

TE Connectivity (NYSE: TEL) is a \$13 billion world leader in connectivity. The company designs and manufactures products at the heart of electronic connections for the world's leading industries including automotive, energy and industrial, broadband communications, consumer devices, healthcare, and aerospace and defence. TE Connectivity's long-standing commitment to innovation and engineering excellence helps its customers solve the need for more energy efficiency, always-on communications and ever-increasing productivity. With nearly 90,000 employees in over 50 countries, TE Connectivity makes connections the world relies on to work flawlessly every day. To connect with the company, visit [te.com](http://te.com)

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**ONE CLEAR SOLUTION FOR BOTH ROUGH ENVIRONMENTS AND TOUGH SPECS.**

INSIST ON RAYCHEM CABLE ACCESSORIES AND COMPONENTS FOR ALL YOUR SHIPBUILDING AND OFFSHORE POWER INSTALLATIONS.

# PROVEN POWER CONNECTIONS FOR SHIPBUILDING AND OFFSHORE INSTALLATIONS

Tried and trusted for over 60 years, TE Connectivity's Raychem range of connection solutions has been proven to withstand environmental extremes and high pollution levels over long operating lifetimes. Engineered to maintain service reliability under high electrical, thermal and environmental stress, Raychem connection solutions are manufactured with specially formulated insulation materials that resist tracking and degradation caused by erosion, ultraviolet light and other environmental stresses.

With a broad industry portfolio, and applications across several industry sectors, the ruggedness and reliability of the Raychem range is particularly suited to the requirements of the shipbuilding and offshore industry; the reliability of the range is further supported by a global network of dedicated TE Connectivity professionals who will do whatever it takes to maintain your operational efficiency regardless of the conditions.

That's why Raychem is the first choice of renowned shipbuilding and offshore companies around the globe. If you're looking for high-quality, reliable connection solutions that conform to stringent environmental and performance specs, Raychem will exceed all your expectations.

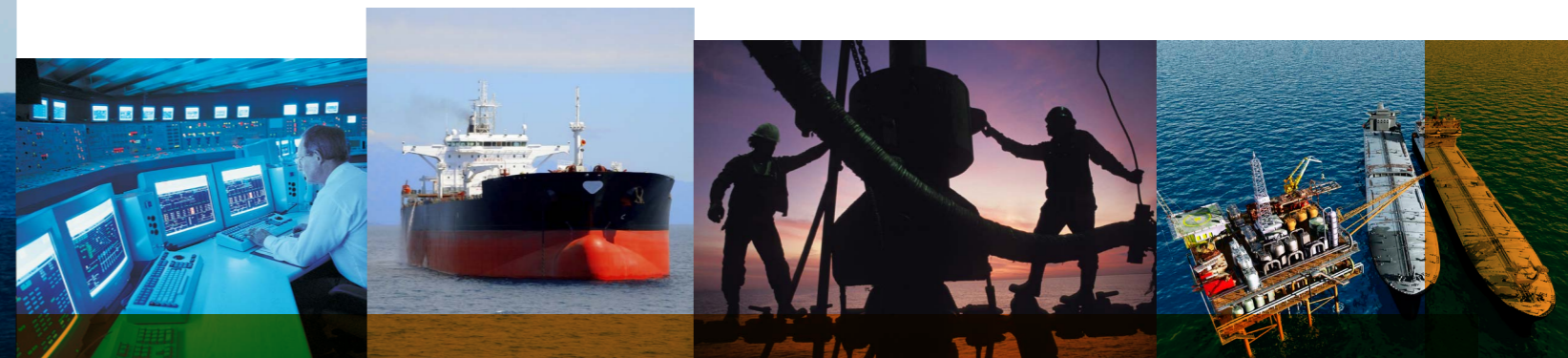
## Capabilities

Born from several decades of meticulous R&D in advanced materials as well as ceaseless refinement, the Raychem range answers all the diverse demands of modern power systems:

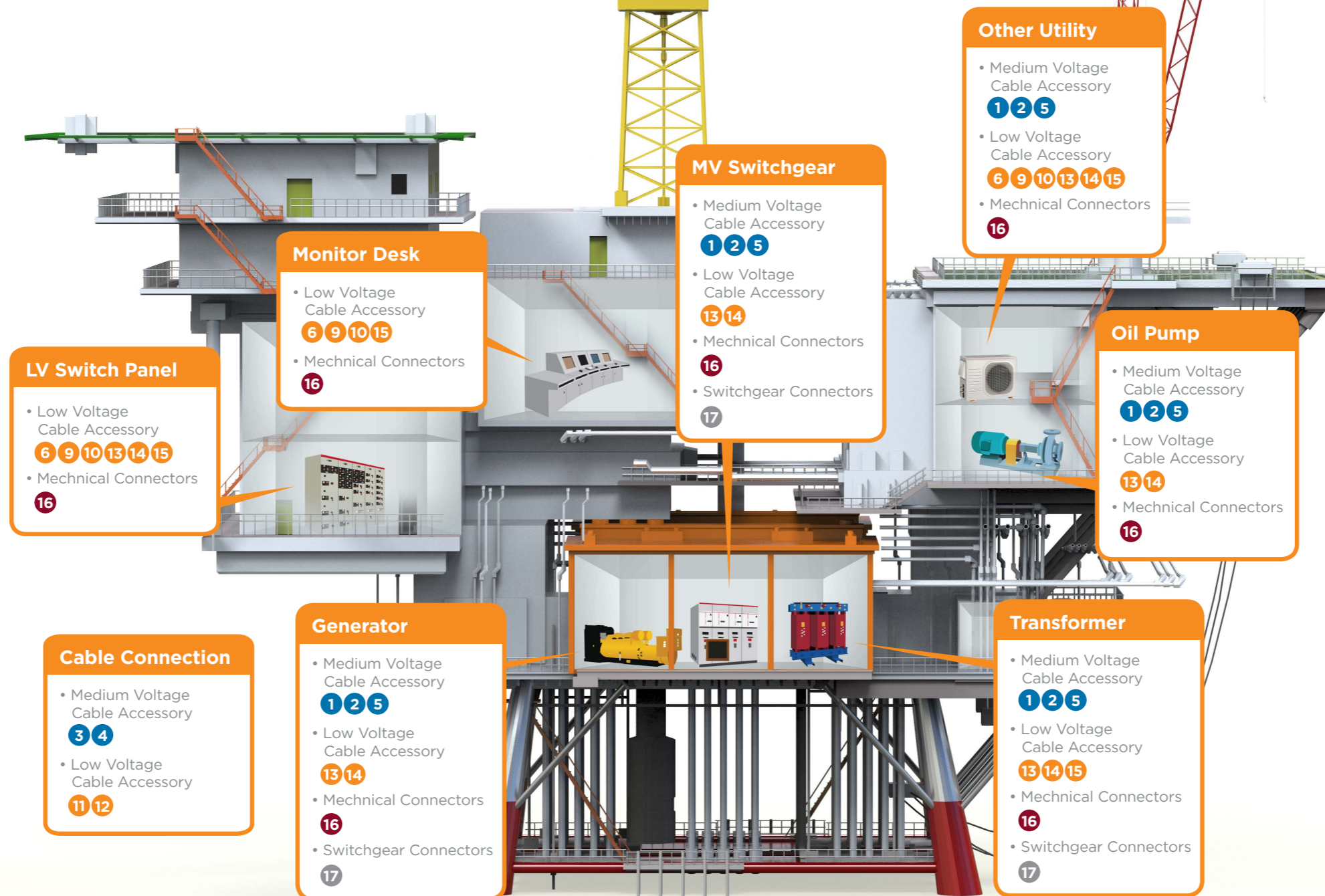
- Fewer components and simplified cable preparation
- Fast installation and installer safety
- Consistency across cable types and voltage classes
- High reliability and meet exacting international specifications

Best of all, most Raychem products come with DNV (or equivalent) certificates. Whatever the extremes in climate and operating conditions, wherever the installation, Raychem has the perfect answers for all your demanding specs.

“With a broad industry portfolio, and applications across several industry sectors, the ruggedness and reliability of the Raychem range is particularly suited to the requirements of the shipbuilding and offshore industry; the reliability of the range is further supported by a global network of dedicated TE Connectivity professionals who will do whatever it takes to maintain your operational efficiency regardless of the conditions.”



# APPLICATIONS IN THE MULTIPLE SHIPBUILDING AND OFFSHORE INDUSTRIES



## MEDIUM VOLTAGE CABLE ACCESSORIES



### EPKT

Terminations for polymeric and MIND paper insulated cables from 7.2 kV up to 36 kV DNV certified, fully type-tested, and conforming to IEC, CENELEC and VDE specs, they have more than 30 years of proven reliability under all types of operating conditions, and are widely used in shipyards and offshore installations all over the world.

Certificates:  
• DNV GL



### IXSU-F/OXSU-F

Heat-shrinkable termination system with non-linear, zinc oxide stress control for polymeric cables up to 24 kV

With certificates from DNV GL, BV, LR, RMR, RIN and more, it features an integrated stress control mastic for a compact one-piece design plus a moisture seal, eliminating the need for separate, discrete seals, thereby greatly simplifying installation.

Certificates:  
• DNV GL • Lloyd's Register of Shipping  
• Registro Italiano Navale • Bureau Veritas  
• Russian Marine Register of Shipping



### XCSM

Heat-shrink, medium-wall, general purpose insulating and sealing tubing  
Comes with UV-stabilised material suitable for outdoor applications. Internally coated with hot melt adhesive or mastic to provide high corrosion and mechanical performance.

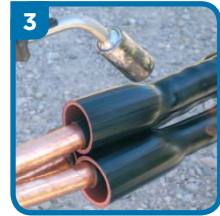
Certificates:  
• DNV GL



### CRSM

Heat-shrinkable, wraparound system for plastic or metal sheathed cable repair  
A fast and permanent cable repair and sealing system with rail and channel closure for quick fitting in place. One-step heating enables moisture-proof, insulating and tight-fitting repair.

Certificates:  
• DNV GL



### MXSU/MXST/MXSW

Jointing system up to 36 kV complete with mechanical connectors

DNV-certified, fully type-tested and conforming to IEC, CENELEC and VDE specs, this polymeric/elastomeric triple-extruded solution features a conducting/insulating joint body that ensures higher recovery force and fewer components, improving reliability and simplifying installation. Mechanical connectors with pre-set torque shear bolts, ensure consistent contact pressure, and eliminate the need for a crimping tool as well.

Certificates:  
• DNV GL

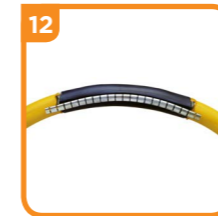


### SXSU/SXST/SXSW

Joints for polymeric insulated cables from 12 kV up to 36 kV

DNV-certified, fully type-tested and conforming to IEC, CENELEC and VDE specs, this polymeric/elastomeric triple-extruded solution features a conducting/insulating joint body that ensures higher recovery force and fewer components, improving reliability and simplifying installation.

Certificates:  
• DNV GL



### MRSRM

Heat-shrink flexible cable jacket repair sleeve  
Enables one-step installation for a tight, moisture-proof and insulating seal that's reliable and repeatable. Its tough modified polyolefin material offers high abrasion resistance, flexibility and insulating properties.

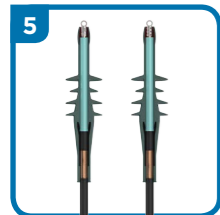
Certificates:  
• Lloyd's Register of Shipping



### EPKE

Heat-shrink live end seal  
Rapidly and reliably achieved moisture seal that has been proven in thousands of installations thanks to its heat-shrinkable design and special pre-coated adhesives. It's also impact-resistant, eliminates topping-up and curing delays, and can therefore be immediately placed and taken into use.

Certificates:  
• DNV GL



### CSTI/CSTO

Silicone Cold-shrink termination with integrated stress control for XLPE cables up to 24 kV in various industries, such as Utility, Shipbuilding & Offshore, Oil & Gas, Wind Generation

One-piece, pre-expanded integrated stress cone termination on a spiral holdout for easy installation and excellent electrical stress control. Has excellent electrical properties with superior track resistance and outstanding weathering and UV resistance for a long service life.

Certificates:  
• DNV GL



### 102L End Cap

Heat-shrink cable end cap  
Heat-shrinkable, inside coated with hot-melt adhesive, these end caps can be used on plastic, paper and rubber insulated cables to seal and protect their ends during storage, transport and cable laying. They are also resistant to UV-light and weathering.

Certificates:  
• DNV GL



### 302K, 402W, 502K Breakout

Heat-shrink cable breakouts  
Made from semi-rigid cross-linked polyolefin, with resistance to abrasion, UV-light, weathering, and atmospheric pollution. Their pre-coated adhesive melts and reliably seals the cable crutch against moisture and the environment.

Certificates:  
• Lloyd's Register of Shipping

## LOW VOLTAGE CABLE ACCESSORIES



### MWTM / WCSM

Heat-shrinkable medium-wall insulation tubing

UV stable and pollution resistant. Available with an inner sealant wall that makes it suitable for either cable oversheath replacement or sealing, or uncoated as an insulating tubing for common usage.

Certificates:  
• DNV GL



### ZCSM

Heat-shrink, halogen-free, flame-retardant insulating tubing for low hazard areas

Built with high-performance materials with to withstand weathering and be UV-resistant, this tubing is ideal for oil and gas production, and ships.

Certificates:  
• DNV GL

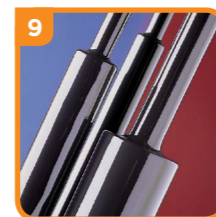


### ATUM

Heat-shrink, thin-wall, general purpose insulating and sealing tubing

This semi-flexible, general purpose adhesive-lined, moisture proof heat-shrinkable tubing provides excellent environmental sealing of electrical components including wire splices and harness breakouts, and for sealing cable ends against moisture ingress.

Certificates:  
• Lloyd's Register of Shipping



### FCSM

Heat-shrink, flame-retardant, heavy-wall flexible insulating tubing

Built with tough electrical insulating material that combines flame-retarded properties with flexibility, abrasion resistance and a rapid installation technique. Its high-performance, cross-linked polyolefin construction provides better sealing, or uncoated as an insulating tubing for common usage.

Certificates:  
• DNV GL

## MECHANICAL CONNECTORS



### Aluminium ShearBolt terminal lugs and connectors

Designed for easy installation with a standard socket spanner and featuring chamfered edges, they are suitable for up to 42 kV voltage and can be adapted to existing termination designs.

## SWITCHGEAR CONNECTOR



### RSTI-58

Screened separable connection system 800 A up to 24 kV

Designed for cable connection to medium-voltage gas insulated switchgear and other equipment using CENELEC bushings type "C". The insulation of the connector is made of a highly modified silicone rubber, fully screened, characterised by high tracking resistance, elongation at break and non-flammability. Perfectly water/weather proof in moist environments, its performance exceeds CENELEC HD 629.1 S2 requirements, including BS, VDE and other international specifications.

Certificates:  
• DNV GL

# SOLVING THE TOUGH ISSUES

## FOR SHIPBUILDING AND OFFSHORE APPLICATIONS

With the development of shipbuilding and offshore manufacturing technology, more and more large-scale and complex power systems will be required on ship and offshore platforms. Reliability in harsh environments is the biggest challenge and weakness of these power systems - making customers very concerned about power connections and long operating life. They will insist on stable solutions that optimise the power system design.

Our mission is to support you in answering your biggest challenges: more reliable connections, easier installation and operation, better environmental tolerance, environment and operator safety, and stronger support and service capability

You can count on TE Connectivity to be an indispensable partner who provides consistent, high-quality products - all driven by proven innovation and backed by extraordinary customer support.



### KEY BENEFITS

- High reliability in harsh environments
- Long operating lifetimes
- Easy installation
- Comprehensive product portfolio
- Total power connection solution

### Put 7,000 engineers to work for you

TE Connectivity has approximately 7,000 engineers and worldwide sales and customer service capabilities. TE leads the industry in innovation by bringing together expertise in materials, processes, physics and manufacturing. TE engineers design solutions and rigorously tests products. The TE commitment is to provide you with advantages in high performance and greater efficiencies in new and existing shipbuilding and offshore systems. TE engineers thoroughly understand industry standards and regulations, from adherence to stringent specifications or calls for rugged solutions built for harsh applications.

In addition, the TE Field Service Team provides the best support system in the industry. Our team supports customers seeking guidance on everything from design integration to onsite training to field supervision.

Working together, we can help you reach a better power connectivity solution.

For more information on our high-performance connection solutions or to connect with a TE expert, visit [energy.te.com](http://energy.te.com)

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