



Global, Innovative, Comprehensive

# Oil & Gas Solutions



**COOPER**





# ONE COOPER

Cooper Industries (NYSE: CBE) is a global manufacturer of the electrical infrastructure utilized within the oil and gas exploration and production process. From upstream to midstream to downstream, our comprehensive and rugged product offering—specifically explosion-proof electrical equipment, our drive to reinvest in innovative technologies for your benefit and our global manufacturing base make us uniquely positioned to locally serve even the most remote facilities.

[▶ LEARN MORE](#)

## A BEST-IN-CLASS PARTNER FOR THE OIL & GAS INDUSTRY

- GLOBAL FOOTPRINT TO HELP DELIVER WHEREVER YOUR BUSINESS TAKES YOU
- A BROAD PRODUCT OFFERING TO MAXIMIZE SAFETY, STANDARDIZATION AND SAVINGS
- INNOVATIVE SOLUTIONS FOR TODAY AND TOMORROW

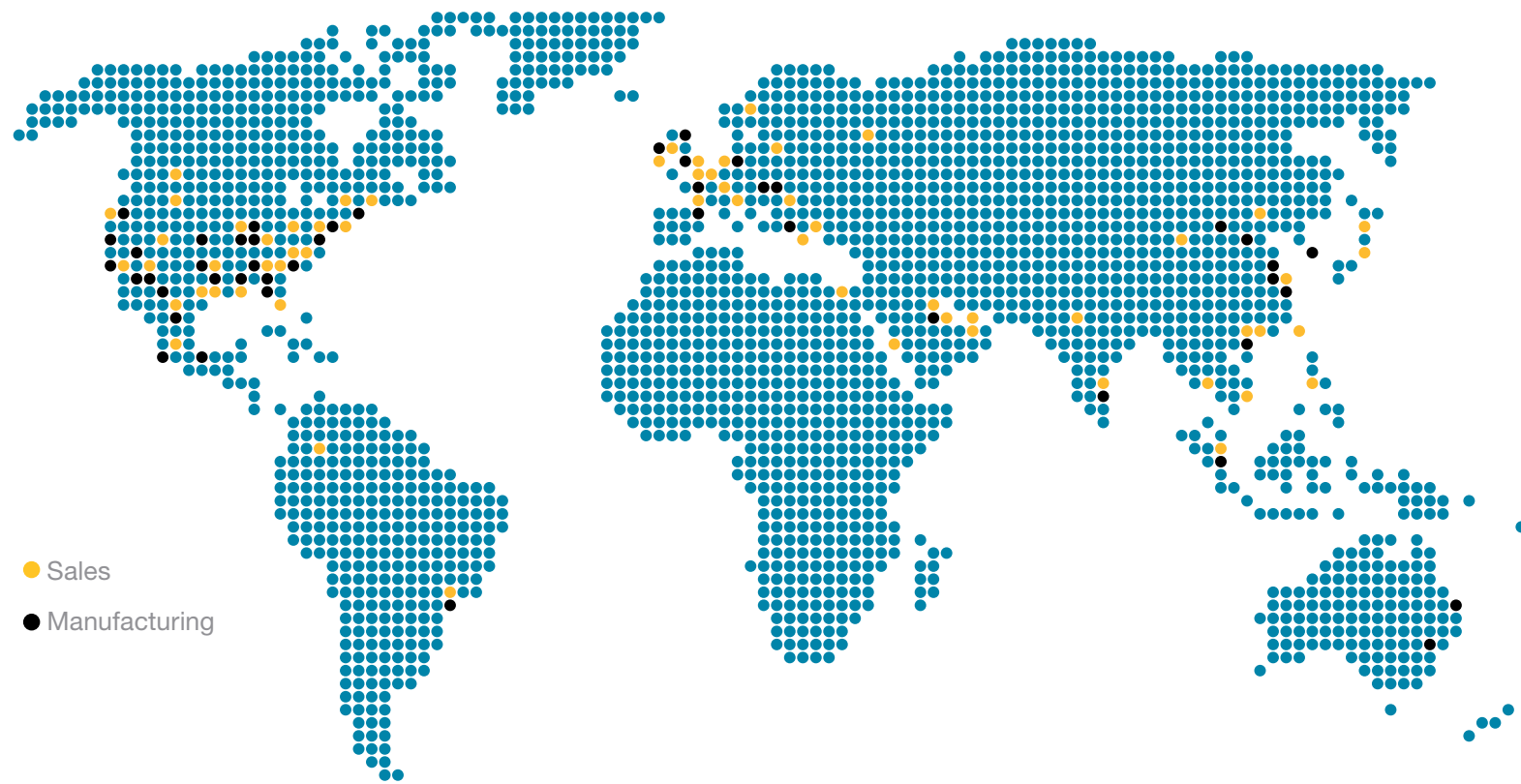
WHATEVER IT TAKES. WHATEVER YOU NEED. WHEREVER YOU ARE.

Global Manufacturing and Distribution Network

Our manufacturing facilities are strategically positioned globally to deliver products close to your project. We manufacture in 23 countries and sell into more than 100 countries. We inventory more than 100,000 SKUs and ensure our products meet your quality standards no matter where they are manufactured.

Our network includes more than 140 manufacturing and distribution locations worldwide with local technical sales and engineering teams to support your immediate needs.

Our logistics teams manage shipments to conform to your project schedule. We are there on-site during construction, commissioning and training. Your Cooper project manager serves as your single point-of-contact.



Dammam, Saudi Arabia

Shanghai, China

Arad, Romania



COOPER WORLDWIDE



MANUFACTURED IN **23 COUNTRIES**  
SOLD INTO MORE THAN **100 COUNTRIES**  
**39%** OF PRODUCTS **SOLD OUTSIDE U.S.**  
MORE THAN **100,000+ SKUs**  
**140 LOCATIONS WORLDWIDE**

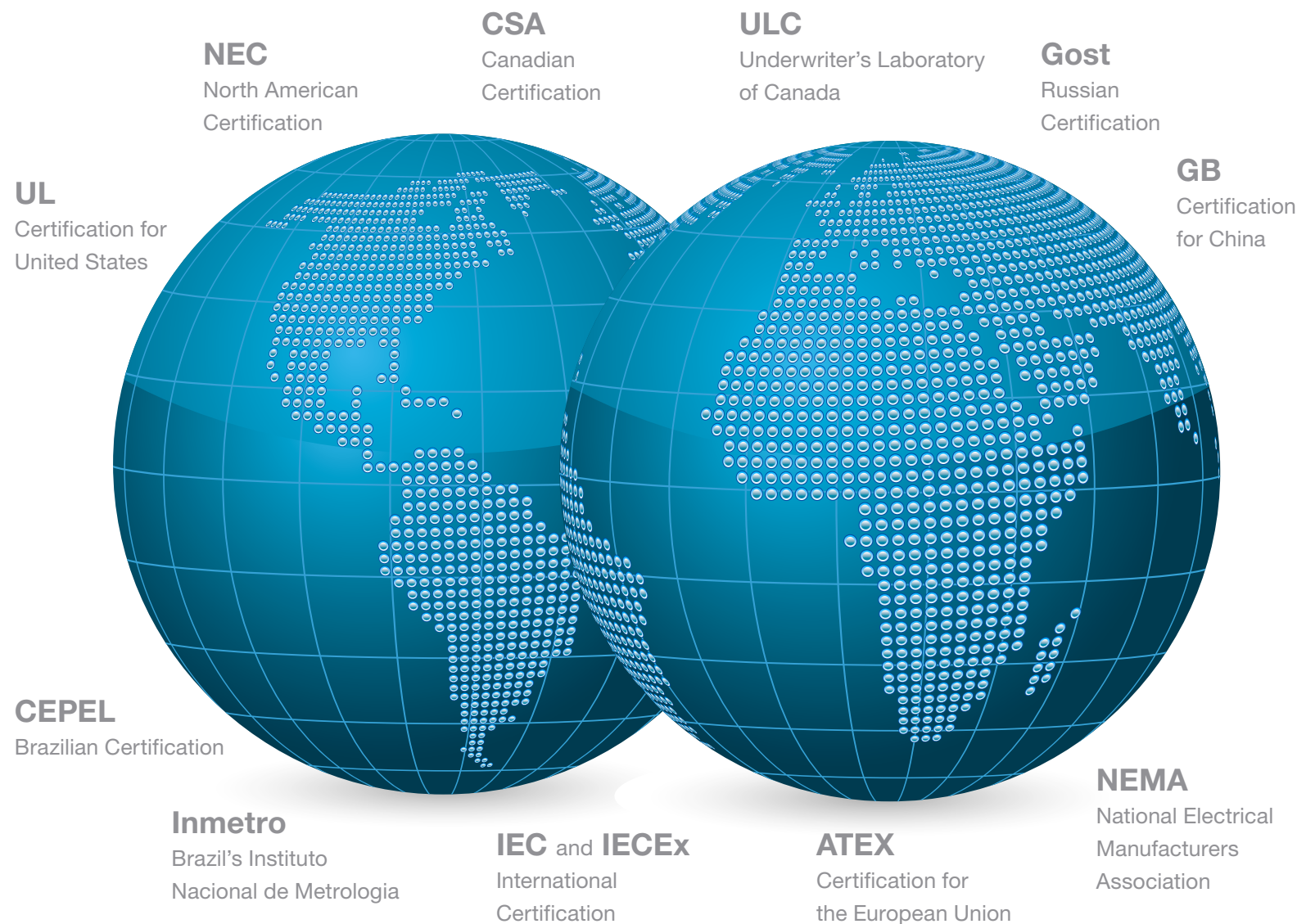
## DESIGNED FOR GLOBAL SPECIFICATIONS

Cooper offers customers the most competitive, compliant product and service portfolio as a single stop for end-to-end electrical solutions including lighting, switchgear, circuit protection, connectivity, cable management, and explosion-protected instrumentation, enclosures and signaling.

We are the world's leading provider of products and services for electrical systems in hazardous environments.

### Tap Our Knowledge Base

Wherever you are drilling, pumping or refining, we know the codes and standards. Our products are built to meet and exceed certifications applicable to locations around the world to ensure the safety of your employees and equipment. The knowledge and expertise we leverage every day to help your operation run smoother and safer lies not in one mind but in thousands of Cooper employees. We continuously collaborate with customers to ensure that you have the services and support needed to reach optimal performance.



### Global Certifications

*IEC/IECEX International certification, ATEX certification for the European Union, CSA Canadian certification, NEC/CEC North American Standards, UL US certification, GOST-R/GOST-K Russia and Kazakhstan certification, NEPSI certification for Asia, KOSHA certification for Korea, ANZEx Australian/New Zealand Certification, GB certification for China, CEPEL Brazilian certification, CCC China Compulsory Certificate, CQST China National Quality Supervision and Test, Inmetro Brazil's Standardization and Industrial Quality. ULC Underwriter's Laboratory of Canada.*

## SERVICE SOLUTIONS TO DELIVER SUCCESS

### Custom Service Centers

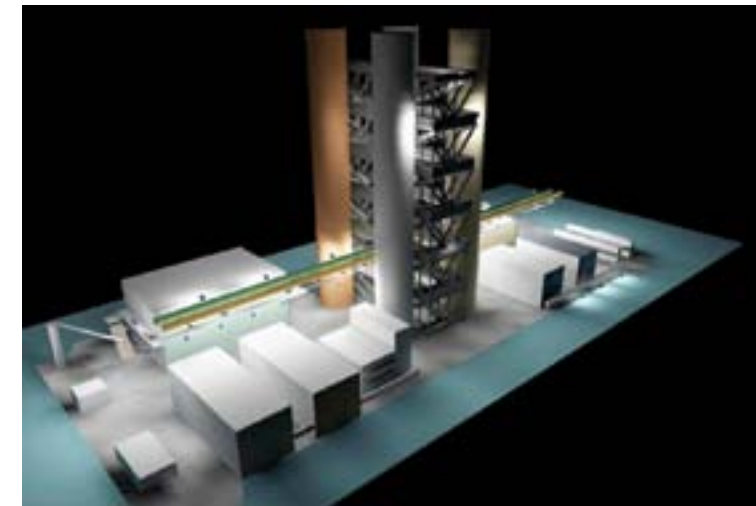
We specialize in local assembly and fast delivery of custom-engineered electrical products specifically for industrial and corrosive applications. Our service centers offer full drafting capabilities and in-house control and instrumentation experts to help you develop the optimal solution:

- Custom-built panelboards and motor control
- Switchracks
- ATEX and IEC assemblies
- Portable power products

### Lighting Layout Support

From simple layouts to complete drawings, our lighting design engineers will provide precise, efficient application-focused lighting designs:

- 3D fixture placement with comparison of alternate fixtures
- Point-by-Point footcandle diagram calculations
- AutoCAD® drawings overlaying your floorplans
- Complete bill of material



### Technical Knowledge Exchange

The years of experience of our field and design engineers have been downloaded into technical publications, online training videos and in-person training programs held on-site at your facility or at one of our training centers. Hazardous location training covers requirements and methods for classifying and protecting hazardous locations.

Code digests cover NEC, CEC and IEC key changes to current regional codes as well as the classifications of hazardous atmospheres, explosion prevention techniques, equipment wiring methods, and electrical safety.

### Bulk Electrical and Instrumentation Material Supplier

As one of the largest oil & gas bulk electrical and instrument material suppliers, we can easily provide you a single source for the smallest but necessary components to complete your project on time and on budget.

### On-Site Module Yard

Large modular units can be manufactured and shipped to the plant site to be bolted together, saving on-site construction time.

We also offer:

- On-site engineering support, supervision and training
- On-site material inspection for authenticity assurance
- Local support following project completion



## COMPREHENSIVE PRODUCT SOLUTIONS FOR GLOBAL OIL & GAS APPLICATIONS

### Signal, Alarms & Surveillance

High powered speakers, strobes and horns for indoor and outdoor applications cover large areas with crisp, intelligible warnings.

### Motor Control/Electrical Distribution

High-speed fuses protect large drive systems that run motors on drilling rigs.

### Lighting

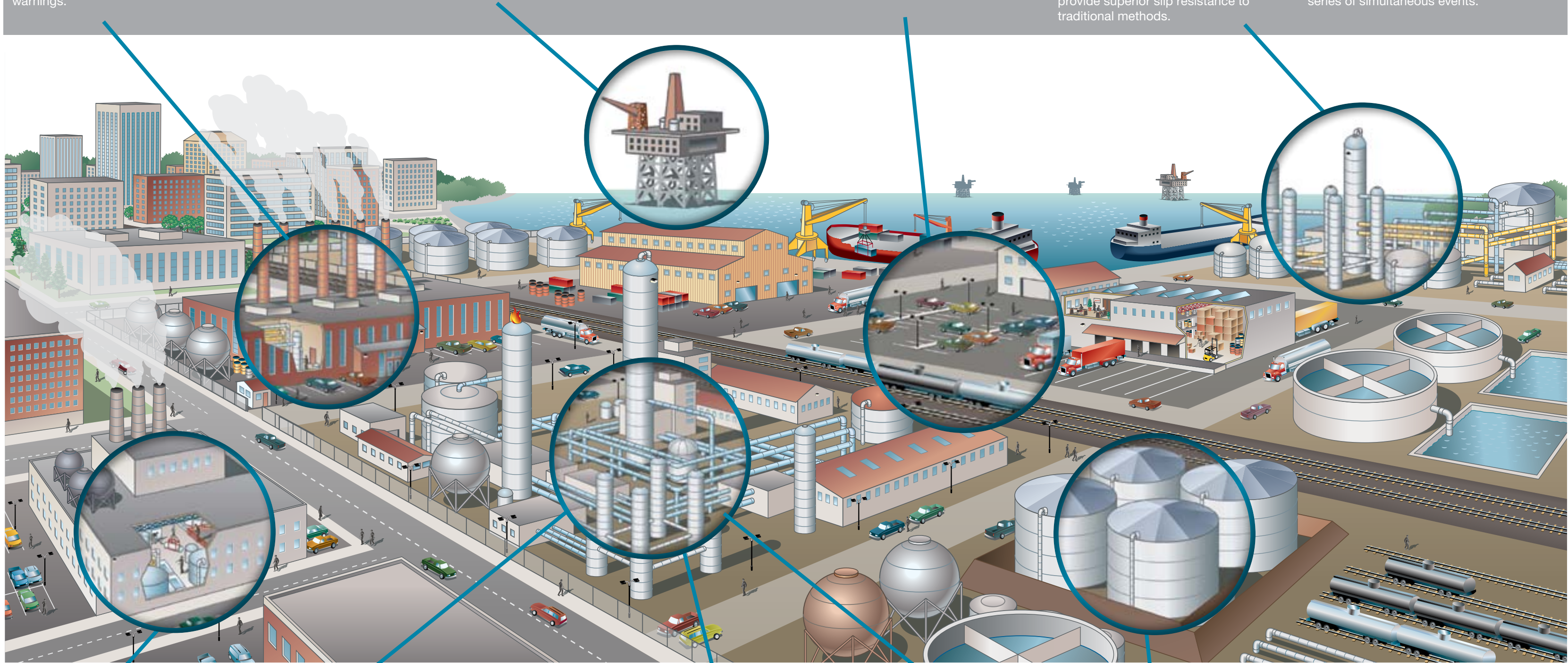
Outdoor area luminaires provide street lighting and floodlighting solutions.

### Support Structures

Safety grating on walkways and platforms utilizes a unique serrated surface to provide superior slip resistance to traditional methods.

### Instrumentation

CCTV cameras centrally monitor all critical areas in order to efficiently respond to a series of simultaneous events.



### Lighting

Cooper illuminates your way no matter the environment—hazardous, emergency or simply general lighting applications.

### Enclosures

Junction boxes are used in threaded rigid conduit systems in hazardous and non-hazardous areas to house terminal blocks, relays and other electrical devices.

### Motor Control/Electrical Distribution

Explosion-proof VFDs are highly flexible AC drives which can be mounted next to the motor in hazardous locations.

### Connectivity

Rugged construction and numerous interlocking designs safely and reliably connect power where needed, including hazardous areas.

### Wireless

Wireless products monitor tank farms, forming part of the plant energy management system and OBL alarm monitoring system.

### Industrial Fittings & Cable Glands

Move power where you need it simply and safely in any electrical installation.

## LIGHTING

We deliver complete lighting solutions designed to meet both NEC and IEC standards and the highest quality, safety and optical performance for both hazardous and non-hazardous areas. We combine reliability and expertise into every product, providing you with labor and maintenance savings, simplified installation and improved productivity.

### Hazardous and Corrosive Areas

- LED
- H.I.D.
- Fluorescent
- Floodlights
- Induction
- Incandescent

### Emergency Lighting for Both Hazardous and Non-Hazardous Areas

- Exit signs (LED Available)
- Emergency lighting systems (LED Available)
- Compact fluorescents
- Obstruction lighting and visual signals (LED Available)

### General Indoor/Outdoor:

- Quarters lighting utilizing incandescent, fluorescent, H.I.D. and LED luminaires
- Exterior parking and walkway lighting
- Exterior building floodlighting



### case study



**Petroleos Mexicanos (PEMEX)**, the largest oil company in Mexico, recently turned to Cooper Lighting for an exterior lighting retrofit. With a goal of saving energy and creating a safer environment at its Veracruz, Mexico-based Complejo Petroquimico Cosoleacaque PEMEX plant, PEMEX made the decision to replace the facility's old High Intensity Discharge lighting fixtures with new technology that would meet required light levels, enhance security and reduce environmental impact. After documenting and analyzing multiple LED lighting brands to validate their energy-saving benefits, PEMEX selected Cooper Lighting's McGraw-Edison Ventus LED Luminaires which have reduced energy consumption by approximately 66% while providing the desired illumination to the facility's exterior. Incorporating Cooper Lighting's modular LightBAR™ technology and AccuLED Optics™ system, the LED luminaires' unique design allows lumen and energy output to be customized to fulfill the exact needs of an outdoor space, eliminating wasted energy and obtrusive spill light.

### product focus



The **Champ VMV® LED Series** provides the same durability and reliability of a traditional Champ luminaire, combined with the improved energy efficiency and long life of LED technology. Additionally, the new, state-of-the-art LED luminaire helps industrial facilities to meet rising environmental standards and regulations. Improved temperature ratings and enhanced visibility with full-spectrum lighting provide a safer work environment in hazardous and industrial locations. Currently, there are over 6,000 of these units installed in hazardous and industrial locations around the world. The Champ VMV LED outperforms compact fluorescent technology in cold temperatures by offering instant, full illumination with no warm-up required.



## CONNECTIVITY

Our rugged construction solutions offer extensive configurations, custom capabilities, and numerous interlocking designs with safe and reliable NEC and IEC solutions for fixed or portable power applications.

### Pin and Sleeve Devices

- Hazardous and non-hazardous areas
- Interlocking units for additional protection
- Nonmetallic units for corrosion protection

### IEC 309 Devices

- Light industrial, heavy duty and hazardous areas
- IP44 and IP66 variations
- Interlocking units for additional protection

### Low Amperage & Signal Transmission

- LynxPower Passive Connectors
- LynxPower Network Connectors

### High Amperage Products

- Roughneck Connectors
- Posi-Lok System
- Pin & Sleeve
- IEC 309 Devices
- Cam-Lok

### Well Head Penetrators

### Submersible, Networking

- Burton Subsea Connectors

### Portable Power Solutions

- Custom cable assemblies
- Power distribution panels
- Custom power carts & specialty products

### NEMA Configured Devices

- Specialty products
- Locking devices
- Plugs and connectors

### Specialty Products

- Single-pole
- Multi-pin
- Ex-Link

### Electrical Thread Conversion Products

Includes adaptors and reducers, are designed for hazardous area and industrial applications with appropriate levels of dust and water ingress protection.



Plug and Receptacle



Hazardous Area Receptacle



Global Connectors



Distribution Panel and Color Coded Connectors



Multi-pin Connector



Single-pin Connector

## MOTOR CONTROL/ELECTRICAL DISTRIBUTION

Cooper is the industry leader in critical circuit protection, power management and electrical safety. We are committed to the development, manufacturing and marketing of innovative, circuit and power electronics protection and power management products; from fuses and circuit breakers to explosion-proof variable frequency drives.

### Panelboards

- Lighting and heat trace
- Power
- Premier and value lines

### Motor Starters and Switches

#### Circuit Protection

- High speed fuses for protection of large drives
- Medium voltage fuses to protect transformers and motor starters
- Low voltage fuses to protect general electrical distribution and equipment
- Surge protection devices
- Circuit breakers

#### Switchracks

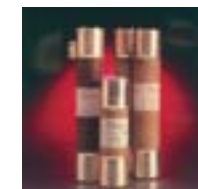
#### Explosion-proof Variable Frequency Drives



Fusible Panel



High-Speed Fuse



Medium Voltage Fuse



Circuit Protector



Variable Frequency Drive



Circuit Panel Boards



Global Disconnects



Global Motor Controls

### case study



Portable power carts from Cooper Crouse-Hinds deliver customized solutions for even the most demanding environments. Crouse-Hinds Portable Power Sales and Applications Specialists worked with a large Gasification company in Bismarck, North Dakota. They carefully reviewed the process maintenance requirements of the customer, and designed a portable cart that used 480V on primary side and 208V on secondary. Before this solution was presented, the company was dragging cords all over their facility for the provision of power to remote locations. Our specialists observed their work application, proposed and later designed their customized cart. The customer can now bring in the carts to step-down power with also a continuation of 480V power where needed. The cart also has the capability of cable storage. This solution provided a safe work environment with GFI protection built to NEC Code 590.6. The customer required that any receptacle had to be GFI protected. The power cart also provides them with mobility they never previously had.

### case study



Cooper Bussmann Field Application Engineers worked with a large EPC in Houston, Texas, U.S., on several Uninterruptible Power Supply (UPS) panels for a new power generation plant. The initial design plan had utilized standard circuit breaker panels. Because of the added benefits of selective coordination, fast-clearing and small footprint, the fusible Quik-Spec Coordination Panelboard (QSCP) was selected instead. While reviewing the installation plan, it was discovered the five 200kA panels were to be located in a hazardous environment. This required a purged QSCP for Class I, Div. 2. In order to provide this option, Cooper Bussmann representatives coordinated with sister division Cooper Crouse-Hinds in Houston to make the required modifications. The custom enclosure featured a pressure regulator and pressure switch designed to meet or exceed NEC®, NFPA 70, NFPA 496 and IEC 60079-02 requirements for application in hazardous locations.



Click to Go Back

## INSTRUMENTATION

We are a leader in the development and supply of electronic instrumentation and protection equipment for the process control industry. Our MTL products are used in both hazardous and general purpose locations, from offshore oil and gas platforms to power production plants and petrochemical installations.

### Fieldbus

- Comprehensive range of fieldbus power supplies, wiring components, diagnostic tools, and displays for FOUNDATION™ fieldbus H1 networks
- Fieldbus component ranges carry comprehensive approvals to satisfy installation requirements world-wide
- All fieldbus power supplies are qualified by the fieldbus FOUNDATION™ to the FF-831 standard for reliability and performance

### Intrinsic Safety I/O

Specifically designed for the most hostile and hazardous of environments

- Galvanic isolators
- Zener safety barriers
- HART multiplexing equipment and annunciators
- Beacons and sounders

### Surge Protection

Comprehensive solutions for mains power, process control, network and communications, telecom and wireless, and RF systems.

### Intrinsically Safe Ethernet

- Power over Ethernet (PoEx™) products allow the installation of Ethernet in classified areas with the advantages of being able to be “live worked” and provide power and communications over a single cable
- Compliant with IEEE 802.3/802.11 and designed for Zone 1 or Division 1 mounting—combined with the Zone 2 or Division 2 mounted power supply and isolator
- Complete “Ethernet anywhere” solution



## WIRELESS

With the most comprehensive product portfolio available, Cooper industrial wireless products are found throughout oil & gas operations worldwide. Our products provide reliable, secure, robust communications in aiding our customers to cost effectively improve safety, monitoring and/or control plant/equipment and better manage operations over distances or plant obstructions prohibiting the use of wired solutions.

Our suite of products and services range from simple to complex, point to multipoint I/O and industrial protocol networks to serial and Ethernet products supported by our highly trained technical and sales engineers. Application examples of our products include:

### Upstream

- Oil and gas well-head monitoring systems
- Pipeline pressure, flow and valve monitoring
- Cathodic protection/leak detection monitoring
- Underground gas storage monitoring
- Pump/compressor station monitoring/control

### Downstream

- Oil/gas tank level gauging/monitoring
- Distribution pipeline pressure, flow and valve monitoring
- Plant IP camera and annunciator security management
- Production emissions monitoring and reporting
- Water and electrical utilities custody transfer verification/monitoring
- Electrical apparatus temperature profiling and monitoring

### Our Products Include

- I/O Small to large count one/two way modules
- Gateways Industrial protocol conversion modules
- Serial RS232/485 modems
- Ethernet 802.11, 900MHz/2.4/5GHz modems
- GSM/GPRS Quad band modem and router
- Expansion I/O RS485 and Modbus slave I/O modules
- Accessories Antennas, coaxial cables, power supplies, surge protectors, battery packs, and more



### case study



BP needed reliable, live-workable FOUNDATION™ fieldbus power supplies for floating production platforms for the Angola Deepwater project. Because of maintenance and service expenses associated with their construction and remote location, offshore platforms require a combination of high reliability, low weight and ease of maintenance for their equipment. The MTL Redundant FISCO 910x series power conditioner solution met all these requirements while also being the lowest installed cost.

The first project in the phased Angola Offshore development program will comprise the Plutão, Saturno, Vênus and Marte (PSVM) fields which lie in the north east sector of Block 31. Construction work started in 2008 with first oil planned in 2011. Production from these four fields is expected to be around 150,000 barrels per day by 2012.

### case study



An operator of a long oil pipeline uses ELPRO low power small I/O count wireless modules, ELPRO protocol interface gateway modules and the pipelines cathodic protection and SCADA system to monitor/control the health of the pipeline over miles/kilometers. A cathodic protection system actively suppresses pipeline corrosion by injecting electrical currents into the pipeline and the SCADA system provides supervisory control/data acquisition of field information at the control room to avoid costly corrosion, leaks and litigation.

The battery powered ELPRO low-power devices provide not only wireless communications but the injected voltage to the cathodic devices as well. Hundreds of measurements are transmitted to a SCADA computer via wireless gateway repeaters and on to the SCADA system.





## ENCLOSURES

Enclosures and junction boxes built and configured to meet the requirements of the most demanding IEC/NEC hazardous areas and industrial environmental applications across the globe.

### Junction Boxes and Empty Enclosures

- Explosion-proof and flameproof metallic enclosures
- Customized entry options and control panels

### Enclosures With Components

- Explosion-proof and flameproof metallic/non-metallic enclosures

### Instrument Housings

- Hazardous rated metallic or non-metallic enclosures
- Explosion protected terminal boxes



### product focus



**EJB junction boxes from Cooper Crouse-Hinds** are used in threaded rigid conduit systems in hazardous areas as a junction or pull box to provide enclosures for splices and branch circuit taps for housing terminal blocks, relays and other electrical devices. These units can be placed indoors or outdoors in damp, wet, dusty, corrosive, or hazardous locations. They are constructed to withstand exposure to frequent or heavy rain, water, spray, moisture, and humidity is common, such as offshore drilling facilities.

## SUPPORT STRUCTURES

As the leading supplier of cable support systems, pipe supports and walkways, our designs are suited to match varying environments and conditions. We have one of the broadest offerings of cable tray with the longest spans available in the market today. Our product solutions are suited for electrical and mechanical subsystem applications in both indoor or outdoor environments for industrial facilities, office buildings, personnel quarters, and more. We offer cost-effective alternatives that provide field flexibility and labor savings.

### Bolted Framing and Strut

- Structural grade steel for superior strength
- Materials and finishes for every environment, including stainless steel, carbon steel and aluminum
- Various sizes and fittings for connection in any configuration

### Cable Ladder

- Industry leading spans reduce support requirements and cost
- Standard I-Beam construction provides superior strength and safety
- Unique splicing capability provides unique solutions for support locations
- Complete line of industrial grade stainless steel, fiberglass (GRP) and aluminum support options suited for harsh offshore and coastal environments

### Pipe Hangers

- Patented technology eases pipe installation
- Materials and finishes for any environment and pipe type

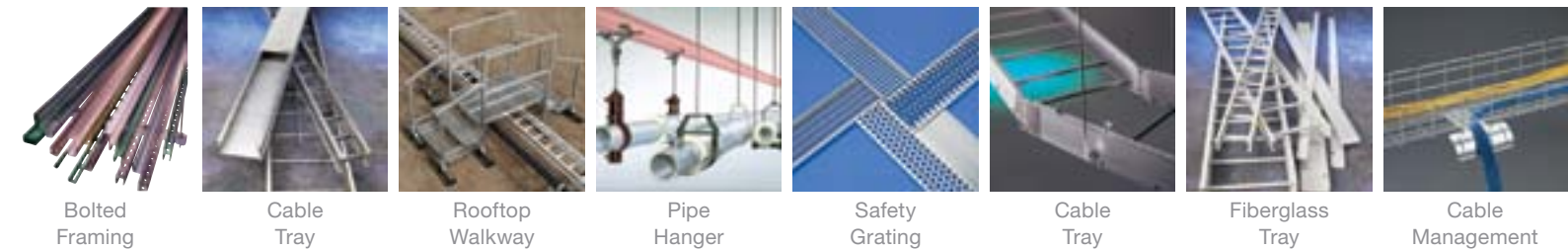
- All products meet or exceed industry standards set for their design and manufacture

### Flextray

- Field fabricated fittings reduces installation time and increases flexibility
- Materials for any environment including offshore, coastal and indoors
- Unique splicing and support options that reduce the total installed cost over alternative methods

### Safety Gratings

- Serrated surface provides superior personnel safety by providing a slip-resistant surface
- Open diamond design allows for debris to pass through the grating without becoming trapped and creating a hazard
- The longest spans and highest loads in the industry allow for reduced total installed cost



### case study



**A refinery expansion project** required control and power cabling to a new flare located approximately 1,300 feet from existing structures. Due to the long distance, new supports were to be fabricated every 20 feet, requiring 65 new supports for the new cable tray. After reviewing the cable load and support structure requirements, Cooper B-Line engineering was able to maximize the spans of the aluminum cable tray to 40 feet, reducing the required number of supports by half and resulting in \$100,000 in savings for the client.



## SIGNAL, ALARMS AND SURVEILLANCE

Deliver the right message to the right people at the right time to save lives, mitigate casualties and minimize chaos. Cooper Notification products operate in extreme environments utilizing a secure technology that protects its network during a disaster and reconfigures automatically if a unit goes down. Alerts and messages continue broadcasting without interruption. We offer a system which can be built around your budget and specific needs—from light-weight flameproof horns to explosion-proof relays and bells.

Process Shutdown

Alarm and Emergency Signaling

Condition Signaling

Security Alert

Equipment Obstruction Warning

Individual Building Notification

CCTV Systems

Outdoor Warning Systems

Portable Alerting Systems

Fire Systems

General Alarm

Public Address

System Status/General Warning



Mobile Speaker Array CCTV Camera Battery System Horn Emergency Lighting Strobe Sounder Fire System

## INDUSTRIAL FITTINGS AND CABLE GLANDS

Our time-tested and innovative conduit fittings, cord connectors and cable glands move power where you need it simply and safely in any electrical installation. We deliver solutions for both non-hazardous and hazardous areas where safety is the utmost of importance.

### Conduit Outlet Bodies and Boxes

- Multiple configuration sizes & materials

### Cable Glands

- Built to NEC/IEC Standards
- Armored or Non-armored

### Sealing Fittings and Compounds

- Standard sealing fittings
- Sealing fittings with drains
- Retrofit & Expanded Fill

### Unions and Elbows

### Conduit Hubs

- Comprehensive range of hub sizes, materials and ratings

### Reducers and Plugs

### Couplings

### Ultra High Pressure and Secondary Process Seals

- Prevents gases, liquids and vapors from moving through conduit, cables and conductors



Conduit Body Cable Gland Conduit Seals Device Boxes Sealing Compound Explosion-proof Conduit Bodies Breather and Drain Secondary Process Seal

### product focus



A New Jersey Petroleum Refinery selected Cooper Notification's Roam Secure Alert Network™ (RSAN) to enable rapid response to various types of dangerous situations, communicate critical incident information, and allow for continuity of operations. With RSAN, emergency managers have the capability to reach both internal and external parties via e-mail and text messaging on any cell phone, pager, or other mobile device regardless of the carrier. The system also features two way reply and tracking.

With the implementation of RSAN, the refinery was able to reduce administrative overhead by changing the internal paging group structure. The company no longer needs to return individual pagers to various wireless providers to change cap codes each time a process changes, or a person moves between departments. Multiple disparate devices are now aggregated onto the single RSAN platform, allowing for faster paging of personnel with different devices and carriers.

### product focus



Today, the conduit outlet body seems like a pretty simple concept. It's hard to imagine that it was a radical idea when first proposed in 1906. But our engineers at Cooper Crouse-Hinds saw the promise and dedicated themselves to perfecting the Condulet® idea. Over the past 100 years we've continually found ways to improve on the functionality, flexibility and durability—building a Condulet family that delivers safer, more convenient and more practical solutions. To meet the evolving demand and environments, the Condulet line has grown to include five distinct families of products and ten different body shapes to provide you the most flexible offering on the market. In addition, integrally gasketed Condulet covers save you inventory and labor cost. The simple idea of Condulet helped change our industry.



## DRIVING INNOVATION

### Building on a Legacy of Innovation

Our application-specific solutions are built on more than 175 years in the business and over 4,000 U.S. patents. We understand the key factors to drive success in the oil & gas markets.

- Safety
- Security
- Quality
- Efficiency
- Intelligence
- Lowest Total Cost Solutions

We develop innovative products that help ensure each of these factors is built into our designs and solutions. In fact, Cooper is ranked #6 on Industrial Innovator. (*Patent Board's August 2010 Industrial Component Supplier Patent Scorecard*)

Whether you are protecting the electrical circuit powering a gas analyzer, requiring mass emergency notification in the case of a HAZMAT spill or lighting a walkway through a hazardous area, we offer the best product for your specific application.

We are a diversified company in the respect our electrical products are used throughout industry, utilities and in commercial and residential applications. With our balanced portfolio, we will maintain our vitality during market downturns which will allow us to continue to drive innovative ideas for you.



*Brothers Charles and Elias Cooper opened the C&E Cooper Company as a foundry in Mt. Vernon, Ohio, US, in 1833 with initial products including plows and stoves. Within 10 years the focus turned to manufacturing steam engines, leveraging the growing rail transportation. In 1880 Cooper focused on gas engine technology and became the national leader in pipeline compression engines and other products that enabled the development of the growing oil & gas industry.*

### A Future in Innovation

We back this claim with investments such as our 5,574 square meters (60,000 square foot) LED Innovation Center located in Peachtree City, Georgia, U.S. and our world-class, 3,252 square meters (35,000 square foot) industrial training at the Cooper Technology Center (CTC) in Houston, Texas, U.S., and the 234 square meters (2,526 square foot) Asia Training Center (TTC) in Seoul, Korea.

#### LED Innovation Center

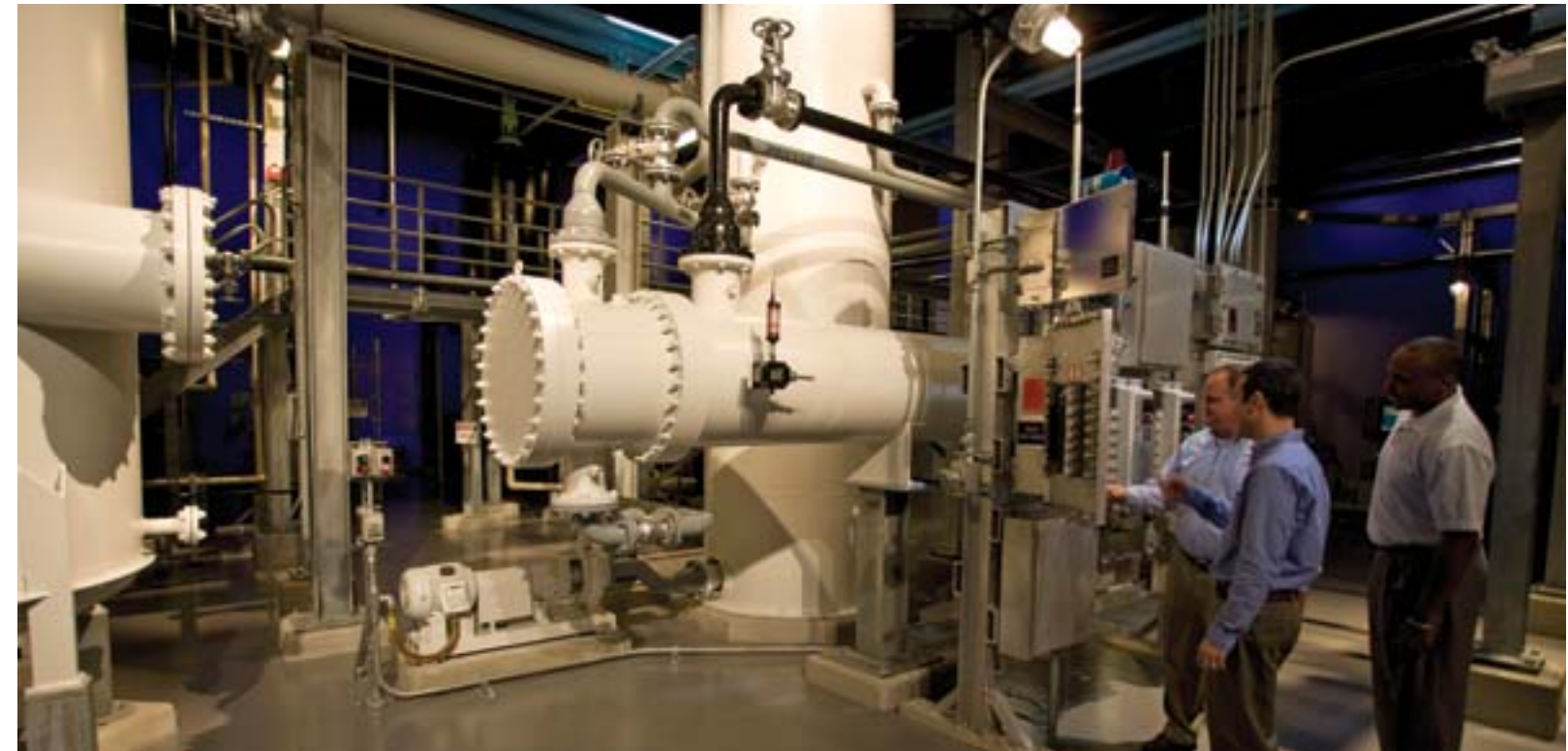
Our LED Innovation Center is a world-class facility for design, thermal modeling, accelerated life and reliability testing, photometric measurement, rapid prototyping, and manufacturing. A team of mechanical, electrical, thermal, and optical engineers have accelerated proprietary LED technologies that now allow energy savings between 30–75% without sacrificing lighting performance or safety.



LED Innovation Center

#### Cooper Technology Center (CTC)

The CTC is dedicated to the ongoing training and education of end-users, distributors, engineers, and procurement professionals. This state-of-the-art training facility features an auditorium, executive conference room, multiple training rooms, and a unique full-scale mock refinery designed to help facilitate industry-specific education and hands-on demonstration of a vast array of the products and solutions offered by Cooper.



Cooper Technology Center (CTC)

#### Asia Technical and Training Center

TTC Asia, located in Seoul, mirrors the CTC hands-on experience with full-scale mock settings highlighting Cooper products. This training facility includes demonstrations, and showcases the newest product offerings.



Asia Training Center

## THE COOPER ADVANTAGE

With more than 175 years of quality and experience, chose Cooper as your one source for global, innovative and comprehensive Oil & Gas solutions.

- One of the largest single source electrical / instrument bulk material offering. Standardize and save.
- Global technical EPC support to help ensure project-wide product standardization, safety, maintenance.
- 3D Modeled Products, Lighting Design, and CCTV System Design for reduced engineering time and site standardization.
- Global operations to support your onsite project needs, OEM supply and aftermarket service.
- Efficient, on-time supply chain helps deliver cost reductions while maintaining Cooper quality.
- On-site installation support and training to facilitate safe and consistent installations and start-ups.
- Globally Connected EBS (Enterprise Business System) via SAP helps provide standardization, traceability, accurate business records, and cost reductions.



Thousands of Products. Hundreds of Solutions. **One Cooper.**

**Cooper B-Line**

509 West Monroe Street  
 Highland, IL 62249  
 Phone: (800) 851-7415  
 Fax: (618) 654-1917  
[www.cooperbline.com](http://www.cooperbline.com)

**Cooper Bussmann**

114 Old State Road  
 St. Louis, MO 63021  
 Phone: (636) 394-2877  
 Fax: (866) 715-0769  
[www.cooperbussmann.com](http://www.cooperbussmann.com)

**Cooper Crouse-Hinds**

Wolf & Seventh North Streets  
 Syracuse, NY 13221  
 Phone: (866) 764-5454  
 Fax: (315) 477-5179  
[www.crouse-hinds.com](http://www.crouse-hinds.com)

**Cooper Lighting**

Customer First Center  
 1121 Highway 74 South  
 Peachtree City, GA 30269  
 Phone: (770) 486-4800  
 Fax: (770) 486-4801  
[www.cooperlighting.com](http://www.cooperlighting.com)

**Cooper Power Systems**

2300 Badger Drive  
 Waukesha, WI 53188  
 Phone: (877) CPS-INFO  
 Fax: (262) 691-9330  
[www.cooperpower.com](http://www.cooperpower.com)

**Cooper Safety**

Jephson Court, Tancred Close  
 Royal Leamington Spa  
 Warwickshire CV31 3RZ  
 United Kingdom  
 Phone: +44 1926-439200  
 Phone: (800) 631-2148  
[www.cooper-safety.com](http://www.cooper-safety.com)

**Cooper Wiring Devices**

203 Cooper Circle  
 Peachtree City, GA 30269  
 Phone: (770) 631-2100  
 Phone: (866) 853-4293  
[www.cooperwiringdevices.com](http://www.cooperwiringdevices.com)



B-Line  
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 Crouse-Hinds  
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 Power Systems  
 Safety  
 Wiring Devices

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Cooper Industries plc  
 600 Travis, Ste. 5600  
 Houston, TX 77002-1001  
 P: 713-209-8400  
[www.cooperindustries.com](http://www.cooperindustries.com)

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