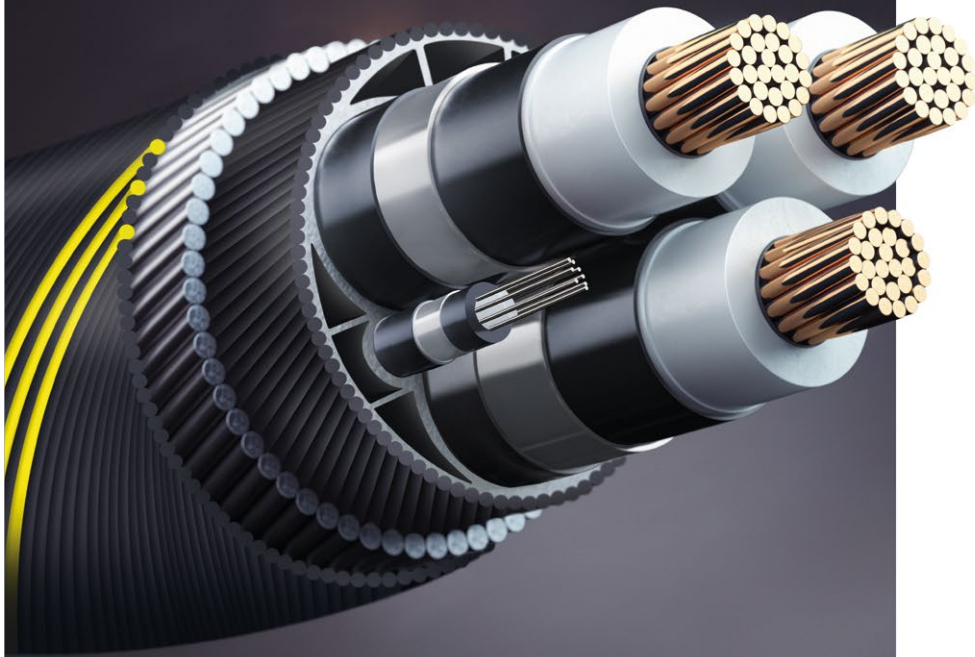


Consistent Performance for Power Cable Systems

PRE-ELEC® Semiconductive Compounds

PREMIX

Engineered for Stable Processing and Reliable Cable Performance



Premix supplies thermoplastic semiconductive compounds for demanding cable applications. **PRE-ELEC® materials combine high dispersion quality, stable electrical performance and excellent processability.**

Manufacturers value PRE-ELEC® compounds for their stable processing behavior and consistent surface quality. These characteristics build decades of experience with electrically conductive plastics in demanding applications, including **highly regulated industries** such as healthcare. In production, this **enables longer runs and fewer process interruptions**, supporting efficient manufacturing and **consistent product quality.**

Why PRE-ELEC® Compounds



Stable and predictable processing

PRE-ELEC® compounds deliver high dispersion quality and controlled electrical properties. Their consistent processing behavior supports smooth production, longer runs, and fewer process interruptions.



Designed for modern cable structures

Our materials support key functional layers in LV to EHV cable systems, including conductor and insulation screens, semiconductive jackets and specialty cable components.



Global support and consistent supply

With manufacturing in Finland and the United States, we provide reliable deliveries and technical support for customers across global cable markets.

Flexible Contract Manufacturing

We also offer contract manufacturing services for semiconductive compounds. With production in Finland and North-Carolina, USA, we support customers with material development, scale-up and reliable industrial manufacturing.

Our contract manufacturing services provide a **flexible way to scale production**, access **specialized conductive compounding expertise** and ensure **consistent material quality.**

PRE-ELEC® Materials for Cable Applications

PRE-ELEC® semiconductive compounds support multiple functional layers in modern power cable systems. The materials are engineered for stable processing, controlled electrical properties, and reliable long-term performance.

These materials are used across several cable construction layers, from conductor and insulation screens to semiconductive outer jackets.



Jacketing & Skin Layers

Semiconductive polyethylene-based compounds used in outer jackets and covered overhead line applications.

Key benefits

- Smooth surface finish
- Reliable and controlled electrical behavior
- Consistent extrusion behavior

Conductor & Insulation Screening

Polypropylene-based semiconductive compounds for conductor and insulation screen layers in medium and high voltage cables.

Key benefits:

- Excellent carbon black dispersion
- Stable volume resistivity
- Consistent processing performance

Adhesive Layer

Semiconductive adhesive is designed to bond metal laminates or welded sheaths to the semiconductive jacket and can also be applied to metal foils to form laminates that provide an effective radial water barrier.

Key benefits:

- Strong adhesion to copper and aluminium
- Supports modern lead-free cable constructions
- Improved interlayer durability

Filler Compounds for Submarine & Umbilical Cables

Semiconductive polyethylene-based filler materials engineered for demanding offshore cable environments.

Key benefits:

- Mechanical stability
- Improved thermal management
- Long-term offshore reliability

Specialty Applications

PRE-ELEC® materials are also used in cable components requiring controlled electrical behavior, example lightning protection structures, flexible cable elements, EMI shielding components

About Premix

Global specialist in electrically conductive plastics

Premix is a global specialist in electrically conductive plastics. We have more than forty years of experience in developing and manufacturing conductive polymer materials. This long heritage gives us deep insight into how carbon black behaves within polymers and how to create predictable electrical performance in demanding cable applications.

Our focus on electrically conductive plastics makes us one of the few companies worldwide specializing in this field. Conductive plastics are not a small segment of our portfolio. They define who we are and what we do. This specialization is one of the reasons why we are considered a trusted partner in critical cable applications.

Premix is recognized for its mastery of carbon black-based technology and premium dispersion quality. These capabilities enable stable and consistent material performance that cable manufacturers rely on.

We operate globally with manufacturing in Finland and North Carolina, USA, serving customers in more than forty countries.

**We are ready to create a new
success story with you!**



www.premixgroup.com