

Special Cables and Heat Protection *for the Steel Industry*



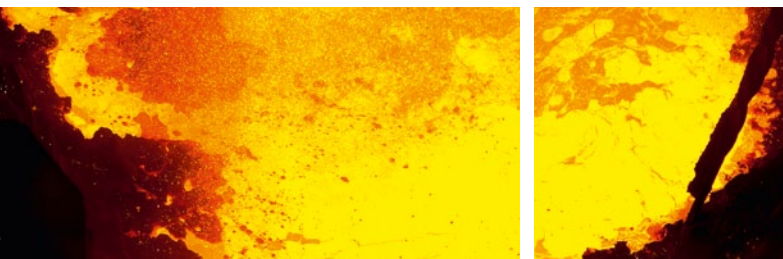
ALMI Alfred Michels
Elektrische Spezialleitungen

RELIABLE CABLES FOR SECURE OPERATION



The selection of the correct cables and protection devices has a major influence on the service life of machinery.

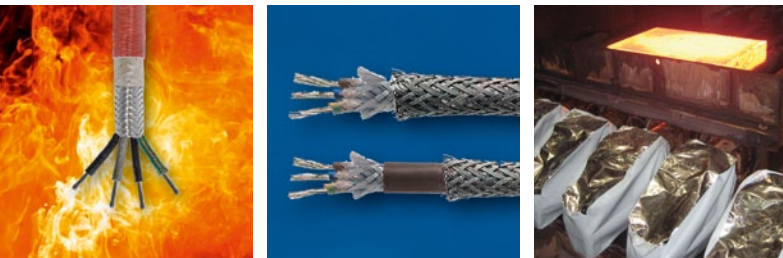
ALMI cables are not only extremely temperature resistant: they can also be designed for high flexibility, to withstand heavy mechanical loads and to perform safely in areas with aggressive atmospheres.



Factor Heat and Cold

High temperature cables

- for temperatures up to $+1,565^{\circ}\text{C}$
- high resistance in the event of contact with liquid steel and slag, as well as heat radiation and flame contact
- long life cycles for extended service life
- silicon-free
- LABS - non adhesive-repelling substances
- typical applications: blast furnace ovens below the runner, close to the distribution channel trolley in extrusion casting plants, foundries, furnaces



Low temperature resistant cables

- applicable for temperatures down to -273°C
- low temperature flexibility
- typical applications: Cooling and air conditioning devices, food industries, laboratory techniques, R&D



Protective devices

- maximum safety
- individual configurations
- easy handling during assembly and disassembly of seals, tarpaulins, curtains, hoods, etc.
- flexible protection hoses for mechanical and thermal protection of cables and other components such as air and hydraulic hoses, etc.

Thermal measurement technology

- thermal and compensation cables according to national and international standards
- temperature resistant insulation from -190°C to $+1,565^{\circ}\text{C}$
- comprehensive accessories, such as, protection fittings, measuring devices, etc.



INDIVIDUAL SOLUTIONS



Factor Flexibility

Cables for lifting, conveying and crane applications

- flexible power, control, bus and data cables
- reelable
- torsional strain resistant
- maximum mechanical strength with simultaneous extreme dynamic loading
- typical applications: Magnetic and grab cranes for scrap loading, crane trolley unit and spreaders
- drag chain cables
- applicable for temperatures up to +180°C
- small bend radii
- high tensile strength
- continuous operation under medium to high mechanical loading
- typical applications: Power supply chains with high thermal loading

Welding cables

- flexible
- extreme notch and wear resistant covers
- suitable for high mechanical loading
- typical applications: welding processes for heavy metal structures in the steel industry

Factor Stability

Chemical and temperature resistant cables

- high resistance to very aggressive media, such as, caustic solutions and solvents
- temperatures from -190 to +260°C
- oil and chemical resistant in continuous operation

Heat resistant data and bus cables

- thermal resistant for static and dynamic applications up to +180°C
- typical applications: Instrumentation cables in the immediate vicinity of hot zones

Oil resistant cables

- high flexibility
- extremely robust
- also available for small design applications (e.g. miniature applications)
- reelable
- temperature resistant up to +260°C
- typical applications: Automation applications in aggressive atmospheres, etc.

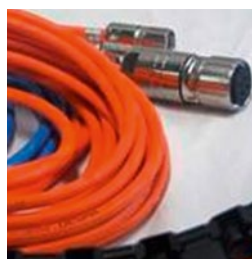
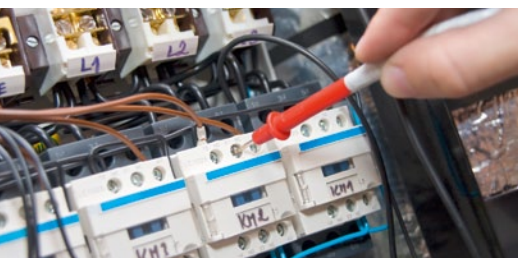
The Single Solution

ALMI SUPREX-THERM – an ALLROUND cable for all demanding applications from -20°C to +180°C

- flexible for static and dynamic applications
- oil and chemical resistant
- suitable for processes with alternating demands of heat, durability and flexibility



MANY YEARS OF EXPERIENCE



Tailor-made service

ALMI special cables are manufactured to fit your specific application and in accordance with the required thermal, mechanical or chemical exposures.

As part of our standard production programme, we offer cable assembly in the form of hoses, hoods, seals, curtains, tarpaulins and connection technologies in various dimensions. Technical textiles are available either cut to size or in rolls from stock.

In addition we offer a wide range of accessories, such as connection and sealing technologies, etc. ALMI provides fast and reliable service. We are available 7 days a week, 24 hours per day.

The Company

For almost one century, ALMI has been a supplier of special cable applications, insulation technology and heat protection systems for demanding industrial processes and individual requirements.

Our proven range of products is subject to an on-going further development process, determined together with our customers and users.

Highest operational safety and long lifetimes are the foundation of all ALMI solutions. We support you with quality products, extensive application experience and tailor-made product service.

Cables and heat protection for
demanding processes

ALMI Alfred Michels GmbH & Co. KG
Waldbleeke 2
45481 Mülheim an der Ruhr / Germany
Tel.: +49. 208. 48 61 86
Fax: +49. 208. 48 25 28
info@almi-kabel.de
www.almi-kabel.de