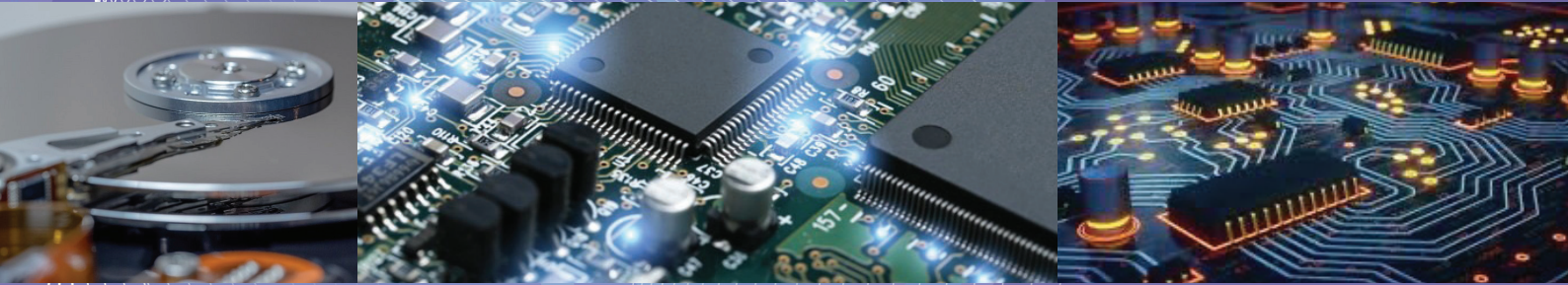




Static solution
Dynamic service



MATERIAL EXPERTISE CO.,LTD.





MATERIAL EXPERTISE CO., LTD

Who are we?

We are Thailand's leading manufacturer and distributor of static safe products used in either electronic and related industries. Our products include wrist straps, heel straps, and a variety of grounding accessories, including male and female plugs, jacks, receptacles, alligator clips, and terminals. Our ESD (Electrostatic Discharge) protection offerings extend to safe marker pens, wires, testers, vacuum wands, pens, tweezers, dispensing needles, and barrel adapters. We pride ourselves on our ability to meet specialized needs with custom-made products, ensuring a broad availability of ESD-safe materials, tools, jigs, and fixtures to our clients.

Company History

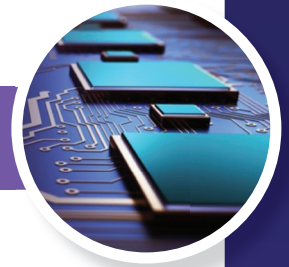
Established in 1993, Material Expertise Co., Ltd. has become Thailand's premier producer and distributor of materials for the electronics and computer industries. With 30 years of experience, we specialize in two key areas: electrostatic discharge (ESD) protection and manufacturing supplies. Our extensive product range includes wrist straps, heel straps dispensing tips, vacuum pads or cups, and ESD pens.

Company Policy

Our unique value proposition lies in our focus on quality – both the quality of our products and our manufacturing processes. As the only ESD distributor in Thailand with our own manufacturing facility, we can offer customization of products to meet the specific demands of our clients, supported by after-sales service. Our rigorous quality control processes set us apart from other local distributors, ensuring our products not only function well but are also superior in quality and durability. Our commitment to continuously improving our manufacturing practices and enhancing our team's expertise reinforces our position as the foremost ESD manufacturer and distributor in Thailand.



Dual Wrist Strap



Dual Wrist Strap Specifications



Product	Specifications	
MTXTech Dual Wrist Strap	Series	MTXTech
	Wrist Band	MTX-specific high quality elastic band with silver conductive filament throughout the entire length ensuring consistent flexibility, throughout the entire length ensuring consistent adjustability, positive skin contact, and reliable grounding integrity
	Dimension	Band width : 18 +/- 1.5 mm Band length: 22-24 cm *custom lengths available
	Conductivity	< 0.01 Mega per cm
	Resistance	<10 ³ Ω (int.) <10 ¹² Ω (ext.)
	Back Plate	Stainless Steel
	Snap Type/Size	No Snap Type , Snap Type, Stud 4 mm, Snap 7 mm (Brass Nickel Plated)
	Plastic part	TPU
	Color	Blue and Light Blue
	Coil Cord	Material : MTX-specialized durable and flexible plastic with excellent compression set, ideal for flexible coil cords. Jacket: Static-dissipative, high durability, and flexibility Conductors: Composite micro-twisted copper wires enhancing cord durability Durability: Copper wires are expertly coiled, ensuring long lifespan aided by Kevlar fiber reinforcement. Length: 10 Ft, 15 Ft, 20 Ft *custom lengths available
	Resistor	1 Mega Ohm ¼ watt +/- 1%
	Terminal	Mono Plug 3.0 mm and 3.5 mm
	Coil Cord Color	Black Color
	Shorting Clip	1ea
Variations : 1. Dual Wrist Band Lock Strap 2. Dual Metal Band		

Product	Specifications	
Lite Dual Wrist Strap	Series	Lite
	Wrist Band	Elastic band with conductive fiber blend
	Dimension	Band width : 18 +/- 2 mm Band length: 20 cm
	Resistance	<10 ³ Ω (int.) <10 ¹² Ω (ext.)
	Coil Cord	Material: PVC plastic with soft spring Length: 6 Ft, 10 Ft
	Plastic part	ABS
	Stud	Copper with chrome plated; snap
	Stud size	4mm, 7mm, 10mm

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Single Wrist Strap

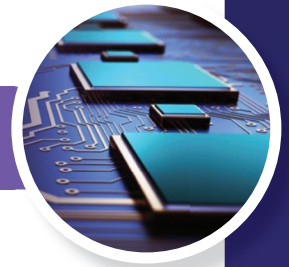
Single Wrist Strap Specifications



Product	Specifications	
MTXTech Single Wrist Strap	Series	MTXTech
	Wrist Band	MTX-specialized high quality elastic band with silver conductive filament throughout the entire length ensuring consistent adjustability, positive skin contact, and reliable grounding integrity
	Dimension	Band width : 18 +/- 1.5 mm. Band length: 22-24 cm. *custom lengths available
	Conductivity	< 0.01 Mega per cm.
	Resistance	<10 ³ Ω (int.) <10 ¹² Ω (ext.)
	Back Plate	Stainless Steel
	Snap Type/Size	Stud 4 mm, 7 mm, 10 mm. (Brass Nickel Plated)
	Plastic part	ABS, PP
	Color	Blue, Light Blue
	Coil Cord	Material : MTX-specialized durable and flexible plastic with excellent compression set, ideal for flexible coil cords. Jacket: Static-dissipative, high durability, and flexibility Conductors: Composite micro-twisted copper wires enhancing cord durability Durability: Copper wires are expertly coiled, ensuring long lifespan aided by Kevlar fiber reinforcement. Length: 6Ft, 9Ft, 12Ft, 15Ft, 17Ft *custom lengths available
	Resistor	1 Mega Ohm ¼ watt +/- 1%
	Dimensions	OD 2.5 +/-0.15 mm.
	Terminal	Banana Plug I-Plug, L-Plug Type with Sleeve 9 Prongs
	Color	Black Color
	Alligator Clip	OD 4.40 mm.
Detail : 1. Single Wrist Band Buckle 2. Single Wrist Band Velcro 3. Single Wrist Band Lock Slap 4. Single Wrist Band Flip Lock 5. Single Metal Band		

Product	Specifications	
Lite Single Wrist Strap	Series	Lite
	Wrist Band	Elastic band with conductive fiber blend
	Dimension	Band width : 18 +/- 2 mm. Band length: 20 cm.
	Resistance	<10 ³ Ω (int.) <10 ¹² Ω (ext.)
	Coil Cord	Material: PVC plastic with soft spring Length: 6 Ft ,10 Ft
	Plastic part	ABS
	Stud	Copper with chrome plated; snap
	Stud size	4mm, 7mm, 10mm

MTXTech Wrist Strap



MTXTech Dual Wrist Strap



Dual Wrist Strap No Snap 10 Ft
Mono Jack 3.0 mm



Dual Wrist Strap 10 Ft
Model A Snap 7 mm Jack 3.5 mm



Dual Wrist Strap 15 Ft Snap 10 mm
Jack 3.5 mm New Design

MTXTech Dual Coil Cord



Dual Coil Cord 10 Ft Snap 7 mm



Dual Coil Cord 10 Ft Stud 4 mm

MTXTech Single Wrist Strap



Single Wrist Strap 9 Ft I-Plug Band
Lock Slap 24 cm Blue Snap 10 mm



Single Wrist Strap 9 Ft L-Plug Band
Flip Lock Blue 25 cm



Single Wrist Strap 9 Ft I-Plug Band
Blue Buckle 20 cm

MTXTech Single Coil Cord



Single Coil Cord 6 Ft 10 mm
with Alligator Clip



Single Coil Cord 6 Ft L
Plug + O-Type

MTXTech Wrist Band



Dual Wrist Band
Stud 4 mm Blue



Dual Wrist Band Snap 10 mm
24 cm Blue New Design



Single Wrist Band
Buckle Light Blue



Single Wrist Band
Flip Lock



Lite Series Wrist Strap

Lite Wrist Strap



PU Full-Black Wrist Strap



Sapphire Blue Wrist Strap



Blue Wrist Strap



Sapphire Blue Dual Wrist Strap



Dark Blue Dual Wrist Strap



Metal Dual Wrist Strap

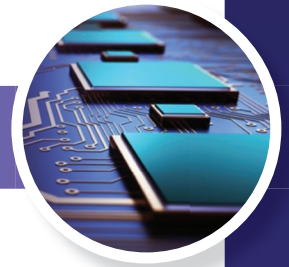


Hollow Metal Wrist Strap
(Full Blue)

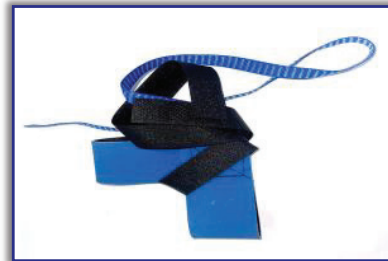
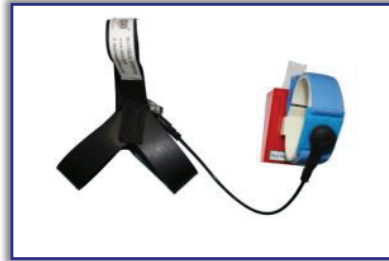


Hollow Metal Wrist Strap
(Full Black)

Heel Strap



Heel Strap Specifications

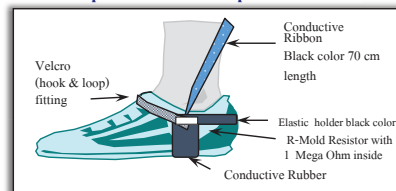


Subject	MTXTech	Lite
Ankle Band	Conductive elastic fabric adjustable with velcro	Ribbon : Width: 15mm Length: 300 mm
Connector	Single Cord Wire Snap 7mm with 1 mega ohm inside Velcro (hook & loop) fitting	- -
Material Rubber	2-layer rubber	2-layer rubber + conductive ribbon
Surface Resistance	Green Dissipative $10^6 - 10^9 \Omega$	Green Dissipative $10^6 - 10^9 \Omega$
	Black Conductive $10^3 - 10^5 \Omega$	Black Conductive $10^3 - 10^5 \Omega$
Resistor	1 Mega Ohm	1 Mega Ohm
Charge Decay	< 0.1 Sec	< 0.1 Sec



Heel Strap Model D

Comparative Electrical Properties of Materials



Materials	Resistance / 5 CM Long
Rubber Band	One-layer black rubber $10^6 - 10^9 \Omega$
	One-layer green rubber $10^3 - 10^5 \Omega$
Conductive Ribbon	Surface Resistance $10^3 - \Omega/\text{sq}$ (65-70k Ohm)

• Heel Strap Model D

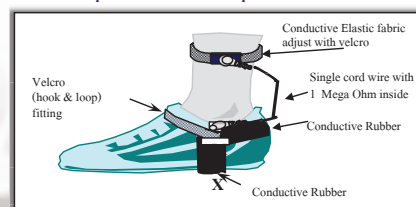
- Conductive Ribbon Black Color
- Elastic Holder Black Color
- Conductive Rubber
- Velcro (hook & loop) fitting

- ☒ CONDUCTIVE RUBBER BAND
☒ CONDUCTIVE ELASTIC BAND



Heel Strap Model E

Comparative Electrical Properties of Materials



Materials	Resistance / 5 CM Long
Rubber Band	One-layer black rubber $10^6 - 10^9 \Omega$
	One-layer green rubber $10^3 - 10^5 \Omega$
Connector	Single Cord Wire Snap 7mm with 1 Mega Ohm inside Velcro (hook & loop) fitting

• Heel Strap Model E

- Conductive Elastic fabric adjustable with velcro
- Single cord wire with 1 Mega Ohm inside"
- Conductive Rubber
- Velcro (hook & loop) fitting

- ☒ CONDUCTIVE RUBBER BAND
☒ CONDUCTIVE ELASTIC BAND



Grounding & Accessories

Grounding Specifications



Subject	MTXTech	Lite
Type	Grounding Wire and Grounding Coil Cord	Common Ground Cord / Common Point Ground Cord
Dimention	OD 2.5-2.7mm	O-Ring type or with a crocodile clip
Terminal	Snap Cover 10mm, Snap 10mm Oring, Banana Plug	Snap 10mm male / female snap as required
Length	Standard Size or custom lengths available upon request	1.8 M, 3 M, or as required
Resistance	1 Mega Ohm	1 Mega Ohm
Color	Black Color, Green Color	Black Color, Blue Color, Yellow Color, Red Color

Terminal Plug



Cover Snap 10 mm



I-Plug



L-Plug



Snap 4 mm



Snap 7 mm



Snap 10 mm



Fish Tail

ESD Earth Facility & Bonding Point



Grounding Jack Socket B

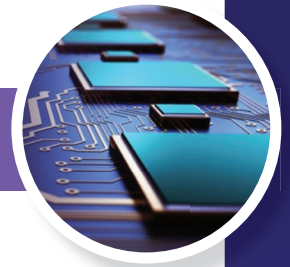


Grounding Jack Socket



Grounding Jack Socket (Seven Jack)

ESD Safe Ball Pen



ESD Safe Ball Pen

Specifications :

- Our ESD-safe ball pen is designed for use in a cleanroom environment. Our product effectively controls electrostatic fields and has passed the FT-IR Test Analysis 85/85, Corrosion Test, IC Test, and Outgassing Test and meets the class 100 cleanroom standards.
- Replacable pen refills. Customers do not have to change all parts. Beneficial for cost saving.
- No “black stains” problems
- The continuity of writing distance is up to 1,500 meters.
- The product should be kept at room temperature and not over 400C Degree or in high humidity.

A : Material : Nylon 6 (PA) & Static Dissipative Plastic Black Color

B : Spring : Stainless Spring

C : Refill Ink : 0.5 mm. Red, Black, Blue Color





Dispensing Tip & Accessories



Plastic Needle

Specifications

- Stainless Steel Tips
- Cleanroom use
- Packet 50 pcs per pack

GATE	ID Size		OD Size	
	inch	mm.	inch	mm.
18 G	0.035	0.9	0.048	1.23
19 G	0.027	0.7	0.041	1.04
20 G	0.022	0.55	0.035	0.9
21 G	0.02	0.5	0.031	0.8
22 G	0.016	0.41	0.027	0.7
23 G	0.013	0.33	0.024	0.62
24 G	0.012	0.3	0.022	0.55
25 G	0.01	0.25	0.02	0.5
26 G	0.009	0.23	0.018	0.45
27 G	0.008	0.2	0.016	0.4



Stainless Needle

Specifications

- Stainless Steel
- Cleanroom use

GATE	ID Size		OD Size	
	inch	mm.	inch	mm.
16 G	0.048	1.23	0.064	1.64
17 G	0.041	1.05	0.059	1.5
18 G	0.035	0.9	0.048	1.23
19 G	0.027	0.7	0.041	1.04
20 G	0.022	0.55	0.035	0.9
21 G	0.02	0.5	0.031	0.8
22 G	0.016	0.41	0.027	0.7
23 G	0.013	0.33	0.024	0.62
24 G	0.012	0.3	0.022	0.55
25 G	0.01	0.25	0.02	0.5



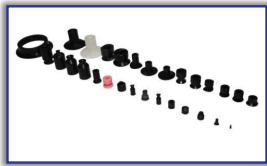
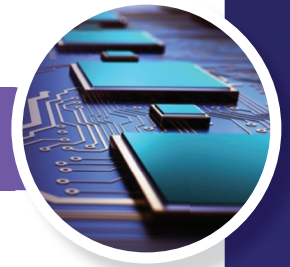
MPE

Specifications

- PE Plastic/PP Plastic (Polyethylene)
- Chloride <3 PPM
- Clean Room use

GATE	ID Size	
	inch	mm.
16 G	0.048	1.23
18 G	0.035	0.9
20 G	0.022	0.55
22 G	0.016	0.41

Parts : Pick up & Accessories



Vacuum Cup



Stainless Blade



Vacuum Wand



Stainless Tweezer No.2 ASA



Tweezer



Tweezer Conductive No.7



Stainless Tweezer No.258



Stainless Tweezer No.9



Stainless Tweezer No.00



Anti Static Tweezer No.1



Anti Static Tweezer No.2



Anti Static Tweezer No.3



Anti Static Tweezer No.5



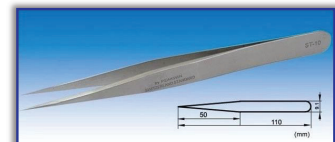
Anti Static Tweezer No.6



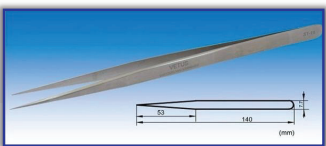
Anti Static Tweezer No.7



Anti Static Tweezer No.8



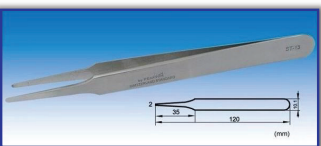
ST -10



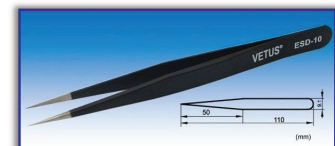
ST -11



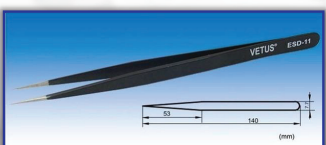
ST -12



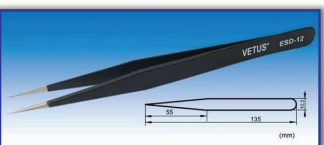
ST -13



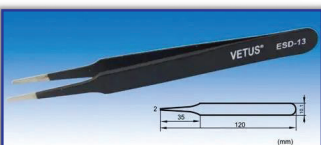
ESD-10



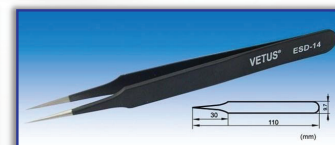
ESD-11



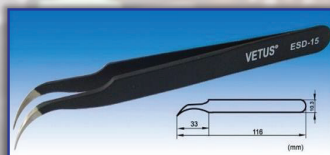
ESD-12



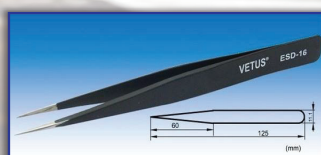
ESD-13



ESD-14



ESD-15



ESD-16



ESD-17



Parts : Pick up & Accessories



Female Banana Plug



Female Mono Plug



Top Plate



ESD (M) U-Shaped Brush



ESD Brush (Size S-M-L)



ESD U Shaped Brush (Size S-M-L)



ESD Flat Head Brush (11 Bunch)



ESD Round Head Brush (1 Bunch)



ESD Round Head Brush (7 Bunch)



ESD Row Brush (Size S-L)

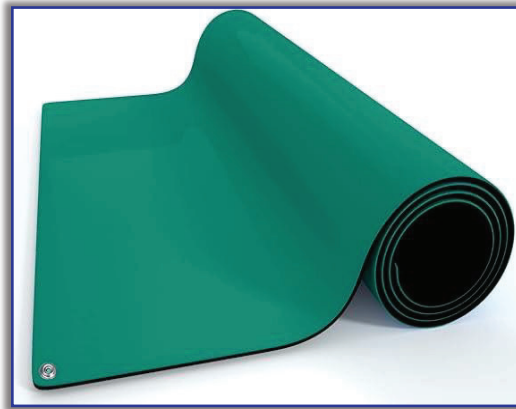
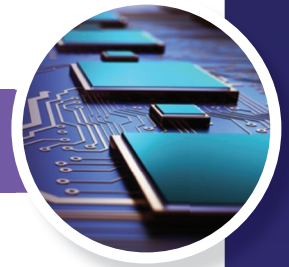


ESD Straight Shank Brush



ESD Straight Shank Brush (Size S-M-L)

ESD Rubber Mat



Item	Specifications
Material	Conductive Rubber, Static Dissipative Rubber
Thickness (mm)	2, 3 mm
Width (cm)	60, 90, 100, 120 cm
Color (upper)	Green, Gray, Blue, Black. Other colors available.
Material	Rubber
Surface	Shiny, Dull, Textured
Thickness	2 mm
Length	10 M
Top Surface Resistance	$10^6 - 10^9 \Omega$ Ohm
Bottom Surface Resistance	$10^3 - 10^5 \Omega$ Ohm
Certificates	SGS, RoHS



MTXTech Dual Wrist Strap Monitor & Master Calibration



Subject	Specifications
Wrist Strap Type	Dual Wrist Strap
Monitor	2 User
Pass	Green LED
Fail	Red LED & Buzzer Alarm
Voltage on Body	> 1 Voltage
Body Resistance	0.1 - < 1 Ohm
Input power	9 - 12 VDC (>450 mA)
Materiel Box	Stainless (2 mm)
Activity Resistanc	0-30 Mega-Ohm +-10%
Dimensions	130 mm x 80 mm x 40 mm
Warranty	1 Year
Including	1. Adaptor 9 V DC 100 -240VAC Length 2 M. 2. Cable-Core 4 Core 2 M. (Telephon Cable) 2 Sets 3. Audio 3.5 mm plug 2 Sets 4. Holder Clamp Lock 1 Set 5. Droper 2 Sets 6. Stainless Plast Stud 4 mm 2 Sets

Subject	Specifications
Resistance Range (Ω)	2.5×10^7 Ohm- 3.5×10^7 Ohm
Resistance Tolerances	+1%(F)
Temperature Coefficient	
Connecting Terminals	Binding Post : Resistance circuit and guard
Material Box	Stainless Steel (SUS304) Thickness 1 mm
Dimensions	70(L) x 60(W) x 37(D)mm
Weight	204 g
Warranty	1 Year

Wrist Strap Monitor, Wrist Strap Tester, and Surface Resistance Tester



Monitor
(Model 209-1/Model 209-2)



Monitor
(Model 401-I/Model 401-II)



Monitor
(Model 518-I/Model 518-II)



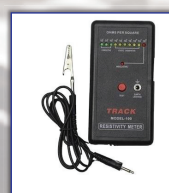
498 Wrist Band Tester



Hammer Type Surface
Resistance Meter SL-030B



Electro Static Field Tester



Surface Resistance Tester



Wrist Band Tester
(EXACT-171)



Consumable Product

A close-up photograph of a hand with black, finger-length sleeves on the index, middle, ring, and pinky fingers. The thumb is bare. The hand is positioned with the fingers slightly spread.

- Amide Free
- Silicone Free
- Natural Latex Rubber
- Ultra-Low powder
- Extractable ions such as Na, Cl, K, Mg, Br and SO₄
- S, M, L Size
- 1440 pcs./bag 20 bags/carton

A pair of white latex gloves, one slightly behind the other, showing the fingers and palms.

The background of the entire page is a deep blue gradient. On the left side, there is a stylized globe with white concentric circles radiating from it, suggesting a global network or signal. The globe is partially obscured by the large MTX logo.

MTX



Static solution
Dynamic service

MATERIAL EXPERTISE Co.,Ltd

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