

Electrical Solutions for the Chemical Industry



Thomas & Betts

A Global Leader in Innovative...

Wire & Cable Management • Cable Protection Systems • Power Connection & Control • Safety Technology



In critical manufacturing environments like chemical plants, the costs of maintenance, replacement and downtime can add up quickly. That's why Thomas & Betts engineers and manufactures solutions that meet specifications and performance demands. Get the most uptime with Thomas & Betts products.

Challenge and commitment.

Thomas & Betts understands your operation in the highly automated chemical industry must stay competitive and profitable while also dealing with:

- Safety and security issues, ranging from accidents to terrorism
- Waste management and other processes impacting the environment
- Continuous operations producing specialty batches or commodity chemicals
- Changeover and startup cycles for specialty chemical plants

The chemical industry demands performance from components used in electrical infrastructure. Thomas & Betts manufactures quality products that reliably connect and protect electrical wiring systems used in mixing, heating, refining and other chemical processes. Our innovative components and systems are designed for safety in classified hazardous locations, save you valuable installation time and stand up to the harshest, most corrosive environments.

From original design and manufacturing excellence to world-class service, Thomas & Betts meets the demands of this challenging market. That's why we are one of the world's largest sources for electrical components.

A few facts about Thomas & Betts:

- 46 manufacturing plants in operation around the world
- More than 100,000 electrical components and systems available
- Efficient service infrastructure offers regularly scheduled deliveries or single shipment service on thousands of stocked items

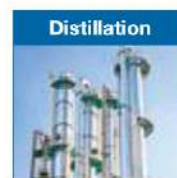
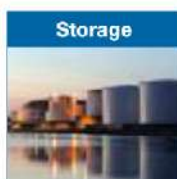
When you need to connect, terminate, fasten or protect, plug into the power and innovation of Thomas & Betts.

Our goal is to be the brand of choice at your facility. Thomas & Betts is committed to developing solutions for the chemical manufacturing industry, staying current with the latest available technology and remaining competitive. Our electrical solutions:

- Provide defense against unpredictable power interruptions
- Reduce installation and electrical system changeover and downtimes by 40–50%
- Resist corrosion and extend the life of electrical systems by up to 300%

Thomas & Betts solutions enable chemical plants to maintain safety standards and improve the bottom line.

Chemical Applications



Delivering value through system solutions based on engineering innovation.

Our Value Commitment

Chemical companies constantly leverage technological advancements to improve their local or global operations. Thomas & Betts is committed to product reliability and helping you meet demanding production and delivery schedules. We satisfy the unique challenges of chemical facilities with electrical solutions, services and systems that deliver value. These include:

T&B Engineered solutions — Our products are designed to perform dependably in marine and hazardous area environments and around high-vibration equipment. They can withstand harsh chemicals, extreme temperatures and ultraviolet penetration.

Tested reliability — Our products are rigorously tested for use in highly corrosive environments, with proven results in thousands of installations.

Expert support — Thomas & Betts technical experts are available at every stage of a project, from planning and site preparation through construction and MRO.

Training and certification — We conduct training programs on specific products and work closely with all electrical industry associations. Contact us for details.

Product availability — Our industry-leading distributor network assures you of reliable and on-time delivery.

Total cost savings — Today's project management emphasizes maintenance, replacement and downtime costs. In a chemical installation, the impact of maintenance and downtime costs is even higher. We put our engineered products through critical tests at every stage of manufacturing to save you time, labor and money.



Product Platforms

Thomas & Betts has everything to connect and protect the infrastructure of chemical production facilities. We can help you obtain greater efficiency in design and installation with a systems approach for any given function.

Wire and Cable Management — T&B invented the Ty-Rap® cable tie in 1958 and continues to lead the world in innovative wire and cable management. OEMs, panel builders, contractors and maintenance personnel depend on T&B electrical boxes, cable ties, weatherproof enclosures, cable tray and modular metal framing to do the job right and help reduce installation time and costs.

Cable Protection Systems — T&B Cable Protection Systems provide unsurpassed protection for wire and cables in the most demanding applications. They encompass industry-leading flexible conduit systems, PVC-coated conduit and fittings and explosion-proof conduit systems meeting worldwide standards for hazardous locations.

Power Connection and Control — For reliable connection and intelligent control of electrical power, T&B mechanical and compression connectors, grounding products, medium-voltage cable accessories, high-voltage fuses, vacuum interrupters, reclosers and capacitor switches are specified worldwide in the industrial, construction and utility markets.

Safety Technology — Protecting lives and property requires state-of-the-art technology. T&B is a worldwide leader in emergency lighting and supporting central battery systems, lighting for hazardous locations and surge protection. T&B Safety Technology extends the life of your electrical system and protects your employees and assets.

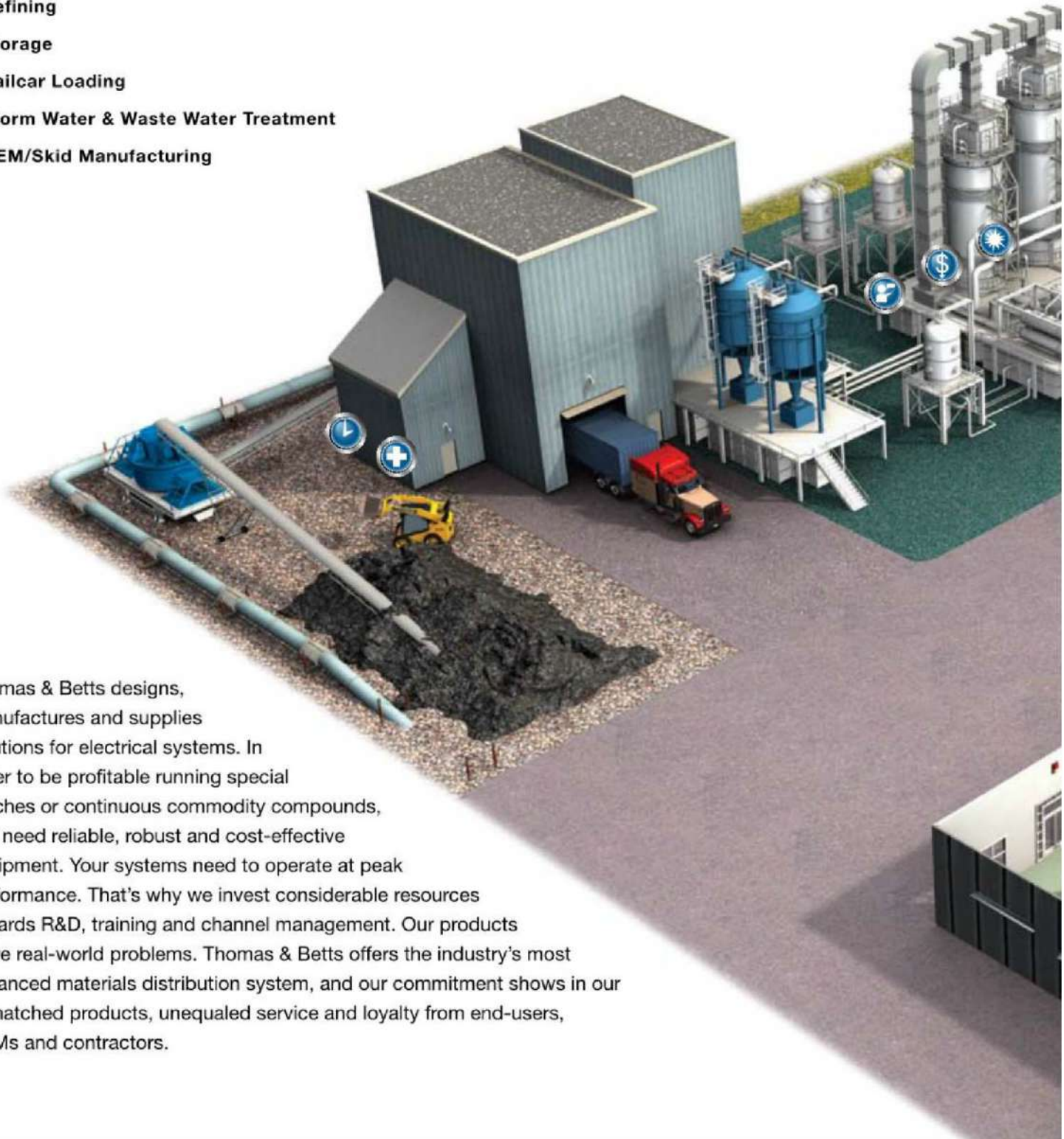


***Key chemical plant
business drivers***

- ***Safety and security***
- ***Environmentalism***
- ***Continuous operations***
- ***Changeover and
startup cycles***

T&B Engineered solutions for every application area

- Flow Process
- Distillation
- Refining
- Storage
- Railcar Loading
- Storm Water & Waste Water Treatment
- OEM/Skid Manufacturing



Thomas & Betts designs, manufactures and supplies solutions for electrical systems. In order to be profitable running special batches or continuous commodity compounds, you need reliable, robust and cost-effective equipment. Your systems need to operate at peak performance. That's why we invest considerable resources towards R&D, training and channel management. Our products solve real-world problems. Thomas & Betts offers the industry's most advanced materials distribution system, and our commitment shows in our unmatched products, unequalled service and loyalty from end-users, OEMs and contractors.



***Safety &
Contamination***



***Continuous Operation
& Sustainability***



***Corrosion & Harsh
Environment
Protection***



Grounding & Bonding



***Hazardous Location
Protection***



***Liquid Ingress
Protection***



***Power Quality,
Efficiency &
Reliability***



***Extreme Temperature
Protection***



***Total Project Cost
Reduction***



Services & Training

Safety & Contamination

Human error is often a factor in accidents, disasters and occupational illness. Identification of and preparation for such accidents translates to accident prevention and impact mitigation.

The major stakeholders in safety solutions are (a) the state, (b) the business/organization, (c) employee(s) and (d) the environment/society. The goal of safety practices is zero accidents, zero injuries and zero deaths.

The U.S. chemical industry provides cutting-edge solutions that protect our drinking water and food supply, improve health and save lives. The chemical industry is tightly regulated, and rightly so. If chemicals are not managed safely, they pose significant consequences to our health and the environment. The U.S. Environmental Protection Agency is the primary governmental body regulating the chemical industry.

We engineer our products and hold training seminars to deliver safety in the field. Thomas & Betts can train you and your staff in the proper methods and use of our tools for various applications.



EZCODE®

Safety Labels, Tags, Signs and Barricade Tapes

- Help to ensure personnel and workplace safety, as well as regulatory compliance
- Visible and long-lasting materials
- Custom labels, tags and signs available
- Barricade and burial marking tapes in a variety of materials and colors

EMERGI-LITE® / Lightalarms®

Emergency Lighting Systems

- Designed to withstand damp, corrosive conditions
- Safe to use in explosive environments
- Energy efficient with long, low-maintenance service life

Russellstoll®

GSUL Ground Indicator System

- Intrinsically safe circuitry
- Instant visual confirmation of safe ground provided by indicator lights
- Prevents pumps from operating until a safe ground is established



Quick Pole Light-Fixture Mounting Assembly

- Suitable for 180km/h winds as per AASHTO LTS-4 2001 — no ladders or lifts required
- Frees up catwalks and walkways during maintenance




All-Struct®
Quick Pole

EZCODE®
Safety Labels, Tags, Signs
and Barricade Tapes

Emergi-Lite®/Lightalarms®
Emergency Lighting
Systems

Russellstoll®
GSUL Ground
Indicator System



Accidents can happen anytime, anywhere. Preparing for accidents, however, can prevent their occurrence or mitigate the impact in case they do occur.

Thomas & Betts products for safety & contamination

All-Struct®

- Quick Pole Light-Fixture Mounting Assembly

Blackburn®

- E-Z-Ground® Compression, Mechanical and Exothermic Grounding Systems
- Compression Lugs and Splices
- Ergonomic Compression Tools

Cyberex®

- Industrial UPS Systems

DTS®

- Lighting, Junction Boxes and Controls

Elastimold®

- Fused Loadbreak Elbows

Emergi-Lite®/Lightalarms®

- Emergency Exit Lighting

EZCODE®

- Danger/Warning Labels and Signs, Industrial/Wire Markers, Barricade/Burial Tape

Fisher Pierce®

- Faulted Circuit Indicators

Furse®

- Lightning Protection
- Exothermic Welds

Hazlux®

- Strobe Lighting Fixtures

Hi-Tech®

- Trans-Guard® Fuses, Molded Current-Limiting Fuses, Molded Canister Fuses

Joslyn®

- Surge Protection Devices

Joslyn Hi-Voltage®

- Obstruction Light-Lowering Device

JT Packard®

- Electrical and Data System Installation, Inspection and Maintenance Services

Kindorf®

- Seismic Bracing System

Ocal®

- PVC-Coated Conduit and Fittings

Red•Dot®

- Code Keeper® Weatherproof While-in-Use Covers

Russellstoll®

- GSUL Ground Indicator System

Sta-Kon®

- Luminare Disconnects

Superstrut®

- Seismic Bracing System

Ty-Rap®

- Extra-High Temperature and Flame-Retardant UL94V-0 Nylon Cable Ties
- Ty-Rap Tote® Cable Tie Dispensers and Ergonomic Installation Tools



Continuous Operation & Sustainability

The costs associated with downtime in chemical operations can be as high as \$1 million per hour. If power is lost during production, the current production may have to be scrapped along with the process equipment.

Due to the high cost of downtime, chemical facilities use better performing materials and products to minimize maintenance, and they perform preventive maintenance at specific intervals instead of waiting for equipment failure.

If plant downtime is experienced, Thomas & Betts offers:

- The capability to get your electrical system back up and running quickly
- A deep product offering to standardize your electrical system and ensure that you have the products you need on hand to minimize downtime
- Long-lasting electrical systems to extend the plant life cycle, reduce your capital expenditures and increase operational equipment effectiveness (OEE)
- Installation training certification to ensure plant sustainability



Industrial UPS Systems

- Developed to UL® standards and designed for a 20-year service life
- Ranges from 10 to 150kVA, incorporating state-of-the-art system topology for higher online system efficiency and longer battery life



Cyberex®
Industrial UPS Systems



Blackburn®
Motor Lead Disconnects



Blackburn®

Motor Lead Disconnects

- Quick, reliable change-out of electric motors with no bolting, taping or loose connections
- Minimize motor downtime
- Offer the only pin-spring and insulation system on the market
- Featuring the Color-Keyed® Compression System that ensures proper connections

Compression Lugs

- Provide robust performance and reliability with the T&B installation method
- Accommodate both code and flex cable on the same lug
- Eliminate the need for additional SKUs to accommodate lugs for both cable types
- Featuring the Color-Keyed® Compression System that ensures proper connections

PMA®

Nylon Cable Protection Systems


- Protect power cables, data lines and control leads
- Provide high impact strength even at low temperatures
- Weather resistant



Blackburn®
Compression Lugs



PMA®
High-Temperature Nylon
Conduit and Fittings



Performing routine preventive maintenance is not as expensive as the skyrocketing costs of downtime. Make sure your electrical system runs right with Thomas & Betts products.

Thomas & Betts products for continuous operation & sustainability

Blackburn®

- E-Z-Ground® Compression, Mechanical and Exothermic Grounding Systems
- Compression Lugs and Splices
- KUBE® Power Connectors and Motor Lead Disconnects
- Ergonomic Compression Tools

Cyberex®

- Industrial UPS Systems

Joslyn®

- Surge Protection Devices

JT Packard®

- Electrical and Data System Installation, Inspection and Maintenance Services

Kindorf®

- 316 Stainless, Aluminum, PVC-Coated or Non-Metallic Channel, Hangers and Clamps
- Seismic Bracing System

Ocal®

- PVC-Coated Conduit and Fittings

PMA®

- Nylon Cable Protection Systems

Russellstoll®

- MaxGard® Pin-and-Sleeve Connectors, Explosion-Proof Interlocked Receptacles
- GSUL Ground Indicator System

Sta-Kon®

- Nylon-, Vinyl- and Non-Insulated Wire Terminals
- Luminare Disconnects
- Corrosion-Resistant, Nickel-Plated Wire Terminals
- Heat-Shrink Terminals, Ergonomic Comfort Crimp® Tools and Disconnect Installation Tool
- Shrink-Kon® Wire and Connector Insulation Products

T&B® Cable Tray

- Aluminum, Stainless Steel and Fiberglass Support and Wire Management Systems

T&B® Fittings

- Type A Liquidtight Flexible Conduit and Fittings
- XTRA FLEX® Non-Metallic Liquidtight Conduit, Tubing and BULLET® Fittings
- Stainless Steel and Aluminum Hubs and Non-Metallic Liquidtight Conduit and Cord Fittings
- Silver Grip® Tray Cord Fittings
- STAR TECK® and STAR TECK XP® Fittings for Jacketed Metal-Clad and Teck Cables
- XD Expansion/Deflection Coupling with Internal Bonding Strap for Rigid Conduit

Thomas & Betts products for continuous operation in your onsite electrical substation

Elastimold®

- High-Voltage Connectors and Solid-Dielectric Switchgear

Homac®

- Substation Connectors

Joslyn Hi-Voltage®

- Capacitor Switches, Air Disconnect Switches and Obstruction Light-Lowering Device



Corrosion & Harsh Environment Protection

Corrosion is the enemy of electrical systems. According to NACE International, corrosion costs the U.S. chemical processing industry an estimated \$1.3 billion annually. The use of corrosion-resistant materials and coatings, however, is the key to extending the life and reliability of your electrical system components.

Problems caused by corrosion include:

- Equipment failure and shortened life
- Poor electrical system reliability caused by high-resistance connections
- Long maintenance repair time due to corroded parts
- Safety hazards at the grounding level and from product contamination
- Added labor expenses

Ocal[®]

OCAL-BLUE[®] PVC-Coated Conduit

- PVC-coated, hot-dipped galvanized conduit and threads
- Fully complies with UL[®] 6, NEMA RN-1 and ANSI C80.1
- Only manufacturer with UL[®] Verified Compliance
- PVC-Coated Conduit System provides superior corrosion protection against many harmful elements
- Interior blue urethane provides corrosion protection around copper wire or fiber optics

Hazlux[®]

HazCote[®] Kynar[®] Coated Lighting Fixtures

- Enclosed, gasketed, sealed fixtures for adverse, wet and marine locations
- Cast aluminum with HazCote[®] corrosion protection
- Polymeric fixtures also available



Ty-Rap[®]

Stainless Steel Cable Ties

- Strong, fireproof and easy to apply — for safe cable bundling
- Resist corrosion and UV light, with the ability to withstand temperature extremes
- Provide a strong, safe installation with a unique dual-locking mechanism

KOPEX-Ex[™]

Stainless Steel Liquidtight Fittings

- Rated IP66
- Operating temperature range of -60° C to 130° C

Stainless Steel Flexible Conduit

- Available for oil-resistant, high-temperature and low and limited fire hazard applications
- Made from Type 316 stainless steel



Ocal[®]
OCAL-BLUE[®]
PVC-Coated Conduit



Hazlux[®]
HazCote[®] Kynar[®] Coated
Lighting Fixtures



Ty-Rap[®]
Stainless Steel Cable Ties



Kopex-Ex[™]
Stainless Steel Flexible Conduit
and Liquidtight Fittings



Chemical plants are subject to corrosion from separation, filtration, extraction and distillation processes involving the use of chemical agents.

Thomas & Betts products for corrosion & harsh environment protection

Adaptaflex®

- Stainless Steel Flexible Conduit, Cord and Cable Fittings

Blackburn®

- Kopr-Shield® and ALUMA-SHIELD® Joint Compounds

DTS®

- Lighting, Junction Boxes and Controls

Hazlux®

- HazCote® Kynar® Coated Lighting Fixtures

Kindorf®

- 316 Stainless, Aluminum, PVC-Coated or Non-Metallic Channel, Hangers and Clamps

Kopex-Ex™

- Explosion-Proof Raceway Systems

Nicote™

- Flameproof IECEx and ANZEx Certified Cable Gland for Steel Wire Armored Cable
- Barrier IECEx and ANZEx Certified Cable Gland for Steel Wire Armored Cable

Ocal®

- PVC-Coated Conduit and Fittings
- OCAL-BLUE® NEMA Type 4X Form 8 Conduit Bodies

PMA®

- Nylon Cable Protection Systems

Red•Dot®

- Code Keeper® Weatherproof While-in-Use Covers

Reznor®

- Washdown Unit Heater

Sta-Kon®

- Corrosion-Resistant, Nickel-Plated Wire Terminals

T&B® Cable Tray

- Aluminum, Stainless Steel and Fiberglass Support and Wire Management Systems

T&B® Fittings

- Stainless Steel Form 8 and BlueKote® Conduit Bodies
- Stainless Steel and Aluminum Hubs
- Stainless Steel, Aluminum and Non-Metallic Liquidtight Conduit and Cord Fittings
- CorroStal® Aluminum Conduit Boxes
- STAR TECK® and STAR TECK XP® Fittings for Jacketed Metal-Clad and Teck Cables
- LU® Conduit Bodies – BlueKote® and Stainless Steel

Ty-Rap®

- Coated and Uncoated Stainless Steel Cable Ties
- Ty-Rap Tote® Cable Tie Dispensers and Ergonomic Installation Tools
- Deltec® Outdoor Fastening System
- Ty-Met™ Stainless Steel Cable Ties



Grounding & Bonding

An electrical system includes various pieces of conductive equipment connected together to keep them at the same potential. Static sparking cannot take place between objects that are at the same electrical potential. Thomas & Betts electrical raceway products provide excellent bonding characteristics for the electrical system.

Grounding the electrical system provides a means in which conductive equipment is connected to an earth potential via the grounding electrode. This prevents potential differences and sparking between conductive equipment and grounded structures.

The National Electrical Code® (NEC®) provides installation rules to follow. Thomas & Betts manufactures a variety of solutions to comply with these rules.

NEC and National Electrical Code are registered trademarks of the National Fire Protection Association, Inc.

Blackburn®

E-Z-Ground® Compression Connectors

- High-conductivity copper and bronze allows direct burial of connectors in OEM and telecom applications
- Featuring the Color-Keyed® Compression System that ensures proper connections

Mechanical Grounding Connectors

- High-strength split-bolt connectors for copper-to-copper connections
- Service post connectors for steel structures, fence posts or transformers using one or two cables
- ViceLock® connectors for cable tray, channel and strut applications

Exothermic Welding System

- Simple, self-contained system to form high-quality electrical connections



Blackburn®
E-Z-Ground®
Compression Connectors



Blackburn®
Mechanical Grounding
Connectors



Blackburn®
Exothermic Welding
System



Boreal™
High-Quality
Flexible Connectors



Furse®
Grounding and Lightning
Protection Systems



BOREAL


High-Quality Flexible Connectors

- A wide variety of grounding straps and accessories for grounding applications
- Extra-flexible links for heavy-duty applications up to 3600A
- Standard flexible links for medium-duty applications up to 2350A

furse

Grounding and Lightning Protection Systems

- Over 100 years' technical expertise with a strong reputation for innovation, quality and service
- Uniquely placed to provide a total solution to all your grounding, lightning and transient overvoltage protection needs



***By properly connecting
all metallic non-current
carrying equipment at
your chemical facility,
you greatly reduce the
potential for electric
shock and explosions.***

Thomas & Betts products for grounding & bonding

Blackburn®

- E-Z-Ground® Compression, Mechanical and Exothermic Grounding Systems
- Compression Lugs and Splices
- KUBE® Power Connectors and Motor Lead Disconnects
- Ergonomic Compression Tools

Boreal™

- High-Quality Flexible Connectors

Cyberex®

- Industrial UPS Systems

Elastimold®

- High-Voltage Separable Connectors and Solid-Dielectric Switchgear

EZCODE®

- Danger/Warning Labels and Signs, Industrial/Wire Markers, Barricade/Burial Tape

Fisher Pierce®

- Faulted Circuit Indicators

Furse®

- Lightning Protection
- Exothermic Welds

Nicote™

- Flameproof IECEx and ANZEx Certified Cable Gland for Steel Wire Armored Cable
- Barrier IECEx and ANZEx Certified Cable Gland for Steel Wire Armored Cable

Russellstoll®

- GSUL Ground Indicator System

Sta-Kon®

- Shield-Kon® One- and Two-Piece Coaxial Grounding Connectors

T&B® Fittings

- Blackjack® Grounding Bushing
- Revolver® Bonding Liquidtight Fitting
- Bonding Locknuts
- Bonding Hubs
- Bonding Wedge
- XD Expansion/Deflection Coupling with Internal Bonding Strap for Rigid Conduit
- XJG Conduit Expansion Coupling with Internal Bonding Strap



Hazardous Location Protection

There are two ways that equipment is made safe. Either the equipment is located in a safe place outside the hazardous location, or the equipment is designed, installed and maintained to the standards applicable to a hazardous location.

All codes define hazardous locations as areas where the possibility of explosion and fire is created by flammable liquids, gases, vapors, dusts, fibers or flyings. In chemical facilities, hazardous locations may be present due to liquids, gases, chemicals and dust.

Typical hazardous locations include:

- Chemical plant process areas
- Booster stations and valve areas along pipelines
- Loading and unloading areas in terminals
- Storage areas for tanks, barrels and trucks

To protect both your employees and your facility, Thomas & Betts offers a wide variety of high-performance, explosion-proof solutions designed to prevent or contain an explosion in classified hazardous locations.



Area Lighting and Controls

- Portable flood lights
- Designed to meet IECEx and ATEX standards for hazardous environments
- Flameproof fluorescent and self-contained emergency luminaires
- Warning lights and beacons
- Junction and control boxes



DTS®
Area Lighting
and Controls



T&B® Fittings
STAR TECK® XP Stainless
Steel and Aluminum Fittings



Kopex-Ex™
Stainless Steel
Flexible Conduit



Nicote™
Metal Cable Glands



Russellstoll®
MaxGard® Pin-and-Sleeve
Connectors



T&B Fittings

STAR TECK® XP Stainless Steel and Aluminum Fittings

- Form a mechanical grip and water- and/or oil-resistant termination
- Provide grounding continuity of cable armor

KOPEX-Ex™

Stainless Steel Flexible Conduit

- Designed to meet UL®, CSA, IECEx and ATEX standards for hazardous environments
- Made from Type 316 stainless steel




Metal Cable Glands

- Flameproof and barrier IECEx and ANZEx certified cable glands for steel wire armored cable
- Multiple options available for each mounting thread size

Russellstoll®

MaxGard® Pin-and-Sleeve Connectors

- Copper-free, cast aluminum, epoxy powder-coated housings
- Explosion-proof interlocked receptacles also available



There is always a concern at chemical installations about the significant presence of gases and vapors. Our explosion-proof solutions can prevent or contain an explosion in classified hazardous locations.

Thomas & Betts products for hazardous location protection

All-Struct®

- Quick Pole Light-Fixture Mounting Assembly

Cyberex®

- Industrial UPS Systems

DTS®

- Lighting, Junction Boxes and Controls

Emergi-Lite®/Lightalarms®

- Emergency Exit Lighting

EZCODE®

- Danger/Warning Labels and Signs, Industrial/Wire Markers, Barricade/Burial Tape

Hazlux®

- Explosion-Proof Lighting Fixtures for Hazardous Locations
- Strobe Lighting Fixtures

Joslyn®

- Surge Protection Devices

Kopex-Ex™

- Explosion-Proof Raceway Systems

Nicote™

- Flameproof IECEx and ANZEx Certified Cable Gland for Steel Wire Armored Cable
- Barrier IECEx and ANZEx Certified Cable Gland for Steel Wire Armored Cable

Russellstoll®

- MaxGard® Pin-and-Sleeve Connectors and Explosion-Proof Interlocked Receptacles
- GSUL Ground Indicator System

T&B® Cable Tray

- Aluminum, Stainless Steel and Fiberglass Support and Wire Management Systems

T&B® Fittings

- Explosion-Proof Boxes, Elbows, Fittings and XP Explosion-Proof Flexible Couplings
- STAR TECK® and STAR TECK XP® Fittings for Jacketed Metal-Clad and Teck Cables



Liquid Ingress Protection

A single drop of oil seeping into an electrical control box is all it takes to knock out your production line for days. And a faulty fitting can be the culprit causing that failure.

At Thomas & Betts, we realize that while most of our products are small, the jobs they do are big. And big jobs demand the right product engineering, testing and quality control. That's what you get with Thomas & Betts.

We engineer more into our products, so you get more out of them — important extras not found in ordinary fittings, like a ground cone that improves pull-out strength while reducing the risk of stripping wires, or a sealing ring with tough, durable plating. Our quality liquidtight fittings stay on the job even under the toughest conditions.

Why do we put more effort into our products and quality control? It's simple. The more effort we put in, the better the product.

T&B® Fittings

Stainless Steel Liquidtight Conduit and Cord Fittings

- Stainless steel construction resists corrosion
- Rounded gland nut deflects water from connector
- Continuous sealing ring ensures a liquidtight seal



T&B® Fittings
Stainless Steel Liquidtight
Conduit and Cord Fittings



Ocal®
OCAL-BLUE® PVC-Coated NEMA
Type 4X Form 8 Conduit Bodies



Ocal®

OCAL-BLUE® PVC-Coated NEMA Type 4X Form 8 Conduit Bodies

- Double coated inside and out for corrosion protection
- Stainless steel encapsulated cover screws can be hand-tightened — using only 15 in.-lbs. of torque — to achieve the UL® Listed Type 4X watertight rating

HOMAC®

Flood-Seal® and Squid® Products

- Unaffected by liquid ingress, sun and soil
- Flood-Seal® compression splice kits' insulating cover seals perfectly every time and is prefilled with an oxide inhibitor that keeps out moisture
- Squid sealing sleeves make seals without tape, compound or heat source

Russellstoll®

MaxGard® Pin-and-Sleeve Connectors

- Provide waterproof pin-and-sleeve connections inside copper-free, cast aluminum, epoxy powder-coated housings
- O-ring-sealed interior components ensure watertight protection
- Support ranges from 30 to 400 amps, with explosion-proof systems for 30, 60 and 100 amps



Homac®
Flood-Seal® and
Squid® Products

Russellstoll®
MaxGard® Pin-and-Sleeve
Connectors



Thomas & Betts products for liquid ingress protection

Adaptaflex®

- Liquidtight Metallic Conduit Connectors

DTS®

- Lighting, Junction Boxes and Controls

Emergi-Lite®/Lightalarms®

- Emergency Exit Lighting

Hazlux®

- HazCote® Kynar® Coated Lighting Fixtures
- Explosion-Proof Lighting Fixtures for Hazardous Locations
- Strobe Lighting Fixtures

Homac®

- Flood-Seal® and Squid® Products

Kopex-Ex™

- Liquidtight Glands

Nicote™

- Flameproof IECEx and ANZEx Certified Cable Gland for Steel Wire Armored Cable
- Barrier IECEx and ANZEx Certified Cable Gland for Steel Wire Armored Cable

Ocal®

- PVC-Coated Conduit and Fittings
- OCAL-BLUE® NEMA Type 4X Form 8 Conduit Bodies

PMA®

- Nylon Cable Protection Systems

Red•Dot®

- Code Keeper® Weatherproof While-in-Use Covers

Reznor®

- Washdown Unit Heater

Russellstoll®

- MaxGard® Pin-and-Sleeve Connectors and Explosion-Proof Interlocked Receptacles

Sta-Kon®

- Shrink-Kon® Wire and Connector Insulation Products

T&B Fittings®

- Type A Liquidtight Flexible Conduit and Fittings
- ATX High-/Low-Temperature Liquidtight Conduit and Fittings
- Stainless Steel Form 8 and BlueKote® Conduit Bodies
- XTRA FLEX® Non-Metallic Liquidtight Conduit, Tubing and BULLET® Fittings
- Stainless Steel, Aluminum and Non-Metallic Liquidtight Conduit and Cord Fittings
- Silver Grip® Tray Cord Fittings
- CorroStall® Aluminum Conduit Boxes
- STAR TECK® and STAR TECK XP® Fittings for Jacketed Metal-Clad and Teck Cables

***Thomas & Betts
solutions provide
superior liquid ingress
protection. Our products
keep your electrical
equipment — and those
who use it — safe.***



Power Quality, Efficiency & Reliability

The loss of a single data record can mean the permanent loss of a process batch. In continuous operations, missing data translates to the loss of thousands of dollars every minute. In this critical industry, the need for stable power is paramount. Count on Thomas & Betts products for power quality, efficiency and reliability.

Our power solutions provide the peace of mind that comes from knowing your equipment is safe and secure from the consequences of unpredictable power. By designing the world-class standard in power equipment, Thomas & Betts has become a leader in custom-designed digital static transfer switches, power distribution and uninterruptible power systems.

From the clean environment of a data center to the harsh conditions of a processing plant, Thomas & Betts products meet the challenge of providing clean, dependable electric power to the chemical industry.



Surge Protection

- Facility-wide protection, from service entrance to equipment level
- Proprietary designs maximize system performance
- Individually fused MOVs increase system reliability
- Available surge ratings: 25kA to 400kA
- Multiple voltage configurations
- Listed to UL® 1449 3rd Edition; RoHS compliant



Joslyn®
Surge Protection Devices



Industrial UPS Systems

- Systems developed to comply with both IEC and UL® applications
- Rugged design for a 20-year service life
- Ranges from 10 to 150kVA, incorporating state-of-the-art system topology for higher online system efficiency and longer battery life
- Digital Static Transfer Switch design provides increased redundancy and reliability



Complete Power Solutions

- UPS maintenance and battery services
- True 24/7/365 support
- Comprehensive reporting
- Emergency response
- Internally staffed call center



JT Packard®
Complete Power
Solutions



Cyberex®
Industrial UPS Systems

Power is prone to sags, spikes and surges. But Thomas & Betts power solutions provide clean, dependable electric power to facilities — and they keep your equipment and data safe.

Thomas & Betts products for power quality, efficiency & reliability

Current Technology®

- Surge Protection

Cyberex®

- Industrial UPS Systems

Elastimold®

- High-Voltage Separable Connectors and Solid-Dielectric Switchgear

Fisher Pierce®

- Faulted Circuit Indicators

Joslyn®

- Surge Protection Devices

Joslyn Hi-Voltage®

- Capacitor Switches, Air Disconnect Switches and Obstruction Light-Lowering Device

JT Packard®

- Electrical and Data System Installation, Inspection and Maintenance Services



Extreme Temperature Protection

Electrical systems need to perform consistently in boiler rooms, furnace operations and around evaporators. Many of these processes require heat tracing to maintain elevated temperatures throughout chemical process systems.

To ensure that connections remain properly shielded against undesirable temperatures, and safeguard the uninterrupted transmission of power and data flows, Thomas & Betts electrical solutions address issues that occur in these harsh and extreme environments.

T&B® Fittings

52® Series High-Temperature Flexible Metal Liquidtight Fittings

- Handle temperatures up to 150° C
- Steel or malleable iron construction, electro-zinc plated and chromate coated for corrosion protection
- Available in 45°, 90° and straight versions

ATX Flexible Liquidtight Conduit

- Performs in extreme temperature environments up to 150° C
- Conduit sizes from 3/8" to 4"

PMA®

High-Temperature Nylon Conduit and Fittings

- Offer good fire protection (flammability and smoke generation)
- Provide high impact strength even at low temperatures
- Also resistant to weather



Ty-Rap®

Extra-High Temperature Nylon Cable Ties

- For use in temperatures from -40° to 150° C
- Feature "The Grip of Steel®" stainless steel locking device and offer infinite adjustability

Fluoropolymer Cable Ties

- Perfect for low-smoke applications
- UL® 94V-0 flammability rating
- For use in temperatures ranging from -46° C to 140° C

Sta-Kon®

High-Temperature Wire Joints and Terminals

- Rated for temperatures up to 150° C, 600V maximum
- Molded, one-piece nylon construction for electrical insulation, rated UL94V-2
- Wire joints feature brazed copper sleeves that prevent separation of connection during crimping
- Wire joints' internal serrations enable cold flow for increased conductivity and pull-out strength



T&B® Fittings
ATX Liquidtight Flexible
Metal Conduit and Fittings

PMA®
High-Temperature Nylon
Conduit and Fittings

Ty-Rap®
Extra-High Temperature
and Fluoropolymer Ties

Sta-Kon®
High-Temperature Wire
Joints and Terminals



Temperatures can go to extremes at chemical processing facilities. That's why Thomas & Betts provides the products electrical systems need to fight the cold and beat the heat.

Thomas & Betts products for extreme temperature protection

Adaptaflex®

- Stainless Steel Flexible Conduit, Cord and Cable Fittings

EZCODE®

- Danger/Warning Labels and Signs, Industrial/Wire Markers, Barricade/Burial Tape

Kopex-Ex™

- High-Temperature Protection

PMA®

- Nylon Cable Protection Systems

Sta-Kon®

- High-Temperature Wire Joints and Terminals

T&B Fittings®

- ATX High-/Low-Temperature Liquidtight Conduit and Fittings
- 52® Series High-Temperature Flexible Metal Liquidtight Fittings

Ty-Rap®

- Extra-High Temperature and Flame-Retardant UL94V-0 Nylon Cable Ties
- Ty-Rap Tote® Cable Tie Dispensers and Ergonomic Installation Tools



Total Project Cost Reduction

When quality products reduce the overall costs associated with a chemical plant's operation, the savings add up in so many ways. Many T&B® Fittings reduce inventory expenses. That further translates to installers not needing to carry so many parts, and labor can be performed in a fraction of the time it normally would take.

Other products enable tremendous savings, too. The Kindorf® Trapnut® strut fastener features either a stainless steel, Galv-Krom® or SilverGalv® finish that stands up to corrosion, enabling chemical processing facilities to save on replacement and labor costs. The Cobra® One-Piece Cable and Pipe Clamp installs quickly and securely right out of the box, attaches to equal trade sizes of EMT and rigid conduit and greatly reduces installation time.

For reducing installation time with teck cable by up to 50%, and for making connections in all those hard-to-reach places, the STAR TECK EXTREME® DIRECTOR™ Fitting comes with a swish-plate design that enables the fitting to adjust from 90° to 180°. This reduces the need for an additional fitting installation to make a bend into an enclosure.



T&B® Fittings

Ranger® Cord Connectors

- Allow for 1/4" more range of cord, providing an opportunity to reduce inventory
- Take twice the cable range of ordinary strain relief connectors
- Straight, 45° and 90° designs

BlueKote® LU® Universal Conduit Elbow

- Provides a 4-to-1 SKU reduction for conduit body applications
- Reduces installation time and risk of installer strain

STAR TECK EXTREME® DIRECTOR™

- Fitting adjusts from 90° to 180°
- Saves on installation time by up to 50%

Blackburn®

Compression Lugs

- Accommodate both code and flex cable on the same lug
- Eliminate the need for additional SKUs to accommodate lugs for both cable types
- Featuring the Color-Keyed® Compression System that ensures proper connections



T&B® Fittings
Ranger® Cord Connectors



T&B® Fittings
BlueKote® LU® Universal
Conduit Elbow



T&B® Fittings
STAR TECK EXTREME®
DIRECTOR™



Blackburn®
Compression Lugs