ISOHEAT®

Qualität
Made in Germany

High Tech Engineering

Heating jackets/heating mats

Electrical heating technology for industry and research





Ex

ISOHEAT®

www.isoheat.de

The brand name for individual electrical heating technology

Fields in which we are active with our products as a certified partner

- Oil and gas industry
- Nuclear technology
- Pharmaceuticals industry
- Chemical industry
- Petrochemical industry
- Foodstuffs industry
- Particle accelerators
- Surface coatings in high vacuum
- Power station construction
- Solar technology
- Machinery construction
- High-quality materials

Characteristics of flexible heating jackets

Complete, flexible heating systems with integrated temperature sensors, thermal insulation, Velcro or lacing system for easy installation.
The heating jackets are flexible and are manufactured to precisely fit the object to be heated.

Advantages of flexible heating jackets

- Simple installation
- Can be realised for complex components
- Short installation time
- Long service life
- Optimum heat distribution
- Precisely fitting production
- Operating temperatures up to 900 °C
- Temperature sensors integrated
- Installed ready for connection
- Optimally heat insulated

Quality characteristics of our products

- High-quality materials
- Performance-optimised products
- 100% individual inspection
- Inspections documented
- Certified quality management system
- Optimum heat transmission

ISOHEAT® is an ATEX- and IECEx-certified company and meets the increased safety standards according to the latest Ex directives

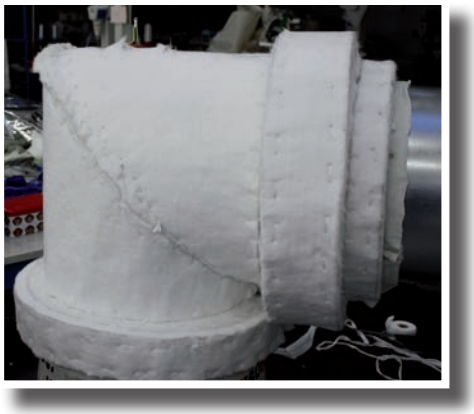


Construction and variants of the heating jackets/heating mats

Version with sewn-on heating conductor

- **Manufactured for a perfect fit on the object**
- Optimum heating conductor distribution
- Heating conductor sewn onto carrier material
- Heating conductor with PTFE insulation up to 250 °C
- Heating conductor with glass silk insulation up to 450 °C
- Carrier material: Glass silk up to 450 °C
  Silicate fibre up to 900 °C
- High power density up to 6 kW/m2





- **Optimum insulation**
- High-quality insulation materials
- Felt insulation material up to 250°C
- Glass needle mats up to 450°C
- Ceramic fibre insulation up to 900°C
- Various insulation thicknesses depending on the temperature



- **Product ready for connection**
- Outer sleeve depending on the application
  - Aluminium-coated glass silk
  - PU-coated glass silk
  - Silicone-coated glass silk
  - PTFE-coated glass silk

Construction and variants of the heating jackets/heating mats

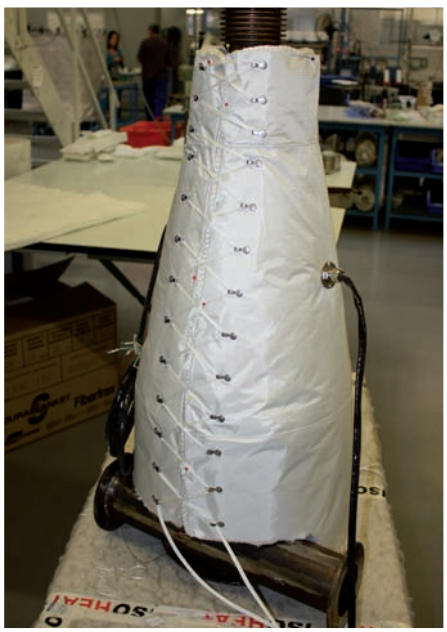
Crocheted heating sleeve



- **Crocheted for a perfect fit on the object**
- Optimum heating conductor distribution
- Heating conductor with PTFE insulation up to 250°C
- Heating conductor with glass silk insulation up to 450°C
- Heating conductor with silicate (quartz fibres) insulation up to 900 °C
- Carrier material: Glass fibre yarn 450 °C
  Silicate fibre yarn up to 900 °C
- Very high power density up to 15 kW/m2
- Optimum heat distribution on the object



- **Optimum insulation**
- High-quality insulation materials
- Felt insulation material up to 250 °C
- Glass needle mats up to 450 °C
- Ceramic fibre insulation up to 900 °C
- Various insulation thicknesses depending on the temperature



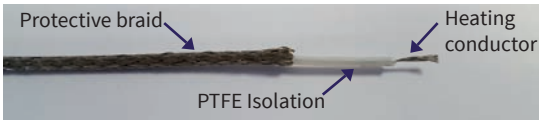
- **Product ready for connection**
- Outer sleeve depending on the application
  - Aluminium-coated glass silk
  - PU-coated glass silk
  - Silicone-coated glass silk
  - PTFE-coated glass silk

Technical data for flexible heating jackets/heating mats

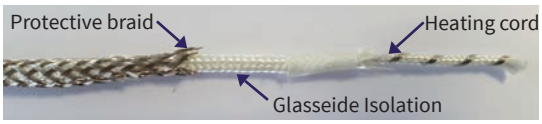
Technische Daten			
Series	MiL-HJ 250	MiL-HJ 450	MiL-HJ 900
Max. operating temperature	250°C	450°C	900°C
Operating voltage	up to 500 V	bis 500 V	up to 500 V
Heating capacity, sewn-on version	up to 2 kW/m²	up to 6 kW/m²	
Heating capacity, crocheted version	up to 3 kW/m²	up to 10 kW/m²	up to 15 kW/m²
Moisture Protection	Yes	No	No
Protective conductor	Yes	Yes	No
Ex version	Possible	No	No

Construction and variants of the heating elements

PTFE-insulated heating cable
with protective conductor braid up to 250°C
Moisture-proof version



Glass silk-insulated heating cable
with protective conductor braid up to 450°C
Not moisture-proof



Heating coil with quartz insulation
without protective conductor braid up to 900°C
Not moisture-proof



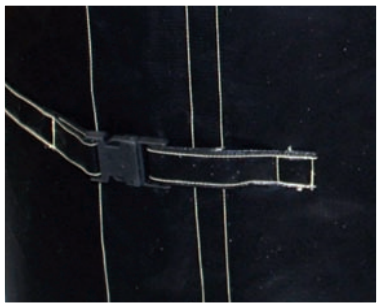
Closure and fastening methods



Hook with cord



Velcro fasteners



Belts with quick-release

ISOHEAT®

High Tech Engineering

Heating conductor production



- **Heating conductor production**
- Various resistance values
  - Glass silk braiding
  - Heating cord production
  - Heating coil production
  - Protective conductor braiding

Examples of heating jackets



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