Nega-Stat®
A NEW STANDARD IN STATIC DISSIPATIVE YARNS
SITUATIONS WHERE A FULL GROUNDING IS NOT POSSIBLE OR IMPRACTICABLE - WHAT ARE THE RISKS?

**Nega-Stat® P190** is a unique bi-component core conducting yarn designed for product and end-uses where full grounding is essential and for use in areas where it is not possible to ensure full grounding. **Nega-Stat® P190** is used in selected products and specific industrial situations where grounding is, either, not required, or is not possible.

Control of static electricity is necessary for a wide range of products in many industrial situations. Static electricity or "static" occurs, when two surfaces separate. On separation both surfaces become charged with an electrical static charge. A static discharge can cause damage to sensitive electronic equipment, cause a static shock and can cause an incendiary discharge and industrial explosion.

Static discharges are dangerous and can be the cause of serious personal injury or major industrial damage.

**Nega-Stat®** yarns are currently used in a wide range of industrial products to eliminate or control static electricity. **Nega-Stat®** is introduced in defined grid, or stripe patterns to woven, knitted or non-woven fabrics to provide static control according to specific industrial requirements and/ or international Standards such as EN 61340, EN 1149/5, JIS1094 etc.. **Nega-Stat®** meets all requirements according to OekoTex 100 and REACH requirements for harmful substances.

The unique design of **Nega-Stat®** ensures full static protection for the duration and work-life of the product in specific industrial situations.
Nega-Stat®

A NEW STANDARD IN STATIC DISSIPATIVE YARNS

Nega-Stat® is introduced into textile materials to provide protection against a range of risks and hazards caused by static electricity in industrial end-use situations. Nega-Stat® yarns are used in products and end-uses where full grounding is essential and in industrial applications where it is not possible to ensure complete grounding. Nega-Stat® yarns are constructed with a unique trilobal shaped conducting core surrounded by a sheath of Polyester. Yarns are offered with performance characteristics designed to meet specific industrial end-use requirements and international Standards.

THE PERFORMANCE OF Nega-Stat® IS DEFINED BY THE END-USE REQUIREMENT OR RISK HAZARD:

- Protection of sensitive electronic components and equipment
- Comfort
- Control of dust particles
- Personal protection against incendiary discharges in hazardous environments
- Protection of sensitive electronic equipment against static discharge from personnel
- Control of static hazards in industrial equipment during operation and processing
- Control of static as an essential part of a technical process

Nega-Stat® APPLICATIONS:

- INDUSTRIAL SAFETY
  container bags (FIBC), conveyor belts, filters
- PROTECTIVE GARMENTS/MILITARY APPLICATIONS
  cleanrooms/areas, paint-shops, industrial workwear, medical clothing/operating gowns, food processing, electronics/pharmaceutical
- AUTOMOTIVE UPHOLSTERY
- BEDDING AND UPHOLSTERY
- COMFORTABLE APPAREL
  hosiery, lingerie, outerwear, sportswear
- COPIER BRUSHES/SMART FABRICS
Nega-Stat® P190

CORE CONDUCTING YARN

Nega-Stat® P190 is a fine-filament bi-component yarn. Each filament has a unique, trilobally shaped conducting core surrounded by a sheath of polyester. Nega-Stat® P190 has been designed to provide optimum antistatic protection in grounded and ungrounded applications according to end-use specifications. The outstanding static dissipative performance of Nega-Stat® P190 is provided by the unique trilobal conducting core. The outer sheath of polyester provides exceptional durability to wear, washing, sterilization and chemical attack. Because of its unique core construction, Nega-Stat® P190 is used in a wide range of industrial applications in both grounded and ungrounded situations.
HOW DOES Nega-Stat® P190 WORK

Nega-Stat® P190 is introduced selectively in grid or stripe patterns to woven, knitted and nonwoven fabrics to provide effective static dissipation for the life of the product. Nega-Stat® P190 neutralizes the surface charges on the base material by induction and dissipates the charge by conduction when grounded or when ungrounded by air-ionization, referred to as corona discharge.

- Whilst other conducting threads work by conducting electric charges along the surface of the thread, Nega-Stat® P190 works by inducing the surface charge into its unique trilobal conducting core.
- The unique trilobal conducting core of Nega-Stat® P190 attracts the electric field from the surface of the fabric and neutralizes all the free charge on the surface of the material. As a result the surface charge can be reduced to zero volts.

Materials containing Nega-Stat® P190 threads do not necessarily require full grounding to be effective. Nega-Stat® P190 can therefore be used in a wide range of industrial applications where full grounding is not possible or impractical.

Nega-Stat® P190 IS AVAILABLE AS A FILAMENT YARN IN THE FOLLOWING DENIERS:

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Nega-Stat® P210

SURFACE CONDUCTING YARN

Nega-Stat® P210 is a fine-filament bi-component yarn made with a trilobal conducting carbon cross section and has been developed from the unique, patented, trilobal carbon core of Nega-Stat® P190. It is enclosed in polyester to provide surface contact for surface conductivity. Nega-Stat® P210 has been designed to provide optimum antistatic performance in end-products and end-uses where surface resistivity or surface conductivity is the required performance parameter. The main end-uses of Nega-Stat® P210 are industrial applications, where it is important for the materials to meet surface resistivity or surface conductivity requirements according to the application by international Standards or where fully grounding is essential.
HOW DOES Nega-Stat® P210 WORK

Nega-Stat® P210 is introduced selected in grid or stripe patterns into woven, knitted and nonwoven fabrics to provide effective static dissipation for the life of the product. Nega-Stat® P210 neutralizes the surface charges on the base material by induction and dissipates the charge by conduction through grounding.

- Nega-Stat® P210 maintains permanent static control properties in fabrics and garments.
- Nega-Stat® P210 provides excellent wash characteristics, even in industrial laundering conditions following sterilization.
- Nega-Stat® P210 provides protection against wear and abrasion in a wide variety of woven and knit fabrics.
- Nega-Stat® P210 protects against static problems ranging from nuisance shocks to dangerous incendiary discharges that will ignite gases and vapors.

In order to meet international Standard and industrial performance requirements, materials containing Nega-Stat® P210 must be effectively grounded.

Nega-Stat® P210 is AVAILABLE AS A FILAMENT YARN IN THE FOLLOWING DENIERS:

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