## **FRANSFORMING TECHNOLOGIES**

**OUTSTANDING ALTERNATIVES IN STATIC CONTROL** 

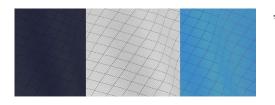
### **TX4000 Series**

**ESD Hard Sole Boots with Ground Ribbons** 

### **TX40BH Series - ESD Hard Sole Hypalon Boots** with Ground Ribbons (Groundable)

- TX4000 ESD Grid Fabric—99% Polyester / 1% Carbon
- PSTAT ESD Hard Sole with twill reinforcement
- Combination 1" elastic and webbing at top of closure with snap adjustment
- Replaceable 18" internal ground ribbon attachment included, with 24" long ground ribbon available for boots
- Internal snaps to electrically connect to coverall and ground ribbon
- Color coded straps denote size
- Reusable / Launderable
- ISO Cleanroom: ISO 6 (Class 1000)
- Meets standards required for ANSI/ESD S20.20 and STM9.1 - Footwear - Resistive Characterization





### **Care Instructions**

Laundry: Make sure all zippers and snaps are closed. Use a mild detergent or neutral soaps. Wash at 120°F for colors and 140°F for whites. Rinse cold. No bleach. Tumble dry moderate (140°F). After drying tumble dry cold for 5 minutes. No iron. Our garments should BS laundered prior to 1st wear.

Part Numbers	Size
TX40BHWH01	XS
TX40BHWH02	S
TX40BHWH03	м
TX40BHWH04	L
TX40BHWH05	XL
TX40BHWH06	2XL

Product Color: White or Navy Blue. Change WH (White) for NB (Navy Blue)



\*Light Blue Color Available By Request

This document is prepared for our customers as a service, and is to the BSst of our knowledge true and accurate. However, it is understood and agreed by the users of this document that we will accept no liability for the conclusions reached. Users of this document may therefore wish to perform additional testing BSfore determining that products mentioned are suitable.

www.transforming-technologies.com

# info@transforming-technologies.com

### Apparel

Rev: 2023-03-29

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### Apparel

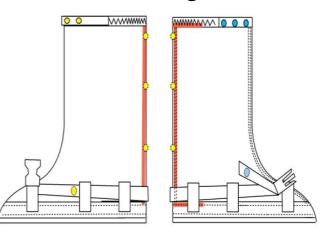
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### **TX4000 Series** ESD Hard Sole Boots with Ground Ribbons

### **TX4000 Fabric Typical Performance Specification**

Test	Units	75 Washes	100 Washes
Filtration Efficiency	% captured, >0.5µm	14.10%	13.90%
Filtration Efficiency	% captured, >5µm	65.60%	65.90%
Particle Generation (ASTM F51 Particle Spec)	#>5µm/sq.ft.	250.1	288.1
Fibre Generation (ASTM F51 Fibre Spec)	Particle Spec >100µm<10 µm/sq.ft.	6.8	6.4
Particles Helmke Drum Method	0.5µm/min : <1200	54.5	51.2
Surface Resistivity	ohms/square	10^7	10^7
Abrasion Resistance, 1000 cy.	% weight loss	1.90%	1.90%
Abrasion Resistance, 1000 cy.	# of tears	0	0
Air Permeability	cu.ft./minute/sq.ft.	>2.0	>2.0
Water Vapor Transmission	grams/sq.m/hour	80.12	78.91

### TX40BH Series - ESD Hard Sole Boot Drawing



Strap Color	Size
Pink	XS
Yellow	SM
Blue	MD
Brown	LRG
White	XL
Green	2XL

### **TX4000 System Standards**

The TX4000 Systems complies with **ANSI ESDS20.20 & IEST-RP-CC052.1 standards** and qualifies as a Category 3 cleanroom ESD garment capable of grounding mobile operators with both soft and hard sole boots.

- Cleanroom Garments meet the requirement for Groundable Static Control Garment System per ANSI/ESD S20.20 required limit of <  $3.5 \times 10^{7}$  ohm Rtg tested per ANSI/ESD STM2.1 and ESD TR53 ( $23^{\circ} \pm 1^{\circ}$  C,  $12\% \pm 3\%$  RH, and  $50\% \pm 5\%$  RH).
- Cleanroom Boots meet the requirement for footwear per ANSI/ESD S20.20 Required limits of <1.0 x 10^9 Rtgp per ANSI/ESD 9.1-2022 and ESD TR53 (23° ± 1° C, 12% ± 3% RH, and 50% ± 5% RH).



### **About Transforming Technologies**

Since 1998, Transforming Technologies has helped electronic manufacturing facilities to protect their products and processes from the many serious problems associated with static electricity.

Transforming Technologies offers a wide range of unique and outstanding products to detect, protect, eliminate and monitor electrostatic charges. Our products are integral components of an effective static control program.



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www.transforming-technologies.com

3719 King Road Toledo Ohio 43617 Phone: 419-841-9552 Fax: 419-841-3241 info@transforming-technologies.com