

Shieldex Conductive Yarns & Fabrics



Plated materials open unlimited opportunities for product development and with over 40 years of experience Statex supports your ideas with a multitude of plated textile materials and processes. Due to our unique metallization process, our long-living premium EMC fabrics are robust, wash- and durable, resistant to abrasion and have increased EMC shielding compared to other products. The worldwide unique 3D metallization process, in which each individual filament is completely metallized, distinguishes our Shieldex products from others and thus enables the ideal utilization of the various metal properties in textile form.

Shieldex high conductive (HC) yarns

Due to the unique metallization process, Shieldex HC silver yarns are highly conductive based on a higher amount of silver.

- 117/17 dtex Z turns HC + B ($< 300 \Omega/m$)
- 235/36 dtex Z turns HC + B ($< 600 \Omega/m$)

Shieldex high conductive (HC) twisted yarns

Shieldex twisted yarns have a higher tenacity and a remarkable homogenous electrical surface resistance

- 117/17 dtex 2-ply HC + B ($< 300 \Omega/m$)
- 235/36 dtex 2-ply HC + B ($80 \Omega/m \pm 30 \Omega/m$)
- 235/36 dtex 4-ply HC + B ($40 \Omega/m \pm 10 \Omega/m$)
- 235/36 dtex 6-ply HC + B ($30 \Omega/m \pm 10 \Omega/m$)

Shieldex Monofilaments

Shieldex monofilaments are often twisted in different constructions in the textile industry and processed in products with anti-static functions.

- 22/1 dtex ($< 200 \Omega/cm$)
- 57/1 dtex ($< 200 \Omega/cm$)
- 90/1 dtex ($< 100 \Omega/cm$)
- 140/1 dtex ($< 100 \Omega/cm$)
- 200/1 dtex ($< 100 \Omega/cm$)

Shieldex MADEIRA® embroidery yarns

MADEIRA® embroidery yarns can be used as a connecting material with other conductive smart textiles or can be embroidered to form individual electrodes.

- MADEIRA® HC 12
235/36 dtex 2-ply HC +B ($< 100 \Omega/m$)
- MADEIRA® HC 40
117/17 dtex 2-ply HC + B ($< 300 \Omega/m$)

www.madeira.de

Shieldex Multifilaments

Amongst others our Shieldex multifilaments are often used for knitted products with shielding functions.

- 33/10 dtex Z turns (< 4 kΩ/m)
- 44/10 dtex Z turns (< 4 kΩ/m)
- 78/20 dtex Z turns (< 3.5 kΩ/m)
- 117/17 dtex Z turns (< 1.5 kΩ/m)
- 235/36 dtex Z turns (< 2.5 kΩ/m)

Shieldex Special Yarns

Shieldex special yarns were created for the special needs of our customers e.g. additionally twisted with polyester and other yarns.

- 22/1 dtex + 113/32 PES (< 200 Ω/cm)
- 117/17 2-ply HC + B TPU (< 300 Ω/cm)
- 235/36 2-ply HC + B TPU (< 80 Ω/m ± 30 Ω/m)

More articles are available on request.

Shieldex® Micron

Shieldex yarns with different micron titers are often used in the textile industry.

- 50 Micron (< 200 Ω/cm)
- 80 Micron (< 200 Ω/cm)
- 100 Micron (< 100 Ω/cm)
- 125 Micron (< 100 Ω/cm)
- 150 Micron (< 100 Ω/cm)

Certificates

Quality is very important to us!

For this reason Statex manufactures its products using exclusive materials only. Since 2003 Statex textiles are certified according to STANDARD 100 by OEKO-TEX®, product class I. All Statex finished and half finished products are guaranteed free of halogens.

**Shieldex®
Woven**

- Shieldex® Berlin (< 0.3 Ω/□)
- Shieldex® Bremen (< 0.3 Ω/□)
- Shieldex® Kassel (< 0.03 Ω/□)
- Shieldex® Nora (< 0.03 Ω/□)
- Shieldex® Nora Dell (< 0.009 Ω/□)
- Shieldex® Zell (< 0.02 Ω/□)

**Shieldex
Non-woven**

- Shieldex® Basel (< 1 Ω/□)
- Shieldex® Bilbao (< 2.5 Ω/□)
- Shieldex® Bonn (< 0.5Ω/□)
- Shieldex® Kiel (< 0.02 Ω/□)
- Shieldex® Köln (< 0.02 Ω/□)
- Shieldex® Zeven (< 0.02Ω/□)
- Shieldex® Bern (< 2.5 Ω/□)

**Shieldex
Knitted fabric**

- Shieldex® Balingen (< 0.6 Ω/□)
- Shieldex® Technik-tex P130 (< 2 Ω/□)
- Shieldex® Technik-tex P180 (< 2 Ω/□)
- Shieldex® Tüll (< 1.4 Ω/□)

**Shieldex
Fabrics with additional coating**

- Shieldex® Silitex P130 (< 5 Ω/□)
- Shieldex® Berlin RS (< 0.3 Ω/□)
- Shieldex® Nora Dell CR (< 0.009 Ω/□)
- Shieldex® Zell CR (< 0.02 Ω/□)

**Shieldex
Polyester**

- Shieldex® Prag (< 0.05 Ω/□)
 - Shieldex® Porto (< 0.02 Ω/□)
 - Shieldex® Pisa (< 0.05 Ω/□)
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**Shieldex®
Spacer Fabric**

Shieldex® Spacer Fabrics open unlimited opportunities for product development, ranging from healthcare, safety, military and automotive to aviation and fashion.

Shieldex® Spacer Fabrics consist of two separate metallized polyamide substrate layers, which are connected by an isolated pile yarn. This production method guarantees an air flow regulation. In addition, the pile yarn makes it possible to implement both, an electrical switch and a capacitive sensor.

Two different configurations of the conductive surface finishing are available.

Did we spark your interest ?

More information can be found on our detailed data sheets.

Please do not hesitate to contact us at any time.