

Catalog 2026



English

About us

The story begins

Our story began in 1973 with Ermanno Plano, a young entrepreneur looking to the future of electronics. He transformed the small family business, originally focused on assembling electronic boards, into a company dedicated to developing innovative solutions for the industry.

At that time, integrated circuits were entering production and technology started to play a key role in process ergonomics, setting new standards for the safe handling of components sensitive to environmental and electrostatic factors.

This is how Iteco was born. With over 50 years of experience, the company has earned an international position in the production and distribution of technologies for the electronics industry, and beyond.

ITECO

Nothing left to chance

Iteco was among the first companies to obtain ISO 9001 certification, back in 1993.

Our organization covers design, production, sales, logistics, quality, and service, bringing together specialists who continuously update their skills through training and collaboration with industry experts.

Thanks to this approach, Iteco is today a trusted partner for companies seeking qualified consultancy in the design of environments for electronic component management.



ITECO COMBINES INNOVATION
AND LOGISTICS: WITH OVER
3,000 SQM OF STORAGE,
WE ENSURE FAST DELIVERIES
AND STAND AS A RELIABLE
PARTNER FOR THE MOST
DEMANDING COMPANIES

Looking ahead

Iteco preserves the principles that made it strong. With the new generation in charge, management embraces new markets and modern procedures while keeping alive the strength and enthusiasm of the company's origins.





Offered Services

Not only products.

Iteco supports industries — especially those in the electronics sector, with services that ensure production lines always operate at the highest level of excellence.

CONSULTANCY FOR EPA AREA SETUP

Il servizio comprende l'analisi delle esigenze produttive del cliente. A seguire, viene elaborato un documento progettuale che definisce le attrezzature necessarie per garantire ambienti di lavoro conformi alle normative sulla gestione della componentistica elettronica.

FROM DESIGN TO PRODUCT CUSTOM TECHNICAL FURNITURE:

This service allows design and production of dissipative mats, foams, and plastic containers, both open and closed, to be used inside EPA areas or for the transport of sensitive electronic components outside protected zones.

All items can be custom-made, either from the customer's drawing or from a project developed by our technical office, with cuts performed by CNC machines to ensure maximum precision.

OUR KNOW-HOW ALWAYS AVAILABLE VIDEO TUTORIALS & TECHNICAL SUPPORTI:

Il Our technical team is always available to assist customers.

In addition to video tutorials, we offer direct support via phone or video call to ensure simple and safe use of our equipment.

INSTRUMENT REPAIR:

This service allows repairs of damaged Iteco instruments to be carried out in our laboratories, after approval of the provided quotation.

DESIGN AND SETUP OF WORKSTATIONS:

This service provides the design of customized workstations using 3D configurators.

These tools allow customers to select worktops, shelving, and other technical furniture elements, previewing the final result before installation.

EPA AREA INSPECTION AND AUDIT

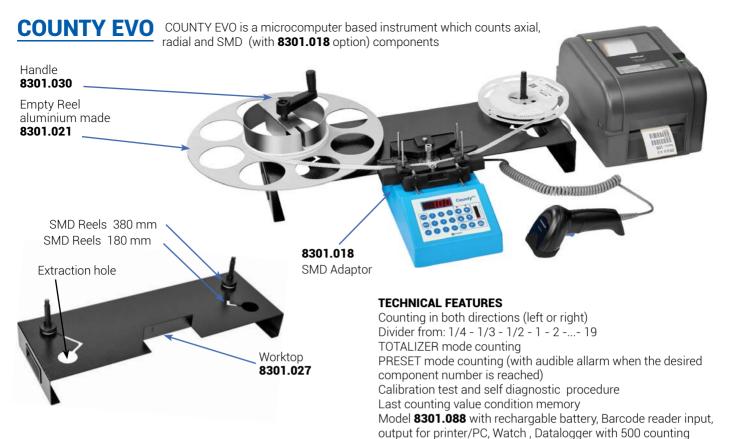
This service, currently available in selected areas of Italy, includes an on-site inspection of new or existing work areas, evaluation of protection and storage systems, and verification of control and access equipment to the protected zones.

INSTRUMENT CALIBRATION

This service includes the issue of traceable calibration reports using primary instruments certified annually by LAT-accredited laboratories. The certificates are valid for all purposes required by standards, including ISO 9001. We offer calibration services for both Iteco and other brands' instruments.

REPLACEMENT OF OBSOLETE EQUIPMENT:

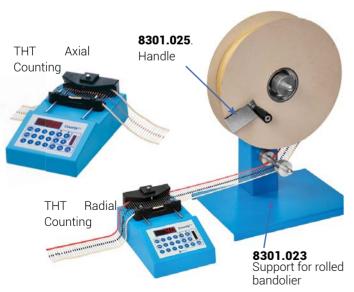
This service, dedicated to Iteco products, allows customers to replace obsolete or damaged instruments with new ones under favorable conditions, even when repair is not possible.



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



8301.087	County EVO 100÷240V/50-60Hz
0301.000	
	barcode input, printer output, watch
8301.350	ISO9000 traceable Calibration Report (not included)
	Accessories for counting of THT taped component
0201 022	
	Complete support for rolled bandolier
8301.025	THT Bandolier handle
	Accessories for counting of SMD taped component
8301.018	
	Worktop with 2 pins for reel
8301.030	SMD Reel handle
8301.021	Empty Reel aluminium made for County-EVO
	Barcode e Printer
8301.155	Barcode with coiled cord (1)
8301.096	57x51mm 1360 labels/roll ⁽¹⁾
	(1) photos and specifications at page 6

Maximum countig value: 999999 comp.

Display: 4 digits 13 mm height

Minimum lead diameter (THT component): 0,4 mm

Maximun component diameter (THT): 14 mm

Maximun tape height (SMD component): 56 mm

Dimensions: 240 x 130 x 110 mm - Weight 1,8 kg

Axial component bandolier width (THT): 55 ÷ 110 mm

Radial component bandolier width (THT): max 18 mm

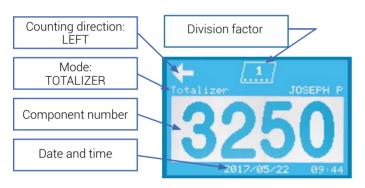
AXIAL AND RADIAL PTH COUNTING

Before counting it is necessary to select the leads 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)

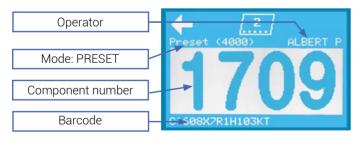


County-s evo is a motorized counting machine for taped SMD component counting. It can operate in two different ways:

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







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 $\,$

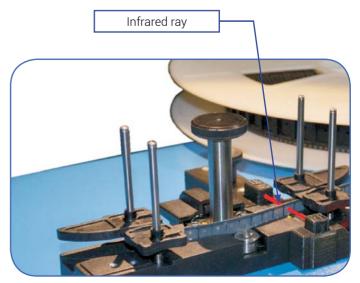
alphanumerical chars everyone) Internal clock (1 week backup)

Datalogger that stores the last 500 counting data

Memory storage for subtotals 2 side handles for easy transport.

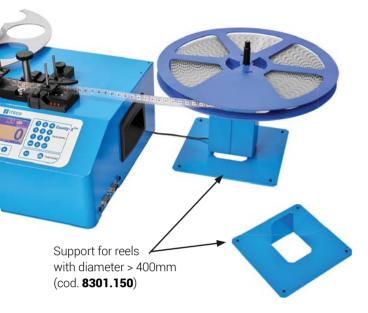
Dimensions: 525 x 340 x 250(H) mm

Weight: 9,5 Kg



County-S EVO 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

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

Empty Reel, aluminium made,

Barcode with coiled cord

ISO9000 Traceable® Calibration Report

Support for reels > 400mm diameter

EMPTY REEL aluminium made diameter 360mm (cod. **8301.021**)

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 57x51mm, 1360 labels/roll



BARCODE

8301.143

8301.350

8301.150

8301.021

8301.155

for County EVO and County-S EVO

(not included)

360mm diameter

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



PREFORMING / CUTTING MACHINE

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

Production rate: up to 20000 pcs/hr

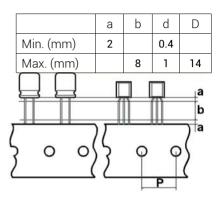
SUPERFORM-R

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

7915.185 Tape Reel Holder arm BR6







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

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

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

The transfer speed is adjustable.

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

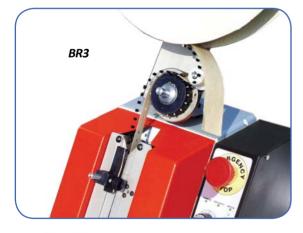
There is an optional adapter for radial taped components.





TECHNICAL FEATURES

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



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

7915.147N	
7915.148N	
7915.160	
7015 150	

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

SUPERCUT-LN5



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

Air supply: 6 ATM Weight: 4,5/6 Kg

340.114

340.214



	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

Optional additional plate for SUPERCUT/LN5 (max 3mm)

Optional additional plate for SUPERCUT/LN5L

(max 3mm)

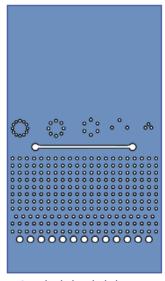
This pneumatic machine is designed to cut/trim almost every type radial lead components.

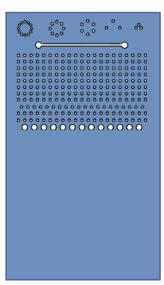
The guillotine cutting system, with zero clearance between the plates, guarantees a sharp and precise cut without burrs or damage to the leads.

It is possible to cut many components at the same time without any risk of wear of the blades.

The machine can be supplied with special cutting jig.

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

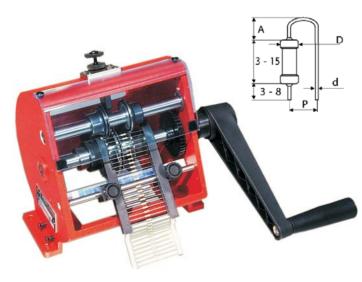




Standard plate hole layout SUPERCUT/LN5

Standard plate hole layout SUPERCUT/LN5L

SUPERFORM-V



	Р	d			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 designed for cutting and bending axial taped components for vertical mounting.

Production rate up to 40000 pcs/hr

7915.031

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

SUPERFORM-A

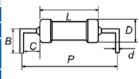


SUPERFORM/A is a machine designed for cutting and bending axial taped components, it is extremely compact and sturdy and its main characteristic is to form components with rheophore up to 1.4 mm. Its tracking wheels are adjustable independently to allow rapid setup at different forms.

Production rate: up to 40000 pcs/hr

	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	I	3		Р	С	D	d		L	quick setting
	version	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Max.	quick setting
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	10,2	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 designed 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.

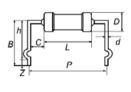
By replacing the 2 "cutting/forming wheels" with 2 "only cutting wheels" (optional) it is possible to obtain an U-shape without curls.

Production rate: up to 20000 pcs/hr

915.030	Motor unit for
915.031	Motor unit for
915.180	CS10 feeder f
915.185	Tape reel hold

Motor unit for SUPERFORM, 230V - 50/60Hz Motor unit for SUPERFORM, 115V - 50/60Hz IS10 feeder for loose axial components Tape reel holder arm BR6

Mod.	version	Z P		В		3	С		L	d		D	H	า	
		Fix.	Min.	Max.	Min.	Max.	Min.	Max.	Max.	Min.	Max.	Max.	Min.	Max.	
7915.102A	standard model	3.1	6.5	60	60		1.2				1.3				
7915.102B	reinforced bending knives	3.1	10.2	60	60			2.4				1.4			
7915.102C	standard model	3.9	6.5			14	1.2	10	50	1	1.3	16	7	11	
7915.102D	reinforced bending knives	3.9	10.2	60	10	10 14	10 14	2.4	10	30		1.4	10	(- 11
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 foot switch 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 **16x.xxx**

SUPERCUT/RS without preforming set 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 **161.500** (7915.166) **161.500** (7915.171)

AND CUT **161700** (7915.166) 181700 (7915.171)

OUT

TO SPREAD

TO REDUCE PITCH AND CUT **161800** (7915.166)

POWER TRANSISTOR CENTER LEAD 2.5 mm OUT 181800 (7915.171) 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 **162.300** (7915.166) **182.300** (7915.171) TO220 STAND-OFF, LOCK-IN 3LEAD IN LINE **162400** (7915.166) 182400 (7915.171)

T092 CENTER LEAD 2.5mm OUT **162500** (7915.166) 182500 (7915.171)

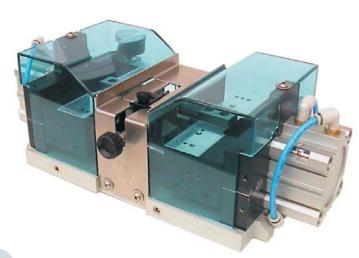
T092 CENTER LEAD SPREAD AND LOCK 162600 (7915.171) **182600** (7915.171)

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 foot switch 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 **18x.xxx**

SUPERCUT/TS1 without preforming set Preforming set



SUPERCUT/TOCF

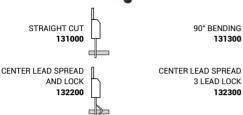
For tubed transistors

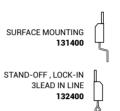
SUPERCUT/TOCF automatic machine is designed to cut and form tubed radial components type T0220, T0218, T0126.

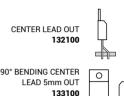
The complete operation is fully automatic and each form needs dedicated die. The full tube is introduced into the upper guide and a pneumatic system allows the component clamping and its positioning in the working point. The leads have before locked by the wire holder and after formed by the sliding die. Production rate: up to 3000pcs/hr

7915.176 7915.177

SUPERCUT/TOCF without tools, 115V 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.

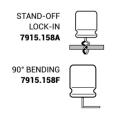
The machine can be supplied with preforming curl dies different from the standard ones. It is a pneumatic machine, the leads must be introduced into a slot on the front of the machine. The machine use an motorized automatic feeder system for taped

Production rate (with feeder): 7000 pcs/hour

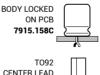


7915.154 7915.154A 7915.155 7915.155A 7915.158[x]

Motorized machine SUPERCUT/RP for taped components. P=12.7, 230V. Without preforming set Motorized machine SUPERCUT/RP for taped components. P=12.7, 110V Without preforming set Motorized machine SUPERCUT/RP for taped components. P=15, 230V Without preforming set Motorized machine SUPERCUT/RP for taped components. P=15, 110VWithout preforming set [x=A..N] Die block











7915.158G



1.27mm OUT 7915.158L

CENTER LEAD SPREAD AND LOCK 7915.158M

TO92 CENTER LEAD SPREAD 3 LEAD LOCK 7915.158N



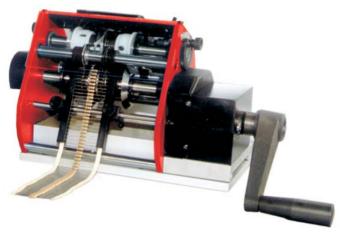
Pin aligner suitable for integrated circuits MOS and CMOS, from 4 to 64 pins. Operation is made by sliding the packaging tube between the 4 metal rollers. Easy adjustment of the pitch by means of the setting knob. Setting of the pin distance: 7 - 24mm (0.3" - 0.9")

7804.711

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

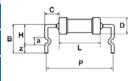
By use of the variable speed Motor Drive Unit working can be automatic and the production rate can be increased.

Production rate: up to 7000 pcs/hour

STAND OFF

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

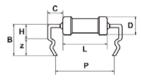
mod.	version	Р		L	С	Н		В		d		D	а	7	Z
(assembly die)	Version	min	max	max	min	min	max	min	max	min	max	max		min	max
7915.095 (420.800)	standard	10.5	61	50	1.2	6*	9	8*	11	0.5	0.8	8	2.5	2	4
7915.095 (420.750)	standard	10.5	61	50	1.2	6.5*	9.5	8.5*	11.5	0.6	0.9	8	3	2	4
7915.096 (420.750)	reinforced	10.5	61	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)

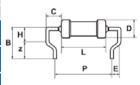
mod.		F		L	C	F	1	E	3	(ł	D	7	Z
(assembly die)	version	min	max	max	min	min	max	min	max	min	max	max	min	max
7915.095 (420.850)	standard	10.5	61	50	1.2	4.5*	8	7.5*	11	0.5	0.8	8	3	4
7915.095 (420.950)	reinforced	10.5	61	50	1.2	4.5*	8	7.5*	11	0.6	0.9	8	3	4.5
7915.096 (420.950)	extra reinforced	10.5	61	50	1.5	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)

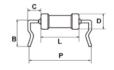
mod.		- 1	•	L	C	The second	4	E	3		d	D		Z	E
(assembly die)	version	min	max	max	min	min	max	min	max	min	max	max	min	max	max
7915.095 (420.900)	standard	8	59	50	1.2	5*	9	7*	11	0.5	0.9	8	2	4	1.27
7915.096 (420.900)	reinforced	8	59	50	1.5	6*	12	8*	14	0.8	1	8	2	4	1.27
7915.097 (430.900)	extra reinforced	10.5	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.	od.		P		C	E	3	d		D
(assembly die)	version	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
	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

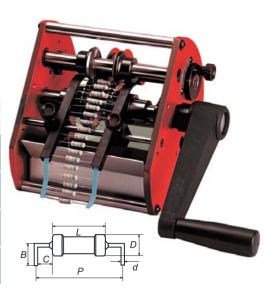
Economic, manual machines, designed for small productions. These machines can not be motorized, the "Tape reel holder" model BR6 (page 9 of the catalog) can be applied

SUPERFORM/A-LC is a machine designed 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	E	3	F)	С	D	(ł	L
mod.	version	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	8.0	10	0.4	0.8	50
7915.200G	like"F" + fixed pitch	4	10	5	-	0.5	4	0.4	0.6	3.5

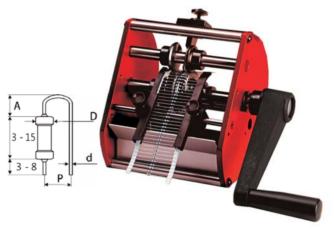
SUPERFORM/A-LC



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

Mod.	Р	(ı	-	4	D
Mod.	fix	min max		min	max	max
7915.201B (standard)	2.54	0.5	0.8	2	6	3
7915.201C	3.8	0.5	8.0	2.5	6	5
7915.201D	5.08	0.5	8.0	3	7	8
7915.201E	7.62	0.5	0.8	4	7	10
7915.209A	3.8	0.8	1.3	4	9	5
7915.209B	5.08	0.8	1.3	5	9	8
7915.209C	7.62	0.8	1.3	6	9	10

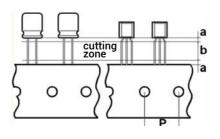
SUPERFORM/V-LC



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

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





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

SUPERFORM/R-LC



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.



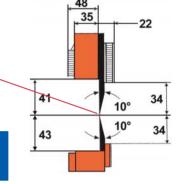
Separation lenght: up to 380mm Thickness of panels: 0.8 ÷ 3.2mm

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



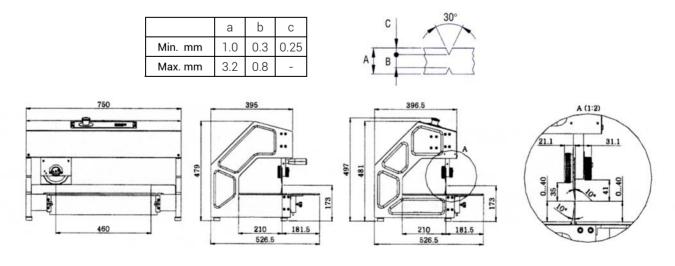
TRACTOR 2



TRACTOR 2M



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



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

TRACTOR-MILL 2

The Tractor Mill 2 depaneling machine mills the routed tabs with the same quality of an automatic system at a lower costs. The key feature of this machine is the easy and guick 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).

Milling slot



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



2- Move the PCB array towards



3- The mill removes the PCB's tabs



7915.591 TRACTOR-MILL2 depaneling machine with pedal

MANUAL DEPANELING TOOL DP 18 ND

Manual depaneling tool designed to separate PCBs quickly, safely, and cost-effectively, ensuring clean and smooth cut surfaces. Equipped with an ESD-safe handle

TECHNICAL FEATURES:

- Maximum PCB thickness: 1.6 mm (0.070")

- Maximum cutting force: 3 kg - Blade thickness: 1.8 mm

- Weight: 90 g - Length: 147 mm

Utensile depannellizzatore manuale DP18ND

10.5 mm



GOSMOKE

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

The GOSMOKE is 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.

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

TECHNICAL FEATURES:

-Power: 20 W

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

The GOSMOKE is supplied with 4 spare filters.

7820.001 Exhauster 230V (table model) 7820.003 Set of 4 spare filters

7820.004 Adjustable support for table model

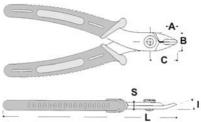


CUTTING NIPPERS

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 (10⁶ 10⁹ Ω)
- 2) INSULATING orange

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





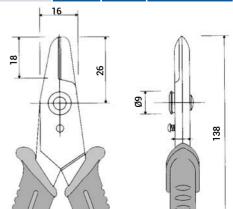
									_	115-04				
USE	TYPEOF	WT		max er wire		D	IMEN	SION	S		CODE	HANI	DLES	SAFETY
USE	CUT	gr.	mm	AWG	A	В	С	S	L	1		ESD black	ISOLANT orange	CLIP
Normal For lead diameter to 1mm	Clean cut	60	1,02	18	8	13,5	20	5	138	21°	TRE 03 NB TRE 03 AB TRE 03 NBD TRE 03 ABD	•	:	•
Normal For lead diameter to 1,3mm	Clean 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	10	13,5	20	5	138	27°	TR 25 TR 25 A TR 25 D TR 25 AD	•	•	•
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	•	•	



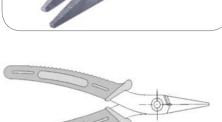
An easy-handly shear, designed for the electronic. Copper wire: max. diameter 1,63 mm (14AWG)

PVC handles **CS 30 D** Black dissipative ESD handles $(10^6 \div 10^9 \text{ W})$





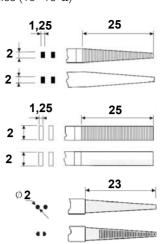




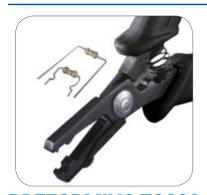
PLIERS

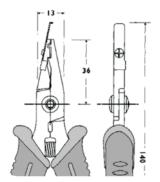
Professional pliers developed for the electronics industry. Short, long, rounded pliers, with smooth or serrated nose. Extension D is for the Black Dissipative PVC handles $(10^6-10^9 \Omega)$

	Α	В	С	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

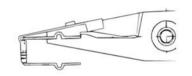


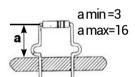


Professional tool specially designed to cut and preform components in a single operation. Variable lenght by means of an adjustable stop.

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

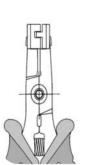
PNR5000D black dissipative ESD handles (106-109Ω)

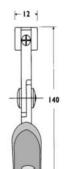




PREFORMING TO220

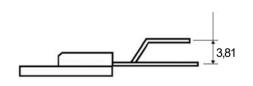






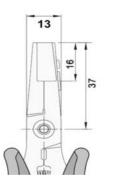
Professional tool specially designed to preform with central lead out of 3.81mm

PN5050/17D black dissipative ESD handles (106-109Ω)



PREFORMING AT 90°

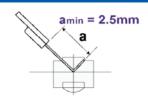




Professional tool specially designed to preform components at 90°.

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

PN5040/7D black dissipative ESD handles (106-109Ω)



PRECISION

SCREWDRIVERS

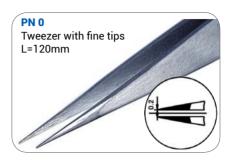


	PVC	Dissipative	Dimensions
	PG1-0	PG1-0-D	1,2x60
SLOT	PG1-1	PG1-1-D	1,5x60
SLUT	PG1-2	PG1-2-D	1,8x60
T.	PG1-3	PG1-3-D	2,5x75
	PG1-4	PG1-4-D	3,0x100
	PG1-5	PG1-5-D	3,0x150
	PG2-0	PG2-0-D	PH000 2,5x60
	PG2-1	PG2-1-D	PH00 2,5x60
PHILLIPS	PG2-1/75	PG2-1/75-D	PH00 2,5x75
+	PG2-2	PG2-2-D	PH0 3,0x60
	PG2-2/75	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
	PG4-0X	PG4-0X-D	Tx5x50
	PG4-0	PG4-0-D	Tx6x50
TORX	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
	PG5-0X	PG5-0X-D	TRx5x50
TAMPER	PG5-0	PG5-0-D	TRx6x50
RESIST	PG5-1	PG5-1-D	TRx7x50
(2)	PG5-2	PG5-2-D	TRx8x60
	PG5-3	PG5-3-D	TRx9x60
	PG5-4	PG5-4-D	TRx10x60
	PG5-5	PG5-5-D	TRx15x60

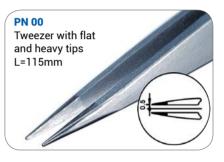
TWEEZER

PN AA Standard Tweezers Fine, robust tips Antimagnetic Acid-resistant L = 130 mm

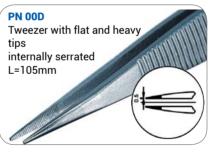
Precision tweezers made out of high quality steels, meet with the standards of the electronic industry. Further models upon request.



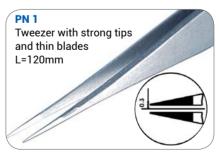


















HIGH TEMPERATURE ADHESIVE TAPES

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

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: <10¹⁰ Ω

Shelf life at 22°C: 6 months



7805.916 Solder masking paste - 215g squeeze bottle **7805.918** Solder masking paste - 5kg in plastic

SOLVENT CLEANING





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

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

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

BRUSHES



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

A range of conductive brushes allows thorough cleaning without the risk of generating static charges. The brush consists of a conductive plastic handle and conductive fibres. Resistance from the tip of the brush to the handle is less than $1\times10^8\Omega$.

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 soft brush 100mm

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: 3m Power supply: 220V - 800W Dust capacity: 1.2 liter







7913.060





WITH STANDARD ACCESSORIES

7913.050 ESD vacuum cleaner

7913.051 ESD vacuum cleaner with electronic speed control

7913.060 Set of 10 special filterbags

7913.062 Micromotorfilter HEPA combined with Electrostatic

charged filtermedia.

7913.066 Flexible rubber nozzle, 34cm with removable brush

WASTE PAPER BIN

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

Waste paper bin, volume 17 litre, ext. dia. 300x330(H)mm 7804,406 7804.405 Waste paper bin, volume 60 litre, ext. 360x360x500(H)mm **7804.405C** Cover for waste paper bin **7804.405**

Waste paper bin made of conductive fibreboard. Rs < $10^6 \,\Omega$

Waste paper bin, volume 120 litre, ext. 400x400x780(H)mm 7804.404

ANTISTATIC WASTE BAGS (PACKAGE OF 100PCS)

Made of antistatic polyethylene, 40 μ m thickness. Rs: 10¹¹ 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** bin



RING BINDER AND WALLETS

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

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



NEWBOX TOTE-BOX

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

CODE	MODEL	EXT. (mm)	INT. (mm)	Vol. (It)
7804.705	NEWBOX 5	300x200x120	260x160x117	5
7804.706	NEWBOX 6	300x200x147	260x160x144	6
7804.709	NEWBOX 9	300x200x220	260x160x217	9
7804.690	NEWBOX 10	400x300x120	353x260x115	10
7804.687	NEWBOX 14	400x300x170	353x260x165	15
7804.688	NEWBOX 20	400x300x220	353x260x215	20
7804.704	NEWBOX 25	400x300x270	353x260x265	25
7804.689	NEWBOX 31	400x300x320	353x260x317	30
7804.692	NEWBOX 15	600x400x075	553x353x070	14
7804.694	NEWBOX 24	600x400x120	553x353x115	23
7804.693	NEWBOX 33	600x400x150	553x353x145	29
7804.698	NEWBOX 34	600x400x170	553x353x165	33
7804.699	NEWBOX 42	600x400x220	553x353x215	42
7804.696	NEWBOX 50	600x400x236	553x353x231	45
7804.695	NEWBOX 55	600x400x280	553x353x275	54
7804.707	NEWBOX 65	600x400x320	553x353x315	63
7804.685	NEWBOX 80	600x400x420	553x353x415	80
7804.713	NEWBOX 130	800x600x320	756x556x297	130



ROLLBOX



7804.691	400 x 300 Conductive Cover
7804.700	600 x 400 Conductive Cover
7804.686	Snapping Closure (2 /each cover)
	Rollbox - 600x400 Conductive Trolley
7804.702	Rollbox (2 wheels with brake)- 600x400 Conductive Trolley
100-1.102	Thombox (2 wheels with brake) 3000x 100 Conductive Holley
7804.923	Spring label holder
7804.931	Logo application
	10mm Conductive Foam FLAT DIVIDER
	for 600x400 Newbox
	10mm Conductive Foam FLAT DIVIDER
	for 300x400 Newbox
	FLAT DIVIDER - Conductive fluted polypropylene LABEPLAST
1000.201	350x5502.5mm for 600x400 Newbox
7806.203	FLAT DIVIDER - Conductive fluted polypropylene LABEPLAST
	350x250x2.5mm for 300x400 Newbox

7804.703 300 x 200 Conductive Cover





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.

LABEPLAST - LABBOX

Useful tote-boxes realized in Labeplast conductive, form and measure personalized upon request. (see page 41)

CUSTOMIZED PRODUCTIONS





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 41).



7806.180	LABEPLAST Divider 552 length 100 height 31 pitch , 17 slits
7806.181	LABEPLAST Divider 350 length 100 height 30 pitch , 11 slits
	LABEPLAST Divider 552 length 155 height 40 pitch , 13 slits
	LABEPLAST Divider 350 length 155 height 153 pitch , 3 slits
	LABEPLAST Divider 552 length 182 height 104 pitch , 6 slits
	LABEPLAST Divider 350 length 182 height 30 pitch , 11 slits
	LABEPLAST Divider 552 length 200 height 31 pitch , 17 slits
	LABEPLAST Divider 350 length 200 height 30 pitch , 11 slits
	LABEPLAST Divider 250 length 200 height 32 pitch,7 slits
	LABEPLAST Divider 552 length 300 height 31 pitch , 17 slits
7806.193	LABEPLAST Divider 350 length 300 height 30 pitch , 11 slits

DIVIPRINT - PLASTIC DIVIDERS

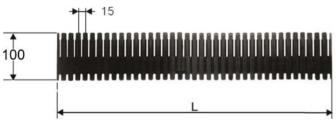
Economical and versatile way to compartmentalise tote-boxes of various dimensions. Ideal for board transport and storage. Made from conductive polystyrene, DIVIPRINT dividers have one division every 15mm, are easy to cut and modify using ordinary scissors.

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 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 $10^6 \div 10^8 \Omega$

Sidewall dimensions: 480 x 290 x 35 mm.

Intermediate wall dimensions:470 x 280 x 40 mm.

Connecting rail: section: 30 x 15 mm. Number of storage channels: 79

Distance between channel centres: 5 mm. Maximum PCB thickness: 2.3 mm max.

Channel depth: 4 mm. Stainless-steel stiffening rib.

Bolts and screws included with sidewalls and intermediate walls.

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 105÷108 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 **7804.075** Bag of 40 spare nuts and bolts

DEPOPRINT

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

Material: black conductive polystyrene

Rs: $<10^5 \,\Omega$

Temperature range: from 0 to +55 $^{\circ}\text{C}$

Number of slots: 32

Distance between slot centres: 10 mm Maximum thickness of the board: 2.3 mm

Depth of the slots: 2.3 mm

7804.751 DEPOPRINT Sidewall 209 mm (H)
7804.760 Aluminium Connecting Rail 95x540mm
7804.762 Aluminium Connecting Rail 95x250 mm
7804.765 Aluminium Connecting Rail 95 mm (H)
7804.759 Insertion Stop





Snap-on insertion of back-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)

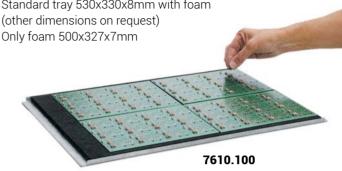
LABEFIX - PCB ASSEMBLY

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 - conductive polyethylene closed cell (cross linked foam density ISO 845 60Kg/m³ thickness 7mm)

Weight: 1Kg

Standard tray 530x330x8mm with foam



7610.100

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

7610.110D Only foam 515x327x7mm

PCB ASSEMBLY FIXTURES



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.





7804.130 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

7805.703 ITECO rack for spools dia. 180-330mm external dimensions 395 x 250 x 65/160(H)mm Movable wire dividers (10 pcs included, 20 pcs capacity) moulded in conductive polypropylene black colour
7805.704 Movable wire divider for 7805.703

7805.692 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, with movable dividers, to lay over tables or inside lockers.

 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

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



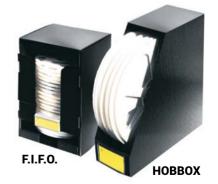
F.I.F.O.

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

7805.711 FIFO box for 180mm dia. spools, useful height 160mm **7805.712** FIFO box for 180mm dia. spools, useful height 280mm 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	Removable lid Box, 1 hard foam, ins. 34x34x12mm
7804.462	Removable lid Box, 1 hard foam, ins. 25x54x14mm
7804.464	Removable lid Box, 1 hard foam, ins. 44x56x14mm
7804.466	Removable lid Box, 1 hard foam, ins. 32x118x14mm
7804.468	Removable lid Box, 1 hard foam, ins. 44x118x14mm
7804.470	Removable lid Box, 1 hard foam, ins. 67x117x14mm
7804.471	Hinged lid Box, 1hard foam, ins. 34x34x10mm
7804.472	Hinged lid Box, 1hard foam, ins. 73x51x16mm
7804.474	Hinged lid Box, 1hard foam, ins. 88x63x16mm
7804.476	Hinged lid Box, 1hard foam, ins. 108x81x16mm
	Hinged lid Box, 1hard foam, ins. 228x125x20mm
	Hinged lid Box, 1hard foam, ins. 228x125x30mm
7804.482	Hinged lid Box, 1hard foam, ins. 228x125x39mm
7805.502	Removable lid, without foam ins. 50x30x16mm
7805.504	Removable lid, without foam ins. 57x36x17mm
	Removable lid, without foam ins. 80x50x27mm
	MOS1 hinged lid, 1 hard foam, ins. 50x90x16mm
	MOS2 hinged lid, 1 hard foam, ins. 95x160x16mm
7805.500	Round with cover ins.diam. 27x13mm, black ESD
7805.499	Round with cover ins.diam. 27x13mm, transparent ESD



7805.502

CASES

7805.500



7805.499

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

7804.496

7804.492

8500.200 Internal dimensions 1/0x130x3/mm	
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 $10^6\text{-}10^9\Omega)$, or orange non antistatic version. Two different sizes are available: 450mm and 600mm

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

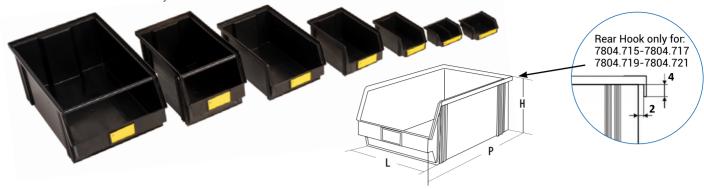
7804.615	Carousel system, 4 trays 450mm dia. Black-ESD
7804.620	Carousel system, 4 trays 600mm dia. Black-ESD
	Carousel system, 4 trays 450mm dia. Orange-non ESD
7804.621	Carousel system, 4 trays 600mm dia. Orange-non ESD



THEMES !

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.



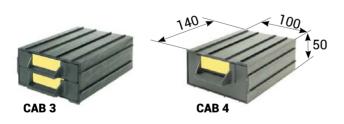
7804.715 Container TECOFIX 6 Dim.: 95(P)x100(L)x50(H)mm ext. 7804.717 Container TECOFIX 6D Dim.: 95x100x50(H)mm ext. with internal partition 7804.719 Container TECOFIX 5 Dim.: 175x100x75(H)mm ext. 7804.721 Container TECOFIX 4 Dim.: 235x145x125(H)mm ext. 7804.723 Container TECOFIX 3Z Dim.: 350x200x145(H)mm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

CAB - CABINETS

These cabinets provide systematic storage of small parts of components which are ESD sensitive.

Four different bins are combined into one slot-in unit, to make possible various configurations.

External dimension of the unit is 50x100x140mm.









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



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

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.













7804.678

7804.677

7804.665

7804.669

Bin			Dividers (optional)				
Code	Туре	Bottom	Outer dim. mmA x B x H	Inner dim. mmA x B x H	Code	Туре	Quantity per bin
7804.676	3010		300x92x82	257x75x70	7804.682	D-10	4
7804.678	3020		300x186x82	257x167x70	7804.684	D-20	4
7804.675	4010	Corrugated	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	А	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	A	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.





7804.651

7804.649 (16-300) 7804.650 (16-400)

7804.648 (12-550) Turntable 3 layers holds 12 cabinets 551/554.

Dim.500x500x1730(H)mm. Load capacity max. 400kg Turntable 4 layers holds 16 cabinets 0830/1630. Dim.700x700x1680(H)mm. Load capacity max. 800kg Turntable 4 layers holds 16 cabinets 0840/1640. Dim.800x800x1680(H)mm. Load capacity max. 800kg 7804.651 (BT-550B) Double stand trolley holds 8 cabinets 551/554. Dim.715x780x1600(H)mm. Load capacity max. 150kg



Code	Type	Frame	Outer dim. A x B x Hmm	Conductive polypropylene bins	Dividers (optional)	
oodc	Турс				Code	Туре
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



PUSH70





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 (SAP507+AT507) ESD Moveable bench H:650-900mm Worktop 500x700mm 4 castors Ø 100mm, 2 with brakes, max. 150kg 8104.731 (SAP710+AT710) ESD Moveable bench H:650-900mm Worktop 700x1000mm 4 castors Ø 100mm, 2 with brakes, max. 150kg PUSH50

ESD mobile table handle (8104.730) depth 500 ESD mobile table handle (8104.731) depth 700

LT507 ESD Extra shelf 418x700 ESD for (8104.730) SAP507 ESD trolley

LT710 ESD Extra shelf 618x1000 ESD for (8104.731) SAP710 ESD trolle

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.



Storage cabinet with 6 drawers MOD20 ext.275 x 250 x 190(H)mm
Accessories / Spare Parts
Drawer MOD20, internal 261 x 238 x 20(H)mm
Rim-frame MOD20
Base-foundation (1 each cabinet), MOD.20
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	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
	Drawer MOD62, internal 340 x 250 x 62(H)mm
7805.430	Rim-frame, MOD.62
	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
	42 round compartments Ø 27 mm

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

6 compartments 56x78 mm
5 compartments 44x62 mm
2 compartments 36x42 mm
2 compartments 75x77 mm

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

They also can be used in drawers 62mm height

3 compartments 80x332 mm
6 compartments 80x165 mm
9 compartments 78x108 mm
12 compartments 78x78 mm
16 compartments 57x81 mm
19 compartments 50x44 mm
+ 1 compartment 92x50 mm
+ 1 compartment 188x50 mm
+ 1 compartment 237x50 mm
25 compartments 46x63 mm
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

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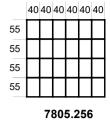
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7805.258

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7805.254



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7805.180

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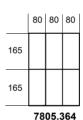
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7805.376					

7805.368

	116	116			
160					
160					
7805.440					

	1005,312			
	75	75	75	
160				
160				
	7805.442			

	7805.374				
	75	75	75		
105					
105					
105					
	7805,444				

	7805.376				
	71	71	71		
75					
75					
75					
75					
	7805.445				

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

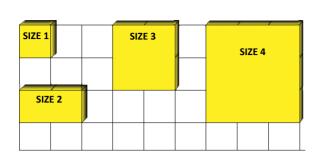
Standard cups for drawers 62mm height (storage cabinet mod. 62)

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.267x355x105(H)mm
	customizable with the choice of SNAPBOX1-2-3-4



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 47 x100mm
7804.920 Label Holder, with label 60 x 140mm
```



LABELS

7807.100	"ATTENTION" Adhesive label, ESD (A) 38xT6mm(T000pcs.)
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 (B) 5x5mm(1000pcs.)
	ESD "SUSCEPTIBLE" symbol only, Adhesive label (B) 13x13mm(1000pcs.)
7807.114	SD "SUSCEPTIBLE" symbol only, Adhesive label (B) 50x50mm(1000pcs.)
7807.11	ESD "PROTECTIVE" symbol only, Adhesive label (C) 12.5x12.5mm(1000pcs.)
	ESD "PROTECTIVE" symbol only, Adhesive label (C) 50x50mm(1000pcs.)
7807.158	"EARTH BONDING POINT" Adhesive label (D) 25x45mm(10pcs.)









SIGNS

7807.148	"ESD PROTECTED AREA"	Self-adhesive yellow PVC 300x150mm
7807.149	"ESD PROTECTED AREA"	Rigid yellow PVC 300x150mm
7807.150	"AREA PROTETTA ESD"	Self-adhesive yellow PVC 300x150mm
7807.152	"AREA PROTETTA ESD"	Rigid yellow PVC 300x150mm
7807.154	"ESD PROTECTED AREA"	English, rigid PVC 600x300mm
7807.154H	"H.V. ESD PROTECTED AREA"	English, rigid PVC 600x300mm
	"AREA PROTETTA ESD"	Italian, rigid PVC 600x300mm
7807.155H	"A.T. AREA PROTETTA ESD"	Italian, rigid PVC 600x300mm
7807.156	"ZONE PROTEGEE CONTRE LES ESD"	' French, rigid PVC 600x300mm
7807.157	"ESD GESCHÜTZTER BEREICH"	German, rigid PVC 600x300m





Use where there are potentials > 250Vac

EPA RETRACTABLE BELT BARRIER

System to delimit an EPA area in an easy and safe way. The belts are printed on both sides with the indication: "ESD PROTECTED AREA"

Belt barrier post

Powder coated steel post, colour: yellow Plastic coated steel base colour: black Base diameter: 350mm

Post height: 1020mm Weight: 10.3 Kg



7807.953 Belt barrier post, single belt, belt length 3m

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	taglia XS
7807.502	Dissipative Overall, WHITE colour	taglia S
7807.503	Dissipative Overall, WHITE colour	taglia M
7807.504	Dissipative Overall, WHITE colour	taglia L
7807.505	Dissipative Overall, WHITE colour	taglia XL
7807.506	Dissipative Overall, WHITE colour	taglia XXL
7807.507	Dissipative Overall, WHITE colour	taglia XXXL
7807.511	Dissipative Overall, LIGHT BLUE	taglia XS
7807.512	Dissipative Overall, LIGHT BLUE	taglia S
7807.513	Dissipative Overall, LIGHT BLUE	taglia M
7807.514	Dissipative Overall, LIGHT BLUE	taglia L
7807.515	Dissipative Overall, LIGHT BLUE	taglia XL
7807.516	Dissipative Overall, LIGHT BLU	taglia XXL

DISPOSABLE COATS

TNT 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



POLO-SHIRTS UNISEX

Features

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

Polo T-Shirt		
7807.708	size S	
7807.710	size M	
7807.712	size L	
7807.714	size XL	
7807.716	size XXL	



ESD FLEECE

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

Features:

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



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

DISSIPATIVE BADGE HOLDER

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

7807.901 Soft Badge holder with clip **7807.902** Rigid Badge holder with clip



GLOVES

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

7804.997 Dissipative nylon gloves, small size

7804.998 Dissipative nylon gloves, medium size

7804.999 Dissipative nylon gloves, large size

7805.000 Dissipative nylon gloves, XL size

VINYL Made in dissipative VINYL are suitable for use in white chambers. Electrostatic decay time <2sec. Rα: ≤ 10⁸Ω

7805.006 Dissipative VINYL gloves small size (100 pcs).

7805.008 Dissipative VINYL gloves medium size (100 pcs).

7805.010 Dissipative VINYL gloves large size (100 pcs).

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

7805.001 Dissipative fabric GLOVES small size

7805.002 Dissipative fabric GLOVES medium size

7805.003 Dissipative fabric GLOVES large size



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

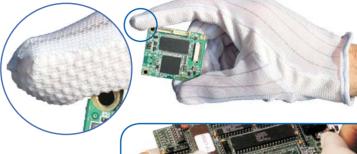
7805.014 Dissipative finger cots size M, 1440 pcs/packing

7805.015 Dissipative finger cots size L, 1440 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 $35M\Omega$ are preferred. A disposable heel grounder is available, ideal for plant visitors or anyone requiring a temporary grounding device. (expected life of 1 day)

7804.200 Disposable Heel grounder (pack of 100)

7804.201 Disposable Heel grounder Dispenser

7804.202 Heel grounder with 2 M Ω resistance

7804.203 Toe grounder with 2 M Ω resistance

DISPOSABLE SHOE COVERS

Shoe Covers are used in hospital, clean rooms, and other industrial facilities. Are made by disposable blue TNT material, includes carbon conductive cord, cannot be washed. Rg: 10^5 - $10^7\Omega$ Suitable up to shoe size 44

7807.850 Light blue ESD shoe cover, 100 pcs packing

DISSIPATIVE FLOOR COATING

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

First treatment:

- -well wash the floor with the stripper -rinse with clean water.
- -when dry apply two thin coats on the floor.

(Yield: 1lt. for approx. 25m² per 2 coats)

Ordinary Maintenance:

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

Maintenance with spray:

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

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

7805.876 LIQUID COAT, 5 Kilos unit

STRIPPER

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. (Specific for 7805.876)

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: $< 10^{11} \Omega$

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 coa-

ts 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: $10^6\Omega \div 10^8$ Ω

7805.856 FLOORPOX PRIMER

Epoxy primer for bare concrete floor
12 litre unit (6 litres base + 6 litres activator)
Coverage: 16m²/litre per coat (we recommend 2 coats)



FLOOR MARKING TAPE

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

7807.172 PVC adhesive tape, ESD Protected Area floor marking

VINYLAB - FLOORS

VINYLAB is a resilient, permanently static-dissipative control flooring developed for facilities where static discharge may cause damage to sensitive electronic devices. The VINYLAB mat meets the requirements for floors in standard IEC61340-5-1, the "Combination Resistance" with appropriate shoes is $35M\Omega$. 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.





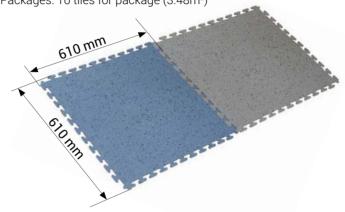
VINYLAB - INTERLOCKING FLOOR TILE

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: 610 x 610 x 4 mm Coverage: 590 x 590 x 4 mm Weight: 6kg/m².

Packages: 10 tiles for package (3.48m²)



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

ECO V4 CONDUCTIVE GLUE FOR MATS

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

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

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 dissipative coloured layer, glare free surface, has a Rsurface from 10^7 to 10^9 Ω .

7804.152 grey orange peel 7804.153 sky-blue orange peel 7804.154 beige orange peel

LABESTAT 2 layers dissipative COLOURED / conductive BLACK

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

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

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



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 ≤ $10^9 \,\Omega$
- Point to ground resistance Rg $\leq 10^9\,\Omega$
- 1 adjustable wrist strap + 1 grounding cord 3m length

7804.195 Field service kit



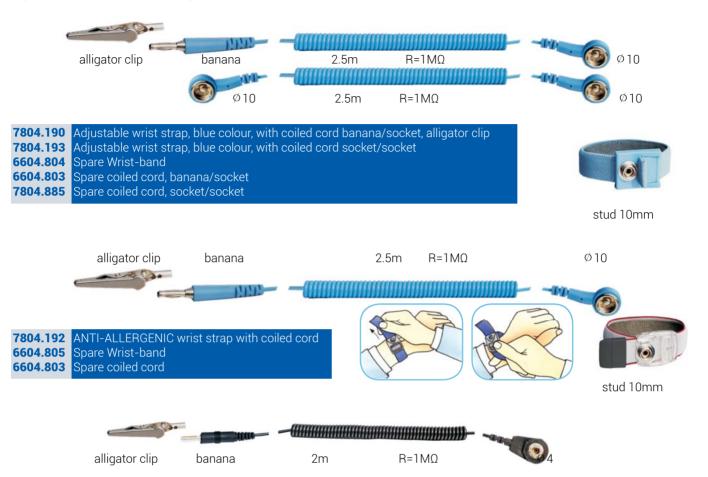
ELECSTAT-109 ESD CLEANER

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 < $10^{11}\Omega$

7805.894 Bottle, 0.5 litre spray **7805.896** 5 litre Can

WRISTSTRAP

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



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

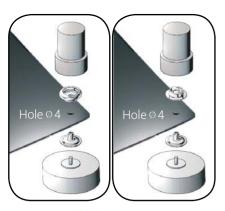
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EARTH BONDING POINT

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

7804.896 EBP BOXthree 4mm shrouded plug sockets **7804.898** EBP BAR three 4mm shrouded plug sockets EBP BAR three studs Ø 10mm

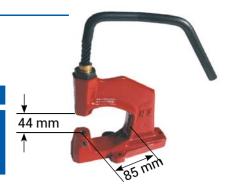




GROUNDING ACCESSORIES

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

7804.811	Eyelets manual press
	Ø 10mm socket (2 parts)
7804.809	Punch and Anvil for sock
7804.804	Ø 10mm stud (2 parts)





7804.870



7804.815

7804.814



7804.818

7804.805



Punch and Anvil for stud M



7804.797



7804.816 7804.873

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=1MΩ	(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
	()		

(C1)**Cables** (C2)



Plugs

LABEPLAST

CONDUCTIVE FLUTED POLYPROPYLENE

LABESTAT is an extruded conductive polypropylene that offers strength, durability and appearance superior to the







Small parts holder in conductive labeplast



Pencil holder in conductive labeplast

CUSTOM BOXES AND DI-VIDERS 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 LABBO\XC1 Cover for LABBOX30/50



Diviprint

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LABEPLAST REELS BOXES

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. (>>>See page.25)

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. (>>>See page.25)

CUSTOMIZED PRODUCTIONS

Customized creations in conductive labellast are possible, based on a project or customer specifications. The numerical control cutting machine allows the creation of 3D objects.

FOAM - CUSTOM CUTTING FOR PACKAGING



ANTISTATIC SOFT PINK FOAM

Use: cushioning purposes Material: polyurethane with additives, density:30Kg/m³ Rs <10 $^{12}\Omega$

7804.161 1m x 1.5m sheet, thickness 6mm **7804.162** 1m x 1.5m sheet, thickness 10mm



Use: cushioning purposes

Material: polyurethane with additives, density: 30Kg/m³

 $Rs < 10^6 \Omega$

7804.168 1m x 1m sheet, thickness 6mm 7804.170 1m x 1m sheet, thickness 10mm

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

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



CONDUCTIVE HARD BLACK FOAM

Use: insertion of component leads Material: polyurethane with additives, density: 65Kg/m³ Rs <10⁵O

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 Material: polyethylene with additives, density: $60 Kg/m^3$ Rs $<10^6 \Omega$

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



ANTISTATIC HARD PINK FOAM

Use: cushioning purposes Material: polyethylene with additives, density: $27Kg/m^3$ Rs $< 10^{12}\Omega$

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

Custom hard foam packaging is available for Newbox (page 21) and labeplast boxes (page 22)

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

MBB with Too Much (Full) Evacuation

7914002T

-MBB with Recommended Light Air Evacuation

Vacuweld >> Pag.49

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

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.

J-STD-033 doesn't require vacuum for dry-pack. Light air evacuation may be

ESD MOISTURE BARRIER BAGS (METAL-IN)

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

MIL-B-81705C class1 TC1 SBM356

Thickness: 85 µm

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

Rs: $< 1x10^{11} \Omega$

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: $150\mu m$

Film complying: JEDEC-STD-033

Rs: $< 1x10^{11} \Omega$

Electrostatic decay: < 0,1 sec

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

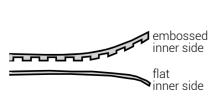
Packaging of 100pcs

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	Embossed	Flat
short side (mm)	85µm	95µm
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	-

PLURIBALL ESD

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

Electrostatic decay: < 2 sec

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

Colour: transparent green

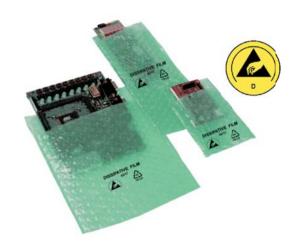
7804.184 Dissipative bubble pack roll 0.5meters x 200meters **7804.185** Dissipative bubble pack roll 1meter x 200meters

DISSIPATIVE BUBBLE PACK BAGS

Provide superior protection against physical damage during shipping and storage.

Opening x depth	Closing pad
100 x 180mm	30mm
130 x 185mm	30mm
180 x 230mm	30mm
250 x 250mm	NO
280 x 360mm	30mm
300 x 480mm	30mm
	100 x 180mm 130 x 185mm 180 x 230mm 250 x 250mm 280 x 360mm

9 m<u>m</u>



POLYETHYLENE TUBING

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



PACKING TAPE

7807.121 Antistatic PAPER adhesive tape - yellow with ESD symbol Paper tape with water-based acrylic adhesive - 50mm wide, 50m long roll

7807.170 PVC adhesive tape yellow with ESD symbol

Conventional PVC auto adhesive tape - 50mm wide, 66m long rol



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 μ m Transparency: 40%

Surface Resistivity:

- -inner layer (polyethylene): $< 10^{11} \Omega$
- -intermediate layer (metal): $< 10^2 \Omega$
- -outer layer (polyester): $< 10^{11} \Omega$

I sur-

ZIPLOCK (zippered recloseable bags)

150 x 250 mm (6" x 10")

7804.290 100 x 150 mm (4" x 6")

7804.304 250 x 300 mm (10" x 12")

7804.306 300 x 400 mm (12" x 16")

7804.296

opening x depth

7804.268	76 x 127 mm (3" x 5")
	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")
	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 $\mu \rm m$ 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 A100 (PACKAGE OF 100PCS)

Material: Polyethilene, green colour amine-free, heat sealable, recyclable Print: ESD and Recycle logos, production batch

Thickness: $100 \mu \mathrm{m}$

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

7807.183

7807.179 Clear Dissipative Tape 12mm x 30m Clear Dissipative Tape 24mm x 36m

7807.183 ESD (Rs: 10^{5} - $10^{9}\Omega$) Tape Dispenser for 25mm wide tapes with 75mm core.



HAND HELD CRIMPER SEALERS

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 SEALERSS

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	Х	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	Х	500	550	7



HAND SEALERS (MEDICAL PACKAGING)



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	white	200	1000	6,5
7914.216	stainless steel	300	1200	8



HAND SEALERS

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



AUTOMATIC HEAT SEALERS 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 7914.165 7914.166

7914.165

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

VACUUM PACKING MACHINES

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 (<u>Vacuum %</u>), controlled by an internal vacuum sensor.

VACUWELD VENTURI PUMP (COMPRESSED AIR)

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 External dimensions: 800x650x270(H) mm

Air requirements: 6nl/s at 6 ATM Power supply: 230V/50Hz 1kW





The Vacuwelds allow you to store up to 10 welding programs to quickly set the desired parameters.

VACUWELD OIL PUMP

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

Maximum vacuum level 98%

(measured at the sea level)

Seal length: 450 x 5 mm

Vacuum pump: Oil bath, 20m³/h.

Chamber capacity: 450x500x900(H) mm External dimensions: 615x726x970(H) mm

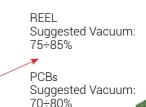
Power supply: 230V/50Hz 2kW

7914.275 Vacuum tank sealer, venturi pump **7914.278** Vacuum tank sealer, oil pump

7914.279 Vacuum tank sealer, oil pump with inert gas injection

NOTE: Compared to the adjustment of the suction time and the visual control, the adjustment of the vacuum percentage (Vacuum%), which can be set by all Vacuweld heat sealers, guarantees maximum repeatability and precision in packaging.

These are the values we recommend to avoid excessive pressure of the envelopes on the SMD and PCBS coils, which could cause breakage or dangerous deformations.





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





The vacuum (Vacuum Time) time can be preset or manually decide when to start the sealing cycle by pressing the SEAL button.

7914.340 Manual vacuum bag sealer, external aspiration.

Unfortunately, the ESD barrier bags used in Electronics to make the Dry Pack of MSD components according to the Jedec J-STD-033D standard, are not available in the embossed type, ie with internal knurling, useful

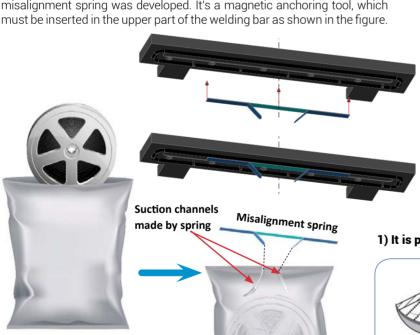
extraction. Therefore they normally require the use of vacuum chamber packaging machines (internal aspiration).

For their use with with external aspiration vacuum packaging machines, the misalignment spring was developed. It's a magnetic anchoring tool, which

Technical features: Seal length: 450 mm Soldering jaws: 2 x 6mm Vacuum pump: Dry, 5m³/h

Noise: <65dB

External dimensions: 490x390x220mm Power supply: 230V/50Hz - 600W



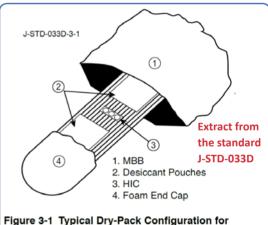
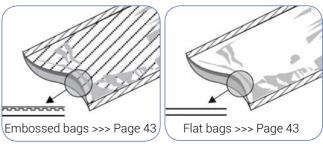


Figure 3-1 Typical Dry-Pack Configuration for Moisture-Sensitive SMD Packages in Shipping Tubes

1) It is possible to use both flat and embossed bags



Hook the misalignment spring when using the flat barrier bags, remove it with the embossed barrier bags.

WORKBENCHES TPH (ESD)

Workbench with upright profiles and a laminate shelf, depth 310 mm height adjustment 1080 to 1550 mm

Worktop height adjustment with allen-key, between 650 - 900 mm

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

lecofix >>> 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 KT150 KT180 CC12

C-profile bar, for bench 1200mm C-profile bar, for bench 1500mm

C-profile bar, for bench 1800mm

Cable clip set (5 pcs)



SWIVEL ARM WITH TRAY

CKV400ESD

Swivel arm with tray of dimension 210 x 460mm. Load 15kg



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



WORKBENCHES TP (ESD)

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.



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 852185-49 Extra shelf with brackets



CONCEPT ERGO (ESD) WORKBENCHES

- Multiple bench variations with advanced ergonomic features. ideal for quality control and assembly environments
- · Highly adaptable to various applications and user needs
- Wide range of accessories for easy reconfiguration
- Excellent stability, suitable for heavy loads; allen key bench up to 500 kg. electric bench up to 400 kg

Select the height adjustment method: allen key or electric.

Height adjustment range: 700-1100 mm

Steel frame parts finished with light grey epoxy coating, RAL 7035. Bench tops made of semi-conductive (ESD) laminated chipboard, 25 mm thick

Adjustable feet provided for fine levelling. Spacer bar included as standard with electric height adjustable benches.



CE15075-49 CE18075-49 101 49 032 101 49 033 CE15075EL-49 CE18075EL-49 TT15075-ESD

TT18075-ESD

Concept Ergo allen key adjustable bench frame ESD 1500x750, max load 500 kg (1) Concept Ergo allen key adjustable bench frame ESD 1800x750, max load 500 kg (1)

Concept workbench frame ESD, hand crank adjustable Dim 1500 x 750 mm. Max. Load 200 Kg (2) Concept workbench frame ESD, hand crank adjustable Dim 1800 x 750 mm Max. Load. 200 Kg (2)

Concept Ergo electric adjustable bench frame ESD 1500x750, max load 400 kg (3)

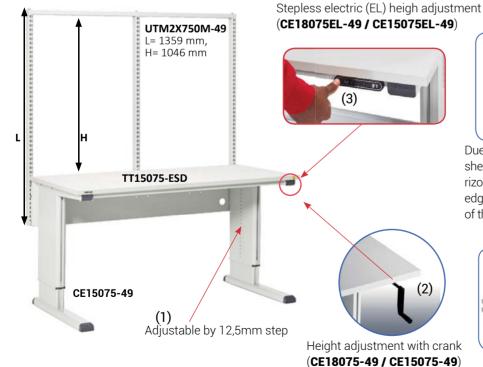
Concept Ergo electric adjustable bench frame ESD 1800x750, max load 400 kg (3)

ESD bench top 1500 x 750, light grey

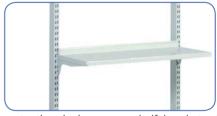
ESD bench top 1800 x 750, light grey

UTM2X750M-49 Upright tube module ESD 2xM750 (for bench frame 1500 x 750) L=1359mm, H=1046mm UTM2X900M-49

Upright tube module ESD 2xM900 (for bench frame 1800 x 750) L=1359mm, H=1046mm



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



Due to the dual-purpose shelf brackets, the shelf 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, depending of the use of the shelf.

859151-49 / 859152 -49



Space saving bin rails ensure an ergonomic working position.





Design your workstation with the 3D Configurator

TPR7-001 / TPR9-001



Cable channel with switch, 5/6 schuko socket and 2 USB socket

93049002P



LCD screen holder, suitable for VESA 75 and 100 standards

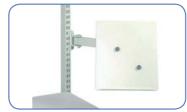
CPU holder for Concept Ergo. The CPU holder can be mounted on either the inner or outer side of the bench leg, offering flexible installation

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

CPUCE-49



Extension for curved bin rail ESD 770x54 with arm.

861511-49 / 861516-49



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

TPR9-001

860941-49



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

92949002P



Max load 15 kg Curved bin rail with arm can be equipped with an extension bin rail.

Curved bin rail ESD 770x54 with arm.

Optional accessories

Dim 836x44x(H)52 mm (for module M900)

836028-49 Steel shelf ESD Width mm 740 Depth mm 300 Max load 50 kg (for UTM2X750M-49) Steel shelf ESD Width mm 890 Depth mm 300 Max load 50 kg (for UTM2X900M-49) 852283-49 Steel shelf ESD Width mm 890 Depth mm 400 Max load 50 kg (for UTM2X900M-49) 852769-49 Steel shelf ESD Width mm 740 Depth mm 400 Max load 50 kg (for UTM2X750M-49) 852770-49 859151-49 Bin rail ESD M750 742x100 Bin rail ESD M900 895x100 859152-49 Keyboard tray ESD 480x260 for LCD holder Width mm 480 Depth mm 260 Max load 5 kg 860941-49 Perforated back panel Width mm 718 Depth mm 16 Height mm 389 861511-49 Perforated back panel Width mm 878 Depth mm 16 Height mm 389 861516-49 Adjustable rails to mount on the upright tubes (for frame UTM2X750M-49) 91849006P Adjustable rails to mount on the upright tubes (for frame UTM2X900M-49) 91849008P 92849008P Document holder A4 ESD dim. 290x330mm, with a double arm of lenght 200+200 mm. Max load 5 kg 92949002P Curved bin rail ESD 770x54 with arm 860911-49P Extension for curved bin rail ESD 770x54 with arm LCD screen holder ESD with double arm. Max load 15 kg. Suitable for VESA 75 and 100 standards 93049002P CPU holder for Concept Ergo, dim. 180-225 x 450 x 50, max load 20 kg. CPUCE-49 **TPR7-001** Power supply channel with switch, 5 schuko socket and 2 USB socket. 4,5 m cable is included. Dim 684x44x(H)52 mm (for module M750)

Power supply channel with switch, 6 schuko socket and 2 USB socket. 4,5 m cable is included.

ACCESSORIES COMPATIBLE WITH ALL WORKBENCHES

CABLE CHANNEL

TPR4-001 Cable channel with switch, 6 schuko socket and 2 USB



Fixed on table top

FOOTREST ESD

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

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



860947-49

Footrest ESD with adjustment

TRESTON INTOLITE LED 850



LED Lamp, 1800 Lux, L=8500mm L=900mm

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.



TNL900

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

STEEL CABINET 45

Suitable for TP/TPH/WB/Concept 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).



	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	450x520x760

CLEANROOM ITEMS

Among the technical furniture items produced and marketed for industry, those intended to be used in cleanrooms are particularly important. Cleanrooms are classified based on the level of cleanliness achieved and maintained, so the quality of the materials used becomes a fundamental requirement. Possible abrasions resulting from friction between solid surfaces, such as the movement of boxes across worktops or storage areas, can promote the dispersion of particulate matter. If the surface characteristics of a technical furniture change as a result of the action of chemicals, a typical example being the formation of rust, the resulting dispersion of these products into the environment can impact the most delicate production processes. To limit the problems arising from the use of unsuitable technical furniture, Iteco offers a carefully selected product line to be used in cleanroom environment.

METRO PRODUCT LINE FOR CLEANROOM

Since 2024, Iteco Trading has become official partner and distributor of METRO Shelving & Productivity Solutions, a leading US manufacturer of technical furniture for industry. Among the various products produced by METRO and marketed by Iteco, those intended to be used in cleanrooms are particularly important, where quality is a fundamental requirement to prevent the dispersion of contaminating microparticles. Our decades of experience in the safe management of electrostatic-sensitive components allows us to recommend the use of antistatic furniture and equipment in cleanrooms to prevent contaminant deposits retained by electrical polarization. The Metro technical furniture product line meets this requirement with items made of stainless steel or treated with chrome plating processes. Finally, we strongly recommend combining them with the cleanroom accessories line proposed on page 57 to further ensure environmental cleanliness.

METRO TABLEWORX

The TableWorx serie is a modular platform of high-performance work tables, designed to provide fully customizable solutions. Constructed entirely from Type 304 stainless steel, these tables feature a reinforced work surface with hat channels and 90-degree turned-down edges on all sides for a sleek and functional finish. Available in adjustable heights (ranging from 86.4 cm to 99.1 cm), these tables are ideal for both stationary setups, with leveling feet, and mobile applications, with optional caster compatibility. Additionally, accessories like backsplashes, overhead shelves, and grids allow you to optimize every inch of space, enhancing productivity and comfort. Built to last and engineered for versatility, TableWorx are the perfect choice for professional performance and tailored solutions.





TWS3060SI TWS3072SI ESDTWS-KIT

TableWorx Strationary in Stainless Steel 304 - Dimension: 762x1524mm TableWorx Strationary in Stainless Steel 304 - Dimension: 762x1829mm

Kit to ground the stationary TableWorx from top to feet

METRO TABLEWORX PRODUCTIVITY RISER

Enhance the efficiency of your workspace with the Metro TableWorx Productivity Riser, designed to optimize the performance of your table. This riser features a SmartWall grid 610 mm high, in 304 stainless steel The SmartWall grid is compatible with a wide range of accessories, including hooks, baskets, and shelves (sold separately). Its hanging rail also doubles as a bin holder along the full length of the table. The riser mounts at the rear of the table, staying entirely within its footprint to maximize workspace efficiency. In alternative they can be mounted in the middle of the table to create two opposite working places. Please note: TableWorx productivity risers are exclusively compatible with TableWorx work tables and can be easily added or removed as needed.



METRO STAINLESS STEEL DRAWERS

The stainless steel drawers are crafted from 304 stainless steel, ensuring a sturdy, no-flex design. With compact dimensions and a weight capacity of up to 16 kg per drawer, they can be stacked up to 3 units high. They offer flexible mounting options: right, center or left. The drawers are easy to remove, equipped with heavy-duty ball bearing slides, and feature a flush front that aligns with the work surface. The Add-a-Drawer system allows for customized configurations.



TWDR6-30 TWDR6-ADD Base Drawer for TableWorx 508x508x154(H)mm in SS304 Additional Drawer for TableWorx 508x508x154(H)mm in SS304

CLEANROOM ACCESSORIES LINE

ESD 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 7913.171 DCR-PAD Block of 50 adhesive paper sheets dim.: 240x333mm



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°Ω

Dissipative Polyester film: 100 µm thickness Dissipative acrylic adhesive: 12 µm thickness Release Not ESD film: 23 µm thickness

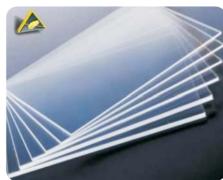
7809.042 Self-adhesive polyester film 1000mm x 100m roll Custom size on request



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: 108 a 1010Ω

METRO PRODUCTS FOR CLEANROOMS

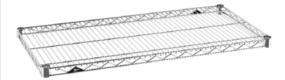
The Super Erecta® wire shelving features an innovative open wire design that reduces dust buildup, promotes air circulation, and improves visibility and light penetration. Constructed from heavy-gauge carbon steel or Type 304 stainless steel, these shelves are built for durability and available in various finishes to suit different environments, including rust-resistant Metroseal™ Epoxy with Microban® protection. Their versatile design allows for numerous configurations, easy assembly without tools, and adjustable shelves at 1" intervals, making them perfect for evolving storage needs. Shelves can be accessed from all sides, maximizing space utilization, while adjustable feet ensure stability on uneven surfaces.

Load Capacity: Shelving Unit: 900kg

Shelf: 360kg (up to 1220mm wide) 270kg (from 1525mm wide)

SHELF	SHELF DIM. (mm)	VINYLAB MAT
1436NC	350x910mm	8104.140
1448NC	350x1220mm	8104.141
1836NC	455x910mm	8104.142
1848NC	455x1220mm	8104.143
1860NC	455x1525mm	8104.144
1872NC	455x1830mm	8104.145
2436NC	610x910mm	8104.146
2448NC	610x1220mm	8104.147
2460NC	610x1525mm	8104.148
2472NC	610x1830mm	8104.149

METRO SUPER ERECTA WIRE SHELF. CHROME





METRO SUPER ERECTA STATIONARY POST, CHROME

Equipped with an adjustable leveling bolt to stabilize on uneven floors. Height includes leveling bolt (fully tightened) and cap; bolt adjusts up to 0.5" (13mm). Foot plates can be ordered separately. Replacement parts available for leveling bolts and caps.



SUPER ERECTA SMT REEL SHELVING

SMT component Reel Shelving offers an efficient method of storage and transport for standard size component reels. These SMT reel shelves can be mixed with standard Super Erecta shelving, posts and casters to create a reel handling and storage system to address the exacting needs of PCB manufacturers. 15-reel capacity for 330mm — 381mm reels. 78-reel capacity for 180mm reels.



Load Capacity: Shelving Unit: 900kg Shelf: 360kg (up to 1220mm wide) 270kg (from 1525mm wide)



R1836BR-13

Super Erecta SMT Reel Shelf 455x910mm for 180mm reel Super Erecta SMT Reel Shelf 455x910mm for 330mm reel

OTHER ACCESSORIES FOR SHELVING AND CARTS

LABEL HOLDER

This black PVC rail securely snaps onto wire shelves, providing a stable label display solution.

8104101

Black (no ESD) PVC rail 80mm with yellow label

SIDE LEDGES (STACKABLE)

Prevent items from protruding or falling from shelves. Ledges may be stacked to form an 8" (203mm) or higher barrier. Compatible with wire shelving only.

L18N-4C 455x100(H)mm **L24N-4C** 610x100(H)mm **L30N-4C** 760x100(H)mm

SHELF DIVIDERS

Designed for Super Erecta and Super Adjustable shelves, these sturdy, pressure-fit dividers help keep shelf contents organized. Available in 203mm heights, they come in Chrome, Metroseal Green (K3) with Microban, Metroseal Gray (K4) with Microban, and Stainless Steel finishes. Note: dividers are not stackable.

DD18C 455x203(H)mm 610x203(H)mm

"S" HOOKS



S-Hook Used to eliminate two posts per adjacent unit. Sold individually. Two are required per shelf.

9995Z

S-Hook



L18N-4C

ALUMINUM SPLIT SLEEVES



For high temperature, over the road, or ESD applications. Including zinc retainer rings. One bag required per shelf.

4 per bag.

9986 Z

8104.062

Manicotti

CASTERS - U-HANDLE - POST









H₃C

METRO CARTS - CHROMED OR IN STAINLESS STEEL SS304

The Super Erecta® utility carts are versatile, heavy-duty solutions ideal for transporting materials in various environments. With customizable configurations of wire shelves, casters, and integrated handles, they're available in 2 or 3 shelves models and multiple sizes. Choose from three finishes: stainless steel for wet or corrosive environment, chrome for dry environment, and economical Super Erecta Brite for standard applications. Featuring a modular design for easy assembly and quick shelf adjustments, these carts offer high maneuverability and durability, with open-wire construction that maximizes airflow and visibility while minimizing dust. Load Capacity per Cart: 450kg

They can be made with handle uprights or standard uprights. Maximum trolley load: 450 kg.

Composition A:

2 U-handles.

1 set of castors,

3 shelves

3 Set of split sleeves

Composition B:

1 handle,

4 posts, 1 set of castors

2 shelves.

2 Set of split sleeves

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.

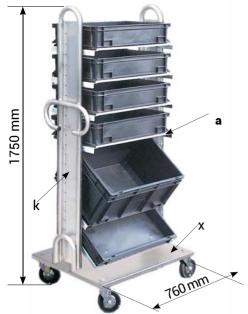
Set of 4 ESD castors Ø125mm (2 with brake).

The Trolley is available in 2 versions:

- The TRTA / 2 version (figure D) has 2 shelves dim. 800x430. Load max. 150kg.
- The TRTA / 4 version (figure E) has 4 shelves dim. 1000x530. 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.

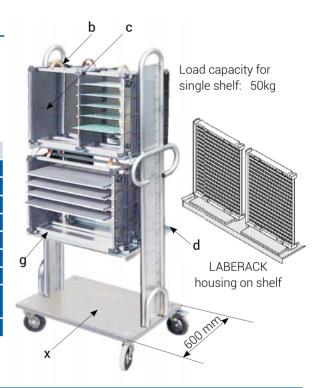
code	description	fig.	Qnt.
8100.050	Stainless steel baseplate with castors	Х	1
8100.054	Stainless steel lateral support post	Н	
8100.055	Stainless steel lateral post with handle	K	2
8100.056	A4 document holder	J	
8100.065	P370 shelf 370x630mm NEWBOX tote boxes (cat. page 22)	а	6 in figure
8100.066	P600 shelf 600x630mm		

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:

	description	fig.	n.
8100.050	Stainless steel baseplate with conductive castors	Χ	1
8100.054	Stainless steel lateral support post	Н	
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	С	
7804.017	LABERACK intermediate wall		
7804.002	LABERACK aluminium bar (600mm lenght)	g	
7804.021	LABERACK handle for transport (rail fixing)	b	



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

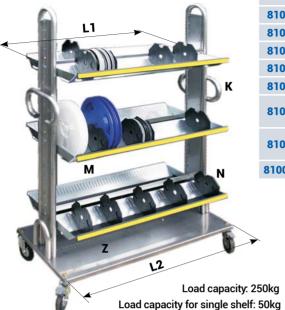
8104.695 ESD wheel kit, Φ 125mm (2 with brake)

8104.696 NON-ESD wheel kit, Φ 125mm (2 with brake)

CHARIOTTE SMD REEL HOLDER

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.



	description	ref.	n.
8100.050	Stainless steel baseplate with castors, 600x760(L2) mm	Х	
8100.049	Stainless steel baseplate with castors, 600x1130(L2) mm	Ζ	1
8100.054	Stainless steel lateral support post	Н	
8100.055	Stainless steel lateral support post with handle	К	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	М	3
8100.075P	Divider for SMD reels	Ν	







8100.055

8100.054

8100.056

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) Dim. 1100 x 530 x 1780(H)mm

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

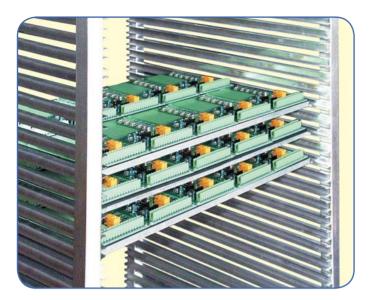




SMD REEL HOLDER

The Wire Reel Holders can be combined with the standard wire shelves and posts. (see page 60)

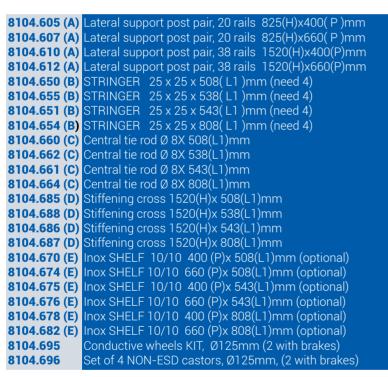
8104.012 WIRE SHELF for 180mm SMD reels - 455x910x95(H)mm. Slot opening 16mm - Reel capacity /shelf: about 80 8104.013 WIRE SHELF for 330/380mm SMD reels - 455x910x108(H)mm. Slot opening 50mm - Reel capacity /shelf: about 13

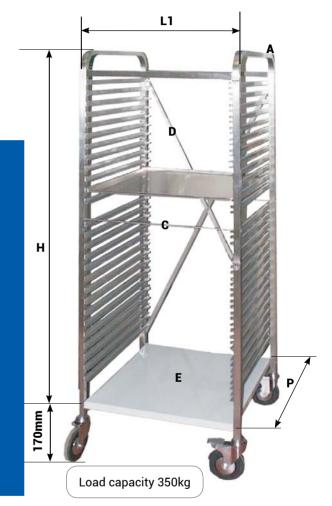


Supporting structure made of tubular AISI 304 stailless steel. C - shaped tray control guides, made of stainless steel with back stops. Wheelbase 32mm

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





P Welded corners Anti-injuries lap

ALUMINIUM TRAYS

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

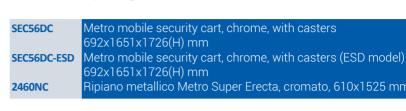
Code	S	H	L2xP	L1
8104.580	1.2	12	500x330	508
8104.582	1.2	12	500x390	508
8104.584	1.2	15	500x650	508
8104.587	1.2	12	535x290	543
8104.588	1.2	12	535x600	543
8104.592	1.2	15	800x330	808
8104.594	1.5	15	800x390	808
8104.596	1.5	16	800x650	808

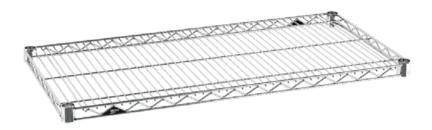
SECURITY CARTS Metro Mobile Security Shelving

Super Erecta® security units provide safe storage and protect valuable materials and sensitive items from theft or loss. The heavy-gauge open wire construction ensures full visibility of the contents, making inventory checks easy. Optional, adjustable intermediate shelves adapt easily to changing needs, thanks to a patented system that allows adjustments in 2.5 cm increments

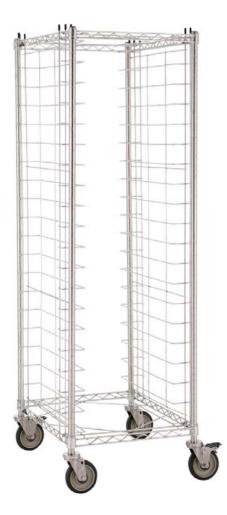
along the entire height of the post.

Available in stationary or mobile versions, the mobile units ensure secure transportation and facilitate the cleaning of storage areas. Designed for quick assembly and shipped knocked down to reduce freight costs, the units include 12.7 cm pivoting casters without brakes.





TRAY-CARTS Metro End-Load Wire Tray Rack



The SmartTray system is engineered to improve productivity, minimize damage during PCB handling, and provide superior ESD protection. It accommodates boards of various sizes, ensuring safe and efficient management of sensitive components. The tray racks, made from corrosion-resistant type 304 stainless steel, are easy to clean and designed to hold up to 20 standard 46x66 cm trays. Their durability makes them perfect for demanding work environments. Additionally, the carts are compatible with all industrial cleaning devices, supporting a weight capacity of 90 kg, with up to 13.6 kg per level, ensuring efficient storage and streamlined workflow while maintaining high safety standards.

Dimension of cart: 55,6 x 67,6 x 175(H) cm Capacity: 20 trays/cart Dimension of tray: 46 x 66 cm Slide Spacing: 7,6cm



RE3S RE3S-ESD CBNTCMTRAY

Metro Stainless Steel Wire Tray Rack with casters ESD Metro Stainless Steel Wire Tray Rack with casters Metro ESD tray in molded fiberglass

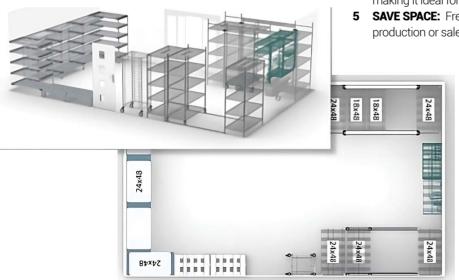
MOBILE SHELVING

TO OPTIMIZE SPACE AND INCREASE STORAGE CAPACITY BY UP TO 40%

Designed to maximize storage capacity and enhance operational efficiency, the Metro Top-Track™ system is the ideal solution to optimize space and simplify material handling tasks.



- **MAXIMUM STORAGE CAPACITY:** Increases storage capacity by up to 40% by eliminating hard-to-reach or "dead" spaces and ensuring complete access to every shelf.
- **EASY ACCESS:** The overhead track system creates a movable aisle between units, ensuring quick access to stored items while allowing easy movement for employees and utility carts.
- **CLEAN AND PRACTICAL:** Overhead tracks simplify floor cleaning and compensate for slight floor unevenness, provided the surface is smooth and free of large cracks or obstacles.
 - **4 COST SAVINGS:** By optimizing storage space, the system reduces the need for facility expansion or new warehouse construction, making it ideal for growing businesses.
 - **5 SAVE SPACE:** Frees up space for more profitable activities, such as production or sales areas, maximizing daily revenue potential.



CONTACT US TO RECEIVE A CUSTOM 3D RENDERING OF YOUR LOGISTICS OR PRODUCTION AREA, TAILORED TO YOUR NEEDS!





ITALIAN ENGLISH



Comfortable static safe chairs designed to improve job efficiency and productivity Chrome -plated metal parts - Pneumatic seat height adjustment Standard self-braking conductive castors Maximum load capacity: 110 kg Rg to ground < $1 \text{x} 10^9 \Omega$

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 dimen- sions (mm)	seat height (mm)
7804.204S	380 x 240	fix.	200 v 460	480 ÷ 580
7804.208	390 x 360	adj.	390 x 460	460 - 560





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.	390 X 400	500 ÷ 700

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.	450 X 460	450 ÷ 560





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	450 X 460	500 - 060

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 - 460	400 : 500
7807.317	420 x 480	adj	450 x 460	490 ÷ 590





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 v 460	560 ÷720
7807.322	420 x 480	adj	450 x 460	500÷120

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)









Backrest (max.40x40) - Seat (max.40x45)

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 $1M\Omega$ series resistor)



7804.197 Dissipative CHAIR COVER SET, 2 cables included

SIMCO - ION IONIZING

- 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

SMCO® INCOME.

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 m³/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 m³/h at high speed Coverage Area: 120x60cm

Power requirement: 230Vac Auto-balance: 0 ±5 V



IONIZING GUNS

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

6115 LIGHT ANATOMIC GUN

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

Gun ergonomic, low-noise, weight 0.34kg Discharge time: from 1000 to 100V ≤ 0.5seconds at 6", 30psi Emitter points: Machined Titanium, field-replaceable

Gas input: 20-87psi(1.4-6 bar), Clean dry air or Nitrogen

Ozone: 0.005ppm (24 hour accumulation)

Noise: 70dbA at 1m, 30psi Power: requirement 24Vac - 10W

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

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



HEAVY DUTY TOP GUN

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

There is a flow control valve to adjust airflows for the specific application. It is completely ESD and can be used even in clean rooms.

The version with sidekick allows "hands free" operation.

Discharge time: from 1000 to 100V ≤ 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 blowoff 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

ELECTROSTATIC FIELDMETER

The FieldLab Evo instrument detects and measures intensity and polarity of electrostatic fields. It's useful for checking packaging materials, circuit assemblies, ionized areas. Maximum range is 20KV at 1" (25.4mm) distance, the correct positioning of the instrument is obtained through the beams of 2 LEDs converging at the right distance. The Ion Balance mode allows you to check the ionizers by inserting the included insulated metal plate. The instrument is supplied in two versions: FIELDLAB and FIELDLAB EVO. Compared to the FIELDLAB EVO model, the FIELDLAB version offers greater accuracy (±05%) and the possibility of providing the analog signal on a specific output. ISO9000 traceable Calibration Report included with the instrument.

FIELDLAB EVO

- Range:
 - ±20KV (Resolution 100V) ±1,5KV (Resolution 10V) ±200V (Resolution 1V)
- Accuracy ±10%.



FIELDLAB

- Range:
 - ±20KV (Resolution 100V) ±1.5KV (Resolution 10V) ±200V (Resolution 1V)
- Accuracy ±5%.
- Analog output for recording device.



2 Leds

9265.701

Electrostatic fieldmeter FieldLab Evo, with battery.

9265.501 Electrostatic fieldmeter FieldLab, with battery.

9265.508 Instrument recalibration, ISO9000 Traceable Calibration Report (not included)

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:

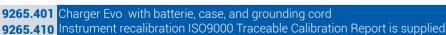
- Settable output voltage (step 1V)
- The output voltage is clearly indicated on the LCD and the internal accuracy (5%) allows a roughly check of other ESD instrumentation equipments.
- Low battery and overload are clearly indicated.













The 9265.710 kit includes a FieldLab Evo fieldmeter and a Charger Evo. It can be used to verify ionizer operation and check ion balance and discharge time



9265.710 Ionizer verification kit (FieldLab Evo and Charger Evo) **9265.403** Ionizer verification kit (FieldLab and Charger Evo)

WRISTLAB II 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.

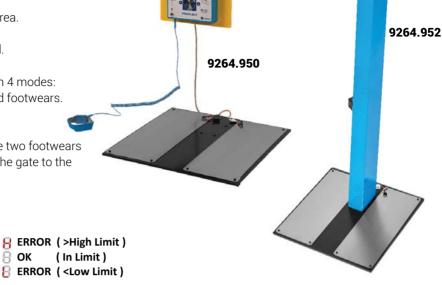
Internal battery supplied 9V or external 9Vdc.

ISO9000 traceable Calibration Report is included.

The personnel grounding test station can work in 4 modes:

- 1) Simultaneus measurement of wrist strap and footwears.
- 2) Wrist strap 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





9264.955

	LOW limit	HIGH limit
Wrist strap	750ΚΩ	35ΜΩ
Footwear	0 - 100KΩ (selectable)	$10\text{M}\Omega$ – $35\text{M}\Omega$ – $70\text{M}\Omega$ – $100\text{M}\Omega$ – $200\text{M}\Omega$ (selectable) or: $1\text{G}\Omega$ for the Atex compliant version

(ISO9000 Traceable Calibration Report is supplied)

9264.950*	Personnel Grounding Test Station wall mounting including: Wristlab-II instrument, fo- otplate 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
	ATEX compliant version of the code 9264.950* (Footwear High Limit = 1GΩ)
	ATEX compliant version of the code 9264.952* (Footwear High Limit = $1G\Omega$)
9264.960.1G	ATEX compliant version of the code 9264.960 (Footwear High Limit = $1G\Omega$)



* Add to code: I (Italian), F (French), E (English), D (German), H (Hungarian), S (Spanish)



CONTINUOUS MONITOR

Instrument recalibration

ОК

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 (reguaired R< $10^7\Omega$) with cord included.

Wriststrap input: 10mm banana plug / 10mm snap adaptor

Supply: 230/110 Adc. Dimensions: 98x53x23mm

9263.652 Continuous Monitor with power 230/24Vac adapter included

TEST STATION EVO TEST STATION

The instrument is available in 5 different models. It includes a recognition system and an internal data logger storing data regarding personnel access to the EPA. The EVO test station records and documents the parameters of personnel's ESD protection (wristband and footwear). It can be used either as a wall-mounted instrument or on a console to take measurements at workstations. Available in versions with fingerprint user recognition and RFID card recognition.





The display simultaneously shows:

- PASS/FAIL measurement result
- User data
- Numerical measurement results
- Date and time

TECHNICAL FEATURES:	9264.925	9264.926	9264.929	9264.929M	9264.929P
Power supply:	9-12VDC 1A (alimentatore incluso, con connettore jack 5,5/2,1mm)				
Wriststrap inputs:	1x(4mm) botton / 1x(10mm) botton / 1x(4mm) banana socket				
Data Interface (LAN/USB):	USB	LAN RJ45	LAN RJ45	LAN RJ45	LAN RJ45
Footplate and door opener connector:	4 way Phoenix				6 way Phoenix
Wriststrap measuring range:	50kΩ - 2GΩ				
Footwear measurement range:	50kΩ - 2GΩ				
Measurement accuracy:	±10%				
Test voltage:	50V/100V (selezionabile)				
Relay Output:	max.60V, 1A - 50VA				
Maximum number of users:	1000	1000	200	200	1000
Fingerprint recognition:	Yes	Yes	No	No	No
Recognition with 125KHz RFID Card:	No	No	Yes	No	Yes
Recognition with 13,56MHz RFID Card:	No	No	No	Yes	Yes
Recognition speed:	<1 sec				
Data logger (accessi memorizzati):	10.000	10.000	10.000	10.000	25000
Display:	Display grafico LCD, 160x104 pixel				
Dimensions:	225x168x38mm				
Weight:	650g				

NOTE ON FINGERPRINT SENSOR RECOGNITION

The fingerprint sensor, used in models 9264.925 and 9264.926, captures a digital image of the operator's fingerprint. The captured image is not stored within the EVO test station, so user biometric data is secure and cannot be duplicated. Only a biometric template (a collection of extracted characteristics) is stored.

The template is very small: approximately 400 bytes. Templates are used for guick and secure operator identification.

RFID CARD RECOGNITION

The RFID card reader uses contactless technology that uses a radio frequency signal to recognize a suitably encoded RFID card placed near the reader. This encoding allows each registered card to be uniquely assigned to a user.

TURNSTILE OPTIONAL



9266.101



For access control to restricted areas, such as EPAs, a stainless steel turnstile is available; it can be activated directly from the Test Station based on measurement results. Control can be unidirectional or bidirectional.

	AVAILABLE MEASURING INSTRUMENTS
9264.925	Test Station EVO USB with fingerprint recognition
9264.926	Test Station EVO ETHERNET with fingerprint recognition
9264.929	Test Station on EVO RFID with RFID Card recognition 125kHz
9264.929M	Test Station on EVO RFID with RFID Card recognition 13,56MHz
9264.929P	Test Station on EVO RFID with RFID Card recognition 125kHz and 13,56MHz
9264.927	Verifica dello strumento con Rapporto di Taratura tracciabile ISO9000.
	ACCESSORIES FOR WALL-MOUNTED OR STAND-UP TEST STATIONS
9264.953	Stand up for Test Station
9264.965	Dual footplate
	ACCESS GATE
9266.100	Stainless steel turnstile with tripod and test station support bracket
	(dimensions 1220x800x990 mm)
9266.101	Stainless steel counter-side rail
9266.102	Dual footplate for turnstile access gate
9266.103	Addtional RFID sensor for exit registration (compatible with model 9264.929P)



CALIBRATION UNIT

It's a resistance decade box made specifically for the calibration of the ESD Test Station (Wrightlab-II). Test Station EVO Wrightlab PRO and IEC 61340-5-1 compatible testers)

(Wristlab-II, Test Station EVO, Wristlab PRO and IEC 61340-5-1 compatible testers)

Range: 10Ω - $110M\Omega$ (model 9264.980) Range: 100Ω - $2G\Omega$ (model 9264.981)

Tolerance: ±1%

Power. 1W for resistors up to $4M\Omega$, 0.5W for resistors from $10M\Omega$ to $40M\Omega$

Operative Voltage: 250Vac max

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

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



9264.980 Calibration Unit for ESD testers (Max $110M\Omega$) cables and adapters included **9264.981** Calibration Unit for ESD testers (Max $2G\Omega$) cables and adapters included **9264.982** Instrument recalibration (ISO9000 Traceable Calibration Report is supplied)

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 software to manage the tests recorded in the instrument is included iwith Walking Test EVO.

Range: $\pm 1050V$ Resolution: 1 Volt Accuracy: 5% o $\pm 5V$ Input resistance: $10^{14} \, \Omega$

Humidity: 1 to 95%RH (accuracy: ±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

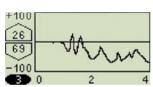
Dimensioni: 243x130x60mm (instrument) Ø35x130mm (probe)

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

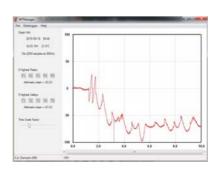
Max total graphs duration: 2minutes and 30 sec

Interface: USB

SOFTWARE WT MANAGER

(included) Program to manage the tests recorded in the instrument, compatibile with Windows XP/../11.

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, ISO9000 traceable calibration report included **9265.082** Instrument recalibration, ISO9000 Traceable Calibration Report is supplied

GIGALAB EVO / GIGALAB EVO PLUS

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

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

Connectivity: Serial data interface (Plus model only)

Vmeas	Range	Accuracy
10V	1KΩ ÷ 50GΩ	±5% ±0.6% / GΩ
100V	100ΚΩ ÷ 1ΤΩ	±5% ±0.06% / GΩ
250V	500ΚΩ ÷ 1ΤΩ	±5% ±0.045% / GΩ
500V	1ΜΩ ÷ 1ΤΩ	±5% ±0.03% / GΩ





7.48×10⁰⁹ Ω 100V ☑ 28.9°C 52.4%

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, Traceable Calibration Report is supplied

9265.064 GIGALAB EVO Complete kit including meter, 2 probes, batteries and case, Traceable Calibration Report is supplied

9265.066 GIGALAB EVO PLUS Meter with batteries and case, Traceable Calibration Report is supplied

9265.067 GIGALAB EVO PLUS Complete kit including meter, 2 probes, batteries and case, Traceable Calibration Report 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.

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:

Typical configuration:

9265.063 GigaLab Evo meter >> page 75

9265.070 Concentric Ring Probe >> page 76

9265.065 Shielded Probe >> page 76

9265.047 Counter-electrode, 150 x 150mm >> page 76

9265.080 Walking Test EVO meter >> page 74

7804.190 Adjustable Wrist Strap >> page 39

7804.874 Spina prelievo terra >> page 39



9265.064

9265.151 ESD Survey KIT - Carrying case with instruments

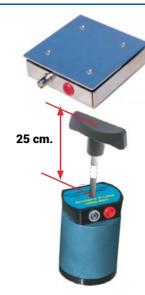
PROBES FOR GIGALAB AND LABEOHM



9265.065CONNECTIONS 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)

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



DISSIPATIVE $\mathbf{4} \mathbf{6}\Omega$

DISSIPATIVE $4 \times 10^{09} \Omega$





Display: LCD graphic

102x64pixel,

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
	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 Calibration Report is included

9265.065
9265.070
Shielded probe, 63mm, weight 2,3Kg, one BNC socket, two 4mm sockets
Concentric ring probe, 63/30mm, weight 2,3Kg, one BNC socket, three 4mm sockets
9265.047
Counter-electrode, 150 x 150mm
9265.013B
9265.012B
9265.012B
Cable 1.5m - 4mm banana plugs terminated, BLACK
9265.012R
9265.012R
9265.008
9265.008
9265.008
9265.008
9265.072
Shielded probe, 63mm, weight 2,3Kg, one BNC socket, two 4mm sockets
Concentric ring probe, 63/30mm, weight 2,3Kg, one BNC socket, three 4mm sockets
Counter-electrode, 150 x 150mm

9265.013B
9265.013B
9265.012B
Cable 1.5m - 4mm banana plugs terminated, BLACK
9265.012B

DRYLOGGER

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

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

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

Humidity: 1 to 95%RH, resolution: 0.1%RH accuracy: $\pm 2\%$ RH Temperature: -20°C to 60°C, resolution: 0.1°C Accuracy: ± 1 °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 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 Calibration Report 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: ±1°C

LED Display: 190 x 190mm Memory: 21600 samples

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

Dimensions: 190 x 190 x 40mm



Alarm

Led



DryLogger

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

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-PRO 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.

ADVANTAGES ABOUT GHIBLI

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 the cabinet there is an instrument for measuring environmental parameters: a DryLogger 9265.302 for the GHIBLI PRO line, visible through the glass of the upper door, or a Ghibli ADV Sensor module 8104.853 for the GHIBLI ADVANCED line, magnetically anchored to the internal walls. Both instruments can be sent for calibration at any time without problems

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

GHIBLI PRO LINE (DRY CABINET)

Technical specifications

Humidity range: <5% RH guaranteed, typical

2% RH

Colour: Anthracite Power supply: 230Vac

Structure: 1,2 mm thick carbon steel with

antistatic paint

Door: magnetic handles, magnetic sealers Wheel (optional): 4 antistatic 3" wheels,

two of them with brakes Grounding wire: 2mt ESD paint: $10^3 - 10^9\Omega$

Maximum load per shelf: 100 kg Maximum total load: 300 kg

The portable instrument DryLogger (**9265.302**) 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.





GHIBLI-ADVANCED LINE (DRY CABINET)

Technical specifications

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

Power supply: 230Vac

Structure: 1,2 mm thick carbon steel with

antistatic paint

Door: magnetic handles , magnetic sealers Wheel (optional): 4 antistatic 3" wheels, two of them with brakes

Grounding wire: 2mt long ESD paint: $10^3 - 10^9 \Omega$

Internal LED lighting activated with proximity sensor

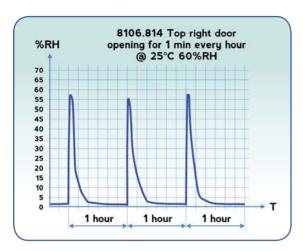
Visualization of environmental parameters on the display integrated into the top of the cabinet

Ethernet port for real-time reading of environmental parameters and for alarm management from PC

Maximum load per shelf: 100 kg Maximum total load: 300 kg

The Ghibli ADV Sensor **8104.853** module allows you to measure humidity and temperature at different points inside the cabinet, is magnetically anchored to the floors or walls. It is equipped with an internal data logger for viewing and analyzing the data both on the display and on remote PC. Through an Ethernet port it can make data available on the network in real-time.

			I	40°C	40°C			B	40°C	40°C
Code	8106.814	8106.807	8106.803	8106.834	8106.837	8106.808	8106.809	8106.810	8106.838	8106.839
Model	Ghibli PRO 1400	Ghibli PRO 700	Ghibli PRO 350	Ghibli PRO 1400 BK	Ghibli PRO 700 BK	Ghibli ADV 1400	Ghibli ADV 700	Ghibli ADV 350	Ghibli ADV 1400 BK	Ghibli ADV 700 BK
Capacity	1400L	700L	350L	1400L	700L	1400L	700L	350L	1400L	700L
Interior lights	-	-	-	-	-	Led	Led	Led	Led	Led
Connection to the LAN network	-	-	-	-	-	Ethernet	Ethernet	Ethernet	Ethernet	Ethernet
Ext. Dimensions (mm)	1160x767 x1720(H)	580x767 x1755	580x767 x895	1160x767 x1720	580x767 x1755	1160x767 x1755	580x767 x1755	580x767 x895	1160x767 x1755	580x767 x1755
Shelves	5	5	2	5	5	5	5	2	5	5
Shelf Size (mm)	1094x606 x18	510x606 x18	510x606 x18	1094x606 x18	510x606 x18	1094x606 x18	510x606 x18	510x606 x18	1094x606 x18	510x606 x18
Average power without baking	80W	80W	40W	80W	80W	80W	80W	40W	80W	80W
Maximum power without baking	-	-	-	580W	330W	-	-	-	580W	330W
Average power with baking	500W	500W	250W	500W	500W	500W	500W	250W	500W	500W
Maximum power with baking	-	-	-	1500W	1000W	-	-	-	1500W	1000W
Weight	178kg	118kg	56kg	198kg	128kg	178kg	118kg	56kg	198kg	128kg



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

TEKDRY MODULE (INCLUDED)

The TekDry is a zeolite dehumidifier module (element that absorbs humidity), designed to work continuously, capable of lowering the humidity level up to 2%RH depending on the environment.

Operating ambient temperature: 5 °C < T < 35 °C Operating ambient humidity 5% < RH < 90% Power supply: 200÷240 Vac 50/60Hz Average power: 40W Maximum power 250W

8104.852 TEKDRY



8104.852 Zeolite dehumidifier module

ADDITIONAL SHELF AND WHEEL KIT ESD (OPTIONAL)

8106.840 Additional shelf 510x606x18 mm , Ghibli 700 and 350. 100Kg Max. 8106.841 Additional shelf 1094x606x18 mm , Ghibli 1400. 100Kg Max.

8106.850 Wheel Kit ESD

FAST RECOVERY MODULE (OPTIONAL)

The FAST RECOVERY 8106.820 module is an immediate action dehumidifier. By exploiting the physical characteristics of compressed air (free of humidity) or nitrogen, it allows the humidity inside the GHIBLI cabinets to be reduced in just a few minutes. Connected to the cabinet hygrometer, it allows you to maintain the humidity level within the established limits.



8106.820 **FAST RECOVERY**

8106.820 FAST RECOVERY module



TRAY RACK (OPTIONAL)

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

8106.866 GHIBLI - RACK 10 trays store **8106.583** Aluminium tray 495x570x12mm

ALARM BOX (OPTIONAL)

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 cabinets



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-1602 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 unnecessarv 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

SAHARA OVENS

Compliance with: IPC-1602 Baking PCB Temperature Control Safety thermostat Ventilation opening



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

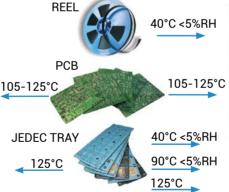
SAHARA DRY OVENS

Compliance with: J-STD-033 Baking SMD IPC-1602 Baking PCB

- Ventilation opening
- Safety thermostat
- Humidity Control

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.







Oven with temperature control only

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

	Sahara MODEL	Shelf	Int. Dimensions	Ext. Dimensions	Power	Weight
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
8107.117	(OPTIONAL) Door with inspection window, 200x200mm					
8107.121	(OPTIONAL) Lateral hole for cables, Ø 50mm					

ADDITIONAL SHELF (OPTIONS)

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

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 next page)

Humidity Control



Included on Sahara DRY models only

Humidity electronic control

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

Humidity range: 1-95%RH Accuracy: ±2%RH

Resolution: ± 0.1 %RH It can work in 2 modes:

Fast: dehumidification occurs at the maximum possible

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

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..

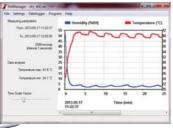
All our ovens are equipped with a data logger for traceability and you can print/save graphs of temperature (for sahara ovens) and temperature/humidity (for Sahara DRY ovens). To analyze the logged data and to set the thermal programmer is required the 8107.215 option which inlude the PidManager software and USB specific cable.

The software is compatible with Windows XP/../11. 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)

DATALOGGER







Sahara 80L Thermal Program

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

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

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County-S EVO 5 Cups for drawers 31 Cutting nippers 16 D Dehumidifier module 80 Depaneling machines 14 Depoprint 23 Detergent for floors 36 Dip tubes boxes 27 Dissipative bags 45 Diviprint 22 Drawers 27, 29 DryLogger 77 Dry Pack 43 E Earth Bonding Point 39 EBP plug 39 Elecstat-109 38 Elecstat-112 36 Electroguard 36 ESD fleece 34 Eyelets press 40 F Fast Recovery 80 Fieldlab 70 Field service kit 38	Mats for floor 37 Mats for workbenches 38 Meghommeter 75 Metro Carts 59, 60 METRO Products for cleanrooms 58 METRO Shelving 58 METRO Tableworx 55, 56 Minilaberack 23 Moveable benches 29 N Naturlite Led 54 Newbox 21 Nippers 16 O Oven 81 P Packing 41 Packing tape 44 Paint 36 PCB Assembly Fixtures 24 PCB Handling 23 PCB racks 23 PCSA 24 Pins aligner 11	Tote-boxes 21 TPH (Workbenches) 50 TP (Workbenches) 51 Tractor 14 Tray rack 80 Treston cabinets 29 Tubing 44 Turnstile 73 Tweezer 18 V Vacutek 49 Vacuum cleaners 20 Vacuweld 48 Vinylab 37 Vistabox 32 W Walking Test EVO 74 Waste bags 20 Waste paper bin 20 Workbenkes (ESD) 50, 51 Wristalab II 71 Wriststrap 39 X XC2 (Ionizer) 68
County-S EVO 5 Cups for drawers 31 Cutting nippers 16 D Dehumidifier module 80 Depaneling machines 14 Depoprint 23 Detergent for floors 36 Dip tubes boxes 27 Dissipative bags 45 Diviprint 22 Drawers 27, 29 DryLogger 77 Dry Pack 43 E Earth Bonding Point 39 EBP plug 39 Elecstat-109 38 Elecstat-112 36 Electroguard 36 ESD fleece 34 Eyelets press 40 F Fast Recovery 80 Fieldlab 70 Field service kit 38 Fifo 25, 42	Mats for floor 37 Mats for workbenches 38 Meghommeter 75 Metro Carts 59, 60 METRO Products for cleanrooms 58 METRO Shelving 58 METRO Tableworx 55, 56 Minilaberack 23 Moveable benches 29 N Naturlite Led 54 Newbox 21 Nippers 16 O Oven 81 P Packing 41 Packing tape 44 Paint 36 PCB Assembly Fixtures 24 PCB Handling 23 PCB racks 23 PCSA 24 Pins aligner 11 Pliers 17	Tote-boxes 21 TPH (Workbenches) 50 TP (Workbenches) 51 Tractor 14 Tray rack 80 Treston cabinets 29 Tubing 44 Turnstile 73 Tweezer 18 V Vacutek 49 Vacuum cleaners 20 Vacuweld 48 Vinylab 37 Vistabox 32 W Walking Test EVO 74 Waste bags 20 Waste paper bin 20 Workbenkes (ESD) 50, 51 Wristalab II 71 Wriststrap 39 X XC2 (Ionizer) 68 Y
County-S EVO 5 Cups for drawers 31 Cutting nippers 16 D Dehumidifier module 80 Depaneling machines 14 Depoprint 23 Detergent for floors 36 Dip tubes boxes 27 Dissipative bags 45 Diviprint 22 Drawers 27, 29 DryLogger 77 Dry Pack 43 E Earth Bonding Point 39 EBP plug 39 Elecstat-109 38 Elecstat-112 36 Electroguard 36 ESD fleece 34 Eyelets press 40 F Fast Recovery 80 Fieldlab 70 Field service kit 38	Mats for floor 37 Mats for workbenches 38 Meghommeter 75 Metro Carts 59, 60 METRO Products for cleanrooms 58 METRO Shelving 58 METRO Tableworx 55, 56 Minilaberack 23 Moveable benches 29 N Naturlite Led 54 Newbox 21 Nippers 16 O Oven 81 P Packing 41 Packing tape 44 Paint 36 PCB Assembly Fixtures 24 PCB Handling 23 PCB racks 23 PCSA 24 Pins aligner 11	Tote-boxes 21 TPH (Workbenches) 50 TP (Workbenches) 51 Tractor 14 Tray rack 80 Treston cabinets 29 Tubing 44 Turnstile 73 Tweezer 18 V Vacutek 49 Vacuum cleaners 20 Vacuweld 48 Vinylab 37 Vistabox 32 W Walking Test EVO 74 Waste bags 20 Waste paper bin 20 Workbenkes (ESD) 50, 51 Wristalab II 71 Wriststrap 39 X XC2 (Ionizer) 68 Y
County-S EVO 5 Cups for drawers 31 Cutting nippers 16 D Dehumidifier module 80 Depaneling machines 14 Depoprint 23 Detergent for floors 36 Dip tubes boxes 27 Dissipative bags 45 Diviprint 22 Drawers 27, 29 DryLogger 77 Dry Pack 43 E Earth Bonding Point 39 EBP plug 39 Elecstat-109 38 Elecstat-112 36 Electroguard 36 ESD fleece 34 Eyelets press 40 F Fast Recovery 80 Field ab 70 Field service kit 38 Fifo 25, 42 Finger cots 35	Mats for floor 37 Mats for workbenches 38 Meghommeter 75 Metro Carts 59, 60 METRO Products for cleanrooms 58 METRO Shelving 58 METRO Tableworx 55, 56 Minilaberack 23 Moveable benches 29 N Naturlite Led 54 Newbox 21 Nippers 16 O Oven 81 P Packing 41 Packing tape 44 Paint 36 PCB Assembly Fixtures 24 PCB Handling 23 PCB racks 23 PCSA 24 Pins aligner 11 Pliers 17 Preforming machines 7 Printer 6 PTH Counting 4	Tote-boxes 21 TPH (Workbenches) 50 TP (Workbenches) 51 Tractor 14 Tray rack 80 Treston cabinets 29 Tubing 44 Turnstile 73 Tweezer 18 V Vacutek 49 Vacuum cleaners 20 Vacuweld 48 Vinylab 37 Vistabox 32 W Walking Test EVO 74 Waste bags 20 Waste paper bin 20 Workbenkes (ESD) 50, 51 Wristalab II 71 Wriststrap 39 X XC2 (Ionizer) 68 Y
County-S EVO 5 Cups for drawers 31 Cutting nippers 16 D Dehumidifier module 80 Depaneling machines 14 Depoprint 23 Detergent for floors 36 Dip tubes boxes 27 Dissipative bags 45 Diviprint 22 Drawers 27, 29 DryLogger 77 Dry Pack 43 E Earth Bonding Point 39 EBP plug 39 Elecstat-109 38 Elecstat-112 36 Electroguard 36 ESD fleece 34 Eyelets press 40 F Fast Recovery 80 Fieldlab 70 Field service kit 38 Fifo 25, 42 Finger cots 35 Fleece (antistatic) 34 Floor coating 36 Floors 36	Mats for floor 37 Mats for workbenches 38 Meghommeter 75 Metro Carts 59, 60 METRO Products for cleanrooms 58 METRO Shelving 58 METRO Tableworx 55, 56 Minilaberack 23 Moveable benches 29 N Naturlite Led 54 Newbox 21 Nippers 16 O Oven 81 P Packing 41 Packing tape 44 Paint 36 PCB Assembly Fixtures 24 PCB Handling 23 PCB racks 23 PCSA 24 Pins aligner 11 Pliers 17 Preforming machines 7 Printer 6	Tote-boxes 21 TPH (Workbenches) 50 TP (Workbenches) 51 Tractor 14 Tray rack 80 Treston cabinets 29 Tubing 44 Turnstile 73 Tweezer 18 V Vacutek 49 Vacuum cleaners 20 Vacuweld 48 Vinylab 37 Vistabox 32 W Walking Test EVO 74 Waste bags 20 Waste paper bin 20 Workbenkes (ESD) 50, 51 Wristalab II 71 Wriststrap 39 X XC2 (Ionizer) 68 Y
County-S EVO 5 Cups for drawers 31 Cutting nippers 16 D Dehumidifier module 80 Depaneling machines 14 Depoprint 23 Detergent for floors 36 Dip tubes boxes 27 Dissipative bags 45 Diviprint 22 Drawers 27, 29 DryLogger 77 Dry Pack 43 E Earth Bonding Point 39 EBP plug 39 Elecstat-109 38 Elecstat-112 36 Electroguard 36 ESD fleece 34 Eyelets press 40 F Fast Recovery 80 Fieldlab 70 Field service kit 38 Fifo 25, 42 Finger cots 35 Fleece (antistatic) 34 Floor coating 36	Mats for floor 37 Mats for workbenches 38 Meghommeter 75 Metro Carts 59, 60 METRO Products for cleanrooms 58 METRO Shelving 58 METRO Tableworx 55, 56 Minilaberack 23 Moveable benches 29 N Naturlite Led 54 Newbox 21 Nippers 16 O Oven 81 P Packing 41 Packing tape 44 Paint 36 PCB Assembly Fixtures 24 PCB Handling 23 PCB racks 23 PCSA 24 Pins aligner 11 Pliers 17 Preforming machines 7 Printer 6 PTH Counting 4	Tote-boxes 21 TPH (Workbenches) 50 TP (Workbenches) 51 Tractor 14 Tray rack 80 Treston cabinets 29 Tubing 44 Turnstile 73 Tweezer 18 V Vacutek 49 Vacuum cleaners 20 Vacuweld 48 Vinylab 37 Vistabox 32 W Walking Test EVO 74 Waste bags 20 Waste paper bin 20 Workbenkes (ESD) 50, 51 Wristalab II 71 Wriststrap 39 X XC2 (Ionizer) 68 Y
County-S EVO 5 Cups for drawers 31 Cutting nippers 16 D Dehumidifier module 80 Depaneling machines 14 Depoprint 23 Detergent for floors 36 Dip tubes boxes 27 Dissipative bags 45 Diviprint 22 Drawers 27, 29 DryLogger 77 Dry Pack 43 E Earth Bonding Point 39 EBP plug 39 Elecstat-109 38 Elecstat-112 36 Electroguard 36 ESD fleece 34 Eyelets press 40 F Fast Recovery 80 Fieldlab 70 Field service kit 38 Fifo 25, 42 Finger cots 35 Fleece (antistatic) 34 Floor coating 36 Floors 36 Foam 42 G	Mats for floor 37 Mats for workbenches 38 Meghommeter 75 Metro Carts 59, 60 METRO Products for cleanrooms 58 METRO Shelving 58 METRO Tableworx 55, 56 Minilaberack 23 Moveable benches 29 N Naturlite Led 54 Newbox 21 Nippers 16 O Oven 81 P Packing 41 Packing tape 44 Paint 36 PCB Assembly Fixtures 24 PCB Handling 23 PCB racks 23 PCSA 24 Pins aligner 11 Pliers 17 Preforming machines 7 Printer 6 PTH Counting 4 PU (Chairs) 66 R Racks 23	Tote-boxes 21 TPH (Workbenches) 50 TP (Workbenches) 51 Tractor 14 Tray rack 80 Treston cabinets 29 Tubing 44 Turnstile 73 Tweezer 18 V Vacutek 49 Vacuum cleaners 20 Vacuweld 48 Vinylab 37 Vistabox 32 W Walking Test EVO 74 Waste bags 20 Waste paper bin 20 Workbenkes (ESD) 50, 51 Wristalab II 71 Wriststrap 39 X XC2 (Ionizer) 68 Y
County-S EVO 5 Cups for drawers 31 Cutting nippers 16 D Dehumidifier module 80 Depaneling machines 14 Depoprint 23 Detergent for floors 36 Dip tubes boxes 27 Dissipative bags 45 Diviprint 22 Drawers 27, 29 DryLogger 77 Dry Pack 43 E Earth Bonding Point 39 EBP plug 39 Elecstat-109 38 Elecstat-112 36 Electroguard 36 ESD fleece 34 Eyelets press 40 F Fast Recovery 80 Fieldlab 70 Field service kit 38 Fifo 25, 42 Finger cots 35 Fleece (antistatic) 34 Floor coating 36 Floors 36 Foam 42	Mats for floor 37 Mats for workbenches 38 Meghommeter 75 Metro Carts 59, 60 METRO Products for cleanrooms 58 METRO Shelving 58 METRO Tableworx 55, 56 Minilaberack 23 Moveable benches 29 N Naturlite Led 54 Newbox 21 Nippers 16 O Oven 81 P Packing 41 Packing tape 44 Paint 36 PCB Assembly Fixtures 24 PCB Handling 23 PCB racks 23 PCSA 24 Pins aligner 11 Pliers 17 Preforming machines 7 Printer 6 PTH Counting 4 PU (Chairs) 66 R	Tote-boxes 21 TPH (Workbenches) 50 TP (Workbenches) 51 Tractor 14 Tray rack 80 Treston cabinets 29 Tubing 44 Turnstile 73 Tweezer 18 V Vacutek 49 Vacuum cleaners 20 Vacuweld 48 Vinylab 37 Vistabox 32 W Walking Test EVO 74 Waste bags 20 Waste paper bin 20 Workbenkes (ESD) 50, 51 Wristalab II 71 Wriststrap 39 X XC2 (Ionizer) 68 Y

