 10/10 660 (P) x 808(L)mm (optional)
8104.695		Pivoting conductive wheels KIT, Φ125mm (2 with brakes)
8104.696		Set of 4 NON-ESD castors, Φ 125mm, (2 with brakes)

170 mm

Load capacity 350Kg
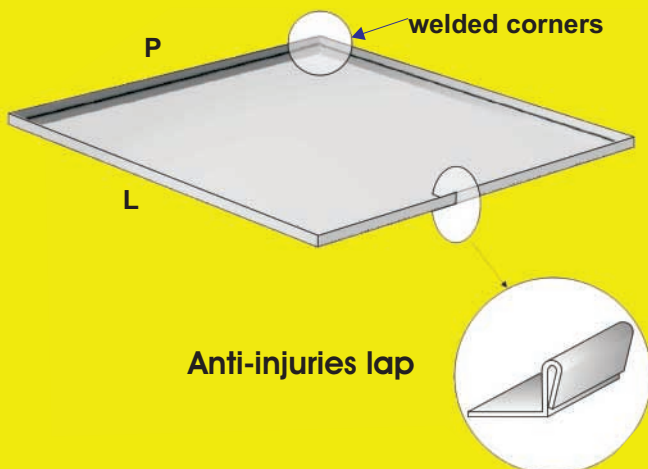
ALUMINIUM TRAYS

Flat trays, made of aluminium alloy 3003 with anti-injuries laps.

Code	S	H	LxP
8104.580	1.2	12	500x330
8104.582	1.2	12	500x390
8104.584	1.2	15	500x650
8104.587	1.2	12	535x290
8104.588	1.2	12	535x600
8104.592	1.2	15	800x330
8104.594	1.5	15	800x390
8104.596	1.5	16	800x650

welded corners

Anti-injuries lap

PC BOARD STORAGE & TRANSPORT "LABECART"
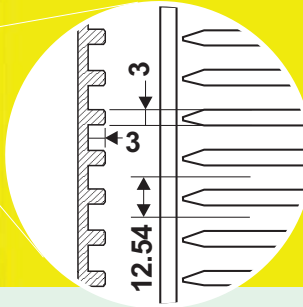
A mobile PCBs' store, ideal for transporting work process and storing large quantities of board.

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.

PART LIST

8104.312	Stainless steel lateral support post pair
8104.318	Stainless steel stud ∅ 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	Conductive wheel kit, ∅ 125mm (2 with brake)
8104.696	NON-ESD wheel kit, ∅ 125mm (2 with brake)

PRODUCT INDEX