

# Static Control Workstation

## KSWKS2

### Description

Bondline's static control workstation kit is designed to give full static protection when handling static sensitive electronic components and devices in a production or test environment. The ESD work top kit includes a 1200mm x 600mm anti-static bench mat together with a grounding cord, coil cord, wrist strap and adapter snap.

The static control workstation kit has all the equipment needed to create a basic ESD workstation for the safe handling of electronic components or devices. The kit is ideal for repairs on electrical items such as laptops, tablets, PCBs, computer parts, medical equipment and audio devices. The static control workstation comes with our popular blue ESD bench mat as standard, unless otherwise specified.



### Kit Includes:

- x1 1200mm x 600mm, blue static dissipative 2-layer bench mat with 10mm stud in each corner
- x1 Black, stud-to-jack, coiled Earth lead with 10mm stud
- x1 Black, stud-to-jack, straight Earth lead with 10mm stud and crocodile clip
- x1 10mm hypoallergenic, adjustable, dark blue crocheted ESD wrist strap
- x1 Adaptor snap with banana receptacle and 10mm male/10mm female snaps

### Key Features

- Quick and easy to set up
- Saves money by buying as a kit
- Easy to clean with Staticide mat and table top cleaner
- Prevents sliding of electronic components
- Suitable for loose laying: does not require application with adhesive
- Good resistance to scratches, excellent flexibility and offers good comfort
- Heat resistance: does not melt if in contact with hot metal parts or soldering debris
- UV resistance: No major discolouration
- Resistant to abrasion, solder flux, most commonly used solvents
- All products included in the kit are compliant to the IEC-61340-5-1 International Standard

### ESD Standards & Regulations Compliance

 RoHS compliant

REACH compliant

 CE certified

IEC-61340-5-1 compliant

# Static Control Workstation

KSWKS2



Premium Textured Bench Matting	
Specification	Typical Values
Thickness	0.076 (2.00mm)
Hardness - Upper Dissipative Layer	70 -5 + 5 shore A (Per ASTM D2240)
Hardness - Lower Conductive Layer	75 -5 + 5 shore A (Per ASTM D2240)
Scratch Resistance	No clear scratch and well recovery
UV Resistance	No major disc.
Stud Force	6KG/ 59cm (Recommended)
Surface Resistance Point-to-Point	<10 <sup>9</sup>
Surface Resistance Resistance-to-Ground	10 <sup>6</sup> – 10 <sup>8</sup>
Heat Resistance	Resist holds irons and hot paste, rubber doesn't melt if in contact with hot metal parts and soldering debris.
Charge Decay	< 0.1 sec per FTMS 101C, M4046, TB-WINT-0008
Charge Generation	< 100 volts per ANSI/ ESD STM4.2
Room Temperature	21°C
Humidity	62%
300% Tensile Strength	Top Layer: 3.7Mpa Bottom Layer: 3.7Mpa
Breaking Strength	Top Layer: 18.7Mpa Bottom Layer: 3.7Mpa
Elongation at Break	Top Layer: 690Mpa Bottom Layer: 250Mpa
Hardness	Top Layer: 66° Bottom Layer: 80°
Dimensions	1200mm x 600mm

# Static Control Workstation

KSWKS2



ESD Coil Cord	
Specification	Typical Values
Conductor	Diameter is 2.5mm with 7 tinsel wires
Insulation	Coil cord is insulated with PU material
Electrical Properties	The cord conductor shall have an end to end resistance not greater than 50 ohms
Resistivity	Current limiting resistance = 1 meg ohm + 20%
Breakaway Force	1 to 5lbs of pull away force is required to disconnect the snap in a normal disconnect direction
Ground Lead Extendibility	Cord should return back to at least 85% of its original length in less than 10 minutes after hanging for 24 hours, with 1KG weight on the other end
Plastic Parts	Anti-static nylon materials
Connection Integrity	The tensile strength of the end connections shall be not less than 66% of the tensile strength of the wire, and in no case shall it be less than 5 lbs
Hardware	All metal parts shall show no evidence of corrosion and rust after 24 hours submersion to salt solution. Preferably made from stainless steel or brass alloy plated with nickel
Dimensions	1.8 metres long (6ft)

# Static Control Workstation

KSWKS2



Straight Grounding Lead	
Specification	Typical Values
Conductor	Diameter is 2.5mm, with 7 tinsel wires
Insulation	Straight cord is insulated with PU material
Electrical Properties	The cord conductor shall have an end to end resistance not greater than 50 ohms
Resistivity	Current limiting resistance = 1 meg ohm $\pm$ 20%
Bending Life Test	Exceeds 20,000 cycles of bending life test without any physical damage on the strain relief
Breakaway Force	1 to 5 lbs. of pull away force is required to disconnect the snap in a normal disconnect direction
Connection Integrity	The tensile strength of the end connections shall be not less than 66% of the tensile strength of the wire, and in no case shall it be less than 5 lbs
Markings	With customer identification logo, resistance value, and date code
Hardware	All metal parts shall show no evidence of corrosion and rust after 24 hours submersion to salt solution. Preferably made from stainless steel or brass alloy plated with nickel.
Plastic Parts	Made of static dissipative plastic material
Dimensions	3 metres long

# Static Control Workstation

KSWKS2



Crocheted ESD Wrist Strap	
Specification	Typical Values
Interior Cuff Resistance	≤ 100 kilo ohms at 7 to 30 volts dc open circuit
Exterior Cuff Resistance	≥ 10 meg ohms at 7 to 30 volts dc open circuit
Wrist-Strap Life Test	When stretched to 200%, band returns to its normal length after 20,000 cycles
Breakaway Force	1 to 5 lbs. of pull away force is required to disconnect snap into normal direction
Termination	Fabric band assembled to GO2 buckle, with flap and grip, and male snap connector available 10mm.
Band Construction	Constructed using premium crochet fabric band with elastic ratio of 1:2.5" to 1:3". Outer surface is non-conductive and inner surface of the strap shall be conductive, lined with 5- rows of double-ply silver yarn
Dimensions	For free-sized wrist band, the flattened length must be 95 to 105mm
Hardware	All metal parts shall show no evidence of corrosion and rust after 24 hours submersion to salt solution. Preferably made from stainless steel or brass alloy plated with nickel.
Markings	With identification logo and date code (Killstat)
Plastic Parts	Made of static dissipative plastic material

# Static Control Workstation

KSWKS2



Adaptor Snap	
Specification	Typical Values
Construction And Material	Brass insert assembled to 10mm female and male snaps then moulded with plastic material
Hardware	All metal parts shall show no evidence of corrosion and rust after 24 hours submersion to salt solution. Preferably made from stainless steel or brass alloy plated with nickel
Breakaway Force	1 to 5 lbs. of pull away force is required to disconnect the snap in a normal disconnect direction
Colour	Standard colour is blue with white rim
Plastic Parts	Made of static dissipative plastic material

## Cleaning Guidance

For optimum electrical performance, the bench matting must be cleaned regularly using an ESD-safe mat cleaner. We suggest using our Staticide mat and table top cleaner for best cleaning results. This will maintain the original resistivity of the anti-static matting whilst extending its shelf-life.



# Eliminate Costly Static Damage...

Whether you are experiencing unacceptable levels of damage in transit, need a specific cleanroom solution or simply don't know which ESD safe equipment is best for you, we can help!

Request complimentary,  
no obligation advice by  
speaking with one of  
our technical experts  
today.

