STM

Electrically Conductive and Reflective Metalized Fabrics

Protecting People and Equipment from Electromagnetic Interference (EMI), Radio Frequency Interference (RFI) and Static Discharge
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Swift Textile Metalizing LLC is a U.S. manufacturing company that specializes in the design, development and production of a wide range of electrically conductive and reflective metalized fabrics used in products that provide protection to people and equipment from Electromagnetic Interference (EMI), Radio Frequency Interference (RFI) and Static Discharge.

Fabric Options

STM’s line of conductive and reflective materials includes flexible, lightweight Woven, Non-Woven and Knit fabrics, typically utilizing a durable nylon base. The base is coated with layers of highly conductive metals designed to meet a wide range of EMI and RFI shielding applications, such as shielded gaskets, tapes (including hook & loop), cable wrap, towed arrays, curtains, doors, tents, enclosures, grounding straps and more. Swift Textile Metalizing utilizes proprietary technologies to produce silver, nickel and copper coated fabrics. STM product width dimensions range from 0.5 inches for tape products up to a maximum of 80 inches for rolled fabrics. STM produces products with electrical resistivity of up to a maximum of 1.8 Ohms/sq.

All Swift Textile Metalizing fabrics offer flexibility, durability, electromagnetic reflection, and resistance to corrosion, as well as anti-static, anti-bacterial, and ultra low out gassing properties.

Woven Fabrics

Light Weight, Durable Shielding & Conductive Fabric

Swift Textile Metalizing woven fabrics are lightweight and extremely durable. They deliver the highest standard of performance in shielding and conductivity. STM’s proprietary metalizing process applies a thin layer of metal to each fiber. The result is a textile product with the feel, durability and flexibility of a woven fabric and the conductivity and shielding effectiveness of a metal foil.

Woven Fabric Product Features

- Silver, nickel, or copper coatings
- Rip stop or tafteta weaves
- Weights ranging from 1.1 to 2.8 oz/sq yd
- Widths from 0.5 up to 60 inches
- Non-conductive, conductive, or fire retardant adhesives
- Available with maximum resistivity as low as 0.05 Ohms/sq
- Available with EMI shielding effectiveness as high as 80 dB at 1 GHz
- Available in single or multi-ply versions

Woven Fabric Product Details

Nickel-Silver Coated Rip Stop SMS-0115
Lightweight and highly durable. Nickel top coat enhances durability and protects against corrosion.
Applications: EMI/RFI shielding gaskets; shielded enclosures, containers, and bags; architectural shielding; conductive and shielding tapes.

Silver Coated Rip Stop SMS-0116
Lightweight and highly durable. No Nickel improves biocompatibility for direct skin contact applications.
Applications: Pressure sensors; medical products and sensors; conductive ground planes; conductive gaskets and tapes; bacterial mitigation products.

Silver Coated Heavy Rip Stop SMS-0117
A heavier version of standard rip stop for improved durability and performance in harsh environments or severe conditions.
Applications: Pressure sensors; medical products and sensors; conductive ground planes; conductive gaskets and tapes.

Nickel-Silver Coated Taffeta SMS-0118
Tighter weave and high thread count for low permeability and excellent shielding.
Applications: EMI/RFI shielding gaskets; shielded enclosures, containers, and bags; architectural shield; conductive and shielding tapes.
**Knit Fabrics**

**Stretchable, Flexible, Shielding & Conductive Fabric**

*Swift Textile Metalizing* knit fabrics are the best choice for applications that require stretching and flexing characteristics. The unique bond of silver to the nylon fabric allows for superior endurance, conductivity and shielding performance, especially for repeated loading and unloading applications. Precision knit fabrics used for the base material provide excellent product elasticity.

**Knit Fabric Product Features**

- Silver coating
- Mesh, scrim, tricot, jersey knit and continuous loop fabric options
- Weights range from 0.4 to 5.2 oz/sq yd
- Widths range from 1 up to 80 inches
- Available in mesh counts from 338 to 2200 cells/sq in
- Available with maximum resistance as low as 0.5 Ohms/sq
- Available with EMI shielding effectiveness as high as 50 dB at 1 GHz
- Available with removable carrier film

**Knit Fabric Product Details**

**Silver Coated Tricot SMS-0107**

Offers lightweight and breathability characteristics without sacrificing strength in a durable knit fabric.  
**Applications:** Medical products and sensors; EMI/RFI shielding; conductive ground planes; radar reflection; bacterial mitigation products.

**Silver Coated Scrtn SMS-0105**

Maintains a high degree of shielding and conductivity performance in an open and stretchable structure.  
**Applications:** Conductive ground planes; radar reflection.

**Silver Coated Mesh SMS-0109**

Our lightest weight metal coated material offers an open structure & a high degree of stretchability.  
**Applications:** Radar reflection; shielding covers and enclosures; bacterial mitigation products.

**Silver Coated Continuous Loop SMS-0104**

Silver coated napped nylon knit provides conductivity with compatible hook fastener.  
**Applications:** Shielding covers; bacterial mitigation products; anti-static applications.

**Silver Coated Jersey Knit SMS-0108**

STM’s heaviest knit fabric delivers excellent stretch and unparalleled durability. Provides conductivity, shielding and superior biocompatibility in medical skin contact applications.  
**Applications:** Medical, shielding covers, pressure sensors.

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**Non-Woven Fabrics**

**Breathable, Durable Shielding & Conductive Fabric**

*Swift Textile Metalizing’s* non-woven fabrics are made from point-bonded non-woven nylon. Non-woven fabrics are a breathable alternative to tightly woven fabrics. Point bonding adds strength, stability and durability beyond what a knit product can offer. Available in silver only and silver-nickel coating options for added conductivity, shielding and corrosion resistance.

**Non-Woven Product Features**

- Silver or nickel-silver coating
- Weights range from 1.3 to 2.6 oz/sq yard
- Widths range from 0.5 up to 36 inches
- Point bonding provides superior strength, stability and durability
- Offers a more breathable alternative to woven fabrics
- Nickel coating provides resistance to corrosion
- Available with EMI maximum resistance as low as 0.1 Ohms/sq
- Available with EMI shielding effectiveness as high as 75 dB at 1 GHz

**Non-Woven Fabric Product Details**

**Nickel-Silver Coated Heavy Non-Woven SMS-0113**

Heavy duty, point bonded silver & nickel coated fabric delivers excellent conductivity and our best non-woven shielding option.  
**Applications:** EMI/RFI shielding gaskets; shielded enclosures, containers, and bags; architectural shield; anti-static and grounding materials.

**Nickel-Silver Coated Light Non-Woven SMS-0112**

A lightweight, non-woven fabric that offers excellent conductivity, shielding and durability.  
**Applications:** EMI/RFI shielding gaskets; shielded enclosures, containers, and bags; architectural shield; anti-static and grounding materials.

**Silver Coated Non-Woven SMS-0141**

A lightweight, non-woven fabric without nickel for improved biocompatibility and reduced skin contact irritation with good conductivity and shielding characteristics.  
**Applications:** Medical applications; bacterial mitigation products.
Since 1955, Swift Textile Metalizing has offered conductive fabrics for customers in a wide range of industries including Aerospace, Telecommunications, Medical Equipment manufacturing, Commercial and Consumer Electronics, Defense and Mobile Forensics. Our specialized services include research and development, design, prototyping, and testing of custom products for a wide range of applications.

Swift also provides a variety of value-added services designed to save our customers time and money. Swift's value-added capabilities include tape slitting, laminating, sewing, ultrasonic cutting, ultrasonic bonding, and dimensional cutting, along with printing, calendaring and the installation of fasteners and grommets. An onsite specialty production shop handles prototype to high volume production runs, with flexible turnaround times. Swift Textile Metalizing maintains a culture of quality, upholding stringent industry standards. Swift Textile Metalizing maintains ISO 9001:2008 certified status. As a defense contractor, Swift complies with ITAR, International Traffic in Arms Regulations.

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