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ESD
2020
English

COUNTY EVO

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

SMD COMPONENT COUNTING

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

AXIAL AND RADIAL PTH COUNTING

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

TECHNICAL FEATURES

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

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

Accessories for counting of PTH taped component
8301.023 Complete support for rolled bandolier
8301.025 PTH Bandolier handle

Accessories for counting of SMD taped component
8301.018 SMD Adaptor
8301.027 Worktop with 2 pins for reel
8301.030 SMD Reel handle
8301.021 Empty Reel aluminium made for County-EVO

Barcode e Printer (photos and specifications at page 4)
8301.155 Barcode with coiled cord
8301.095 Direct thermal label printer
8301.096 57x51mm 1360 labels/roll

COUNTY-S EVO

COUNTY-S EVO

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

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

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

EMPTY POCKET CHECK

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

EPC disabled

EPC enabled

EPC counting

TECHNICAL FEATURES

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

COUNTY-S EVO

County-S EVO control keyboard

8301.131 County-S EVO 230V/50-60Hz
8301.133 County-S EVO 230V/50-60Hz
with Empty Pocket Check
8301.141 County-S EVO 115V/50-60Hz
8301.143 County-S EVO 115V/50-60Hz
with Empty Pocket Check
8301.350 ISO9000 Traceable® Certificate

8301.150 Support for reels > 400mm diameter

8301.110 Empty Reel, aluminium made,
350mm diameter
8301.155 Barcode with coiled cord
8301.095 Direct thermal label printer
8301.096 57x51mm, 1360 labels/roll

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

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

PRINTER

For County EVO and County-S EVO

Direct thermal label printer built for ease-of-use and durability, ac adaptor 110-230Vac and data cable included.
Maximum print width is 104mm however the print is optimized for 57x51mm labels

8301.095 Direct thermal label printer
8301.096 57x51mm, 1360 labels/roll

PRINTER

BARCODE (for County EVO and County-S EVO)

It's small, lightweight and ergonomic design, coiled cable included, a wider than usual scan angle provides the ability to read a longer bar code from a shorter distance, IP42 protection.
The barcode is connected and powered via a single cable, without the hassle of two separate cables1

8301.155 Barcode with coiled cord

SUPERFORM-R

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

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

SUPERCUT

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

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

T (original lenght) > L + 6 mm

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

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 (**7915.041**): 100 x 250 x 93 mm
Dimensions (**7915.041L**): 100 x 300 x 93 mm
Supply: 6 ATM
Weight: 4,5/6 Kg

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

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

Standard plate hole layout
SUPERCUT/LN5

Standard plate hole layout
SUPERCUT/LN5L

SUPERFORM-V

	P	d		A		D
	fix.	min.	max.	min.	max.	max.
7915.101 B standard	2.54	0.5	0.8	2	6	3
7915.101 C	3.8	0.5	0.8	2.5	5	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, 230V - 50/60Hz
7915.031	Motor Unit for SUPERFORM, 115V - 50/60Hz
7915.182	Feeder CS30 for loose axial components
7915.185	Tape Reel Holder arm BR6

SUPERFORM-A

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

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

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

(*) maximum P dimension with quick setting

SUPERFORM-AP

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

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

Mod.	version	Z	P		B		C	L	d	D		h	
		Fix.	Min.	Max.	Min.	Max.	Min.	Min.	Min.	Min.	Max.	Min.	Max.
7915.102A	standard model	3.1	6.5	60	10	14	1.2	10	50	1.3	16	7	11
7915.102B	reinforced bending knives	3.1	10.2	60			2.4			1.4			
7915.102C	standard model	3.9	6.5	60			1.2			1.3			
7915.102D	reinforced bending knives	3.9	10.2	60			2.4			1.4			
7915.102E	standard model	5	6.5	60			1.2			1.3			
7915.102F	reinforced bending knives	5	10.2	60			2.4			1.4			

OPTIONAL ACCESSORIES

SUPERFORM MOTOR UNIT

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

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

SUPERFORM Tape Reel Holder BR6

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

7815.185 BR6 for all SUPERFORM models

SUPERCUT/RS4

for loose radials

A pneumatic machine designed to cut loose radial component leads.
The feed is manual, on the top of the machine.
Pressing the footpedal effects cutting and 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
16x.xxx	Preforming set

STAND-OFF
LOCK-IN
160600 (7915.166)
180600 (7915.171)

STAND-OFF
LOCK-IN LED
160700 (7915.166)
180700 (7915.171)

STAND-OFF
OUTWARD FORM
160800 (7915.166)
180800 (7915.171)

LOCK-IN
160.900 (7915.166)
180.900 (7915.171)

STRAIGHT CUT
161000 (7915.166)
181000 (7915.171)

DIODE 4 LEADS
STAND-OFF
INWARD FORM
161100 (7915.166)
181100 (7915.171)

STAND-OFF
LOCK-IN
POLARITY FOR LED
161200 (7915.166)
181200 (7915.171)

90° BENDING
161300 (7915.166)
181300 (7915.171)

MONTAGGIO IN
SUPERFICIE
161400 (7915.166)
181400 (7915.171)

STAND-OFF
INWARD FORM
160.900 (7915.166)
180.900 (7915.171)

TO SPREAD OUT
AND CUT
161700 (7915.166)
181700 (7915.171)

TO REDUCE PITCH
AND CUT
161800 (7915.166)
181800 (7915.171)

POWER TRANSISTOR
CENTER LEAD
2.5 mm OUT
162100 (7915.166)
182100 (7915.171)

TO220
90° BENDING
CENTER LEAD
5mm OUT
163100 (7915.166)
183100 (7915.171)

TO220 CENTER
LEAD SPREAD
AND LOCK
162200 (7915.166)
182200 (7915.171)

TO220 CENTER
LEAD SPREAD
3 LEAD LOCK
160.900 (7915.166)
180.900 (7915.171)

TO220 STAND-OFF,
LOCK-IN
3LEAD IN LINE
162400 (7915.166)
182400 (7915.171)

TO92
CENTER LEAD
2.5mm OUT
162500 (7915.166)
182500 (7915.171)

TO92
CENTER LEAD
SPREAD AND LOCK
182600 (7915.171)
180900 (7915.171)

TO92 CENTER LEAD
SPREAD,
3 LEAD LOCK
162700 (7915.166)
182700 (7915.171)

TO92 STAND-OFF
LOCK-IN
3 LEAD IN LINE
162800 (7915.166)
182800 (7915.171)

SUPERCUT/TS1 ***for loose radials***

A pneumatic machine designed to cut loose radial component leads, the feed is manual, on the top of the machine.
Pressing the footpedal effects cutting and 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
18x.xxx	Preforming set

SUPERCUT/TOCF *for tubed transistors*

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

7915.176	SUPERCUT/TOCF without tools, 115V
7915.177	SUPERCUT/TOCF without tools, 230V

SUPERCUT/RP *for taped radials*

SUPERCUT/RP is a machine designed to cut and form taped radial component leads, the curl formed by this model allows the components to remain spaced and locked in the PCB, making assembly operations easier.
The machine can be supplied with preforming curl dies different from the standard ones. It is a pneumatic machine, the leads must be introduced into a slot on the front of the machine. The machine use an motorized automatic feeder system for taped components.
Production rate (with feeder): 7000 pcs/hour

7915.154	Motorized machine SUPERCUT/RP for taped components. P=12.7, 230V. Without preforming set
7915.154A	Motorized machine SUPERCUT/RP for taped components. P=12.7, 110V Without preforming set
7915.155	Motorized machine SUPERCUT/RP for taped components. P=15, 230V Without preforming set
7915.155A	Motorized machine SUPERCUT/RP for taped components. P=15, 110VWithout preforming set
7915.158..	Die block

PINS ALIGNER

Pin aligner suitable for integrated circuits MOS and CMOS , from 4 to 64 pins.
Operation is made by sliding the packaging tube between the 4 metal rollers.
Easy adjustment of the pitch by means of the setting knob.
Setting of the pin distance: 7 - 24mm (0.3" - 0.9")

7804.711	PINS Aligner, 7-24mm with press (P)
7804.712	PINS Aligner, 7-24mm without press (P)

SUPERFORM-AF

The SUPERFORM/AF is a machine designed to cut, bend and preform axial components.
An innovatory preforming system, fully mechanic, allows the rotation of the central feed to stop while two preforming assemblies grip the component leads and preform the leads according to the chosen dies.
The components are in this way first cut and "U" bent to the dimensions previously set and then the preforming is made.
The cutting and bending parameters as well of the position of the preform are fully adjustable.Different forms can be obtained with this machine, through the easy substitution of the two preforming dies.
It is also possible to exclude part of the preforming operation to obtain the cutting and "U" bending only.
By use of the variable speed Motor Drive Unit working can be automatic and the production rate can be increased.
Production rate: up to 7000 pcs/hour

STAND OFF

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

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

STAND OFF - LOCK IN

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

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

STAND OFF - REDUCED PITCH

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

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

BODY LOCKED ON PCB

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

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

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

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

LOW-COST PREFORMING MACHINES

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

SUPERFORM/A-LC

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

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

SUPERFORM/V-LC

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

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

SUPERFORM/R-LC

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

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

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

TRACTOR

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

Separation 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 230V
7915.583 TRACTOR - PCB Motorized depaneling machine 230V/Titan blades

TRACTOR2

TRACTOR2M

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

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

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

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

TRACTOR-MILL 2

TRACTOR-MILL 2 The Tractor Mill 2 depaneling machine mills the routed tabs with the same quality of an automatic system at a lower costs. The key feature of this machine is the easy and quick change of the milling cutter and the interchangeable rail (patented).
This rail is useful to assist the operator to place and drag the circuit until the cut is complete. The particular shape of the rail avoids any damages to the assembled circuit: if the operator inserts it incorrectly it will not match the eyelet. This rail gives a total protection against possible accidents under safety rules.
This manual depaneling machine has an integrated electric vacuum cleaner system therefore it's easy to place it in every working area. It has been designed and realized to solve stress problems, break or tearing out of the PCB's fibers that often occur using standard blades or manual tools and that are not tolerated with the increasing complexity and miniaturization.

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

7915.591 TRACTOR-MILL2 depaneling machine with pedal

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

2- Move the PCB array towards the mill

3- The mill removes the PCB's tabs

GOSMOKE

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

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 .

Technical features:
Power: 20 W
Air volume: 130 m^3/h
Noise: 45 dB(A)

All GOSMOKE exhausters are supplied with 4 spare filters.

Cutting nippers

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

1) ESD black (10^6 - 10^9 Ω)
2) INSULATING orange

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

USE	TYPEOF CUT	WT	dia.max Copper wire		DIMENSIONS						CODE	HANDLES		SAFETY CLIP
		gr.	mm	AWG	A	B	C	S	L	I		ESD black	ISOLANT orange	
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 nosefor 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 nosefor 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 cutwith 48°bending nosespecially developed for IC leads	Clean back cut	45	0,64	22	8	9,5	18	4	118	48°	**TR 20 TM** **TR 20 TMD**	 ●	● 	

Shears

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

CS 30	PVC handles
CS 30 D	Black dissipative ESD handles (10^6 - 10^9 Ω)

Pliers

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

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

PREFORMING WITH CURL

Professional tool specially designed to cut and preform components in a single operation. Variable lenght by means of an adjustable stop.
Max. diam.: copper lead 1mm/18AWG

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

PREFORMING TO220

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

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

PREFORMING AT 90°

Professional tool specially designed to preform components at 90°.
Max. diam.: copper lead 1mm/18AWG

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

PRECISION SCREWDRIVERS

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

TWEEZER

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

STANDARD

PN 0
Tweezer with fine tips
L=120mm

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

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

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

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

SMD

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

PN 102
Tweezer for SMD
angled tips
L=120mm

PN 105
Tweezer for SMD
L=120mm

PN 106
Tweezer for SMD
L=120mm

PN 109
Tweezer for SMD
L=120mm

HIGH TEMPERATURE ADHESIVE TAPES

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

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

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

SOLDER MASKING PASTE

It is a good quality latex compound, ESD safe, designed to protect parts of the PC boards during the soldering production processes. Once cured, the paste will not lift or separate during soldering, it is exceptionally cohesive, generally peeling off in one piece. It is also suitable for use as a conformal coating.
Mask can be applied using robotic, pneumatic, hand applicators, brush and template screening.

Curing at normal temperature: 40 to 60 min
Curing at 60°C: 15 to 25 min
Colour: white
Smell: light ammonia
Resistance 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)

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

BRUSHES

Conventional brushes can generate high charges in use, they are therefore unsuitable for cleaning ESD sensitive assemblies. Nonetheless it is necessary to remove solder flux and other dirt particularly in SMD assembly where there are high densities of components.
A range of conductive brushes allows thorough cleaning without the risk of generating static charges. The brush consists of a conductive plastic handle and conductive fibres. Resistance from the tip of the brush to the handle is less than $1x10^{8}\Omega$.
Brushes should be used by operators who are earthed. Hard brushes are for scrubbing whilst soft ones are for brushing of delicate items such as optics and diskettes.

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

STICKY MAT FOR CLEAN ROOMS

Numbered Multilayer Dissipative Sticky Mats, for progressive removal when dirty.
The special adhesiveness ensures collecting of dust and particles of shoe soles and cartwheels by passing over the mat.
It should be placed where cleanness is required.

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

SILICON STICKY ROLLER FOR CONTAMINATION REMOVING

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

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

SELF-ADHESIVE POLYESTER FILM

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

Point to point resistance: $10^9\Omega$
Dissipative Polyester film: 100 µm thickness
Dissipative acrylic adhesive: 12 µm thickness
Release Not ESD film: 23 µm thickness

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

ESD ACRYLIC PANELS

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

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

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

HAND ESD VACUUM CLEANER

All parts of the fully ESD safe vacuum cleaner are made out of conductive material. It is compact, light and equipped with a carrying belt for easy handling.
It's Fully EPA compliant to IEC61340-5-1 and equipped with thermal cut-out & RFI/EMC filter.
Model **7913.051** is a "BlowVac" = Blower and vacuum cleaner in one.

Dimensions: 31.5 x 12 x 18.5cm
Weight: 2.2kg
Flexible pipe: 1,3m
Power cord length: 6m
Power supply: 220V – 1300W
Dust capacity: 1.2 liter

7913.050
WITH STANDARD ACCESSORIES

7913.060

7913.062

7913.066

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

WASTE PAPER BIN

Waste paper bin made of conductive polypropylene. Rs < 10^6 Ω

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

ANTISTATIC WASTE BAGS *(PACKAGE OF 100PCS)*

Made of antistatic polyethylene, 40mm thickness. Rs: 10^{11} 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 **7804.405** bin
7804.410A	120 litre bag (package of 100pcs), to fit **7804.404**

RING BINDER AND WALLETS

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

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

NEWBOX TOTE-BOX

Conductive polypropylene Tote-Boxes, stackable, in EURO format.
Rsup < 10^6 Ω.

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

ROLLBOX

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

7804.923 Spring label holder
7804.931 Logo application
7806.300 10mm Conductive Foam FLAT DIVIDER for 600x400 Newbox
7806.306 10mm Conductive Foam FLAT DIVIDER for 300x400 Newbox
7806.200 FLAT DIVIDER - Conductive fibreboard 350X550X5mm for 600x400 Newbox
7806.202 FLAT DIVIDER - Conductive fibreboard 350X250X5mm for 300x400 Newbox
7806.201 FLAT DIVIDER - Conductive fluted polypropylene LABEPLAST 350x5502.5mm for 600x400 Newbox
7806.203 FLAT DIVIDER - Conductive fluted polypropylene LABEPLAST 350x250x2.5mm for 300x400 Newbox

7804.923 Label holder

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

DIVIPRINT - LABEPLAST DIVIDERS

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

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

DIVIPRINT - IN CONDUCTIVE CORRUGATED BOARD

7806.211	Type C DIVIDER	lenght 555 heigth100 pitch 19, 28 slots
7806.215	Type D DIVIDER	lenght 350 heigth100 pitch 19, 17 slots
7806.217	Type C DIVIDER	lenght 552 heigth200 pitch 31 17 slots
7806.216	Type D DIVIDER	lenght 350 heigth200 pitch 30, 11 slots
7806.219	Type C DIVIDER	lenght 552 heigth300 pitch 31, 17 slots
7806.218	Type D DIVIDER	lenght 350 heigth300 pitch 30, 11 slots

Type **D**

Type **C**

DIVIPRINT - PLASTIC DIVIDERS

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

Material: black conductive polypropylene

Rs: $<10^5\ \Omega$

Temperature range: from 0 to +55 °C

Slit pitch: 15mm

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

LABERACK - PCBS HANDLING

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

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

MINILABERACK

Safe storage and transport system for PCBs from assembly through testing. Easy snap-together modular system to increase storage capacity.The racks are made from black static dissipative polypropylene
Material: Static dissipative polypropylene, Rs 10^5¸ 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. 3m)
To give the exact length of connecting rail add to the board width 18mm for each sidewall

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

Snap-on insertion of back-stop

Snap-on insertion for sidewall

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 Ω
Temperature range: from 0 to +55 °C
Number of slots: 32
Distance between slot centres: 10mm
Maximum thickness of the board: 2.3mm
Depth of the slots: 2.3mm

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

LABESERT 10

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

7804.110

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

LABEFIX - PCB ASSEMBLY

LABEFIX trays are used for component insertion before wave soldering of the PCBs. A special foam gently holds the leads until the PCB is removed for wave soldering. The foam doesn't crumble, or pollute and has a very long life.
Material: zinc plated material base - conduttivo polyethylene closed cell (cross linked foam density ISO 845 60Kg/m^3 thickness 7mm)
Weight: 1Kg
Standard tray 530x330x8mm with foam
(other dimensions on request)
Only foam 500x327x7mm

7610.100

7610.100	Standard tray 530x330x8mm with foam (other dimensions on request)
7610.110D	Only foam 500x327x7mm

PCB ASSEMBLY FIXTURES

PCSA1 PCSA2

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

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.

7804.134

7804.132

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

SMD SPOOL RACKS

ITECO RACK FOR SPOOLS

7805.703	ITECO rack for spools dia. 180-330mm external dimensions 395 x 250 x 110(H)mm Movable wire dividers (10 pcs included, 20 pcs capacity) moulded in conductive polypropylene black colour
7805.704	Movable wire divider for **7805.703**

LICEFA RACK FOR SPOOLS

7805.692	LICEFA rack for 25 spools max.dia. 220mm external dimensions 450 x 240mm 25 slots with adjustable width ESD vacuum formed, black colour
7805.696	LICEFA rack for 25 spools max.dia. 330mm external dimensions 450 x 310mm 25 slots with adjustable width ESD vacuum formed, black colour

ZINC PLATED SPOOL RACK

Zinc plated spool rack, with movable dividers, to lay over tables or inside lockers.
It can house reels from 180 to 380mm diameter.

7805.730	Zinc plated spool rack, 180-330mm reels, 29 slots, length 630mm
7805.732	Zinc plated spool rack, 180-330mm reels, 49 slots, length1000mm
8100.075P	Movable plastic divider for 7805.730 - 7805.732

TRESTON RACK FOR SPOOLS

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

F.I.F.O.

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

7805.711	FIFO box for 180mm dia. spools, useful height 160mm
7805.710	FIFO box for 180mm dia. spools, useful height 280mm
7805.712	FIFO box for 330mm dia. spools, useful height 280mm

HOBBOX

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

7805.724	HOBBOX - Hopper front box made from LABEPLAST for 180mm dia. SMD spools, useful width 128mm
7805.725	HOBBOX - Hopper front box made from LABEPLAST for 220mm dia. SMD spools, useful width 128mm
7805.728	HOBBOX - Hopper front box made from LABEPLAST For 330mm dia. SMD spools, useful width 128mm

CONDUCTIVE BOXES

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

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

7805.500

7805.499

7805.502

7804.492

7804.496

CONDUCTIVE BOXES *(with hinges and metal fasteners)*

7805.522 int.288x156x16mm

7805.523 int.288x156x38mm

7805.525 with 54 compartments each 28x27x15mm

CASES

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

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

CAROUSEL SYSTEM

The basic CAROUSEL system consists of four rotating trays stacked on the top of each other and secured to a stable metal base by a central column. The whole unit can be tilted through 20°.
They can be supplied with diameter 450 or 600mm and are available in black dissipative material (Rsup 10^6-$10^9\Omega$) , or orange non antistatic version. Two different sizes are available: 450mm and 600mm

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

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

CAB - CABINETS

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

CAB 2

7804.629

CAB 3

CAB 4

CAB 1

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

DIP TUBES BIN BOXES

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

TECOFIX - STACKING BINS

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

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

VISTAFIX - ASSEMBLY STAND

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

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

TRESTON BINS

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

7804.676 7804.678 7804.675 7804.677 7804.665 7804.669

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

TRESTON STORAGE CARTS AND TURNTABLE ASSEMBLIES

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

7804.648

7804.649

7804.651

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

TRESTON CABINETS

TRESTON cabinets will provide systematic storage of small parts or components which are ESD sensitive.
The drawers, made of conductive polyethylene, can be fitted with dividers (optional).

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

TRESTON MOVEABLE BENCHES

8104.074

8104.736

8104.730

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

Storage cabinets

LICEFA Cabinets, made of conductive polypropylene, will provide systematic storage of loose SMD components and other small parts. Drawers can be fitted with Vacuum-formed inserts or with cups to give more compartments.
The cabinets, four different sizes, are normally supplied with the following assemblies: mod. **7805.210** with 6 drawers MOD20, mod. **7805.150** with 9 drawers MOD22, mod. **7805.153** with 3 drawers MOD22, mod. **7805.305** with 4 drawers MOD40, mod. **7805.405** with 4 drawers MOD62.

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

7805.210

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

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

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

7805.305

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

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

STORAGE CABINETS

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

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

CUPS

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

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

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

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

SNAPBOX

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

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

SNAPBOXSET

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

SMD - VISTABOX

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

Material:zinc plated steel
Dimensions: 180 x 260 x 200mm
Capacity: 48 base units (size 1) for shelf

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

LABEL HOLDER

Transparent adhesive label holder with and ESD symbol.

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

LABELS

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

SIGNS

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

Use where there are potentials > 250Vac

EPA RETRACTABLE BELT BARRIER

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

Wall mounted retractable belt head

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

Belt barrier post

Powder coated steel post, colour: yellow
Plastic coated steel base colour: black
Base diameter: 350mm
Post height: 960mm
Weight: 12,5kg

Sign holder

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

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

PROTECTIVE CLOTHING

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

Features

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

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

T-SHIRTS / POLO-SHIRTS

(unisex)

Features

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

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

T-Shirt

Polo T-Shirt

DISPOSABLE COATS

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

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

ESD FLEECE

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

Features:

- Color: gray or blue
- Fabric Composition: 97% Polyester, 3% Carbon Fiber
- Fabric weight: 245g/m^2

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

DISSIPATIVE BADGE HOLDER

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

7807.901

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

DISSIPATIVE FINGER COTS

Dissipative latex finger cots, provide excellent tactile sensitivity for handling of ESD sensitive components. Rs: < $4x10^{10}$ Ω

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

BAGGY BEAUTY-CASE FOR EPA AREAS

For storage of personal things into an EPA area.
Colour: Grey
Dimensions: 320 x 100 x 150(H)mm
Rs: < 10^9 Ω

7807.910	Beauty-case for EPA areas

NITRILE GLOVES

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

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

NYLON GLOVES

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

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

VINYL GLOVES

IMade in dissipative VINYL are suitable for use in white chambers .
Electrostatic decay time <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).

POLYESTER GLOVES

Fully launderable lightweight white gloves, made from additived polyester fabric and synthetic rubber. Rg: ≤ 10^8Ω

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

DISSIPATIVE FOOTWEARS

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

According to the IEC 61340-5-1 2017-01 regulation all operators shall be connected to ground when operating in contact with ESDS.
In case of personnel seated at an ESD protective workstation, they shall be connected to ground via a wrist strap system (Rg between 750kΩ -35MΩ) .
Standing operators may be grounded via a flooring / footwear system. When only the flooring / footwear system is used to ground it is necessary to wear ESD footwear on both feet and satisfy these 2 conditions:
Total resistance of the system (person, footwear and flooring) to ground: Rg < 1,0 x 10^9Ω
Maximum HBV (Human Body Voltage) generation:
HBV < 100V
Rg shall be measured during the product qualification according to IEC 61340-4-5 and HBV shall be checked periodically (note "d" Table 2 of the standard)

For compliance verification the person / footwear system must be checked at a groundable point: Rgp <1,0 x 10^8Ω

Rgp person / foorwear compliance verification
Rgp <1,0 x 10^8Ω

Wristlab-II (page 72)

HBV (Human Body Voltage) periodic verification
HBV < 100V

Walking Test EVO (page 71)

M-clog

White colour
Non slip polyurethane sole
"MICROSAFE" Synthetic upper shoe
RG from 1x10^6 to 3.5x10^7Ω

8915.935 - 8915.947 White colour, sizes from 35 to 47

JUNIOR

High comfort, high style - White colour
Shock absorbent, anti-slip polyurethane sole
Perforated leather upper shoe
Removable and washable insole
RG from 1x10^6 to 3.5x10^7Ω

7807.427 - 7807.440	Clog, sizes from 35 to 48
6807.420 - 6807.433	Spare innersole, sizes from 35 to 48

TRAINER

High comfort, high style - White colour
Shock absorbent, anti-slip polyurethane sole.
Perforated leather upper shoe
Removable and washable innersole
RG from 1x10^6 to 3.5x10^7Ω

7807.469 - 7807.481	Sizes from 35 to 47
6807.420 - 6807.432	Spare innersole, sizes from 35 to 47

SPRINT
Safety shoe with toecap

Very attractive price
Grey colour
Steel toe cap
Non-slip polyurethane sole
Upper with holes in real suede leather, perspiring lining
Rg from $1x10^6\Omega$ to $1x10^7\Omega$

EN 20345 S1

8913.135 - 8913.147	sizes from 36 to 4

Worker
Safety shoe with toecap

Very attractive price
Grey colour
Steel toe cap
Non-slip polyurethane sole
Upper with holes in real suede leather, perspiring lining
RG from $1x10^6\Omega$ to $1x10^7\Omega$

EN 20345 S1

8908.036- 8908.047	sizes from 36 to 47

DISPOSABLE SHOE COVERS

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

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

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

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

7807.850	Light blue ESD shoe cover, 100 pcs packing

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.
A disposable heel grounder is available, ideal for plant visitors or anyone requiring a temporary grounding device. (expected life of 1 day)

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

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 detergent diluted in water at 1-5% ratio.

Maintenance with spray:
-Dilute the coat in water at 30% ratio, spray it on the floor and then polish by a one-brush machine, provided with a suitable scotch-bride. (Yield: 1lt. for approx. 100m^2)
Rs: < 10^{11} Ω

7805.876 LIQUID COAT, 5 Kilos unit

STRIPPER *(Specific for 7805.876)*

Dewaxing alkaline detergent have to be used the first time, before applying the coating on the floor. It removes quickly multiple coats of wax and embedded dirt. It is suitable on PVC, Rubber and Hard floors. Biodegradable up to over 90%.
Dilution in water 5-10% machine stripping 12-16% manual stripping Lay off the solution and let it act for 5 minutes, then wash with water.

7805.870 FLOOR STRIPPER, 5 Kilos unit

DETERGENT

Low foaming-agent detergent with highly concentrated active substances and alkalinity. It is used for cleaning and maintenance of the waxed surface.
Biodegradable: up to over 90% - Dilution in water 1-5%
It may be used to wash by hand and with a one-brush polisher or a washing-drying machine.

7805.873 DETERGENT, 5 Kilos unit

ELECSTAT-112 *Dissipative floor detergent*

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

Rs: < 10^{11} Ω
Biodegradability: over 90%
Dlution in water: 10 to 20%:
Application: for manual or mechanical cleaning.

7805.890 Dissipative agent ELECSTAT-112
5kg plastic can

DISSIPATIVE FLOOR PAINT

A ready to use single pack, dissipative water based paint can be easily applied by brush or roller. The paint has an attractive satin finish and is available in mid grey, nearest to RAL7035.
Two coats are recommended for best results and should be applied over a sound, sealed floor, free from dirt, oil or any loose particles.
It is strongly recommended that the paint is not applied directly over bare concrete. Where this occurs the Water Based Primer 7805.856 should be first applied.

7805.854 ELECTROGUARD 40. SINGLE PACK water based static dissipative acrylic paint, 5 litre unit.
Coverage: 10m^2/litre per coat (we recommend 2 coats).
Typical resistance to ground Rg: 10^6 Ω¸ 10^8 Ω

7805.856 FLOORPOX EPOXY PRIMER
For bare concrete floor
12 litre unit (6 litres base + 6 litres activator)
Coverage: 16m^2/litre per coat (we recommend 2 coats)

FLOOR MARKING TAPE

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

7807.172 PVC adhesive tape, ESD Protected Area floor marking

VINYLAB - FLOORS

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

VINYLAB - MAT

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

7805.820 Mat roll, azure colour 140cm x 2.2mm x 10m.
7805.818 Mat roll, grey colour 140cm x 2.2mm x 10m.

COPPER EARTHING TAPE

Used to ground ESD matting
Self-adhesive
- 0.04mm thickness
- 30m long roll

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

FLOOR GROUNDING KIT AND TEST POINT

Supplied with two meters long copper earthing type. Dowels and screws not supplied.

7805.834 GROUNDING KIT

VINYLAB - INTERLOCKING FLOOR TILE

The tiles are clicked together quickly and can be dry laid over any hard and flat base even on damaged, damp or contaminated surfaces.
To have a reliable ground connection create a copper grid under the tiles and ground it.
Dimensions: 500 x 500 x 4 mm
Weight: 6kg/m².
Packages: 20 tiles for package (4.70m²)

7805.800 Interlocking tile, azure colour
7805.801 Interlocking tile, grey colour

ECO V4 *Glue for mats, one component*

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

One component,
Color: Grey,
16kg pack,
Useful time 10-15 minutes,
consumption about 350g/m².

7805.840 One component conductive glue

ANTI-FATIGUE ESD MATS

ESD Anti-Fatigue Floor Mats designed to provide comfort and reduce worker fatigue. Provide ergonomic comfort for your feet and create a healthier more productive work environment.
The mats should be used on ESD floors correctly grounded.
-External side in nitrile conductive rubber (10^5 - $10^6\Omega$)
-Internal in highly elastic Polyurethane foam

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

WORKSTATION MATS

Labestat table mats

LABESTAT mats are made from a rugged rubber resistant to hot solder, fluxes and chemicals. The underside layer is black conductive, the top coloured layer, glare free surface, has a Rsurface from 10^7 to 10^9 Ω.

LABESTAT 2 layers dissipative COLOURED / conductive BLACK

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

Kostaplan mats

KOSTAPLAN mats are made from a rugged synthetic rubber resistant to hot solder, fluxes and chemicals. The underside layer is black conductive, the top coloured layer, glare free surface, has a Rsurface from 10^7 to 10^9 Ω

KOSTAPLAN 1 layer , conductive BLACK

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

KOSTAPLAN 2 layers , dissipative GRAY / conductive BLACK

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

Esd workstation kit

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

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

Field service kit

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

- 3 Layer Mat RED/BLACK colour, 600x600mm dim.
- Surface resistance Rs ≤ 10^9 Ω
- Point to ground resistance Rg ≤ 10^9 Ω
- 1 adjustable wrist strap + 1 grounding cord 3m length

7804.195	PORTABLE FIELD SERVICE KIT

ELECSTAT-109 ESD CLEANER

A topical antistatic cleaning solution for use on dissipative and non-ESD surfaces. After it has been applied and the surface dries, an antistatic and protective static dissipative coating is left behind. This enhances existing ESD surfaces and will give electrical properties to insulative surfaces. Rs < 10^{11}Ω

7805.895	Bottle, 0.75 litre spray
7805.896	5 litre Can

WRISTSTRAP

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

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

stud 10mm

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

stud 10mm

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

stud 4mm

EARTH BONDING POINT PLUG

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

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

EARTH BONDING POINT

An Earth Bonding Point (EBP) ties together (via cords) several elements of an EPA such as bench surface, floor mat or wrist strap. Each input is fitted with a 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 Ø 10mm

GROUNDING ACCESSORIES

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

7804.811	Eyelets manual press

7804.803	Ø 10mm socket (2 parts)
7804.809	Punch and Anvil for socket F
7804.804	Ø 10mm stud (2 parts)
7804.805	Punch and Anvil for stud M

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

GROUNDING CORDS

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

HARD FOAM CUSTOM CUSHIONING FOR NEWBOX

NEWBOX TOTE-BOX
Conductive polypropylene Tote-Boxes, stackable, Rs < 10^6 Ω.
Available in two EURO format:
400x300mm and 600x400mm

ANTISTATIC HARD PINK FOAM
Use: cushioning purposes
Density: 27Kg/m^3
Rs < 10^{12}Ω

Newbox

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7804.165	1m x 1.5m sheet, thickness 10mm
7804.166	1m x 1.5m sheet, thickness 20mm

FOAM (CUSTOM CUT)

ANTISTATIC SOFT PINK FOAM
Use: cushioning purposes
Density: 30Kg/m^3, 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: 30Kg/m^3, Rs <10^6Ω

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 <10^5Ω

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 <10^6Ω

7804.156	1m x 1.78m sheet, thickness 2.5mm
7804.158	1m x 1.78m sheet, thickness 7.5mm

ANTISTATIC HARD PINK FOAM
Use: cushioning purposes
Density: 27Kg/m^3, Rs < 10^{12}Ω

7804.165	1m x 1.5m sheet, thickness 10mm
7804.166	1m x 1.5m sheet, thickness 20mm

LABEPLAST
conductive fluted polypropylene

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: $\leq 10^5\Omega$

Color: black

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

LABBOX

CUSTOM BOXES AND DIVIDERS UNDER REQUEST

LABBOX-S Box with antistatic profiled foam

7806.815	LABBOX-S Dim. est. 350x145x70mm
7806.245	LABBOX-S Dim. est. 400x230x60mm

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

Fifo

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Diviprint

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ESD CORRUGATED BOARD

REUSABLE, STURDY CARTONS MADE FROM CONDUCTIVE CORRUGATED BOARD
Rsup ≤ $1x10^5$ Ω

SLIDING SLEEVE BOXES

Antistatic cushioning FOAM

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

SIMM SHIPPERS

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

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

CARTONBOX

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

PACKING TAPE

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

GREEN POLY ANTISTATIC BUBBLE PACK

Multilayer polyethylene, green colour, amine-free, heat sealable, recyclable. Small strong barrier bubble provides a superior packaging protection with excellent puncture and tear resistance.
Electrostatic decay: < 2 sec
Rs: < 10^{11} Ω
Colour: transparent green

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

DISSIPATIVE BUBBLE PACK BAGS

Provide superior protection against physical damage during shipping and storage.

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

POLYETHYLENE TUBING

6604.210 Black CONDUCTIVE 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 - 100m 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

SHIELDING BAGS (metal-in)

LABESTAT S85 (packages of 100pcs)
Semi-transparent, heat sealable, the metallised shielding bags offer excellent protection for ESD sensitive devices.
A buried layer of metallic film sandwiched between an inner layer of polyethylene and an outer layer of polyester to provide protection against all static damage without exposing metal surfaces.

Thickness of the film: 78 μm
Transparency: 40%
Surface Resistivity:
-inner layer (polyethylene): $< 10^{11}\ \Omega$
-intermediate layer (metal): $< 10^{2}\ \Omega$
-outer layer (polyester): $< 10^{11}\ \Omega$

ZIPLOCK (zippered recloseable bags)

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

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

CONDUCTIVE BAGS

LABESTAT C75 (package of 100pcs)
Made from black multilayer polyethylene layflat tubing are available in many sizes. All bags are printed with the ESD logo and text in conformity to IEC61340-5-1. Don’t use for packaging PCBs with on-board batteries.

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

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

DISSIPATIVE BAGS

LABESTAT A100 (package of 100pcs)
Material: Polyethilene, green colour amine-free, heat sealable, recyclable
Print: ESD and Recycle logos, production batch
Thickness: 100μm
Rs: $< 10^{11}\Omega$

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

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

CLEAR DISSIPATIVE TAPE

Clear Dissipative Tape used to seal shielding bags or boxes.
Generates low electrostatic charge and can be used in EPA.
Material: Cellulose based tape with rubber based adhesive.
Rs: 10^{9} - $10^{11}\ \Omega$
T1000: 2 sec at 25% rH

7807.180	Clear Dissipative Tape 12mm x 66m
7807.181	Clear Dissipative Tape 24mm x 36m

DRY PACK

Moisture absorbing desiccant bags

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

Humidity indicator card

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

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

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

MBB with Recommended Light Air Evacuation

MBB with Too Much (Full) Evacuation

Vacuweld >>>
GO TO page 53

Esd moisture barrier bags *(metal-in)*

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

MIL-B-81705C class1 TC1 SBM356

Thickness: 85μm
Film complying: MIL-B-81705C class1 TC1 SBM356
Rs: < $1x10^{11}$ Ω
Electrostatic decay: < 0,1 sec
EMI shielding (MIL 81705-C): 40dB / 1÷10 GHz
Packaging of 100pcs

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

JEDEC-STD-033

Thickness: 150μm
Film complying: JEDEC-STD-033
Rs: < $1x10^{11}$ Ω
Electrostatic decay: < 0,1 sec
EMI shielding (MIL 81705-C): 40dB / 1÷10 GHz
Packaging of 100pcs

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

Not-esd moisture barrier bags

SACS BARRIERE GAUFRES (Packaging of 100pcs)

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

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

HAND HELD CRIMPER SEALER

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

HAND SEALERS

The welding time is adjustable, to match the type and thickness of material. The models with cutting blade can be used to produce bags from tubing or to seal filled bags and to trim the exceeding material.
Seal width: 2mm
Max.Sealable Thickness: 2x0.125mm.

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

HAND SEALER (MEDICAL)

Recommended for the health care industry, creates water-tight seals on sterilisation rolls (paper-plastic) and sterilisation tubing (plastic-plastic) materials. The welding time is adjustable, to match the type and thickness of material, an audible beep advises when the seal is complete. Each seal has a deeply embossed texture.
- Soldering width: 10mm (according DIN58953)
- Max.Sealable Thickness: 2x0.2mm

	Model	Sealing lenght (mm)	Power (Watts)	Weight (Kg)
7914.215		200	1000	6,5
7914.216	stainless steel	300	1200	8

WITH HOLDING magnet and cutter

The machine operates quickly and efficiently with magnet hold, offering consistent secure sealing for every package. After the seal cycle the machine re-opens automatically.
- Adjustable welding and cooling time.
- Uniform set contact pressure.
- Welds all types of thermoplastic films.
- Easy and simple to operate.

Seal width: 5mm
Max seal thickness: 2x0.15mm

7914.245	Hand Sealer with holding magnet and Cutting Blade Max. seal length: 300mm
7914.246	Hand Sealer with holding magnet and Cutting Blade Max. seal length: 400mm

	ACCESSORIES FOR HAND SEALERS
7914.217	Worktable for sealing unit 200mm
7914.227	Worktable for sealing unit 300mm
7914.237	Worktable for sealing unit 400mm
7914.226	Holder for tubing roll, maximum width 310mm
7914.236	Holder for tubing roll, maximum width 510mm

DOUBLE AUTOMATIC HEAT SEALER

Heavy duty, single or double, automatic or manual impulse heat sealer. Seals up to 0.5mm gusseted or regular thermoplastic film.
Separate programmable timers (for sealing, cooling and recycle time when in automatic mode).
Foot switch included for manual operation.
Seal width: 10mm
Max. seal thickness: 2x0.15mm

7914.247	Automatic heat sealer 300mm (2000W - weight 22kg)
7914.247V	Automatic heat sealer 300mm with floor support
7914.248	Automatic heat sealer 450mm (2500W - weight 24kg)
7914.248V	Automatic heat sealer 450mm with floor support
7914.249	Automatic heat sealer 600mm (3000W - weight 26kg)
7914.249V	Automatic heat sealer 600mm with floor support

AUTOMATIC HEAT SEALER WITH TEMPERATURE CONTROL

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

Seal width: 15mm
Max. seal thickness: 2 x 0,25mm
Temperature range: 30 - 199°C
Sealing time: 0,2 - 2,5 sec
Recycle time (automatic mode): 1 - 8 sec

7914.163	Constant automatic heat sealer 200mm (350W - weight 15kg)
7914.165	Constant automatic heat sealer 400mm (520W - weight 19kg)
7914.166	Constant automatic heat sealer 600mm (600W - weight 22kg)

AUTOMATIC BAND SEALERS

7914.391

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

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

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

7914.390

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

SHRINK WRAP SYSTEM

7914.255

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

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

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

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

Technical features:
Seal length: 450 mm
Soldering jaws: 2 x 6mm
Vacuum pump: Dry , 5m^3/h.
Noise: <65dB
External dimensions: 490x390x220mm
Power supply: 230V/50Hz - 600W

With these economic and flexible machines is possible to package every length of bag.
The unit is hand operated or motorized and the degree of vacuum is achieved by the operator's evaluation.

7914.340	Manual vacuum bag sealer, external aspiration.
7914.345	Motorized vacuum bag sealer, external aspiration, Foot pedal included.
7914.341	Upgrade kit from manual to motorized model

The advantages of Vacutek are:

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

Textured bags >>> Pag. 48

Flat bags >>> Pag. 48

2) No danger for the operator with the motorized version
Unlike other motorized vacuum machines, the pressure exerted by the jaws moving is not sufficient to cause damage to the hands.

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

4) Little effort to start the cycle
Both Vacutek models can start the suction cycle by manually pushing the upper jaw handle down. Once the cycle has started, it is not necessary to continue pushing.
The force to apply on the handle to start the cycle is about 4Kg for the **7914.340** model, while it is about 400g (just use a finger!) For the **7914.345** model.

7914.340

7914.345

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

6) No maintenance
The vacuum pump is dry therefore it does not require any maintenance.

VACUWELD - vacuum tank sealers for epa area

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

VACUWELD - Venturi pump (compressed air)

7914.275

7914.275 Vacuum tank sealer

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

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

VACUWELD - Oil pump

7914.279

7914.278 Vacuum tank sealer
7914.279 Vacuum tank sealer, with inert gas injection

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

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

Table top vacuum sealers

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

Wire shelving

Solid CONDUCTIVE shelving, in chrome plated steel, resistant to rust, bumps and scratches.
This system allows an efficient air circulation, a good light penetration and the maximum accessibility.
Easy to assembly on field, it doesn't require any screws, bolts or tools.
Split sleeve assembly device locks shelves in place in 1" increments along height of post.
Levelling bolt compensate for uneven floors.
Every wire shelf system can be made mobil by using conductive castors.

VINYLAB mat optional cover, 2 layers, grey ESD

Load capacity for single shelf: 150 kgs
Load capacity for shelving unit: 800 kgs

Composition

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

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

(1)

(2)

(3)

(4)

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

8104.050

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

Fixed Label-holder (1)
8104.101 Fixed Label-holder 80mm
Divider (2)
8104.110 Shelf Dividers 455x200(H)mm
8104.111 Shelf Dividers 610x200(H)mm

Side and back ledges (3)
Side and back ledges 100mm height to avoid dangerous falls.
8104.130 Ledge 100mm x 455mm
8104.131 Ledge 100mm x 610mm
8104.135 Ledge 100mm x 762mm
SMD reel shelf (4)
8104.012 SMD reel shelf 455 x 910mm
Reel capacity: 70, DIA.180mm x width. max.17mm
8104.013 SMD reel shelf 455 x 910mm
Reel capacity: 13, DIA.330mm x width. max.50mm

Plastic split sleeve included withshelves

8104.061 (optional)
Chromed plastic
ESD split sleeve

Wire trolley

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

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

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

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

Stainless steel trolley

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

TWO/THREE SHELF TROLLEY (A)
Load capacity for single shelf: 50kg

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

CART FOR STUFF (B)
Load capacity: 200kg

8104.720	Trolley - dim. 1000 x 550mm

TRESTON trolley

TRESTON TROLLEY ESD (C)
Storage trolley is an easy solution for mobile storage, it has an adjustable middle shelf and all shelves are fitted with standard rubber mats.
Set of 4 ESD castors diam. 100mm (2 with brake)
Max load 30 kg per shelf.

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

TRTA TROLLEY ESD
The Trolley can be equipped with several accessories to transport and store tools and electronic components.
Set of 4 ESD castors Ø125mm (2 with brake).
The Trolley is available in 2 versions:
- The TRTA / 2 version (figure D) has 2 shelves dim. 800x400. Load max. 150kg.
- The TRTA / 4 version (figure E) has 4 shelves dim. 800x400. Load max. 300kg.

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

Load capacity for single shelf: 50kg

CHARIOTTE - Trolley per newbox

CHARIOTTE conductive trolleys are ideal for efficient handling of tote boxes, circuit board carriers, cabinets and other parts handling containers.
The basic unit consist of two lateral support posts on a stable, wide based assembly.
Steel shelves are adjustable in height, depth and tilt angle.
P370 shelf, without fittings, can accomodate one EURO 600x400 or two EURO 300x400 boxes.
In the table below are listed the parts forming the trolley shown left.

codice	description	fig.	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	4 in figure
8100.066	P600 shelf 600x630mm NEWBOX tote boxes (cat. page 22)		2 in figure

Chariotte - trolley for laberack

CHARIOTTE conductive trolley can be customized to carry Printed Circuit Boards or LABEFIX trays. The trolley shown in figure consists of four LABERACK carriers, securely housed on the two special double support shelves.
In the table below are listed the parts forming the trolley shown right:

codice	description	fig.	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

Load capacity for single shelf: 50kg

LABERACK housing on shelf

pc board storage & transport LABECART

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

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

CHARIOTTE
Smd reel holder

Load capacity: 250kg
Load capacity for single shelf: 50kg

	description	ref.	Qnt.
8100.050	Stainless steel baseplate with castors, 600x760(L2) mm	x	
8100.049	Stainless steel baseplate with castors, 600x1130(L2) mm	Z	1
8100.054	Stainless steel lateral support post	H	
8100.055	Stainless steel lateral support post with handle	K	2
8100.056	A4 document holder	J	
8100.073	Double shelf for SMD reel support L1 = 630mm 29 slits for side, pitch 20mm		
8100.074	Double shelf for SMD reel support L1 = 1000mm49 slits for side, pitch 20mm	M	3
8100.075P	Divider for SMD reels	N	

8100.055

8100.054

8100.056

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

TRESTON smd reel holder

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

The trolley has four perforated steel shelves depth 460mm. All shelves are individually adjustable.
The load capacity of one shelf is 50kg, and the load capacity of the trolley is 200kg.

8100.020	Trolley with four shelves and wheels (reel holders not included)
7805.698	Reel rack Ø 180 / 330 / 380mm - Dim. 960x426x254(H)mm

Smd reel holder
(wire shelving page 54)

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

8104.012	WIRE SHELF for 180mm SMD reels - 455x910x95(H)mm. Slot opening 16mm - Reel capacity /shelf: about 70
8104.013	WIRE SHELF for 330/380mm SMD reels - 455x910x108(H)mm. Slot opening 50mm - Reel capacity /shelf: about 13

CHARIOTTE tray trolleys

Supporting structure made of tubular AISI 304 stailless steel.
⊏ - 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 , ∅125mm (2 with brakes)
The optional stainless steel shelf, can be placed on the bottom and on the top.

8104.605 (A)	Lateral support post pair, 20 rails 825(H)x400(P)mm
8104.607 (A)	Lateral support post pair, 20 rails 825(H)x660(P)mm
8104.610 (A)	Lateral support post pair, 38 rails 1520(H)x400(P)mm
8104.612 (A)	Lateral support post pair, 38 rails 1520(H)x660(P)mm
8104.650 (B)	STRINGER 25 x 25 x 508(L1)mm (need 4)
8104.651 (B)	STRINGER 25 x 25 x 538(L1)mm (need 4)
8104.654 (B)	STRINGER 25 x 25 x 808(L1)mm (need 4)
8104.660 (C)	Central tie rod Ø 8X 508(L1)mm
8104.661 (C)	Central tie rod Ø 8X 538(L1)mm
8104.664 (C)	Central tie rod Ø 8X 808(L1)mm
8104.685 (D)	Stiffening cross 1520(H)x508(L1)mm
8104.686 (D)	Stiffening cross 1520(H)x538(L1)mm
8104.687 (D)	Stiffening cross 1520(H)x808(L1)mm
8104.670 (E)	Inox SHELF 10/10 400 (P) x 508(L1)mm (optional)
8104.674 (E)	Inox SHELF 10/10 660 (P) x 508(L1)mm (optional)
8104.675 (E)	Inox SHELF 10/10 400 (P) x 538(L1)mm (optional)
8104.676 (E)	Inox SHELF 10/10 660 (P) x 538(L1)mm (optional)
8104.678 (E)	Inox SHELF 10/10 400 (P) x 808(L1)mm (optional)
8104.682 (E)	Inox SHELF 10/10 660 (P) x 808(L1)mm (optional)
8104.695	Conductive wheels KIT, Ø125mm (2 with brakes)
8104.696	Set of 4 NON-ESD castors, Ø125mm, (2 with brakes)

Aluminium trays

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

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

Workbenches TP

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

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

Steel cabinet 45

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

Load capacity: 60 kg/drawer.
Drawers size: 380 x 500 mm (Width x Depth).

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

WORKBENCHES TPH

Workbench with upright profiles and a laminate shelf, depth 310 mm, height adjustment 1080 to1550mm
Worktop height adjustment with allen-key, between 650 - 900mm
Frames are of epoxy powder coated steel in dark grey RAL 7035.
The worktops are of 26 mm laminated particle board
Load capacity 300 kg equipment static u.d.l.

Tecofix
>>> go to page 27

Movable Benches
>>> go to page 29

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

CORNER WORKBENCH TPH

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

AUXILIARY SHELF SH

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

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

METAL SHELF TH

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

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

Design your workstation with the 3D Configurator

TOOL AND LIGHTING SUPPORT KT

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

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

CC12
Cable clip set (5 pcs)

CABLE TIDY TPHCT

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

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

CABLE CHANNEL TJK

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

TRESTON NATURLITE LED

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

FOOTREST ESD

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

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

860947-49

S860947-49	Footrest ESD with adjustment

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

SC10050200

SHELF CABINETS

Designed to store electronic components.
Delivered pre-assembled.
The metal frame is epoxy powder coated with a light grey ESD paint.
Shelves can be installed in different position at 80mm pitch distance.
There are leveling screws under the cabinet for adjusting the cabinet straight, and the door are key lockable.
The empty cabinet can be lift up with forks.
Maximum load capacity 150 kg./shelf

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

CONCEPT WORKBENCHES

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

Select the height adjustment method: allen-key, electric or hand-crank. Stepless height adjustment between: allen key 700-1100mm, hand crank 675-1025mm, motor 670-1100mm. The frame is strong and rigid. Steel frame parts are epoxy coated light grey paint, RAL 7035. Worktops are of 25 mm ESD laminate particle board, adjustable feet are provided for fine levelling. Cable tidy is standard with hand-crank and electric adjustable benches.
Load capacity from 200 kg to 500 kg depending on the version.

Design your workstation with the 3D Configurator

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

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

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

859151-49 / 859152 -49

Space saving bin rails ensure an ergonomic working position

SJK M900 SET / SJK M750 SET

Power supply channel with switch and 6 Schuko socket.

93049002P

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

CPU

Adjustable support for CPU

91849006P / 91849008P

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

92849008P

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

860911-49P

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

861511-49 / 861516-49

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

860941-49

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

92949002P

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

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

CHAIRS

Comfortable static safe chairs designed to improve job efficiency and productivity
Chrome -plated metal parts - Pneumatic seat height adjustment
Standard self-braking conductive castors
Rg to ground < $1x10^{10}\Omega$

COMFORT

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

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

CLASSIC / standard

ESD chair with long wearing dissipative upholstery, antracite colour

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

7804.204S **7804.208**

7804.204 **7804.204R**

CLASSIC / high with foot-plate

ESD chair with long wearing dissipative upholstery, antracite colour

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

PU / standard

ESD chair in black dissipative PU foam

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

7807.338 **7807.345**

7807.336 7807.341

PU / high with foot-plate

ESD chair in black dissipative PU foam

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

YOUNG / standard

ESD chair with long wearing dissipative upholstery, antracite colour

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

7807.315 7807.317

7807.320 7807.322

YOUNG / high with foot-plate

ESD chair with long wearing dissipative upholstery, antracite colour

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

OPTIONS

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

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

(does not leave marks on the floor)

DISSIPATIVE CHAIR COVER SET

Made of grey conductive woven fabric, the dissipative chair covers are designed to make a conventional padded factory chair more suitable for use in an EPA.
The covers easily fitted on all chair types, are supplied with the cables to connect the back rest to the seat and the seat to the earth (by means of a 1MΩ series resistor)

7804.197 Dissipative CHAIR COVER SET, 2 cables included

SIMCO ION™
An ITW Company

LEADER ON THE MARKET

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

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

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

IONIZATION SIMCO-ION

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

ACTIVE PROTECTION SYSTEM

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

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

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

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

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

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

6422/E point of use ionizing blower

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

Discharge time: from ±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, 24Vac
9265.577	Wall transformer 230Vac/24Vac 32W

6432/E local area ionizing blower

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

Discharge time: from ±1000V to 100V ≤7s at 60cm
Emitter points: Tungsten alloy, internally shielded, 5 year life
Air flow: 80m³/h
Coverage area: 122x46cm
Power requirement: 230Vac / 6W

9265.576	Local area ionizing blower

local area ionizing blower AEROSTAT PC2

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

Decay Time: ±1000V to 100V ≤ 2s at 60cm
Emitter: Patented emitter point cleaner
Air Flow: 220 m³/h at high speed
Coverage Area: 150x30cm
Power requirement: 230Vac
Auto-balance: 0 ±10 V

9265.582	Local Area Ionizing Blower AEROSTAT PC2, 230V

Turbo ionizing blower XC2

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

Decay Time: ±1000V to 100V ≤ 3.5s at 60cm
Emitter cleaning: "Emitter Clear Button"
Air Flow: 250 m^3/h at high speed
Power requirement: 230Vac
Auto-balance: 0 ±10 V

9265.602	Turbo Ionizing Blower XC2, 230V

Overhead ionizing blower GUARDIAN

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

Decay Time: ±1000V to 100V ≤ 6s at 45cm
Emitter: Patented emitter point cleaner
Air Flow: 500 m^3/h at high speed
Coverage Area: 120x60cm
Power requirement: 230Vac
Auto-balance: 0 ±5 V

9265.610	Overhead Ionizing Blower GUARDIAN, 230V

CR2000 overhead ionizer for clean room

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

Decay Time: ±1000V to 100V ≤ 3s at 45cm
Emitter: Patented emitter point cleaner
Air Flow: 450 m^3/h at high speed for the 3 fan / 300 m^3/h for the 2 fan
Coverage Area: 120x60cm for the 3 fan version / 90x60 cm for the 2 fan
Power requirement: 230Vac
Auto-balance: 0 ±5 V
Clean room: Compatible with Class 10

9265.620	CR2000 overhead ionizing blower for clean room 2 Fan, 230V – length 81cm
9265.622	CR2000 overhead ionizing blower for clean room 3 Fan, 230V – length 109cm

IONIZING GUNS

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

6115 Light anatomic gun

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

9265.530

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) - 0.1mm 99,99%EFF

Heavy duty TOP GUN

Designed for heavy duty jobs, due to its high performance, reliability and durability.
There is a flow control valve to adjust airflows for the specific application.
It is completely ESD and can be used even in clean rooms.
The version with sidekick allows "hands free" operation.

9265.520

9265.523

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

9265.520	Ionizing Gun TOP-GUN, 230Vac
9265.523	Ionizing Gun TOP-GUN, 230Vac with flexible support and Sidekick (foot pedal switch)

6110A AIR CARTRIDGE

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

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

9265.542	Ionizing cartridge, air flow triggered - 24Vac
9265.544	Transformer 230/24Vac

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

CARBON FIBRE static dischargers

Highly efficient anti-static tools which are used to neutralize static electricity on different types of machines including: paper, texture or plastic film handling, packaging, labeling, coding and printing.
The brushes housed in an aluminium body contain a large number of highly conductive carbon fibre.
The fibre tips are normally positioned a few millimetres from the material to be neutralized.
The aluminium body must be connected to earth by a 5mm2 wire. The brushes are available in different sizes and are custom length supplied.

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

FIELDLAB electrostatic fieldmeter

The 775 electrostatic meter detects and measures intensity and polarity of electrostatic fields.
Indispensable for checking packaging materials, circuit assemblies, ionized areas; this versatile meter offers:
- Digital display in KV from 0 to 20KV at 1"(25.4mm).
- Accuracy ±5%.
- LED distancing feature for accuracy.
- Chopper stabilized circuit, for accurate reading in a ionizedenvironment.
- Analog output for recorder.

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

The 9265.403 is a Ionizer Verification System which includes a detachable isolated plate and a 1100V charger in addition to the fieldmeter.

Together, the three components can be used to verify ionizer operation and check ion balance and discharge time

CHARGER EVO

The CHARGER EVO is used to charge insulated plates at a desired voltage.
Settable output: 100V to 1100V (step 1V)
Resolution: 1 Volt
Accuracy: 5%
Dimensions: 124x72x28mm

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

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

TREK520 electrostatic voltmeter

A new type of handheld electrostatic voltmeters provides accurate, noncontacting measurements of electrostatic surface voltage for ESD applications in either ionized or non-ionized environments.

- No need to maintain fixed spacing.
- Inspect small spots for charge accumulation.
- Chopper stabilized circuit for accurate reading in ionized environments.
- 9V alkaline battery included (for 8 hours operating time)

9265.099 TREK520-1	Electrostatic Voltmeter 0 to ±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 Resolution: 1V - Accuracy better than 5%of full scale over a probe-to-surface distance of 5 to 25mm. Model with Voltage Monitor Output(1/1000 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)

WALKING TEST SYSTEM

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

Here some clarifications

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

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

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

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

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

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

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

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

WALKING TEST EVO

The WALKING TEST EVO is a portable measuring system that allows analysis of charge levels accumulated on the human body according to IEC 61340-5-1 standard.
It's fully portable and doesn't require a PC for data acquisition because all data are measured and logged in the internal memory.
The operator can perform all necessary operations without any collaborator, and while he is walking the instrument is attached only with a single cable to a fixed position for the reference to the ground.
The graphs of the tests can be displayed on the graphic LCD for a quick evaluation. Then they can be easily exported and analyzed on a PC for a professional documentation.
A program to manage the tests recorded in the instrument is included in the Walking Test EVO.

Range: ±1050V
Resolution: 1 Volt
Accuracy: 5% o ±5V
Input resistance: 10^{14} Ω
Humidity: 1 to 95%RH (accuracy: ±2%RH)
Temperature:-20°C to +60°C (accuracy: ±1°C)
Display: graphicLCD 128 x 64 pixel, 68x51mm
Power supply: 6 alcaline batteries, LR6 1, 5V
Dimensioni: 243x130x60mm (instrument) Ø35x130mm (probe)
Weight: 650g (instrument) - 250g (probe)

MONITOR
(Datalogger OFF)

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

Datalogger
In the internal memory of the instrument can be logged till to 10 graphs.
Sample rate: 200Hz
Max total graphs duration: 2minutes and 30 sec
Interface: USB
Software WT Manager (included)
Program to manage the tests recorded in the instrument, compatibile with WIN XP/7/8/10
For each walking measurement, the five highest peaks (P1-P5) and the five highest valleys (T1-T5) are indicated with their arithmetic means.

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

WRIST STRAP AND DUAL FOOTWEAR TEST STATION

Test station for checking personnel grounding connection of wrist straps and footwear, according to the IEC 61340-5-1.
Separate testing of left and right shoe; the test is executed at 50V or 100V to provide more accuracy.
A relay output allows access to ESD Protected Area.
Internal battery supplied 9V or external 9Vdc.
ISO9000 traceable certificate is included.

The personnel grounding test station can work in 4 modes:
1) Simultaneus measurement of wrist straps and footwears.
2) Wrist straps only measurement
3) Footwears only measurement
4) HandsFree mode (if the serial measure of the two footwears pass the test then the internal relay enables the gate to the EPA area)

9264.950

9264.952

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

9264.950*	Personnel Grounding Test Station wall mounting including: Wristlab-II instrument, footplate and yellow panel.
9264.952*	Personnel Grounding Test Station on Stand-up support including: Wristlab-II instrument, footplate, yellow panel and stand-up support
9264.960	Wristlab-II instrument
9264.950.1G*	ATEX version for code 9264.950* (Footwear High Limit = 1GΩ)
9264.952.1G*	9264.952.1G* ATEX version for code 9264.952* (Footwear High Limit = 1GΩ)
9264.960.1G	ATEX version for code 9264.960 (Footwear High Limit = 1GΩ)
9264.955	Instrument recalibration (ISO9000 Traceable certificate is supplied)

* Aggiungere al codice: I (Italiano), F (Francese), E (Inglese) D (Tedesco), H (Ungherese), S (Spagnolo)

CONTINUOUS MONITOR

This instrument continuously monitors the integrity of the operator and one ESD worksurface. It uses the "wave distortion" technology to avoid false alarms caused by voltage offset, 50Hz fields and other electro-magnetic and electrostatic interference.
Screw Terminal to monitor the worksurface's path-to-ground (requaired $R<10^7\Omega$) with cord included.
Wriststrap input: 10mm banana plug / 10mm snap adaptor
Supply: 24Vdc.
Dimensions: 98x53x23mm

9263.652 Continuous Monitor with power 230/24Vac adapter included

TEST STATION EVO

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

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

Technical features

- Measurement of bracelets and footwears according to IEC61340-5-1
- Up to 1000 different users identified through fingerprint recognition or manual recognition (entering the ID number)
- Fingerprint recognition 1,5 sec
- Datalogger can store data for the last 10000 access (date and time, user name and ID, the resistance values of the bracelet and shoes, etc ...)
- Control footwear separate (left and right)
- Relay output for controlling the opening of the access door to the EPA
- LCD display with blue backlight 160 x 104 pixels, 74 x 46mm viewable area
- Beep to indicate clearly PASS or FAIL test of the protections
- Voltage Test selectable to 50V or 100V.
- Programmable tresholds
- Wriststrap measuring range: 50kΩ - 2GΩ
- Footwear measuring range: 50kΩ - 2GΩ
- Footwear measuring range (2 in series): 50kΩ - 2GΩ
- Precisione misura: 10%

- ISO9000 Traceable Calibration Certificate included

- Freeware program to manage the data included in the Test Station EVO (compatible with Win XP/7/8/10)

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

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

The fingerprint sensor capture a digital image of the fingerprint pattern.
The captured image it's not stored inside the Test Station EVO, therefore the biometrical data of the users are safe and can't be duplicated.
Only a biometric template (a collection of extracted features) is memorized.
The template size is very small: about 400 byte.
The templates are used for a smart and secure identification of the operator.

9264.922
Test Station EVO
Stand-up version

LAN

USB Pendrive

FREEWARE

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

GIGALAB EVO

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

indication of humidity and temperature

programmable acoustic alarm

100 MEMORY CELLS

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

Vmeas	Range	Accuracy
10V	1KΩ ÷ 50GΩ	±5% ±0.6% per GΩ
100V	100KΩ ÷ 1TΩ	±5% ±0.06% per GΩ
250V	500KΩ ÷ 1TΩ	±5% ±0.045% per GΩ
500V	1MΩ ÷ 1TΩ	±5% ±0.03% per GΩ

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

Internal memory where the data of 100 measures can be stored.
The data stored for each measurement are:
- Resistance value
- Voltage used for the measurement
- Humidity detected during measurement
- Measured temperature during measurement

9265.064

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

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

ESD SURFACE RESISTANCE TESTER 100V

The Labeohm EVO and the Labeohm EASY are instruments that measure the surface resistance and the ground resistance of mats, worktops, floorings and other objects in the EPA area.
The embedded probes are suitable for surface resistance measure, connecting one ground cord the resistance to ground can be read, and two external probes can be connected for point to point measurements.
Both instruments are pocket-size and use 2 embedded parallel electrodes, in accordance with DIN EN 100015/1.
The Easy version allows to measure the order of magnitude of surface resistance or resistance to ground.
The EVO version is more accurate (accuracy of ½ decade) , it displays up to one significant digit and it is equipped with a graphical display and programmable sound alarm

Measuring range: from 10^4 to 10^{12} Ω
Test voltage: 10V R<100KΩ, 100V R>100KΩ
Electrodes: Soft conductive rubber
Dimensions: 80x120x27mm
ISO9000 Traceable Certificate is supplied

LABEOHM EASY

programmable acoustic alarm

LABEOHM EVO
Display: LCD graphic
102x64pixel, 36x26mm

LABEOHM Kit

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

PROBES FOR GIGALAB AND LABEOHM (Page 76)

9265.065

9265.047

9265.070

PROBE - OPTIONS

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

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

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

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

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

CALIBRATION UNIT

It's a resistance decade box made specifically for the calibration of the ESD Test Station (**9264.960** Wristlab-II, **9264.925** Test Station EVO, **9265.030** Wristlab and IEC 61340-5-1 compatible testers)
Range: 10Ω - 110MΩ (resolution 10Ω)
Tolerance: 1%
Power: 1W for resistors up to 4MΩ, 0.5W for resistors from 10MΩ to 40MΩ
Operative Voltage: 250Vac max
Dimensions: 14,7 x 11,7 x 5,5cm - Weight: 320g
Detailed instruction manual for calibration procedures of the IEC61340-5-1

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

ESD SURVEY KIT

The ESD Survey Kit contains everything needed to conduct an ESD control program survey according to IEC 61340-5-1 in an ESD protected area (EPA)
The Kit can be customized to meet different needs.
The example below shows a typical kit configuration:

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

9265.151 ESD Survey KIT - Carrying case with instruments

DRYLOGGER

Precision Temperature/Humidity meter. It is also a datalogger used to collect environmental data of humidity and temperature and to transfer them to a Windows PC.
It is possible to set an alarm that become active when, after a certain period of time, humidity or temperature are above a predetermined maximum threshold.
When the alarm is activated the red LED under the display flashes.

Humidity: 1 to 95%RH, resolution: 0.1%RH
accuracy: ±2%RH
Temperature: -20°C to 60°C, resolution: 0.1°C
Accuracy: ±0.5°C
Display size: 48 x 11mm
Humidity Alarm: from 1 to 95%
Temperature Alarm: from 0 to 60°C
Alarm activation delay: from 1 to 99 minutes
Memory: 21600 samples
Sampling rates: can be set at 1, 5, 10, 15, 30 seconds and 1, 5, 10, 15, 30 minutes
Interface: RS232 and USB
Size: 184 x 67 x 44mm

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

9265.302	DryLogger – Humidity/Temperature hand LCD datalogger USB cable and LogManager software to collect data to Windows PC are included.
CK-005	ISO9000 Traceable certificate for DryLogger

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

It monitors simultaneously humidity, temperature on his large display, and alerts the engineers to check and repair the facilities immediately when the settable HIGH or LOW limits of RH/T are exceeded. When the alarm is active, its output relay can activate an emergency circuitry. The internal datalogger samples the environmental data of humidity and temperature that can subsequently be transferred to a Windows PC via USB or Ethernet interface (the "TekManager" software is included). The instrument sensor can be hooked to the display or positioned externally. Can be set to fixed display of RH/T or alternate it with date and time.

Humidity: 1 to 95%RH, resolution: 0.1%RH
accuracy: ±2%RH
Temperature: -20°C to +60°C
resolution: 0.1°C
accuracy: ±0.5°C
LED Display: 190 x 190mm
Memory: 21600 samples
Interface: USB pendrive (**8105.113U**) or ETHERNET (**8105.113E**)
Dimensions: 190 x 190 x 40mm

8105.113U	Humidity/Temperature Monitoring & Alarming & Datalogging (USB Interface)
8105.113E	Humidity/Temperature Monitoring & Alarming & Datalogging (ETHERNET Interface)
CK-013	ISO9000 Traceable certificate for Tekmatrix

8105.113E

Ghibli-II Dry Cabinet

Moisture Sensitive Devices (MSDs), must be managed correctly because "a single mistake" on a tray or reel of MSD causes "negative impact on the entire production batch".
Electronic components (like QFP, BGA or SOIC for example), LEDs and Printed Circuit Boards, when extracted from their original protective package, absorb humidity from the environment and during the soldering process the trapped moisture can vaporize and exert internal package stress.
GHIBLI-II dry cabinets provides a "safe place" to temporary stock the MSDs removed from their original Dry Pack before soldering process. In fact the J-STD-033 tells that under 5% RH the Floor Life is congealed.

8104.812

8104.808

Technical specifications
Humidity range: <5% RH guaranteed , typical 2% RH
Colour: Anthracite
Power supply: 230Vac
Structure: 1mm thick carbon steel with antistatic paint
Door: magnetic handles , magnetic sealers and antistatic glass
Wheel: 4 antistatic 3" wheels, two of them with brakes
Grounding wire: 940mm long
ESD paint: $10^3 – 10^9 \Omega$

DryLogger
(included in every cabinet)
Humidity: 1 to 95% RH resolution: 0.1%RH
Temperature: -20°C to +60°C, resolution: 0.1°C
ALARM for Max.humidity and Max temperature
(see page 77)

Advantages about GHIBLI-II

Easy use:
It's plug and play, just connect it to the main supply without any settings and it will be stable at less than 5%RH (5%RH is guaranteed but the cabinets easily reach 2%).
The dehumidifier units are always active and not controlled by any sensor. This avoid dangerous problems due to malfunction or drift of hygrometers.

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

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

Modular design:
The dehumidifier modules are easy extractable with only a screwdriver. This allow easy reparation and grant the long life of the cabinet, over 20 years, as long as the metal structure last. This is our green policy.
Smart magnetic handles with key lock at every door.
The front of the cabinet is flat.
2 years warranty

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

40°C Baking
Some cabinets version can do 40°C low baking process of SMD components.
At this temperature the reels are not damaged and can be afterwards inserted into the feeders of the pick and place without problems.

Code	**8104.800**	**8104.802**	**8104.804**	**8104.808**	**8104.812**	**8104.830**	**8104.832**
Model	Ghibli II/200L	Ghibli II/328L	Ghibli II/400L	Ghibli II/600L	Ghibli II/1200L	Ghibli II/600L baking 40°C	Ghibli II/1200L baking 40°C
Capacity	200L	328L	400L	650L	1280L	600L	1180L
Ext.Dimensions (mm)	600x672x610	905x452x1045	600x672x1255	600x672x1805	1200x672x1805	600x672x18055	1200x672x1805
Shelves	2	3	3	5	5	5	5
Shelf Size (mm)	555x530x20	860x310x20	555x530x20	555x530x20	1155x530x20	555x530x20	1155x530x20
Average power	28W	56W	56W	56W	56W	56W without baking 456W with baking	56W without baking 856W with baking
Maximum power	210W	420W	420W	420W	420W	420W without baking 1220W with baking	420W without baking 2020W with baking
Weight	55kg	64kg	64kg	81kg	134kg	91kg	144kg

8104.840 Additional shelf 555x530x20mm , Ghibli-II 200L, 400L, 600L
8104.841 Additional shelf 1155x530x20mm , Ghibli-II 1200L

Tray rack

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

8104.865 GHIBLI-II - RACK 10 trays store
8104.583 Aluminium tray 530 x 530 x 12mm

ALARM BOX

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

8104.856 Alarm Box for Ghibli-II cabinets

Sahara - baking ovens

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

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

2) Baking of SMD components according to J-STD-033 that specify three temperatures: 40°C, 90°C and 125°C.

To ensure <5% RH when baking at 40°C or 90°C is recommended the use of the Sahara Dry that are ovens equipped with humidity control. How long to bake depends on the moisture sensitive level and package type and body thickness.

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

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

Technical specifications:

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

SAHARA
Baking MSD

Sahara ovens

Oven with temperature control only

Temperature Control
Safety thermostat
Ventilation opening

Compliance with:
IPC-1601
Baking PCB

Sahara dry ovens

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

Ventilation opening
Safety thermostat
Humidity Control

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

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

Temperature Control

(Included both on Sahara and Sahara Dry models)

Temperature electronic control with PID regulator and multifunction timer.
Temperature Range: 40-280°C
Accuracy: ± 1.5 °C
Resolution: ± 1 °C

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

The Sahara ovens can work in 4 modes:

1) SetPoint:
The oven reaches a setpoint temperature and stays steady.

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

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

4) Thermal programmer:
It's possible to edit on a PC and then download to the digital controller up to 10 programs with 100 steps each. In every step you can set: the temperature setpoint, the maximum gradient to reach it and the duration.
To set the thermal programmer it is necessary to have the **8107.215** option , comprehensive of the PidManager software and the special USB cable (see page on the right)

Humidity Control

(Included on Sahara Dry models only)

Humidity electronic control
Humidity control: <5% RH when 40°C ≤ T ≤ 100°C
Humidity range: 1-95%RH
Accuracy: ±2%RH (10%RH~90%RH)
±3%RH (1%RH~10%, 90%RH~95%)
Resolution: ± 0.1 %RH

It can work in 2 modes:
Fast: dehumidification occurs at the maximum possible speed.
Eco: dehumidification is proportional adjustment to optimize the consumption of compressed air. This mode is for a more rational use of compressed air, in fact, the low level of humidity is reached for subsequent cycles and not in a direct way.

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

How much should be dry the air supply?
Normally, centralized systems of compressed air are already equipped with dehumidification system good enough to work properly with this humidity control.
For example, a compressed air system to 7 bar with a dew point of less than 3°C is usually sufficient.

How much is the compressed air consumption?
The dry air is blown into the inner chamber very slowly and only when necessary.
Max consumption: 100 nl per minute
Average consumption: 30 nl per minute

Can be used the nitrogen and what advantages there are?
Yes. The baking in inert environment reduces oxidation of the PCBs and SMD components..

			Int. Dimensions	Ext. Dimensions	Power	Weight
	SAHARA MODEL	**(included/max)**	**(LxPxH)**	**(LxPxH)**	**W**	**kg**
8107.103	Sahara 40 litre	1/7	348x312x367	686x515x575	800/230V	35
8107.105	Sahara 60 litre	2/7	408x372x422	746x570x605	1200/230V	40
8107.107	Sahara 80 litre	2/8	458x372x472	796x570x680	1200/230V	45
8107.109	Sahara 120 litre	2/9	498x477x512	836x680x720	1600/230V	50
8107.111	Sahara 250 litre	2/14	593x522x797	956x730x1025	3200/230V	90
8107.113	Sahara 400 litre (with wheels)	2/18	693x607x980	901x815x1487	3200/230V	140
8107.108	Sahara DRY 80 litre	2/8	458x372x472	796x570x680	1200/230V	45
8107.110	Sahara DRY120 litre	2/9	498x477x512	836x680x720	1600/230V	50
8107.112	Sahara DRY250 litre	2/14	593x522x797	956x730x1025	3200/230V	90
ACCESSORIES						
8107.150	Additional shelf for Sahara 40 litre				(max. 7 shelves)	
8107.152	Additional shelf for Sahara 60 litre				(max. 7 shelves)	
8107.154	Additional shelf for Sahara and Sahara DRY 80 litre				(max. 8 shelves)	
8107.156	Additional shelf for Sahara and Sahara DRY 120 litre				(max. 9 shelves)	
8107.158	Additional shelf for Sahara and Sahara DRY 250 litre				(max. 14 shelves)	
8107.160	Additional shelf for Sahara 400 litre				(max. 18 shelves)	
OPTIONS						
8107.1xxW	Door with inspection window, 200x200mm					
8107.1xxH	Lateral hole for cables, Ø 50mm					

DATALOGGER

All our ovens are equipped with a data logger for traceability and you can print/save graphs of temperature (for sahara ovens) and temperature/humidity (for Sahara DRY ovens)
To analyze the logged data and to set the thermal programmer is required the **8107.215** option which inlude the PidManager software and USB specific cable.
The software is compatible with Windows XP/7/8/10.
Sample rate: 1, 5, 10, 15,30 sec 1, 5, 10, 15, 30 min
Duration (T) Sahara from 6 hour(1sec) to 450 day(30min)
Duration (T+RH%) Sahara Dry: from 3 hour(1sec) to 225 day(30min)

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

Thermal Program :

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

SAHARA DRY 80L 40°C < 5% RH

SAHARA 80L Thermal Program

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