

# Heavy Duty Poly Cotton ESD Scrubs Testing and Maintenance



Made in America



Figure 1. Desco Heavy Duty Poly Cotton ESD Scrubs

## Description

Desco Heavy Duty Poly Cotton ESD Scrubs are made in America and are designed to be low charging (antistatic), and shield ESD sensitive items from electrostatic charges generated by regular clothing.

Outfitting lab technicians in Desco ESD Scrubs is the single most powerful step to demonstrate a company's commitment to their ESD / Static Control Program.

The Desco ESD Scrubs create a Faraday Cage effect around the body of the wearer that shield ESD susceptible items from static charges generated on the wearers' clothing.

Our Static Control Garment's fabric content is heavy duty poly-cotton: 80% Polyester, 19% Cotton and 1% BASF Carbon Suffused Mono-Filament Nylon.

All of the seams in the garment are stitched with conductive thread and designed to maintain electrical continuity from panel to panel, sleeve to sleeve, leg to leg in accordance with the ESD Association Garment Standard, ANSI/ESD STM2.1.

Per the ESD Handbook ESD TR20.20-2008 section 5.3.13.1: "Garments are intended to attenuate electrostatic fields that may be present on personnel clothing."

The Desco ESD Scrub has a Resistance point-to-point (R<sub>tt</sub>) <1 x10E9 ohms meeting the static control garment required limit < 1 x 10E11 ohms of ANSI/ESD S20.20 when tested per ANSI/ESD STM2.1 or ESD TR53.

## Instructions for use

Put on the garments and ensure no regular clothing is exposed outside of the Top or Pants.

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...should be conducted to validate the repair." (ESD TR20.20-2008 section 5.3.13.4.1 Repairs)

## Fabric Specifications

<b>Fabric Weight:</b>	5 ounces/sq yard
<b>Fabric Content:</b>	Texturized polyester (80%), cotton (19%), 1% BASF carbon suffused mono-filament nylon
<b>Surface Resistance:</b>	RTG <1 x 10E9 ohms per ANSI/ESD STM2.1
<b>Static Decay Rate:</b>	5,000 volts to 500 volts in less than 0.1 seconds, per FTMS-101C

## Compliance Verification Testing

Panel to panel conductivity is essential and easy to test using our Surface Resistance Test Kit Item #[41290](#), 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.

## Labeling

Label includes ESD protective symbol identifying the garment as an ESD protective Garment. In addition the label includes size, manufacturer traceability, fabric composition, and laundering instructions. Label identifies product as being made in America.

## 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 120°F. Use only non-ionic softeners and detergents when laundering. Under normal wearing and recommended washing conditions, Desco Heavy Duty Poly Cotton ESD Scrubs will maintain their usefulness and effectiveness for a minimum of 50 washings.

## Unisex Sizing Chart

The unisex Desco ESD Scrubs are designed for both men and women to wear these scrubs. The cut is a loose fit. Thus women tend to size down. The sizing chart is a guide to find the closet appropriate size.

## Personnel Safety

Per ESD Handbook ESD TR20.20-2008 section 5.3.13.6 Other Considerations: "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 Scrub Top

Item #	Color	Size	Chest
<a href="#">17010</a>	Blue	X Small	32"-34"
<a href="#">17026</a>	White	X Small	32"-34"
<a href="#">17011</a>	Blue	Small	35"-37"
<a href="#">17027</a>	White	Small	35"-37"
<a href="#">17012</a>	Blue	Medium	38"-40"
<a href="#">17028</a>	White	Medium	38"-40"
<a href="#">17013</a>	Blue	Large	42"-44"
<a href="#">17029</a>	White	Large	42"-44"
<a href="#">17014</a>	Blue	X Large	46"-48"
<a href="#">17030</a>	White	X Large	46"-48"
<a href="#">17015</a>	Blue	2X Large	50"-52"
<a href="#">17031</a>	White	2X Large	50"-52"

### ESD Scrub Pants

Item #	Color	Size	Waist	Leg
<a href="#">17020</a>	Blue	X Small	24"-26"	30"
<a href="#">17032</a>	White	X Small	24"-26"	30"
<a href="#">17021</a>	Blue	Small	27"-29"	30"
<a href="#">17033</a>	White	Small	27"-29"	30"
<a href="#">17022</a>	Blue	Medium	30"-32"	32"
<a href="#">17034</a>	White	Medium	30"-32"	32"
<a href="#">17023</a>	Blue	Large	34"-36"	32"
<a href="#">17035</a>	White	Large	34"-36"	32"
<a href="#">17024</a>	Blue	X Large	38"-40"	34"
<a href="#">17036</a>	White	X Large	38"-40"	34"
<a href="#">17025</a>	Blue	2X Large	42"-44"	34"
<a href="#">17037</a>	White	2X Large	42"-44"	34"

### **Limited Warranty**

Desco expressly warrants that for a period of one (1) year from the date of purchase or (50) fifty wash cycles, whichever occurs first, Desco garments will be free of defects in material (parts) and workmanship (labor). Within the warranty period, a garment will be replaced at Desco's option, free of charge. Call Customer Service at 909-627-8178 (Chino, CA) or (781) 821-8370 (Canton, MA) for Return Material Authorization (RMA) and proper shipping instructions and address. Include a copy of your original packing slip, invoice, or other proof of date of purchase. Any garment under warranty should be shipped prepaid to the Desco factory. Warranty replacements will take approximately two weeks.

### **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 Desco 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 what so ever in connection therewith.