



Statshield Overshirt with V-Neck Instructions for Use



Figure 1. Vermason Statshield Overshirt with V-Neck

Description

Vermason Statshield Overshirt with V-Neck is a Static Control Garment with $R_p-p < 1 \times 10^{12}$ ohms meeting the limit of EN 61340-5-1 when tested per ANSI/ESD STM2.1.

“Garments are intended to attenuate electrostatic fields that may be present on personnel clothing. ... While a person may be grounded using a wrist strap or other grounding methods, that does not mean that insulative clothing fabrics can dissipate a charge to that person’s skin and then to ground. Personnel clothing usually is electrically separate or isolated from the body.” (ESD TR20.20-2008 section 5.3.13.1)

Vermason Statshield Overshirt with V-Neck are designed to be antistatic, low tribocharging and offer protection to ESD sensitive items from electrostatic fields generated by clothing on the user’s body.

The Statshield Overshirt with V-Neck creates a Faraday Cage around the torso of the wearer that shield ESD susceptible items from static charges generated on the wearers’ clothing.

The Statshield Overshirt with V-Neck is constructed of a light weight poly/nylon blend with a minimum of 9% conductive fiber providing continuous and consistent charge dissipation. All of the seams in the garment are designed to maintain electrical continuity from panel to panel and from sleeve to sleeve in accordance with the ESD Association Garment Standard, ANSI/ESD STM2.1.

Statshield Overshirt with V-Neck are available in the following sizes:

Item#	Size	Chest	Sleeve
221140	Small	86-91cm	49.5cm
221141	Medium	96-101cm	50.8cm
221142	Large	106-112cm	52.1cm
221143	X Large	117-122cm	53.3cm
221144	2X Large	127-132cm	54.6cm

Instructions for use

Put on the overshirt, ensure no clothing is exposed outside of the overshirt. Note: EN 61340-5-1 paragraph 5.2.5 Garments “Coats, jackets, smocks and overalls shall completely cover all clothing in the area of the arms and torso.”

“Garments that become worn or damaged should be repaired or replaced by a qualified source to ensure the electrical integrity of the seams. Once the repair is made, the periodic test described above, should be conducted to validate the repair.” (ESD TR20.20-2008 section 5.3.13.4.1 Repairs)

“For personnel safety, static control garments should not be worn in situations where there is exposure to high voltage. Regular laundering of static control garments according to the manufacturer’s recommendation is suggested to make sure conductive fibers do not become contaminated and rendered insulative. After laundering, thorough rinsing of the garment will help eliminate the possible buildup of chemicals on the conductive fibers, which can cause them to become insulative. Drying garments at high temperatures may degrade conductive fibers in fabrics used to manufacture garments.” (ESD TR20.20-2008 section 5.3.13.6 Other Considerations)

Specifications

Fabric Weight
52.14 grams/sq meters

Fabric Content
Texturized polyester (91%) and
a minimum of 9% carbon
mono-filament nylon

Surface Resistance of Fabric
RTT <1 x 10E7 ohms per
ANSI/ESD STM2.1

Static Decay Rate
5000 volts to 500 volts in less
than 0.1 seconds, per
FTMS-101C

Glass Transition Temp
121°C

Flash Point
560°C

Compliance Verification Testing

Panel to panel conductivity is essential and easy to test using our Surface Resistance Test Kit Item #[222630](#), by placing 5 pound electrodes on different panels. For additional information, refer to ANSI/ESD S20.20, ESD TR20.20, the ESD Association Garment Standard, ANSI/ESD STM2.1, and Compliance Verification ESD TR53.

Maintenance

For proper operation, ESD garments must be laundered periodically. Woolite works well. Liquid detergents are better than dry in that there is less caking and frictional wear. Launder garment in cool or warm water, tumble dry with low heat or hang dry. In terms of laundering the smocks by hand or with a washing machine, most prefer using a washing machine. This works well if using a standard house machine on gentle cycle. Industrial machines are fine if "Pony" (typically under 200 pound loads) machines are used. It is not recommended to launder these garments in heavy industrial laundry machines as it will lead to premature wear. Garments should be tumbled dry using low heat. DO NOT BLEACH.

The conductive fibers are sensitive to heat and should not be exposed to laundering heat in excess of 49°C. Use only non-ionic softeners and detergents when laundering. Under normal wearing and recommended washing conditions, Vermason V-Neck Overshirt will maintain their usefulness and effectiveness for a minimum of 50 washings.

Limited Warranty

Vermason expressly warrants that for a period of one (1) year from the date of purchase, Vermason Statshield Overshirt with V-Neck will be free of defects in material (parts) and workmanship (labour). Within the warranty period, a unit will be tested, repaired or replaced at Vermason's option, free of charge. Call Customer Service at 0044 (0) 1462 672005 for a Return Material Authorisation (RMA) and for proper shipping instructions and address. Any unit under warranty should be shipped prepaid to the Vermason factory. You should include a copy of your original packing slip, invoice, or other proof of purchase date. Warranty repairs will take approximately two weeks.

If your unit is out of warranty, Vermason will quote repair charges necessary to bring your unit to factory standards. Call Customer Service at 0044 (0) 1462 672005 for a Return Material Authorisation (RMA) and proper shipping instructions and address.

Warranty Exclusions

THE FOREGOING EXPRESS WARRANTY IS MADE IN LIEU OF ALL OTHER PRODUCT WARRANTIES, EXPRESSED AND IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH ARE SPECIFICALLY DISCLAIMED. The express warranty will not apply to defects or damage due to accidents, neglect, misuse, alterations, operator error, or failure to properly maintain, clean or repair products.

Limit of liability

In no event will Vermason or any seller be responsible or liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, users shall determine the suitability of the product for their intended use, and users assume all risk and liability whatsoever in connection therewith.