

# TE Energy Products Powerful Solutions

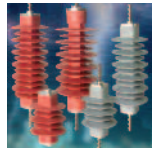


# TE Energy

TE Energy is a global supplier to power utilities and power industry customers, equipment manufacturers, and transport systems, with nearly 4,000 employees. We have sales representatives in more than 80 countries and manufacturing sites in five continents.

Our product range includes:

- Cable Accessories
- Connectors and Fittings
- Insulators
- Insulation and Wildlife Protection
- Surge Arresters
- Power Measurement and Control
- Distribution Components
- Street Lighting



# Research and Development

Basic research and development is carried out at 14 outstanding scientific and engineering research facilities around the world. The majority of R&D projects for cable accessories is handled in Ottobrunn / Germany where a fully equipped high-voltage test lab, material labs and the modelshop are located. Electrical, chemical and mechanical scientists and engineers are working in crossfunctional teams focused on new technologies and product developments and improvements. For short-term and long-term material- and product testing, multiple labs are available.



## Committed to quality

ISO 9000 series and ISO 14001 certifications for almost all locations underline our continuing commitment to quality and the environment. All TE Energy products are subjected to extensive testing from the time they enter our plants as raw material until they leave as finished products. Requalification testing is carried out on a regular basis with installed components. Customers can thus have full confidence in the products, services and data supplied. In many cases, this saves the cost and inconvenience of any further downstream verification. All our electrical power products meet international specifications, such as IEC, CENELEC, IEEE, ANSI, and virtually all national standards.

# Connectors and Fittings



Our full line of connectors and accessories for low, medium and high voltage cable and overhead networks, substations, grounding applications, rail transport infrastructure, industrial applications and accessories for overhead optical fiber lines covers most applications in an electrical network.

- Connectors
- Lugs
- Clamps
- Spacers
- Solderless Terminals and Splices
- Terminal Blocks
- Tooling

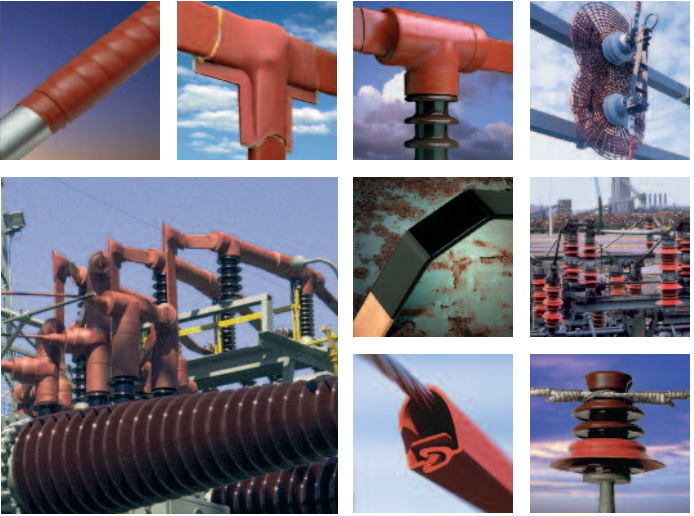
# Insulators



Our wide range of insulators has earned a worldwide reputation for innovation, quality, service and technical expertise for an array of applications in power networks.

- Porcelain Insulators
- Polymeric Insulators
- Hybrid Insulators

# Insulation and Wildlife Protection



Our insulation systems for substations and overhead lines are used in transmission-, distribution networks, HV substations, railway- and OEM applications.

- Busbar Insulation Tubing and Tapes
- Insulating Sheets
- Preformed Covers
- Squirrel Guards
- Bird Protection Caps
- Overhead Line Insulation Sleeves
- Creepage Extenders
- Flexible Insulated Bars

# Cable Accessories



The most innovative utilities and industries around the world use our power cable accessories. Designed to withstand environmental extremes and high pollution levels over long operating lifetimes, they help maintain service reliability in both overhead and underground installations.

- Low Voltage Accessories
- Medium Voltage Joints
- Medium Voltage Terminations
- Medium Voltage Switchgear Connection Systems
- Heat-shrinkable Tubing
- Sealing Systems
- High Voltage Terminations
- High Voltage Joints
- High Voltage Link Boxes
- Nuclear Qualified Products
- Tooling

# Surge Arresters



We offer an extensive range of polymeric and porcelain surge arresters for distribution and transmission networks that are in service around the world and are protecting installations in all climatic conditions.

- Low Voltage Surge Arresters
- Medium Voltage Surge Arresters
- High Voltage Surge Arresters
- Surge Monitoring Systems

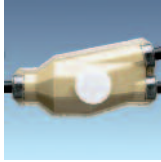
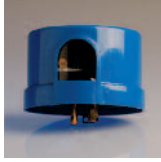
# Power Measurement and Control



Our products have earned a world wide reputation for quality and offer proven reliability across power generation, process control, test and measurement, utility, marine, defense and energy management applications.

- Digital Metering Systems
- Kilowatt Hour Energy Meters
- Transducers
- Protector Trip Relays
- Meter Relays
- Digital Indicators
- Analogue Instruments
- Current Transformers
- Shunts

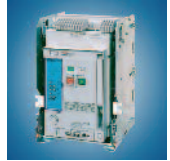
# Street Lighting



Our products for street lighting and public services help utilities and municipalities to reduce the total life cost of ownership and at the same time improve their lighting service levels.

- Photo Controls
- Time Controls
- Connection Boxes
- Fuse Boxes
- Cable Joints

# Distribution Components



Our products for electrical distribution systems include low power components such as circuit breakers and high power devices such as electrical distribution switchboards with busbars from 800 to 3200 A.

- MCB Distribution Board Systems
- Moulded Case Circuit Breakers
- Fuse Combination Units
- Panel Board Systems

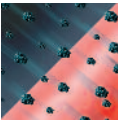
## Manufacturing

With 15 manufacturing facilities across five continents, we can react promptly to customer requirements and keep lead times and shipping distances to a minimum. Our largest manufacturing site is Ottobrunn / Germany, with a capacity for more than 15 million meter of heat-shrink tubes. Manufactured out of approx. 4,000 tons of compounds and with more than 50 different formulations. By combining local knowledge with world-class research, product development and manufacturing capabilities, we set high standards of performance and user convenience.



# Enhanced properties for materials and products

Systematic research into new materials has resulted in a wide range of products with enhanced properties to meet the changing needs of the electrical power industry:



Excellent resistance to surface electrical activity



Moisture blocking



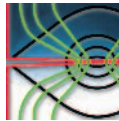
Excellent resistance to thermal aging and UV light



Electrical stress control



Insulation thickness memory



Reduced contact resistance



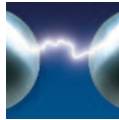
Void-free interfacial bonding



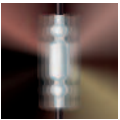
Excellent bimetallic interface



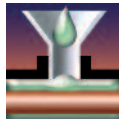
Impermeability to cable oils



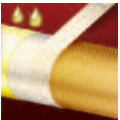
Reliable, durable current interruption



Shape memory



Resin technology



Fiber reinforced resin



PowerGel



Total harmonic distortion analysis

# Markets we serve

## Electrical Network

- Generation
- Transmission
- Distribution



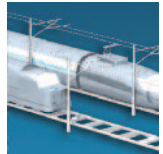
## Industrial & Construction

- Heavy Industry
- Industry
- Building Construction
- Equipment Manufacturers



## Infrastructure

- Lighting
- Transportation



## About TE Connectivity

TE Connectivity is a global, \$12.1 billion company that designs and manufactures over 500,000 products that connect and protect the flow of power and data inside the products that touch every aspect of our lives. Our nearly 100,000 employees partner with customers in virtually every industry – from consumer electronics, energy and healthcare, to automotive, aerospace and communication networks – enabling smarter, faster, better technologies to connect products to possibilities.

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