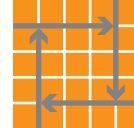




PowerMatrix

POWERHEAT 

S E F A R



Applications

Sports & Fashion

SEFAR® PowerHeat fabric is perfect for both sports and fashion applications. This extremely light and finely woven fabric with its unique active heating can be easily incorporated into existing garment patterns. Also, the use of SEFAR® PowerHeat enables significantly thinner and lighter clothing to provide the same amount of warmth as much thicker and heavier conventional wear.

The fabric can be laminated to other material or inserted as a separate layer between the padding and the lining. The fabric is supplied ready-cut and having pre-fitted contacts, making it the ideal 'ready-to-heat' solution.

With SEFAR® PowerHeat you get more than just a fabric – we provide a complete heating system, including battery, temperature control, connector cables and charger, all from a single supplier.



POWERHEAT

ready to heat!



Medical & Health

The application of heat is a significant part of medical treatment, prevention and rehabilitation. Young children and the elderly also require extra warmth. This extremely light and adaptable fabric can be used to apply heat to just about any part of the body for orthopedic and other therapeutic reasons or used simply to provide general warmth and comfort.



Work

SEFAR® PowerHeat provides construction workers and people having other outdoor professions a much-improved working environment. SEFAR® PowerHeat is the optimal solution against hypothermia for people who work outside for long periods of time.

The material can be easily incorporated in protective vests and other work clothes, and can also be fitted with extra-high-capacity batteries for longer use if required. Cables, electronics, and batteries are shock-resistant and meet all technical and safety regulations.





Technical features

SEFAR® PowerHeat is a fabric made from polyester and coated metal alloy monofilaments.

This is a so-called electronic fabric; they are also known as e-fabrics and e-textiles. The metal filaments have an insulating polymer coating, which means that no short-circuits can occur among the metal wires. In addition, it is machine washable.

SEFAR® PowerHeat fabric is suitable for a wide variety of applications. You will be amazed by the quick heating of this particularly light (around 60g/m²) fabric. The design of the fabric also allows the temperature to be different in different places in the fabric. This is achieved by varying the thickness or spacing of the heating filaments.

The advantages of SEFAR® PowerHeat fabric

- Light and air permeable
- Completely electrically insulated
- up to 1000 W/m² heating power output
- Large heating surface provides quick heating
- Configurable temperature profile (different temperatures in different areas)
- Can be laminated to other materials
- Allows temperature monitoring from directly within the fabric

Weight	approx. 60 g/m ²
Spacing between metal filaments	> 1mm
Air permeability	> 10'000l/m ² /s
Metal filament diameter	> 40 µm
Metal filaments	insulated or bare
Polyester thread diameter	various