

LEVEL 3 GROUNDABLE ESD GARMENT



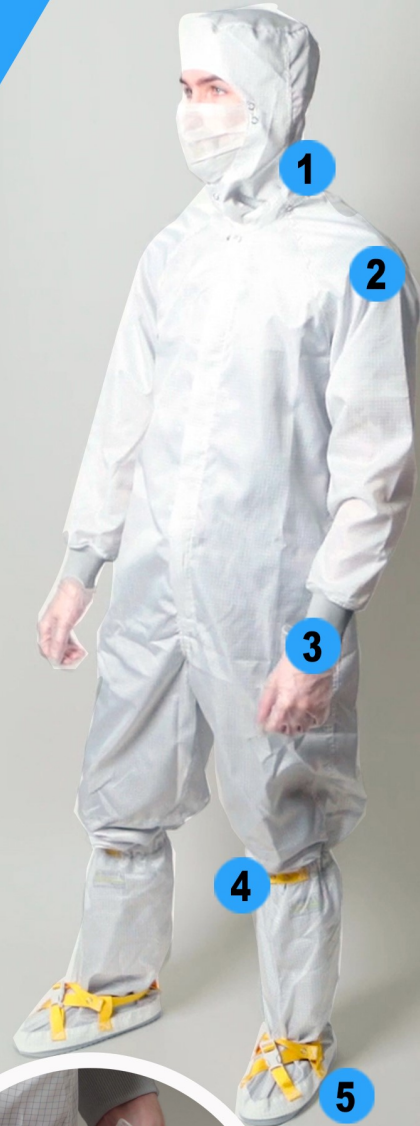
# TX4000 Series ESD GARMENT SYSTEM

*Outstanding ESD Cleanroom Garment  
for Grounding Mobile Operators*

## Critical Connectivity Points for Grounding & Continuity

1. Hood to Coverall
2. Sleeve to Body
3. Cuff (BCP)\* to Sleeve
4. Coverall to Boot
5. Boot Sole (BCP)\* to Floor

*\*Body Contact Point*



**Complies with IEST-RP-CC052.1 & ANSI/ESD S20.20**

# TX4000 Series ESD Cleanroom Garment System

Transforming Technologies TX4000 ESD Cleanroom Garment System protects the environment from the number one source of contamination and static found in cleanrooms – people. Electrostatic charge is an invisible contaminant and has the potential to degrade or destroy both product and equipment, as well as attract unwanted particles. Controlling these charges with the TX4000 Garment System throughout the controlled environment is essential to a productive manufacturing process. Each component—hood, coverall, boots—are connected with a ground snap and a conductive sole on the boot eliminates static on the personnel through the ESD floor or mat in cleanrooms.



- Designed for mobile workers in cleanrooms and controlled environments when ESD protection is paramount
- Electrical continuity from hood-to-boot with dissipative fabric, conductive seams and snaps
- ISO 6, Cleanroom class 1,000
- Complies with IEST-RP-CC052.1 and ANSI/ESD S20.20

## ESD-Safe Integrated Cleanroom Design

Groundable from head-to-boot, the TX4000 ESD Cleanroom Garment System is made with a reliable ISO 6 static dissipative fabric with each component—hood, coverall, boots—connected with conductive thread and ground snaps. Conductive boot soles eliminate static from personnel through the cleanroom ESD floor or mat. The garments system’s superior workmanship and reliable panel-to-panel continuity makes it compliant with IEST-RP-CC052 and ANSI ESDS.2020 standards. The TX4000 Garment System maintains consistent continuity readings for up to 100 wash cycles.



Technical Data	
ISO Cleanroom	ISO 6
ESD Standards	ANSI/ESD S20.20
	IEST-RP-CC052.1
Product Circularity	Reusable
Surface Resistivity	Dissipative: $10^7$
Cuffs	ESD Knit Cuff
Collar	Military Collar
Fabric	99% Polyester, 1% Carbon
Closure	Zipper with Snap
Colors	White, Navy Blue

## Key Attributes

- Eliminates static on personnel and garment in cleanrooms and controlled environments with static dissipative or conductive floors. Operators maintain less than 35meg ohms resistance to ground when used in conjunction with a dissipative or conductive floor.
- Electrical continuity from hood-to-boot through dissipative fabric, conductive seams, ground snaps and grounding ribbon. Also functions when worn with disposable conductive shoe covers.
- TX4000 cleanroom grid fabric (ISO 6, Class 1,000) provides a consistent  $10^7$  surface resistance over 100 washes. The design is compatible with custom fabrics for ISO5 and ISO4 cleanrooms.
- The combination of the hood, coverall and boots create a level 3 ESD Garment, that is ideal for mobile operators, as static can be eliminated through the garment system without additional grounding methods when standing on a grounded floor.

## ESD Hard Sole Boots

## ESD Soft Sole Boots



**Typical System Resistance:  $<3.5 \times 10^7 \Omega$**

**Personnel body voltage less than 100 volts on flooring systems designed for ESD control**

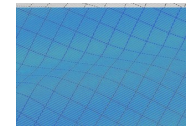
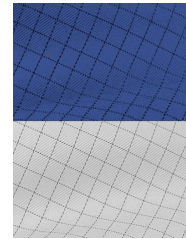
# TX4000 Series ESD Cleanroom Garment System



## ESD Coverall

- TX4000 ESD Grid Fabric—99% Polyester / 1% Carbon
- Raglan sleeves with ESD knit cuffs for body contact
- Military collar
- Snaps at top of zipper and bottom of leg hem and zipper closure for easy gowning
- Grounding snaps for connection to component (hood, boots)
- Seams sewn with conductive threads and grounding tape for reliable panel-to-panel electrical continuity
- Sizes: XS—5XL
- Product Type: Reusable / Launderable
- Color: White / Navy / Light Blue\*
- ISO Cleanroom: ISO 6 (Class 1000)
- Meets standards required for ANSI/ESD S20.20 and STM9.1 - Footwear – Resistive Characterization

Part Number	Size
TX40CRWH01	XS
TX40CRWH02	S
TX40CRWH03	M
TX40CRWH04	L
TX40CRWH05	XL
TX40CRWH06	2XL
TX40CRWH07	3XL
TX40CRWH08	4XL
TX40CRWH09	5XL



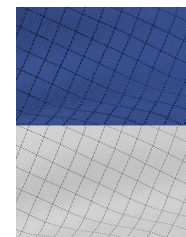
Replace "WH" with "NB" for Navy Blue  
Or "LB" for light blue\*

\* Light blue is a non-stock product

## ESD Hard Sole Boot

- 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
- Color coded straps denote size
- Sizes: XS—2XL
- Product Type: Reusable / Launderable
- Color: White / Navy / Light Blue\*
- ISO Cleanroom: ISO 6 (Class 1000)
- Meets standards required for ANSI/ESD S20.20 and STM9.1—Footwear—Resistive Characterization

Part Number	Size
TX40BHWH01	XS
TX40BHWH02	S
TX40BHWH03	M
TX40BHWH04	L
TX40BHWH05	XL
TX40BHWH06	2XL



Replace "WH" with "NB" for Navy Blue  
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Typical System Resistance:  $<3.5 \times 10^7 \Omega$

Personnel body voltage less than 100 volts  
on flooring systems designed for ESD control

### ESD Soft Sole Boot

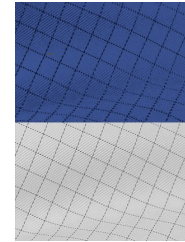


- TX4000 ESD Grid Fabric—99% Polyester / 1% Carbon
- Three layer ESD rubber soft sole (non-marking rubber inside and outside)
- Hypalon Side Wall
- Combination 1” elastic and webbing at top of closure with snap adjustment
- Replaceable 18” internal ground ribbon attachment included, with 24” long ground ribbon available for boots
- Internal snaps to electrically connect to coverall and ground ribbon
- Color coded straps denote size
- Sizes: XS—2XL
- Product Circularity: Reusable / Launderable
- Color: White / Navy / Light Blue\*
- ISO Cleanroom: ISO 6 (Class 1000)
- Meets standards required for ANSI/ESD S20.20 and STM9.1—Footwear—Resistive Characterization

Typical System Resistance:  $<3.5 \times 10^7 \Omega$

Personnel body voltage less than 100 volts on flooring systems designed for ESD control

Part Number	Size
TX40BSWH01	XS
TX40BSWH02	S
TX40BSWH03	M
TX40BSWH04	L
TX40BSWH05	XL
TX40BSWH06	2XL



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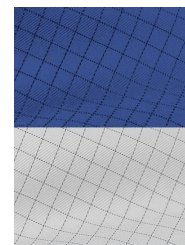


### ESD Hood

- TX4000 ESD Grid Fabric—99% Polyester / 1% Carbon
- Open face with snap-under-the-chin closures
- Two vertical snaps at each side of temples
- Roll hem
- Electrically connects to ESD coverall for ground continuity with two snaps
- Sizes: XS—2XL
- Product Type: Reusable / Launderable
- Color: White / Navy / Light Blue\*
- ISO Cleanroom: ISO 6 (Class 1000)
- Meets standards required for ANSI/ESD S20.20



Part Number	Size
TX40HFWH01	XS
TX40HFWH02	S
TX40HFWH03	M
TX40HFWH04	L
TX40HFWH05	XL
TX40HFWH06	2XL



Replace “WH” with “NB” for Navy Blue  
Or “LB” for light blue\*