



ESD CATALOG 2015

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ESD MATS

Art. 749DUO ESD FLOOR RUBBER ROLL MAT

Colour: GREY with dot decoration
Structure: double layer dissipative/conductive
Thickness 2.5mm
Roll size: 1,9m x 10m (19m²)
Roll weight 3,8 kg/m²
Surface resistance 5x10⁶ - 5x10⁸
Resistance to ground 5x10⁶ - 5x10⁸
Charge decay time <0.5 sec.

Art. 749 DUO KIT

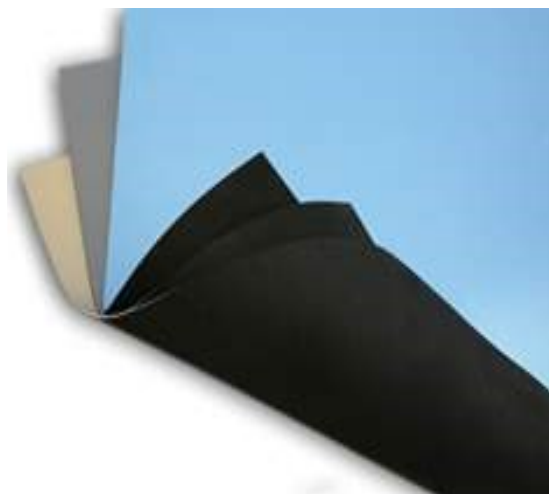
ESD floor mat kit 1200x1900mm includes one 749 DUO floor mat cut with a 10mm ground stud and one 601 ground cord

Art. 749 DUO RUNNER KIT

Flooring runner kit for passage areas (personnel and trolleys). Includes one cut art 749 DUO size 950x3000mm, ground cord art 601 and 2 ground male snaps.

Art. 157ROLL 1.2 & 157ROLL 1.0 ESD TABLE RUBBER ROLL MAT

High temperature resistance: over 450°C
Material: synthetic rubber
Colour: GREY, BLUE or BEIGE
Structure: double layer dissipative/conductive
Thickness 2.0mm
Roll size: 1,22m x 10m (12,22m²) or 1m x 10m (10m²)
Roll weight: 3,3 kg/m²
Surface resistance: 5x10⁶ - 5x10⁸



ESD BENCHMAT KITS

The kits include either 157 benchmats cuts (rounded edges and ESD symbol), 1x ONE TOUCH wristband set and 1x art. 601 ground cord for the mats (moulded resistor included).

Art. 157KIT 4060 BLUE 400X600mm
 Art. 157KIT 4060 GREY 400X600mm
 Art. 157KIT 4060 BEIGE 400X600mm
 Art. 157KIT 6090 BLUE 600x900mm
 Art. 157 KIT 6090 GREY 600x900mm
 Art. 157 KIT 6090 BEIGE 600x900mm
 Art. 157KIT 60120 BLUE 600x1200mm
 Art. 157KIT 60120 GREY 600x1200mm
 Art. 157KIT 60120 BEIGE 600x1200mm



MATS GROUNDING**Art 601**

Ground cord with 1 MOhm resistor

**MATS CONNECTIONS CORDS**

Art 603-32 Mats interconnection cord 32cm

Art 603-200 Mats interconnection cord 2m

Mat interconnection cords 10mm to 10mm female snaps, no resistor

**GROUND ADAPTER****Art 610**

Protected adapter, banana 4mm to female & male snap 10mm

**WORKSTATION GROUNDING POINT****Art CPG1222**

Common point to ground to be fixed under the workbenches. Metal L-shaped bracket, 1 Meg resistor, 2 protected banana 4mm receptacles, 2 male snaps 10mm. All points are equally grounded.

**Art. CPG3000-10M-1R**

2 male snaps 10mm
1 post ring 5mm

**Art. CPG3000-10M**

3 male snaps 10mm

**Art. CPG3000-10M-4B**

2 male snaps 10mm
1 banana receptacles 4mm

**Art. CPG3000-10M-2B**

1 male snaps 10mm
2 banana receptacles 4mm

**ESD SNAPS & PUNCHING TOOL**

Art 604M10-100 : pack of 100 male snaps

Art. 604F10-100 : pack of 100 female snaps

Art. 605: punching tool for snaps insertion

Designed for mats and equipment ground connections

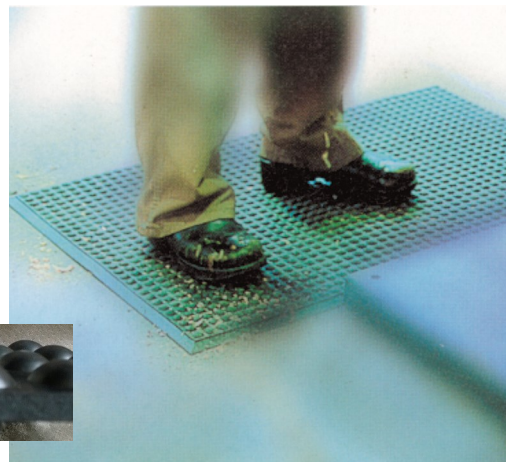


ESD ANTI-FATIGUE MATS

Art. RLX

RLX is an ESD anti-fatigue mat, manufactured with ESD conductive rubber, ensuring instant and continuous drainage of static charge of workers to prevent accumulations.

Designed specifically for standing workers to ensure relief and better blood circulation, reduced stress on spinal column and joints, prevent slips and eventual injuries.



ESD FLOOR WAX & CLEANER

Art. E-CLEAN

Liquid product designed for fast and effective floor cleaning procedures. E-CLEAN has been designed expressly for ESD treated flooring's periodic (also daily) maintenance. In fact the correct usage of E-CLEAN will not alter the dissipative performances of the subfloor.

Manual cleaning operations, or with wash&dry equipment, or also with spray cleaners.

FORMULATION: Light solvents mix, low foams activators, perfume and other minor components

Art. E-WAX

Polymeric antistatic emulsion particularly suitable for treating antistatic and electroconductive ESD floors. It is advisable for electronic production areas, for E.P.A. maintenance.

FORMULATION: Acrylic metal antistatic polymers, polyethylenic waxing emulsion, levelling substances and coadjutants. No harmful substances.



ESD FLOOR PAINT

Art. 5600

5600 dissipative floor paint is a one part latex coating ideally formulated for the electronic manufacturing environment.

- DISSIPATIVE - quickly drains static charges
- DURABLE - hard, abrasion resistant formulation
- ENVIRONMENTALLY FRIENDLY - no solvents
- EASY APPLICATION - apply with rollers
- LOW VOC - water based, no amines or isocyanates
- ECONOMICAL - low cost per square foot
- AESTHETIC - neutral, light grey
- EASY CLEAN UP - soap and water
- RESISTIVITY - consistent 106 - 108 Ohms/sq. reading
- ENHANCED POLYURETHANE - one part system



ESD FIELD SERVICE KIT

ESD field service kit, designed for on-field operators. Static dissipative vinyl, red colour on both faces, rounded sewn borders, double pocket to carry tools for service operations, includes the ONE TOUCH wristband, banana ground cord, the 608 ground banana cord. Dimensions: 600x600mm

Art. KAS 9700



ESD CHAIRS

VERA X and VERA CLEAN X are the new ELME ESD chairs models, meeting ESD requirements of IEC 61340-5-1 std and ESDA 2020 std.

- 3 heights available (low, medium and high), fully adjustable, choice of fabric or vinyl
- High quality **gas lift**, european made, which ensures continued service in time under heavy duty usage.
- Extra-soft high-density foam lining of seat and backrest
- Flame and burn resistant ESD **fabric** and ESD **vinyl**.
- The **backrest** is made with conductive plastics for total ESD protection.
- The **base** is made in polished ESD aluminium anti-scratch
- Adjustable or fixed **armrests** available



VERA X

Fabric (models VERA)	Unflammable	UNI EN 1021 Part 1° e 2°
ESD fabric weight	340gr	1 x 1,45m
ESD fabric resistance	$1 \times 10^5 < R < 8 \times 10^5$	IEC 61340-5-1
Chair resistance to ground	$1 \times 10^5 < R < 1 \times 10^6$	IEC 61340-5-1
Fabric Static decay	1180 V to 50 V < 1,5 sec	IEC 61340-5-1
Color	Grey anthracite or blue (on request)	

VERA CLEAN X

Vinyl (models VERA CLEAN)		
Resistance fabric point to point	10^6 Ohm	IEC 61340.5.1
Chair resistance to ground	10^6 Ohm	IEC 61340.5.1
Static decay time	< 2 sec	IEC 61340.5.1

PHYSICAL FEATURES

Base	Polished aluminium	Inherently conductive
Base diameter	680 mm	
Adjustments	Gas lift	Made in Europe
	Height of the seat models X1R	420-540mm (120mm excursion)
	Height of the seat models X1P	400-520mm (120mm excursion)
	Height of the seat models X1-300R	550-670mm (120mm excursion)
	Height of the seat models X1-300P	530-650mm (120mm excursion)
	Height of the seat models X2R	620-880mm (260mm excursion)
	Height of the seat models X2P	600-860mm (260mm excursion)
	Diameter footrest models X2	420mm
	Height of the backrest (both models)	430-490mm (60mm excursion)
	Backrest width (both models)	470mm
	Depth of the backrest	430-580mm (150mm excursion)
	Inclination of the backrest for permanent contact with the operator's back	17° range angle of inclination
	Foam density	30kg/m3 (seat 40mm thick – backrest 35mm thick)

VERA X



Art. VERA X1 R	Gas lift, ESD wheels, ESD fabric
Art. VERA X1 P	Gas lift, ESD feet, ESD fabric
Art. VERA X1 R BRA	Gas lift, ESD wheels, ESD fabric, fixed armrest
Art. VERA X1 P BRA	Gas lift, ESD feet, ESD fabric, fixed armrest
Art. VERA X1 R BRA R	Gas lift, ESD wheels, ESD fabric, adjustable up-lift armrest
Art. VERA X1 P BRA R	Gas lift, ESD feet, ESD fabric, adjustable up-lift armrest
Art. VERA X1-300 R	Gas lift, medium height, ESD wheels, ESD fabric
Art. VERA X1-300 P	Gas lift, medium height, ESD feet, ESD fabric
Art. VERA X1-300 R BRA	Gas lift, medium height, ESD wheels, ESD fabric, fixed armrest
Art. VERA X1-300 P BRA	Gas lift, medium height, ESD feet, ESD fabric, fixed armrest
Art. VERA X1-300 R BRA R	Gas lift, medium height, ESD wheels, ESD fabric, adjustable up-lift armrest
Art. VERA X1-300 P BRA R	Gas lift, medium height, ESD feet, ESD fabric, adjustable up-lift armrest
Art. VERA X2 R	Gas lift, high stool, ESD wheels, ESD fabric, footrest
Art. VERA X2 P	Gas lift, high stool, ESD feet, ESD fabric, footrest
Art. VERA X2 R BRA	Gas lift, high stool, ESD wheels, ESD fabric, fixed armrest, footrest
Art. VERA X2 P BRA	Gas lift, high stool, ESD feet, ESD fabric, fixed armrest, footrest
Art. VERA X2 R BRA R	Gas lift, high stool, ESD wheels, ESD fabric, adjustable up-lift armrest, footrest
Art. VERA X2 P BRA R	Gas lift, high stool, ESD feet, ESD fabric, adjustable up-lift armrest, footrest

VERACLEAN X



Art. VERA CLEAN X1 R	Gas lift, ESD wheels, ESD fabric
Art. VERA CLEAN X1 P	Gas lift, ESD feet, ESD fabric
Art. VERA CLEAN X1 R BRA	Gas lift, ESD wheels, ESD fabric, fixed armrest
Art. VERA CLEAN X1 P BRA	Gas lift, ESD feet, ESD fabric, fixed armrest
Art. VERA CLEAN X1 R BRA R	Gas lift, ESD wheels, ESD fabric, adjustable up-lift armrest
Art. VERA CLEAN X1 P BRA R	Gas lift, ESD feet, ESD fabric, adjustable up-lift armrest
Art. VERA CLEAN X1-300 R	Gas lift, medium height, ESD wheels, ESD fabric
Art. VERA CLEAN X1-300 P	Gas lift, medium height, ESD feet, ESD fabric
Art. VERA CLEAN X1-300 R BRA	Gas lift, medium height, ESD wheels, ESD fabric, fixed armrest
Art. VERA CLEAN X1-300 P BRA	Gas lift, medium height, ESD feet, ESD fabric, fixed armrest
Art. VERA CLEAN X1-300 R BRA R	Gas lift, medium height, ESD wheels, ESD fabric, adjustable up-lift armrest
Art. VERA CLEAN X1-300 P BRA R	Gas lift, medium height, ESD feet, ESD fabric, adjustable up-lift armrest
Art. VERA CLEAN X2 R	Gas lift, high stool, ESD wheels, ESD fabric, footrest
Art. VERA CLEAN X2 P	Gas lift, high stool, ESD feet, ESD fabric, footrest
Art. VERA CLEAN X2 R BRA	Gas lift, high stool, ESD wheels, ESD fabric, fixed armrest, footrest
Art. VERA CLEAN X2 P BRA	Gas lift, high stool, ESD feet, ESD fabric, fixed armrest, footrest
Art. VERA CLEAN X2 R BRA R	Gas lift, high stool, ESD wheels, ESD fabric, adjustable up-lift armrest, footrest
Art. VERA CLEAN X2 P BRA R	Gas lift, high stool, ESD feet, ESD fabric, adjustable up-lift armrest, footrest

Art VERA ROT spare ESD wheels



Art VERA BRA spare fixed armrest set



Art VERA FOOT spare ESD feet



Art VERA BRA R spare adjustable uplift armrest set



Art VERA GAS LIFT spare gas lift columns for all 3 seat heights



Art VERA BASE spare aluminium base



Art VERA BACKREST COVER spare ESD plastic cover



Art VERA SEAT full spare seat vor VERA X lined with fabric or vinyl



Art VERA BACKREST full backrest lined with fabric or vinyl



ESD POLYURETHANE CHAIRS

ESD foam chair, seat and backrest made of PUR integral foam. Chrome conductive base, ESD wheels.

Art. VERA PU 1 base chair, gas lift, ESD PU foam

Art. VERA PU 2 high chair, gas lift, ESD PU foam, footrest



ESD SEAT CHAIRS COVERS

Art SITCOVER

Fabric conductive cover set for seat + back, designed to convert standard chairs into ESD safe ones. The set includes the two covers, connection cord and ground cord

ESD STEP STOOL

Art GABEL

Use GABEL to reach the highest shelf. This ESD safe step stool is easily movable due to suspended wheels and low weight. GABEL blocks down with as low as 5kg weight. Resistance 10exp8 Ohm.



ESD TRASH CAN

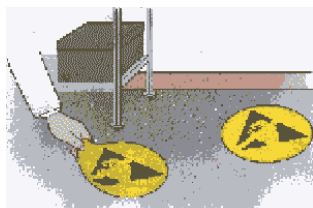
Art BASKET 13

Conductive plastic waste paper basket designed for E.P.A..Volume 13 lt.

EPA BOUNDARY TAPE

Art REA EPA

EPA PVC limits tape, high resistance to passage and high visibility



EPA FLOOR / WALL ADHESIVE SIGNS

Art EAL 3232

PVC floor or wall signs for EPA. Diam 32cm. Packs of 10 each.

EPA ATTENTION SIGN

Art EAL 3060

Rigid plastic EPA attention sign. Size 30x60cm.



ESD WRISTBANDS AND CORDS

ONE TOUCH

Unique anti-allergenic adjustable cloth wristband. The exclusive fastening buckle allows adjustment and release by pulling the loose band. No colourants, no sharp edges. Allergy free.

- Art. ONE TOUCH 4mm
- Art. ONE TOUCH 10mm



STRAPPO

Velcro cloth wristband. Easy adjustment, allergy free, plastic and metal free. Visible ESD symbol, 4 or 10mm male pushbutton.

- Art. STRAPPO 4mm
- Art. STRAPPO 10mm

BLACK TOUCH

Metal adjustable wristband, elasticated bands

- Art. BLACK TOUCH 4mm
- Art. BLACK TOUCH 10mm



DUAL TOUCH

Metal adjustable elasticated dual wristband. Each unit comes with a 6' dual wire grounding cord with a two stud connection at one end and a right-angled mono plug at the other.

- Art. DUAL TOUCH SET dual band with ground cord

Art WIRE BANANA 15-4

Short spiral ground cord 5 feet, 4mm female snap to banana

Art WIRE BANANA 15-10

Short spiral ground cord 5 feet, 10mm female snap to banana

Art WIRE BANANA 30-4

Long spiral ground cord 10 feet, 4mm female snap to banana

Art WIRE BANANA 30-10

Long spiral ground cord 5 feet, 10mm female snap to banana



Art WIRE BOTTONE 15-4

Short spiral ground cord 5 feet, 4mm female snap to female 10mm snap

Art WIRE BOTTONE 15-10

Short spiral ground cord 5 feet, 10mm female snap to female 10mm snap

Art WIRE BOTTONE 30-4

Long spiral ground cord 10 feet, 4mm female snap to female 10mm snap

Art WIRE BOTTONE 30-10

Long spiral ground cord 5 feet, 10mm female snap to female 10mm snap



ESD COATS

ESD COTTON COAT “PEQ” TYPE

ESD coats, PEQ ESD cotton fabric (125gr) with conductive fibres (no polyester). Available man and woman cuts, white or light blue. Meet ESD std IEC 61340-5-1. Company logo on request. Standard ESD logo on all supplies.

- Art. PEQ L-M-W** Long-Man-White (XS to XXL)
- Art. PEQ L-W-W** Long-Woman-White (XS to XXL)
- Art. PEQ L-M-B** Long-Man-Blue (XS to XXL)
- Art. PEQ L-W-B** Long-Woman-Blue (XS to XXL)

- Art. PEQ S-M-W** Short-Man-White (XS to XXL)
- Art. PEQ S-W-W** Short-Woman-White (XS to XXL)
- Art. PEQ S-M-B** Short-Man-Blue (XS to XXL)
- Art. PEQ S-W-B** Short-Woman-Blue (XS to XXL)



ESD POLY-COTTON COAT “PEK” TYPE

ESD coats, PEK ESD polyester-cotton fabric with conductive fibres. Available man and woman cuts, two standard colours (others on request). Meet ESD std IEC 61340-5-1. Company logo on request. Standard ESD logo on all supplies. PEK coats are available in different fabric weights.

- Art. PEK L-M-W** Long-Man-White (XS to XXL)
- Art. PEK L-W-W** Long-Woman-White (XS to XXL)
- Art. PEK L-M-B** Long-Man-Blue (XS to XXL)
- Art. PEK L-W-B** Long-Woman-Blue (XS to XXL)

- Art. PEK S-M-W** Short-Man-White (XS to XXL)
- Art. PEK S-W-W** Short-Woman-White (XS to XXL)
- Art. PEK S-M-B** Short-Man-Blue (XS to XXL)
- Art. PEK S-W-B** Short-Woman-Blue (XS to XXL)



ESD BADGE HOLDER

Art. Badge Holder

ESD rigid transparent badge holder with clip

Dimensions: 91x61cm
 Max dim badge: 89x55mm
 Surface resistance: 10⁹ Ohm





ESD SWEAT SHIRT
Art. PULLOVER

Designed to join ESD protection and protection against colder climates, the new PULLOVER is a soft and warm sweat shirt, with zip closure and long sleeves. The special fabric formulation ensures the best wearability, while the PULLOVER is designed as a unisex shirt, both for men and women.

ESD POLO SHIRTS & T-SHIRTS

Available in different colours, with soft and comfortable ESD knitted fabric in different colours, with short or long sleeves, and ESD symbol. The special fabric formulation ensures the best wearability.

Art. POLO SS polo ESD short sleeves

Art. POLO LS polo ESD long sleeves

Art. TS-SS T-shirts ESD short sleeves

Art. TS-LS T-shirts ESD long sleeves

COLOURS: WHITE-GREY-BLUE-BLACK



ESD WINTER JACKETS

Art. 927 Jacket no sleeves

Art. 925 Jacket with sleeves

Designed for colder climates, available with and without sleeves. Outside and middle layer in static dissipative polyester fabric. The inside is in warm cotton fleece. Unisex design with ESD logo and conductive cuffs.



ESD TROUSERS

Art 906

Straight style - All sizes available - ESD symbol - 2 sidepockets - Rubberized waist



ESD-DUTY JACKET

Art 928

Manufactured with conductive mix material, closure by Velcro, reflective signs highly visible, ESD symbol. Typical resistance: $<10^7$ Ohm

ESD OVERALL AND JACKET

Art 930 ESD trousers with suspenders

Trousers with ribbon, 3 pockets, zip fastener

Art 931 ESD working jacket

Jacket with 2 sidepockets, 1 breast pocket



ESD CAP

Art 932



ESD MICROFIBRE WASHABLE SHOES—ALL MACHINE WASHABLE 40°C**RADO (35-47)**

ESD microfibre clog with back detachable heel belt, heel protection, polyurethane sole, FTB inner sole, perforated upper shoe, standard or safety version (SS-steel toe cap)

Art. RADO WHITE (meets EN 20347-2012—SRC)

Art. RADO BLACK (meets EN 20347-2012—SRC)

Art. RADO WHITE SS (meets EN 20345-2011-SB-SRC)

Art. RADO BLACK SS (meets EN 20345-2011-SB-SRC)

**MOKA (35-47)**

ESD microfibre slipper, polyurethane sole, FTB inner sole, standard or safety version (SS-steel toe cap)

Art. MOKA WHITE (meets EN 20347—2012-SRC)

Art. MOKA WHITE SS (meets EN 20345-2011-S1-SRC)

Art. MOKA BLACK SS (meets EN 20345-2011-S1-SRC)

**STRINGA (35-47)**

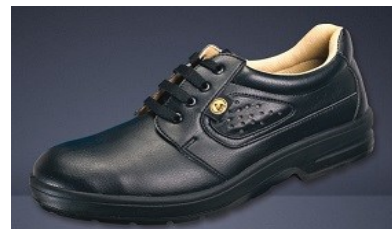
ESD microfibre laced shoe, polyurethane sole, FTB inner sole, perforated upper shoe, standard or safety version (SS-steel toe cap)

Art. STRINGA WHITE (meets EN 20347—2012-SRC)

Art. STRINGA BLACK (meets EN 20347—2012-SRC)

Art. STRINGA WHITE SS (meets EN 20345-2011-S1-SRC)

Art. STRINGA BLACK SS (meets EN 20345-2011-S1-SRC)

**CITYBLACK SC (35-47)**

ESD microfibre safety management laced shoe, FTB inner sole, polyurethane sole, composite metal free toe cap, black colour

Art. CITYBLACK SC (meets EN 20345-2011-S1-SRC)

**ECO WHITE (35-47)**

ESD microfibre closed sandal, polyurethane sole, white colour, velcro closures

Art. ECO WHITE (meets EN 20347—2012-01-SRC)

**NATURA F (34-42)**

ESD microfibre sandal with back heel strap, polyurethane sole, female sizes

Art. NATURA F WHITE (meets EN 20347-2012 OB)

Art. NATURA F BLACK (meets EN 20347-2012 OB)

**ESD IN-SOLES**

ESD spare universal in-soles for ESD shoes. All numbers.

Art. FTB

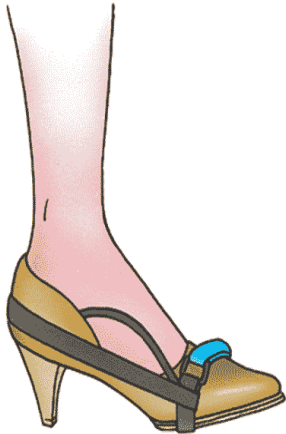
ESD in-sole



ESD FOOTGROUNDERS AND COVERSHOES

Art. STV-UR-CLIP

Heel grounders with extra-resistant rubber, clip closure and safety 1MOhm resistor

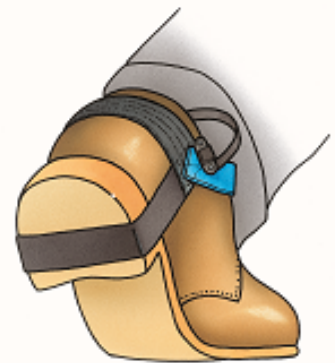


Art. STV-DR-CLIP

Toegrounders with extra-resistant rubber clip closure and safety 1MOhm resistor

Art. STV-VELCRO-EL

Heelgrounders with elastic ankle band and velcro closure and safety 1MOhm resistor



Art. STV-SOLE

Full-sole grounders with extra resistant rubber, clip closure and safety 1MOhm resistor

Art. STV-ONE SHOT

Disposable one-shot footgrounders with semi adhesive conductive tape.



Art. ESD COVERSHOES

Disposable polypropilene elasticated blue cover shoes with conductive grounding strip



Art. HOOK ESD COVERSHOES Polypropilene elasticated ESD cover shoes with conductive strip and hooks for dispenser box



Art. HOOK COVERSHOES BOX Floor dispenser box for HOOK ESD COVERSHOES



Art. CPE COVERSHOES Polyethylene cover shoes

ESD GLOVES

COTTON GLOVES

Art. GNB

ESD low static cotton gloves, white colour, available under MOQ (sizes M & L)



CONDUCTIVE PALM FIT GLOVES

Art. GNK DOT

ESD conductive gloves with PU palm protection, sizes S to XL



CONDUCTIVE TRICOT GLOVES

Art. GNC PALM

ESD conductive gloves with PU palm protection, seamless finger tips, sizes S to XL



MID TEMPERATURE GLOVES

Art 734G

ESD PVC gloves with interlock cotton lining for comfort and sweat absorption. Lightweight and heat resistant for maximum 150-200°C designed for hot boards handling. One size fits all.

HIGH TEMPERATURE GLOVES FOR WET CONTACT

Art. 70G

Packaged for ISO 5 (Class 100).

Wet or dry contact temperatures from -61.4°C to 232°C

PolyTuff silicone elastomer is sulfur-free. Excellent resistance to chemicals, solder and fluxes.

Size: Hand Specific -M, L, XL

Pack: 1 Pair/Poly Bag.



EXTREME HIGH TEMPERATURE GLOVES

Art. 50G

Withstand dry high temperatures (range -210 to +760°C),

ESD protection 10**9Ohm - No asbestos or fiberglass

Packed in class 100 (ISO5), single bags each pair.

Sizes M-XL

Art. 59G

Withstand dry high temperatures (range (-134C to 537°C),

ESD protection 10**9Ohm - No asbestos or fiberglass

Packed in class 100 (ISO5), single bags each pair.

Sizes L-XL



E3-OPERATOR GROUND CHECK

Art. E3

E3 Dual ESD Tester for bands and footwears. E3 has been designed to test the performance of ESD wrist bands and footwears such as shoes or footgrounders.

E3 is designed to operate tests in accordance with IEC 61340-5-1:2007 standard.

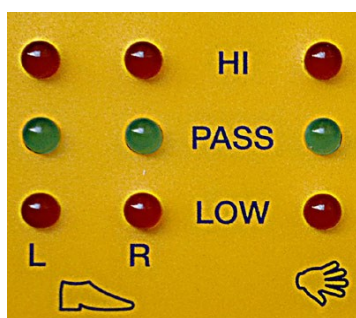
E3 performs test on the ESD wristband and the ESD footwears automatically, with separate test for left and right foot. The operator can easily select the test to perform (band only - shoes only - shoes and bands together). E3 includes a dual large and comfortable foot plate (for left and right foot). E3 shows results as High, Pass, or Low resistance values. A relay output can easily connect to electrical doors opening for access in restricted EPA areas. E3 works with battery or external power supply. The kit includes the tester, the wall mount yellow panel, the dual foot-plate, all cords and , with SPS version, the power supply



MODE SELECTION

On the top right you find the MODE SELECTOR which enables you to select the kind of test you like to perform

WRISTBAND ONLY
FOOTWEARS ONLY
WRISTBAND AND FOOTWEARS



L.E.D. INDICATIONS

The L.E.D. indication is designed to provide an immediate visual reading of the results of the performed test on footwears and wristbands

“HI” L.E.D.s (red colour) indicate that the equipment (footwears and/or wristbands) show an electrical resistance too high, exceeding the top limit of the correct range
 “PASS” L.E.D.s (green colour) indicate that the ESD equipment (footwears and/or wristbands) show correct electrical resistance values (within the range)

“LOW” L.E.D.s (red colour) indicate that the equipment (footwears and/or wristbands) show an electrical resistance too low, exceeding the bottom limit of the correct range

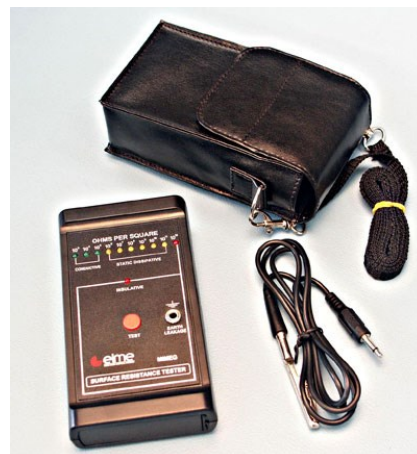
TECHNICAL INFORMATIONS

tester dimensions	158x95x60mm
tester weight	240 gr
tester weight with battery	280 gr
footplate dimensions	380x380x8mm
power supply	battery 9V
external power supply (optional)	220V AC/ 9VDC
colour	white box, yellow/black panel, coloured LEDs
Meets IEC 61340-5-1:2007	

POCKET SURFACE METER

Art MIMEG

This pocket meter has been designed to measure electrical resistivity (EIA 541/ASTM D-257) and resistance to ground on different surfaces in the E.P.A..LED indication between 10³ and 10¹² Ohm. Includes electrodes on the back side and is supplied with a ground connection cord.



PROFESSIONAL SURFACE METER

Art E-MEG

This instrument will test point-to-point, surface resistivity and resistance to ground.

The meter indicates conductive by green LEDs from 10³-10⁵, static dissipative by yellow LEDs from 10⁶-10¹¹ and insulative by red LEDs 10¹²+

Test voltage: 10³-10⁵ 10v 10⁶-10¹² 100v

Automatic voltage switch.

Weight: 250 grams (instrument only)

Available with electrodes and case.



PROFESSIONAL SURFACE METER—TESTS

OHMS, RH & TEMPERATURE

Art MULTIMEG

This professional digital electrical resistance meter kit, automatic switch 10-100V to test both conductive and dissipative surfaces, digital display, measurement of RH and temperature



ESD FIELD METER

Art. EOS 2001

EOS-2001 is a digital static field meter measuring a range from 0 to + / - 19.999V. Featuring ""HOLD"" mode and distance lights to 1 inch for precise testing. Easy readable digital display, tests kV per Inch.



ESD WORKSTATION MONITOR

Art. X-1B-1M

X 1B-1M allows real-time monitoring of grounding connections for 1 operator and 1 workstation. Electronic circuitry continuously checks the grounding of the operator wearing a standard single-cord wristband. The X 1B-1M simultaneously checks the effective grounding of mats (both table and floor mats) by simply connecting it to the ground mains and to the ground cords of the mats. Malfunctions are alerted by coloured LED and audible tones. The monitor is supplied with instructions, ground cords and power supply.



ESD BAGS AND BUBBLES

ANTISTATIC BAGS

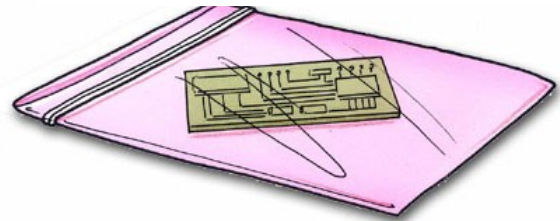
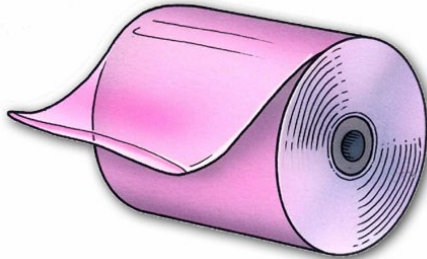
Polyethylene antistatic bags are designed to replace static-generating packaging materials, protecting components handled into the E.P.A.. Flexible, pink-transparent, strong sealings, durable ESD features, ESD symbol included on each bag. Wide range dimensions available.

Art. SA antistatic bags

Art SA: antistatic bags one side open

Art SAC: antistatic bags with zip closure

Art SA/T: antistatic tubing

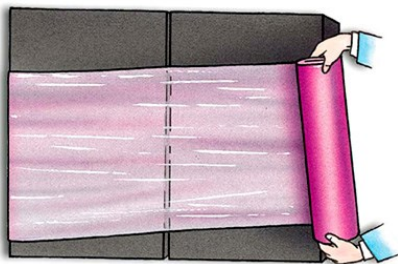


STATIC SHIELDING BAGS

SHIELDO SM static shielding bags are designed to provide an effective shield against electrostatic discharges on sensitive components and assemblies. The metal-in structure provides a durable protection of the metal layer, and an effective Faraday Cage protection on the content. Shielding bags are indicated for ESD protection both inside and outside the E.P.A..

Art. SHIELDO SM: static shielding bags one side open

Art SHIELDO SMC: static shielding bags with zip closure



ANTISTATIC STRETCH FILM

Art FE-AS-30

Wrapping extensible stretch film in rolls of 300m, height 500mm, thickness 25 micron



ANTISTATIC BUBBLE BAG

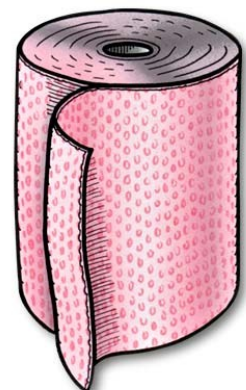
Art SAB

Antistatic bubble ESD bags, pink poly, with closure pad, to protect parts from mechanical shock.

ANTISTATIC BUBBLE ROLL

Art PLAC

Bubble film roll to protect ESD sensitive parts from mechanical shock.



VACUUM BAG SEALER

SEAL 4000

SEAL 4000 vacuum sealers operate by sealing bags and extracting the air (and moisture) at the same time. Repeatable operations with vacuum timing control & sealing timing control, automatic jaws opening at the end of each cycle. Superior aspiration capability through the chamber vacuum system, extracting air from all the open side and leaving no air residues even in hidden spots. Rugged all-metal case, effective power and attractive pricing. Jaws sealing length 520mm. Available 200 or 110V versions, with or without gas injection system



- Art SEAL 4000:** 520mm vacuum sealer. 220V or 110V
- Art SEAL 4000 G:** 520mm vacuum sealer - gas injection. 220V or 110V
- Art SEAL 9000:** 800mm vacuum sealer. 220V or 110V
- Art SEAL 9000 G:** 800mm vacuum sealer - gas injection. 220V or 110V



BARRIER BAGS FOR VACUUM SEALERS

SHIELDO SD

Barrier EMI/RFI anti-humidity bags are designed specifically for dry vacuum packaging of sensitive parts in connection with SEAL 4000 machinery. These bags keep air, moisture and oxygen out for longer periods. Moreover they provide an effective shielding against statics, RFI and EMI interferences (meet MIL B 81705-C).



HUMIDITY INDICATORS & DESSICANTS

Accessories for humidity control inside the bags. The spots on the indicators irreversibly change colour when unwanted humidity enters the bag, the desiccants eliminate the residual humidity after the packaging process.

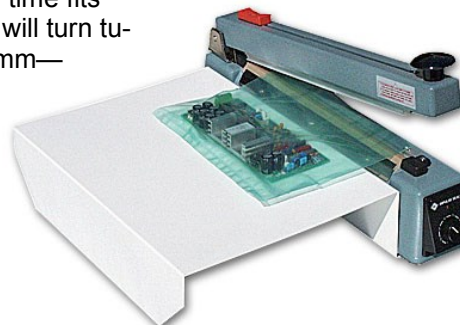


Art DESY: desiccants in various sizes & materials

STANDARD SEALERS & CUTTERS

Heat sealers designed both for ESD bags and tubings. Adjustable sealing time fits material and the thickness of the bag. The models with the cutting blades will turn tubing into single bags. Seal width: 2mm - Max material thickness: 2x0.125mm—available versions with timer and magnetic closure

- Art SEAL HANDY 300 CUT** - 300mm with cutting blade
- Art SEAL HANDY 400 CUT** - 400mm with cutting blade
- Art SEAL HANDY 500 CUT** - 500mm with cutting blade



TAPES AND LABELS

ESD PACKING TAPES

ESD tape for intimate packaging of sensitive devices, do not generate static charges during un-rolling, do not leave residues.

- Art REA7-12** 12,5mm width (1/2 inch)
- Art REA7-24** 24mm width (1 inch)
- Art REA7-48** 48mm width (2 inches)



EPA PACKING TAPES

Packaging tapes for ESD protection boxes, yellow background with ESD symbol, core 75mm, width 48. Visible markings.

Art REA-PACK



ESD SYMBOL MINI-LABELS

Smallest adhesive label rolls with attention ESD symbol, ideal for application on boards and components. Yellow background with ESD symbol

- Art EAS 005005** rolls of 1000 mini labels 5x5mm
- Art EAS 5020** rolls of 1000 labels 20x50mm

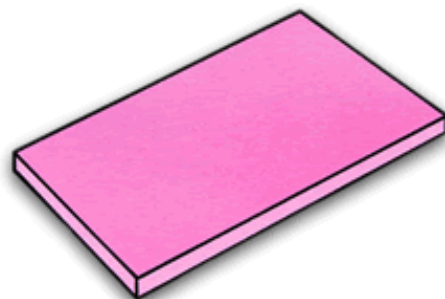


ESD PACKAGING FOAMS

ANTISTATIC PINK SOFT FOAM

Soft cushioning antistatic foam sheets, soft polyurethane for soft cushioning of electronic sensitive devices. Ideal cushioning in carton or plastic boxes.

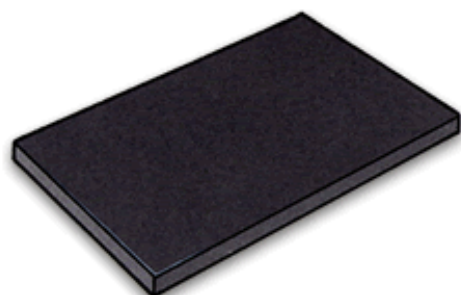
Art. SCA soft foam



CONDUCTIVE BLACK FOAM

Soft cushioning or rigid pin-insertion conductive foam sheets, polyurethane open-cells cushioning of electronic sensitive devices. Ideal to be used in carton or plastic boxes.

- Art. SCL-S soft foam**
- Art. SCL-H hard foam**



ESD OFFICE BENCH PRODUCTS**ESD A4 DOCUMENT BENCH TRAY****Art. VA-A4**

Conductive bench document tray, dim. A4, black colour, Size: 260 x 350 x 55 mm

**ESD A4 DOCUMENT HOLDER****Art. SA-A4**

Transparent permanent antistatic document holder, yellow spine, universal holes

**ESD A4 BINDER****Art. RA-A4**

Conductive A4 ring binder

**ESD TAPES DISPENSER****Art. REA-DSP**

ESD workbench adhesive tapes dispenser

**ESD BALL-PEN****Art. ESD BYRO**

Conductive ball-pen designed for writing into E.P.A. 100 pcs per box



CONDUCTIVE BOXES

Art. CO

Plastic conductive boxes in different sizes, available with optional cover and internal dividers

ART	EXT. DIM.	INT. DIM.
CO 0114	200 x 140 x 130	180 x 130 / 120
CO 0212	300 x 200 / 120	260 x 160 / 100
CO 0305	400 x 300 / 055	355 x 255 / 035
CO 0308	400 x 300 / 220	355 x 255 / 058
CO 0312	400 x 300 / 120	355 x 255 / 100
CO 0317	400 x 300 / 170	355 x 255 / 150
CO 0320	400 x 300 / 220	355 x 255 / 200
CO 0330	400 x 300 / 325	355 x 255 / 305
CO 0408	600 x 400 / 078	555 x 355 / 058
CO 0412	600 x 400 / 120	555 x 355 / 100
CO 0417	600 x 400 / 170	555 x 355 / 150
CO 0420	600 x 400 / 220	555 x 355 / 200
CO 0428	600 x 400 / 280	555 x 355 / 260
CO 0430	600 x 400 / 430	555 x 355 / 410
CO 0612	800 x 600 / 120	755 x 555 / 110
CO 0617	800 x 600 / 170	755 x 555 / 150



CONDUCTIVE COVERS

Art CP-LID

Conductive moulded comb dividers

ART.	DIM.
CP-20 LID	200 X 300 mm
CP-30 LID	300 x 400 mm
CP-40 LID	400 x 600 mm

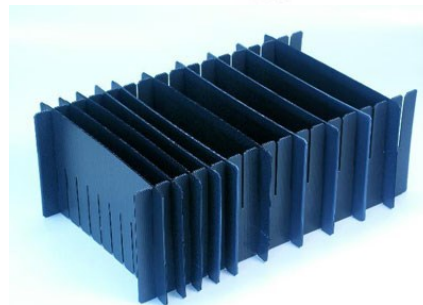


CONDUCTIVE DIVIDERS

Art CODIV

Conductive Conduplast comb dividers

ART.	DIM.
CODIV-300-100	300mmx100mm
CODIV-300-200	300mmx200mm
CODIV-400-100	400mmx100mm
CODIV-400-200	400mmx200mm
CODIV-600-100	600mmx100mm
CODIV-600-200	600mmx200mm

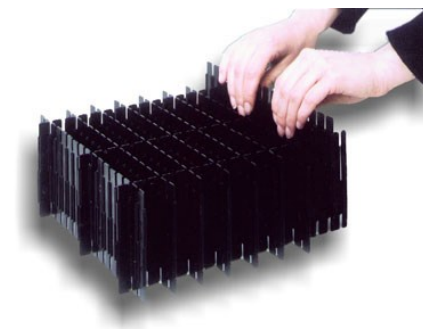


Art. CODIV MO

CODIV MO are comb-style dividers made of moulded conductive plastics (Electrical resistance: 10exp5 Ohms).

They are designed in order to create the best slots combination.

ART.	DIM.	PITCH	No SLOTS	CO BOX FIT
CODIV MO 300-100	255mm x 100mm	15mm	17	400 x 300 - 600 x 400
CODIV MO 400-100	351mm x 100mm	15mm	23	400 x 300 - 600 x 400
CODIV MO 600-100	551mm x 100mm	15mm	36	600 x 400

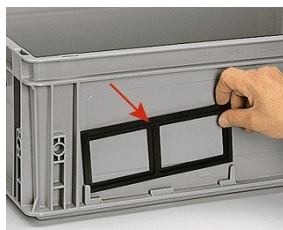


LABEL HOLDERS FRAMES



Art CO 64 LH

Art CO 43 LH



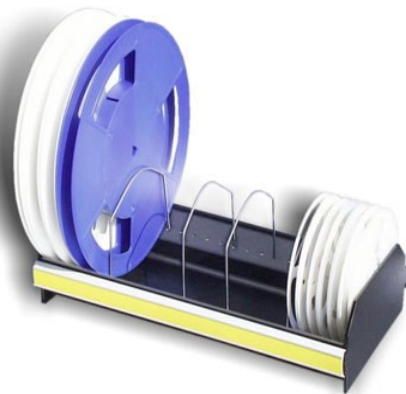
ART	DESCRIPTION	DIM
CO - 43 - LH	Label holder frame for boxes CO 400X300	145X81mm
CO - 64 - LH	Label holder frame for boxes CO 600X400	260X81mm

BENCH REELS RACK

Art REELBOX

Adjustable reels rack (reels diam.: 180-330mm). Ext. dim. 390x250x110(H) mm. Black conductive base, movable wire dividers (10 pcs included, 20 pcs capacity)

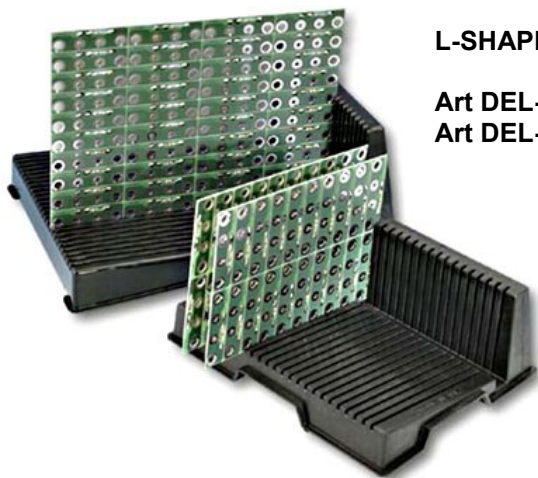
Art REELBOX DIVIDERS-5 set of 5 spare dividers for Art.REELBOX



L-SHAPE BENCH RACKS

Art DEL-1 : 205x274x93mm

Art DEL-2 : 355x268x128mm



FLAT PCB RACK

Art DESK 4

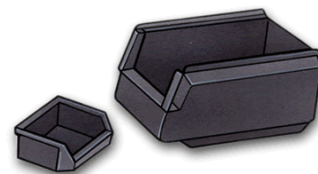
This rack has very practical dot profiles where PCBs can be placed in both directions. Dim. 352x252x15mm



CONDUCTIVE OPEN BINS

Art COCIS

Conductive bins are designed for internal logistics in the manufacturing process. They are stackable, can lay on a benchtop or can be hanged to a wall metal support. Available in a wide range of dimensions.



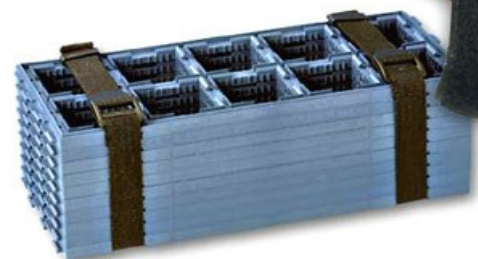
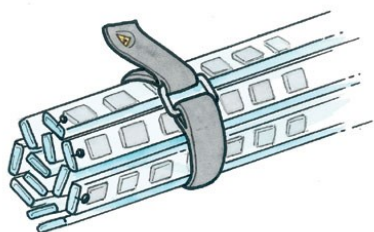
ART.	DIM.
COCIS A	85/65X095X045mm
COCIS B	160/140X095X075mm
COCIS C	230/200X140X130mm
COCIS D	350/300X200X145mm
COCIS E	350/300X200X200mm
COCIS F	500/450X300X200mm
COCIS G	500/450X300X145mm
COCIS H	500/450X300X300mm



ESD TRAY STRAP

Art V-GRIP

V-GRIP ESD tray strap, out performs all existing tray straps on the market. Its exclusive design does not create any electrostatic charge. The strap is made of a strong black conductive velcro band with permanent ESD features. The nylon buckle secures by locking its handle down. V-GRIP straps are economical, reusable and recyclable. Permanently conductive - not just dipped in an anti-static agent - Will not loose ESD properties. Length: 58cm



ESD RACKS

MODULO RACK

Moulded with static dissipative plastics these racks feature bigger sizes, optimal resistance to flexing under weights and are easily adjustable on the desired sizes.

Art RACK WALL - external wall size 480x290x35mm

Art RACK DIVIDER - internal dividing wall size 470x280x40mm

Art RACK SLIDE - metal slide cut to dimension



MODULO HITEC

Moulded with conductive plastics, are easily adjustable on the desired sizes support heavy weights without flexing. Each wall can be used as external or internal dividing wall (grooves on both faces).

Art HITEC 100 - wall size 100x359mm

Art HITEC 180 - wall size 180x359mm

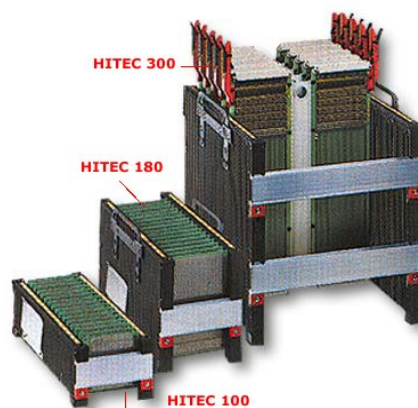
Art HITEC 300 - wall size 300x357mm

Art HITEC RAIL 136 - metal slide 136mm

Art HITEC RAIL 252 - metal slide 252mm

Art HITEC RAIL 547 - metal slide 547mm

Art HITEC HANDLE 100 - handle for 100mm HITEC walls



MODULO 700

Moulded with conductive plastics, or in aluminium (for highest temperatures) are easily adjustable on the desired sizes and support heavy weights without flexing. Specifically designed for automatic assembly equipment boards download or upload.

Available in polystirol (up to 60°C), or polycarbonate (up to 130°C) - the ALU versions withstand up to 200°C



METAL DRAWERS CABINETS

Art CIC-36 (STOCK ITEM)

Metal drawers cabinet, conductive. Ext dim.: 307x420x146mm.

36 plastic drawers dim.: 64x36x135mm.

Weight.: 3.9kg



MODULAR DRAWERS



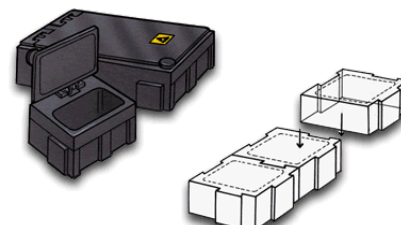
ART.	DIM.	Drawers X unit	Unit X pack
CICVARIO 4020	40X20X120mm	4	12
CICVARIO 4040	40X40X120mm	2	12
CICVARIO 8720	87X20X120mm	2	12
CICVARIO 8740	87X40X120mm	1	12

COMPONENT BOXES

Art SPRINGBOX

Small component boxes, with self-closable spring covers. Designed to be assembled in combinations of different sizes together.

ART.	DIM.
SPRINGBOX 1	dim int: 16x12x15mm
SPRINGBOX 2	dim. int: 37x12x15mm
SPRINGBOX 3	dim int: 37x41x15mm
SPRINGBOX 4	dim int: 57x68x15mm



ION GUN

The ION GUNS are designed to remove dust, residues and other contaminants from electronic assemblies, plastic moulded parts, plastic sheets, lenses, and other dust sensitive surfaces. The air compressed streamflow passes through an ion nozzle which generates positive and negative ions at high voltage. The compressed air will reach the surface to be cleaned and removes all contaminants without generating a static charge on the surface itself. In this way, the surface will result clean and neutral. No static fields will re-attract the dust after the action. ION GUNS are particularly indicated during precision assembly processes where the plastic parts need to keep clean and neu-



Art. ION GUN G9

This ion gun is lightweight, ideal for prolonged operations.

The emitter is protected on the top by a screwed metal point. No danger of touching the charged emitter

Easy periodic cleaning of the emitter

The air compressed inlet is inside the handle, for the best ergonomics.

No need of external power supply, needs just a plug in of 220Vac.

ION GUN G9 TECHNICAL FEATURES

POWER SUPPLY:	DC24V/500mA
PRESSURE OF AIR:	≤ 6MPA
WINDPIPE CONNECTOR SPEC:	DIAM: Ø 6mm
AVAILABLE RANGE:	100mm~800mm
BALANCE:	<±15V
DECAY TIME:	≤1.0S
TEST CONDITION:	25°C, Rh 55%, 30cm to wind outlet, acc. To EOS/ESD S3.1-2006
OZONE CONCENTRATION:	0,002PPM
OPERATING CONDITION:	Temperature 0~50°C, rH20%~80% (without frost)
COLOUR:	Light grey
DIMENSIONS:	127x198x28mm
MATERIAL:	ABS Fireproofing
WEIGHT:	250g±5g

Test data for reference

Test distance	300mm		600mm		900mm	
	Electrostatic decay time	Ion balance voltage	Electrostatic decay time	Ion balance voltage	Electrostatic decay time	Ion balance voltage
Coverage test points	+ -	+ -	+ -	+ -	+ -	+ -
Away from midpoint of fan	0.3s 0.4s	1.0V 1.2V	0.7s 1.1s	6V 7V	1.5s 2.2s	5V 4.7V

* Test conditions: 25°C, humidity 55% (accord with EOS/ESD-3.1-2006 standard).

** The test data bases on the highest air speed and the voltage range of ±1000V to ±100V.

** Power supply: AC 220V±15%/50Hz or AC 110V±15%/60Hz



ION GUN G-9
EUROSAFT srl

ION GUN

Art. SILENCER CP1

Input air pressure : 6bar

Air pressure consumption at 5 to 7 bar: 220-270lt/min

Max air pressure: 7 bar

Operative voltage: 7000V

Optimal distance: 300mm

Power supply: CEL-6

No discharge emitters—All teflon nozzle

POWER SUPPLY

Art. CEL-6 (for SILENCER CP-1)

Box enclosure : stainless steel 13x13x17cm

Voltage OUTPUT: 7000 VAC

Voltage INPUT: 220 VAC

Weight: 4kg

Ion gun connections: 4

Power supply cord: 1,8m, loose termination

ON/OFF switch

Main light indicator: ON/OFF switch



ION BENCH BLOWER—LARGE ION BLOW

Art VSE3000

Effectively eliminate static charges on your work bench quickly and reliably with VSE 3000.

The VSE 3000 has been the first ionizer designed meeting the testing procedures established by EOS/ESD Standard 3.1, the accepted industry standard for benchtop ionizer testing.

Performance: variable speed fan and integral air flow diffuser.

Reliability: Reliable ion balance. Patented, self-balancing circuitry that maintains a balance window of ± 5 Volts. Ion balance is maintained even during the brownouts and voltage fluctuations that cause other ionizers to operate out of balance.

Convenience: exceptionally quiet, the VSE 3000 delivers a powerful air flow with low noise levels thanks to sophisticated sound absorbing materials. A thermostatically controlled heater provides operator comfort. The VSE 3000's stand requires minimal workbench area, and can be mounted over-head or on walls or pedestals.

Larger ionized area: VSE ionizing area, due to its particular design, goes from 30° on the right to 30° on the left side.

UL: VSE 3000 is certified by U.L. (Underwriters Laboratories).

Adjustable Temperature : VSE 3000 streamflow of air can be adjusted in intensity and in temperature ($+ 8^\circ\text{C}$ thermostat). Moreover a filter can be mounted for cleaner air

FEATURES

Ion Balance:	self balancing unit maintains 0 ± 5 Volts balance at all normal operating conditions
Air Volume:	variable 38 to 76 liters/sec (80 to 160 cfm)
Air Velocity:	2.8 m/sec at 0.6 meters (550 ft/min at 2ft) at maximum fan speed
Angle of Ionized Air Coverage:	60 degrees
Heated Air	at Maximum Airflow: 4.4 degree C (8 degree F) rise above ambient at Minimum Airflow: 8.8 degree C (16 degree F) rise above ambient
Noise Level:	63 dbA max at 0.6 meters (2ft) at maximum fan speed
Ozone Protection	per UL 867 requirements
EMI/RFI	complies with FCC Part 15 requirements for Class A equipment
Dimensions	L 254 x W 305 x H 159 mm.
Footprint of Stand	324 x 140 mm.
Weight	3.6 Kg
Line Voltage	230 VAC (European, Schuko, CEE 7.7 plug), 50/60 Hz
Power	35 Watts with heater off; 435 Watts with heater on



Back heater control

ION BLOWER—SMALL FOOTPRINT

Art. ION ONE

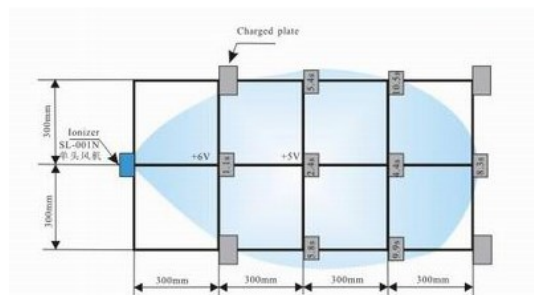
ION ONE is the benchtop ion blower designed to operate on specific place on the workbench. Adjustable airflow, optional warmed airflow, the ION ONE offers very good performance at competitive price.

FEATURES

- Adjustable airflow
- Input Voltage: 220V/110V
- Power Consumption: Max 270VA
- Operating Temperature: $-10^\circ\text{C} \sim +45^\circ\text{C}$
- Air Volume: 45~110CFM
- Weight: 2.8KG
- Size: 190(L)*95(W)*260(H) (mm)

PERFORMANCE

Ideal distance from the surface is 300mm, voltage decay 1kv-100v: 1,0—1,3s at room temperature



OVERHEAD ION BLOWERS

The **OH OVERHEAD BLOWERS** are designed to minimize the static charges accumulations on the workstation where ESD sensitive devices are handled. The OH blowers are designed to cover the area with fans pushing ionized balanced airflow on the area to combine with static charges excesses generated by the oridyction process (material handling, soldering operations etc).

- Quickly neutralizes static charges,
- Light and compact, good operability,
- Variable speed fan for airflow control
- Good grounding protection
- Ionization indicator

ION BLOWER

Art. OH-2

Input voltage 110/60Hz 、 220V/50Hz
Current consumption 0.5 or 0.25A
Limited power ≤20W
Size 600(L)mm ×90 (W)mm ×170 (H) mm
Air Velocity 80~220CFM
Weight 5.5kg
Ion Balance 0V±10V

Decay Test Results:

Testing Conditions RH: 60% **Temperature:** 22°C /
Testing Voltage: 1KV-100V **Operating Voltage:** 110V-220V



Distance	300mm	600mm	900mm	1200mm
Left	1.0s	2.1s	3.2s	4.0s
Center	1.2s	2.5s	3.6s	3.5s
Right	1.0s	2.0s	2.9s	3.9s

ION BLOWER

Art. OH-3

Input voltage 110/60Hz 、 220V/50Hz
Current consumption 0.45 or 0.9A
Limited power ≤30W
Size 1100 (L)mm ×184 (W) mm×110(H) mm
Air Velocity 120~330CFM
Weight 8.5kg
Ion Balance 0V±10V

Decay Test Results:

Testing Conditions RH: 60% **Temperature:** 22°C /
Testing Voltage: 1KV-100V **Operating Voltage:** 110V-220V



Distance	300mm	600mm	900mm	1200mm
Left	1.0s	2.1s	4,9s	1.0s
Center	1.1s	2.2s	4,2s	1,1s
Right	1.1s	2.3s	4,7s	1,1s

ION BLOWER

Art. OH-4

Input voltage 110/60Hz 、 220V/50Hz
Current consumption 0.45 or 0.9A
Limited power ≤30W
Size 1100 (L)mm ×170 (W) mm×125(H) mm
Air Velocity 120~330CFM
Weight 8.8kg
Ion Balance 0V±10V



Decay Test Results:

Testing Conditions RH: 60% **Temperature:** 22°C /
Testing Voltage: 1KV-100V **Operating Voltage:** 110V-

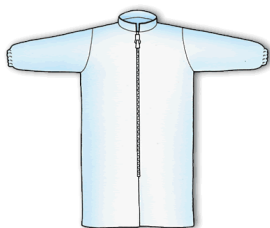
Distance	300mm	600mm	900mm
Left	0,8s	2.1s	4,3s
Center	0.7s	1,9s	2,8s
Right	0.9s	2.4s	4,3s

DISPOSABLE CLEANROOM CLOTHES

Disposable clothing ensures always clean garments to the cleanroom operators. Each part is supplied in a controlled clean packaging. The materials used are typically Tyveck, Polyethylene and Polypropilene.



Shirt collar



Round collar



Art. 7410 unisex low-static poly propilene sms 3-Layers coats, mao collar, pack of 25 units

Art. 7420 unisex low static poly propilene sms 3-Layers coats, shirt collar, pack of 25 units

Art. 9410 unisex ESD Tyveck coats, mao collar, pack of 25 units

Art. 9420 unisex ESD Tyveck coats, shirt collar, pack of 25 units

Art. 8420 unisex PLP coat, shirt collar, snaps, packs of 50 units

Art. 9712 TNT elastic bouffant cap 60cm dia.

Art. 9713/9714 polyester ESD caps for man and woman

Art. 9862 clean face mask with elastics



ESD CLEANROOM POLYESTER CLOTHES

SIZE (cm)	S	M	L	XL	2XL	3XL	4XL	5XL
LENGHT	88,5	100,5	101,5	103,5	105,5	107	108,5	110,5
CHEST	114	124	130	136	145	153	160	169
SLEEVE	75,5	77,5	80	82	85	88	90	92

Art. 3410 unisex ESD polyester coats, grid conductive pattern.

Art. 3420 unisex ESD polyester coats, stripe conductive pattern.



NITRILE GLOVES

Art. BQF09

3 times more resistant then latex or vinyl,
Naturally Anti-static, surface resistance 109 ohms.
Geogrip 360sm fully textured fingers and palms.
Meets ASTM D6319.
Size: XS- XXL, Ambi.
Pack: 100 Gloves/Dispenser Box.



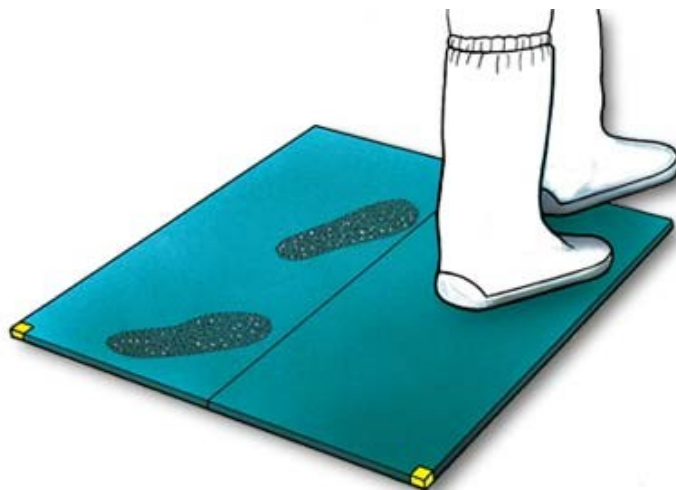
ANTISTATIC FINGER COTS

Art 650G

Packaged 1440 units per bag, durable antistatic features, cream colour, average surface resistance of 5 X 10¹² ohms per square unit.
All sizes

PEELABLE ENTRANCE MATS

STA peelable mats have been designed to minimize the particulate carried in under the soles or on the cart wheels entering the cleanroom. Placed at the entrance of the room, the adhesive traps all particles from soles or from the wheels leaving no residue. Each mat block is composed of 30 adhesive removable sheets. Used (numbered) mats are progressively peeled off to leave new clean ones. Each package includes 8 units for a total of 240 sheets



- Art. STA 09045 size 900 x 450mm
- Art. STA 11545 size 1150 X 450mm
- Art. STA 11565 size 1150 x 650mm
- Art. STA 11590 size 1150 x 900mm

CLEANROOM WIPERS

Highly absorbent cleanroom knitted 100% polyester wipers manufactured with continuous filament yarn designed for general maintenance usage in packages for classes 10 to 10k cleanrooms. Ideal for pharmaceuticals, semiconductor and optical applications

- Durable soft and non-abrasive
- Four edges are thermally sealed
- Laundered and packaged in class 1 cleanroom
- Extremely low ion content, particle generation and extractable residue
- 230 x 230mm, 150 sheets per bag - 10bags per box
- High absorption of water, soft (won't hurt the surface), less particles and ions. No Si ion release.



- Art. ECLW 10-100 cleanroom wipers class 10-100
- Art. ECLW 100-1000 cleanroom wipers class 100-1000
- Art. ECLW 1000-10000 cleanroom wipers class 1000-10000

CLEANROOM BOOTS AND CLOGS

Art. 9930

Designed for cleanrooms application, ensure a correct ESD drainage.
Size: 36 to 48
Material: ESD fabric stocking, PVC vamp and PVC sole

Art.9900ESD—MEET iec 61340-5-1

Designed for cleanrooms application, ensure a correct ESD drainage.
Size: 36 to 48
Material: ESD fabric stocking, Conductive sole.



CLEANROOM CLOGS (ANTISTATIC)

Art. CLEANCLOG

CLEAN CLOGS antistatic cleanroom clogs are designed for cleanroom applications, particularly where periodic washing of shoes is requested. In fact the CLEANCLOGS are manufactured in a special thermoplastic material that withstands tumble washing at 130°C and periodic machine washings at 95°C
Double sizes: 34/35 – 36/37 – 38/39 – 40/41 – 42/43 - 44/45 - 46/47
Different colours available



ESD BRUSHES

EB-1

Vertical conductive pentel style to dispense fluxes and to remove residues. Metal handle and synthetic bristles. Dimensions 135mm, bristles area 11x5mm; bristles length 20mm



EB-WA

Vertical brush for residues removal. Plastic handle and synthetic bristles, fully conductive. Dimensions: 142mm. Bristles area: 22mmx10mm, 12 mm trim length.



EB-30

Toothbrush style to remove residues, plastic handle, synthetic bristles. Dimensions: 190mm, bristles area: 35mm x 8mm, 13 mm trim length



EB-NAIL-2

Small nailbrush to remove residues. Plastic protected handle, synthetic bristles. Dimensions 20x70mm



EB-200

Large brush to remove residues. Plastic protected handle, synthetic bristles. Dimensions 150X45X25mm



EB-PRO

Bigger nailbrush style. Plastic protected handle, synthetic bristles. Length 100mm, bristles area 80x40mm, bristles length 20mm



EB-SOFT

Soft touch larger brush to remove dust from pc boards or any surface, with no risks of scratches or abrasions. Conductive plastic handle and soft conductive bristles



ESD FLUID DISPENSERS

Refillable ESD flux dispensing pen with soft tip (the set includes one chisel tip)

- Art. FLUXPEN SET
- Art. FLUXTIP (PACK OF 100)



BONPENS

Re-usable flux applicator, replaceable felt tip and cartridge, 7cc capacity, fine point, flexible shaft, controlled application - no mess, used with wash/non wash or strong acid flux, excellent for precise applications.

- Art BON PEN 102
- Art BON PEN TIPS 102
- Art BON PEN CARTRIDGE



ESD PUMP BOTTLE

Permanently static-dissipative 177ml (6oz) bottles. Minimize charges when moved or lifted. With low internal contamination, the special plastic will not contaminate contents. Comfortable one handed operation is perfect for cleaning with swabs and brushes.

- Art BOT2000



ESD DESOLDERING PUMP

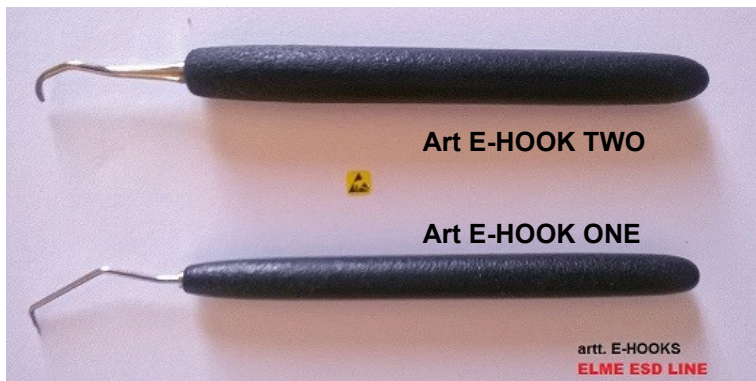
100% ESD safe desoldering pump. The only desoldering pump with nickel plated body on the market. The tips are conductive too.

- Art. COND 77 full ESD desoldering pump
- Art. 4KC1 replacement conductive tip



ESD SCRATCH TOOLS

Created for the electronics manufacturing process, the new **E-HOOKS** provide the operator with a strong scratch tool able to remove all hard residues on the boards. Two shapes design of hooks available, the soft and comfortable **ESD** conductive handle ensures the best and continuous grounding of the tools according to the IEC 61340-5-1 ESD standards requirements. The high grade metal used for the tips and the "hook" design allows the tool to remove the hardest residues with the maximum precision, able to scratch off in-between very tiny spacing.



ESD TOOL BAGS

Designed for EPA operators , safely bring tools and equipment on-field. ESD dissipative vinyl. Zip closure. Ground cord for earth connection on the spot.

- Art. TOOL BAG



ESD VACUUM PICK-UP FOR SMD

Vampire is the new battery-free hand held vacuum pick up pen designed for the safe pick-up of SMD components during assembly, test and rework processes. With fountain-pen dimensions, Vampire grabs, lifts and places components in complete safety, aided by a powerful internal piston and a full ESD protection. A complete choice of tips designed for any size of SMD component helps the operator to have always the right tool in hand. The Classic Vampire includes curved and straight needles, plus 4,6, and 9mm ESD cups. The solid plated aluminium body, the powerful piston mechanism, the ergonomic grip make Vampire the best portable tool for SMD on the market.

Art VAMPIRE CLASSIC

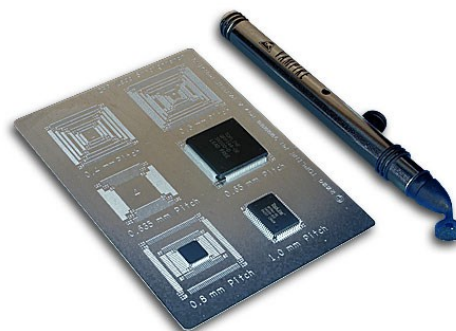
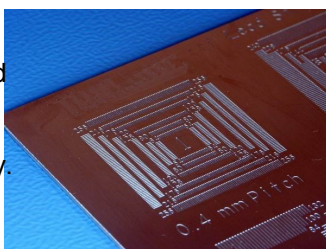


Art V-CL REPLACEMENT SET



QFP LEAD STRAIGHTENER

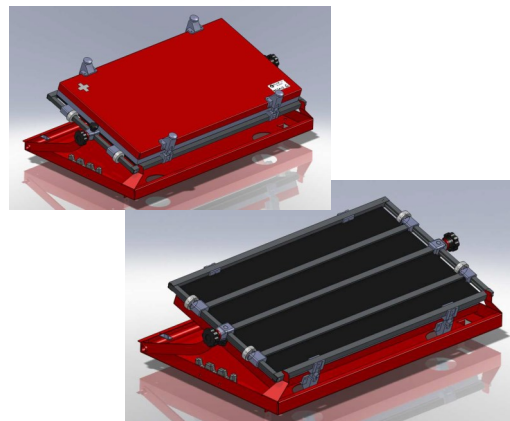
ICB LEADER TOOL is the most versatile lead straightener. It consists of a single universal metal plate with 34 lead template patterns with recessed slots. It handles all QFP, TQFP and LQFP with pitch of 0.4mm to 1.0mm. Rugged metal construction, lightweight and handy.



Art. ICB LEADER TOOL

ESD SAFE PC BOARD BENCH HOLDERS

The antistatic circuit board holders PCSA Series offer a stable and adjustable bench support for the assembly of circuit boards of any size. The PCSA holders are designed for soldering desoldering operations, positioning of components and maintenance of the boards.



Art. PCSA 1

work surface: 290x280mm

Art. PCSA 2

work surface: 520x280mm

Art. PCSA 4

work surface: 520x410mm

ESD MINI INSPECTION MIRRORS

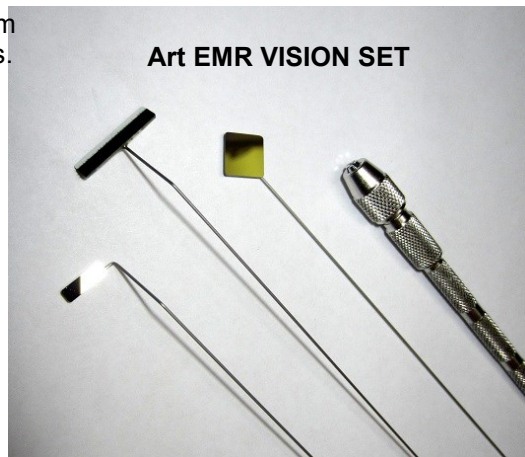
EMR VISION SET is designed to provide the best mini-mirrors to perform accurate optical inspection on pcboards, BGA, various smd components. In combination with magnifiers, lenses, lamps, microscopes the EMR mini-mirrors will allow the operator to view and inspect the hidden sides and corners, to view under the components on the board.

- 3 different shapes (T-shape, square and mini-side) available
- Flexible needles will allow to adjust to the correct angle of vision
- Scratch-proof mirrors
- ESD case to protect the mirrors when not in use
- Stainless steel universal handle

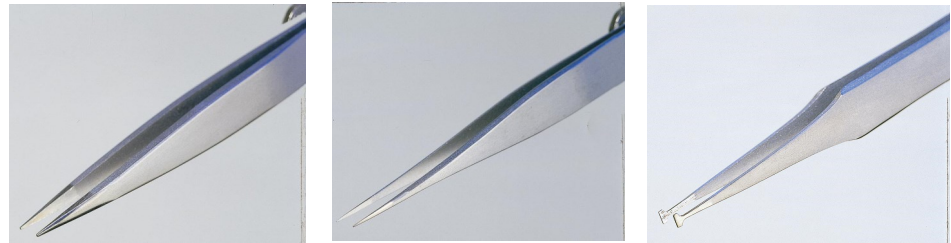


ESD case for EMR

Art EMR VISION SET



TWEEZERS



0 SA	Tweezers with fine tips	15 Carbone	Tweezers with short and cutting flat blades - CARBON
00 SA	Tweezers with flat and thick tips	15A Carbone	Tweezers for cutting springs and small wires; cutting tip - CARBON
00B SA	Tweezers with flat and thick tips, externally serrated	15AC Carbone	Same as 15A, but with smaller head - CARBON
00C SA	Tweezers with flat and thick tips	15AP Carbone	Same as 15A, but with parallel cut along the blades - CARBON
00D SA	Tweez with flat, heavy, internally serrated tips & externally serrated	18 SA	Tweezers for straightening or flattening small wires
0A SA	Tweezers with very fine tips, ideal for watch-repairers	19 SA	Tweezers serrated internally and externally on the handles
0C9 SA	Flat tweezers with very fine tips and thin blades	19P SA	Same as 19, but with bent tips
0C10 SA	Flat tweezers with very fine tips and thin blades	26 SA	Tweezers with very strong and flat tips
0C11 SA	Flat tweezers with very fine tips and thin blades	27 SA	Same as 26, but with thinner blades
0R SA	Tweezers with fine tips and thin blades with reverse action	29D/16 SA	Tweezers for removing dips, 16mm
1 SA	Tweezers with strong tips and thin blades	29D/22 SA	Tweezers for removing dips, 22mm
2 SA	Tweezers with sharp blades and strong tips	29D/28 SA	Tweezers for removing dips, 28mm
2A SA	Tweezers with rounded and flat tips	30D/16 SA	Tweezers with curved tips for removing dips, 16 mm
2AB SA	Tweezers with rounded and bent tips	30D/22 SA	Tweezers with curved tips for removing dips, 22 mm
2AR SA	Tweezers with rounded and flat tips with reverse action	30D/28 SA	Tweezers with curved tips for removing dips, 28 mm
2AT SA	Tweezers with rounded and flat teflon tips	31D/28 SA	Tweezers with large and flat tips for removing dips, 28 mm
3 SA	Tweezers with strong tips and thin blades	31D/40 SA	Tweezers with large and flat tips for removing dips, 40 mm
3C SA	Tweezers with strong tips and thin blades	33 SA	Tweezers with reverse action
3D SA	Tweezers with three teeth for wafer handling	33A SA	Same as 33, but with bent tips
3DT SA	Tweezers with three teflon teeth for wafer handling	34A SA	Tweezers with flat tips for handling of very small parts
4 SA	Tweezers with very fine and sharp tips	35A SA	Tweezers for handling of flat parts like wafers and flat capacitors
4A SA	Tweezers with sharp and strong tips	36A SA	Tweezers with flat and angled tips for handling of very small parts
4D SA	Tweezers with four teeth with flat lower tip for wafer handling	37S SA	Wafer handling tweezers with stop pins
4DW SA	Tweezers with flat lower tip for wafer handling	38 SA (SMD)	Tweezers with a hole on the tip, Ø 1mm
4R SA	Tweezers with very fine and sharp tips with reverse action	40A SA (SMD)	Tweezers with a rhombus-shaped hole on its tip, Ø 0,71mm
5 SA	Tweezers with very fine and sharp tips, ideal for SMD applications	51S SA	Tweezers with very fine tips bent at 40°
5A SA	Tweezers with very fine, sharp and oblique tips	62A SA	Tweezers with flat, rounded and bent tips
5AR SA	Same as 5A, but with reverse action	65A SA	Tweezers with long & thin form and very fine tips bent at 40°
5B SA	Tweezers with very fine and sharp tips, tips bent at 40°	85A SA	Tweezers for wafer handling
5C SA	Tweezers with sharp and strong tips; similar to 5 but shorter	85C SA	Tweezers for wafer handling
5D SA	Tweezers with five teeth with flat lower tip for wafer handling	85L SA	Tweezers for wafer handling
5DW SA	Tweezers with flat lower tip for wafer handling	110N Nylon	Nylon acid proof tweezers
6 SA	Tweezers with fine hook-shaped tips	102 SA (SMD)	Tweezers for handling of chips and SMD components; angled tips
6D SA	Tweezers with six teeth with flat lower tip for wafer handling	102R SA (SMD)	Same as 102, but with reverse action
6DWF SA	Tweezers with six teeth with bent lower tip for wafer handling	103 SA (SMD)	Tweezers for handling of chips and SMD comp; angled & bent tips
7 SA	Tweezers with very fine and bent tips	103R SA (SMD)	Same as 103, but with reverse action
7A SA	Same as 7, but with stronger tips	104 SA (SMD)	Tweezers for handling of SMD components
7B SA	Same as 7, but with blades internally serrated	105 SA (SMD)	Tweezers for handling of SMD components; bent tips
7E SA	Same as 7, but with flat & bent tips	106 SA (SMD)	Tweezers for handling of SMD components
7R SA	Same as 7, but with reverse action	107 SA (SMD)	Tweez for handling of SMD components; hole in the tips Ø 0,75 mm
8 SA	Tweezers for bending and straightening wires and small pins	108 SA (SMD)	Tweezers for handling of SMD components
11 Nickel	Tweezers with strong tips - NICKEL	109 SA (SMD)	Tweezers for handling of SMD components
12 Nickel	Tweezers with strong tips - NICKEL	110 SA (SMD)	Tweezers for handling of SMD components
13S SA	Tweezers with strong, flat and serrated tips	111 SA (SMD)	Tweezers for handling of SMD components

CUTTERS, STANDARD AND ESD VERSIONS



TR 20 M	Tool for a flush cut with pointed and small head
TR 20 MA	As above but with safety clip
TR 20 SM	Tool for a flush cut with pointed and small head, but with rounded edges
TR 20 SMA	As above but with safety clip
TR 20 TM	Tool angled at 50° for the cutting of integrated circuit pins
TR 20 VM	Tool angled at 60° for a front and flush cut
TR 2050 M	Particularly thin nose tool angled at 50° for a flush cut
TR 25	Tool for a flush cut
TR 25 A	As above but with safety clip
TR 25 B	Tool for a rounded flush cut
TR 25 L	Same as TR-25, but with longer handles
TR 25 LA	As above but with safety clip
TR 25 L 25	Tool angled at 25° for a flush cut and longer handles
TR 25 L 25 A	As above but with safety clip
TR 25 P	Tool for a flush cut with particularly sharp cutting blades
TR 25 PA	As above but with safety clip
TR 25 15	Tool for a reverse flush cut at 1.5mm from the surface
TR 25 15 L	As TR-25-15, but with longer handles
TR 25 50	Tool angled at 50° for a flush cut
TR 30	Tool for a flush cut
TR 30 A	As above but with safety clip
TR 30 B	Tool for a rounded flush cut
TR 30 T	Tool 50° angled for the cutting of integrated circuit pins
TR 30 V	Tool angled at 60° for a front, clean and flush cut
TR 30 10	Tool for a clean, flush cut at 1 mm from the surface
TR 30 15	Tool for a clean flush cut at 1,5 mm from the surface
TR 30 15 V	Tool angled at 60° for a front cut at 1,5 mm from the surface
TR 30 58	Tool for a chamfered cut
TR 30 58 A	As above but with safety clip
TR 30 58 R	Tool for a flush cut
TR 30 58 RA	As above but with safety clip
TR 58	Tool for a chamfered cut
TR 58 A	As above but with safety clip
TR 58 R	Tool for a flush cut
TR 58 RA	As above but with safety clip
TRR 58	Strong tool for a chamfered cut
TRR 58 A	As above but with safety clip
TRR 58 B	Strong tool for rounded flush cut
TRR 58 G	Very strong tool for a flush cut
TR 5000	Strong tool for a chamfered cut
TR 5000 A	As above but with safety clip
TR 5000 B	Strong tool for rounded flush cut. Suitable for works with plastic
TR 5000 P	Strong tool for a chamfered cut with pointed cutting blades
TR 5000 PA	As above but with safety clip
TR 5000 PG	Strong rounded flush cutter with pointed, well finished cutting blades
TR 5000 PR	Strong tool for a flush cut, with very sharp cutting edges
TR 5000 PRA	As above but with safety clip
TR 5000 R	Strong tool for a flush cut
TR 5000 RA	As above but with safety clip
TR 5000 V	Special tool angled at 60° for a front, flush cut
TR 5000 W	Tool for a front, flush cut, with cutting height adjustment from the surface
TR 5000-10	Tool for a front cut at 1 mm from the surface
TR 5000-13	Tool for a front cut at 1,3 mm from the surface
TR 5000-15	Tool for a front cut at 1,5 mm from the surface
TR 5015	Strong tool for a clean and flush cut at 1,5 mm from the surface
TR 5020	Strong tool for a clean and flush cut at 2 mm from the surface
TR 5045 V	Tool angled at 45° for a front, flush cut
TRR 5000	Strong tool for a chamfered cut.
TRR 5000 A	As above but with safety clip
TRR 5000 B	Strong tool for rounded flush cut. Suitable for works with plastic

ESD VACUUM CLEANERS

PORTABLE VACUUM CLEANERS

Vacuum cleaners for E.P.A. s, designed with light-weight materials and high power engines, low vi-

Art. ASPIRO ESD S-GS

Vacuum cleaner, PP fully conductive body, 3m cable shucko plug

Art. ASPIRO ESD SE-GS

Vacuum cleaner, PP fully conductive body, 3m cable shucko plug, electronic control

Art. ASPIRO ESD S-GS HEPA

Vacuum cleaner, PP fully conductive body, 3m cable shucko plug, HEPA filter

Art. ASPIRO ESD SE-GS HEPA

Vacuum cleaner, PP fully conductive body, 3m cable shucko plug, electronic control, HEPA filter



LENSES WITH ILLUMINATION



Art. TEVISIO

- 48 premium SMD LEDs
- 40 % energy savings
- Up to 6,000 lx at just 14 W
- Maintenance-free: LED life of up to 50,000 h and more
- Continuously dimmable down to 10 %
- Variants with Visualizer function for identifying structures and faults
- Color reproduction level 1A
- 3.5 diopters for approximately double magnification
- Absolutely scratch-proof glass magnifier, optionally nonreflecting
- Wide field of vision with Ø 153 mm for distortion-free vision
- Robust aluminum and high-performance plastic
- Closed joints protect the internal cables
- Enormous operating radius, uniquely flexible head joint
- Balanced arm, easily adjustable, can be precisely fixed if needed
- Also available in ESD design

Art. SNL 319

- Extremely high illuminance
- Change of the lighting character by different settings of the illuminant for shadow-free light or light with shadow to highlight 3D structures
- Wide-range field of inspection
- Flexible luminaire head that is conveniently adjustable in all directions
- Low energy consumption
- Also available in ESD design