



# Special Cables and Heat Protection

*for Demanding Industrial Processes*



**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.

Our cable programme is subjected to an on-going development process in co-operation with our clients.



For almost one century, ALMI has a tradition in the production of cables and heat protection for maximum operational security. We are also able to offer attractive and high quality economic solutions for shorter lengths and smaller quantities.

Process know-how, careful material selection, quality controlled manufacture and on-time delivery are our quality parameters. Our products are suitable for a very wide range of industrial production processes:

- **Iron and steel**
- **Aluminium, copper, bronze, lead, etc.**
- **Plastics**
- **Foundries, furnaces**
- **Machine and plant construction**
- **Conveyer, elevator and crane technology**
- **Automation, network and instrumentation technology**
- **Transport technology**
- **Automobile and heavy vehicle production**
- **Energy generation (fossil and sustainable)**
- **Electrical and electronic**
- **Paint works**
- **Glass & ceramics**
- **Chemicals**
- **Petrochemicals**
- **Pharmaceuticals and medical technology**
- **Paper and packaging**
- **Food industries**
- **Logistics and harbour operations**
- **Recycling and waste disposal**



ALMI – the simplest route to your individual, quality reliable cable!

# RELIABLE ALMI QUALITY



## Factor Heat & Low Temperature

### High temperature cables

- for temperatures up to  $+1,565^{\circ}\text{C}$
- also silicon-free
- LABS - non adhesive-repelling substances
- long life cycles for extended service life
- typical applications: Foundries, furnaces, paint works and many others

### Low temperature resistant cables

- applicable for temperatures up to  $-273^{\circ}\text{C}$
- 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  $-190^{\circ}\text{C}$  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: Container loading, recycling, etc.

### 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 in conveyor systems, etc.

### Welding cables

- flexible
- extreme notch and wear resistant covers
- suitable for high mechanical loading
- typical applications: Steel mills, ship building, plant construction, etc.

## 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
- special cables for use in food and drinking water applications
- typical applications: Steel production, glass, ceramic and aluminium applications, food industries, etc.

### Data and bus cables

- for static and dynamic applications
- thermal resistant up to +180°C
- typical applications: Instrumentation cables, sensor cables, etc.

### 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.

### Motor connection cables

- connection to frequency converters
- very good electro magnetic compatibility (EMC)
- flexible
- oil resistant
- typical applications: resolver, rotating transducers, servo cables, etc.



# MANY YEARS OF EXPERIENCE

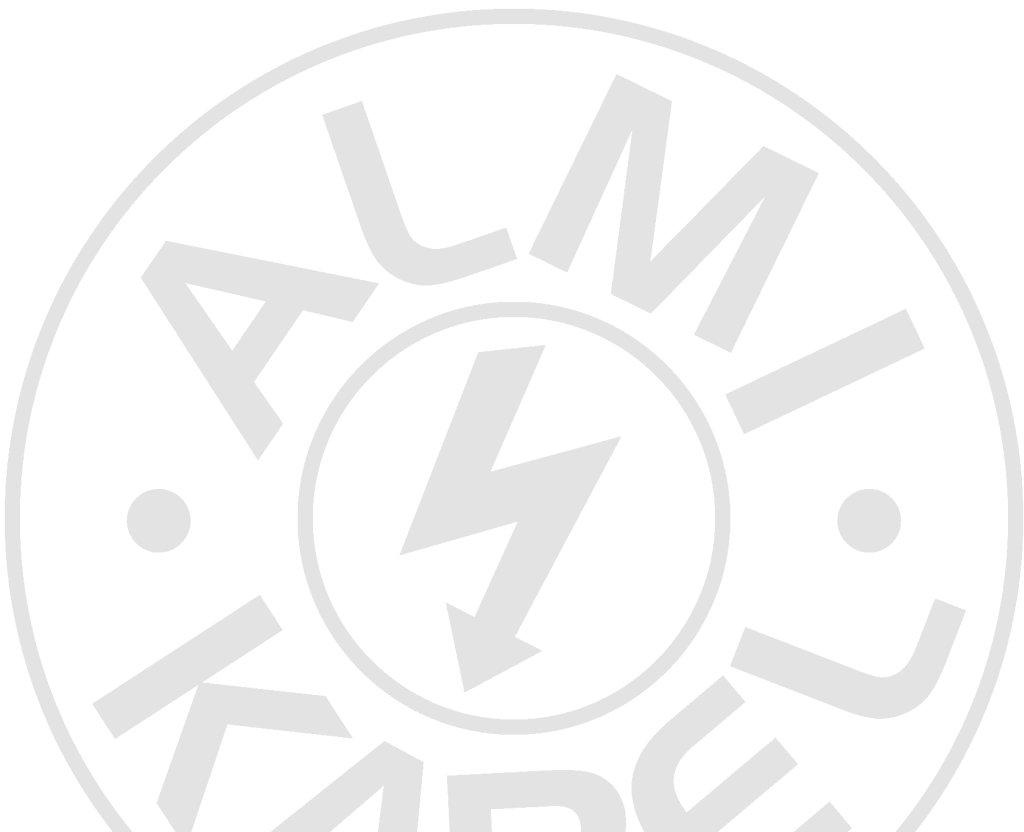
Application	high temperature cables	protective devices	thermal measurement technology	cables for lifting, conveying and crane applications	drag chain cables	welding cables	chemical and temperature resistant cables	data and bus cables	oil resistant cables	motor connection cables
Iron and steel industry, processing of aluminium, copper, bronze, lead, etc., foundries, coke oven plant, metallurgical plants, furnace construction	■	■	■	■	■	■	■	■	■	■
Machine and plant construction, production lines	■	■			■	■	■	■	■	■
Automobile industry, construction and work vehicles						■		■	■	■
Conveyer, crane and elevator applications	■	■		■	■		■	■	■	■
Automation, robotics, instrumentation technology	■	■	■				■	■	■	■
Power generation and distribution		■	■		■			■	■	
Cement, glass and ceramic industries, paint works	■	■	■				■	■		■
Shipbuilding, aircraft and electric motor industries, traffic systems		■				■	■		■	■
Chemicals, petrochemicals, pharmaceuticals, medical technology		■	■	■	■		■	■	■	■
Food industries							■	■	■	
Paper & packaging				■	■		■	■	■	■
Logistic and harbour applications				■	■					
Recycling and waste disposal	■			■	■			■		■

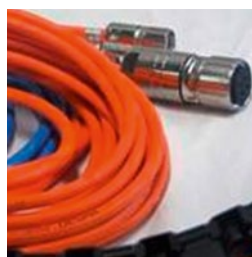
## Tailor-made service

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.

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

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