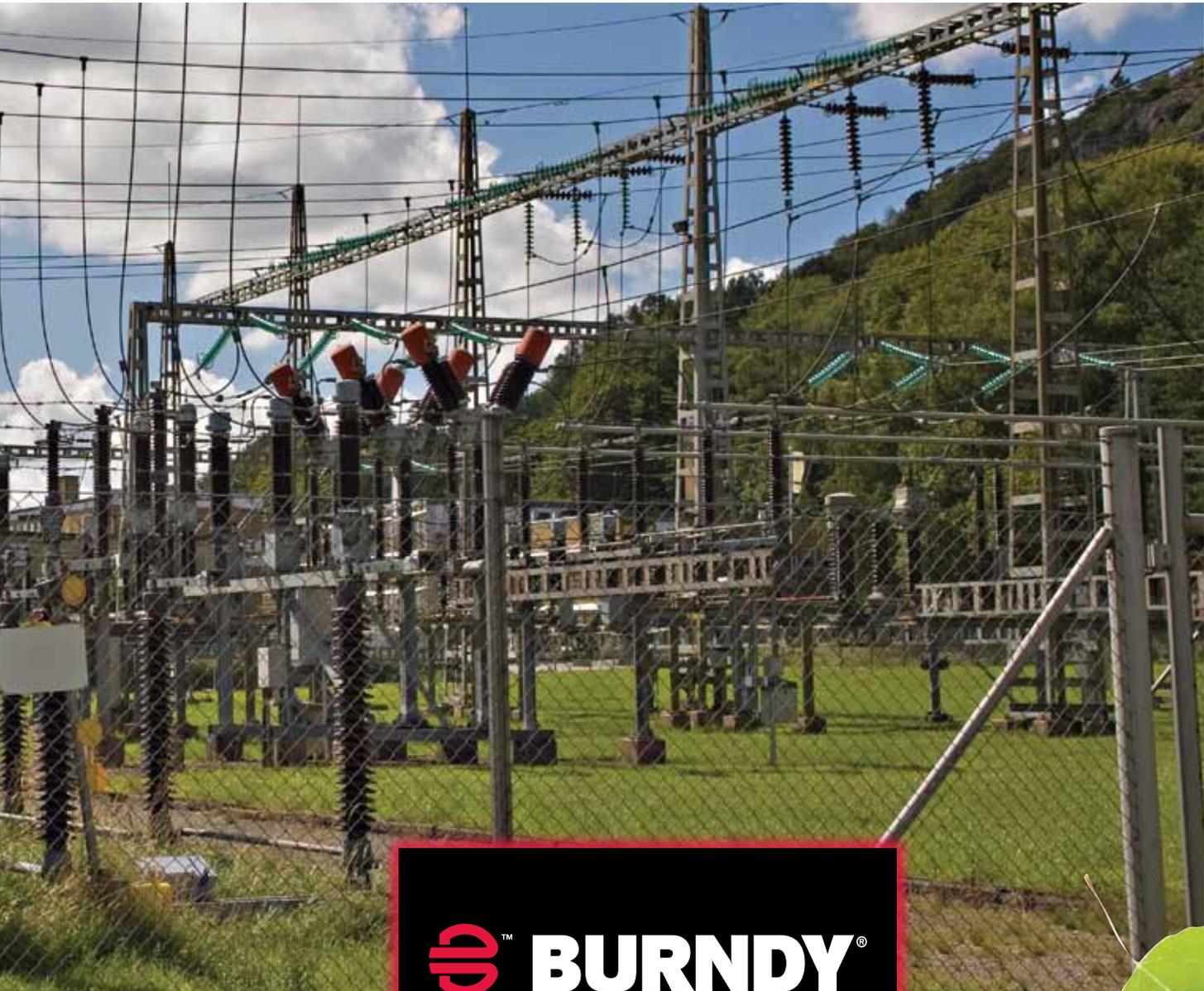


*Connecting the Grid*



# Substation

*Solutions for Power Systems*



 **BURNDY**<sup>®</sup>



*Experience. Technology. Answers.*<sup>™</sup>



## Over 85 Years of Experience

Since 1924, BURNDY® has been at the forefront of technological innovation. As a result, we offer one of the most widely used and reliable product lines available. We can provide an integrated connector solution for substation projects, from the highest point of the bus structure to the lowest point of the grounding network.

To ensure you have exactly the right products for each specific job, BURNDY® has developed unique engineering capabilities and made significant investments in technology such as:

- CAD—providing 3D neutral files
- CAM
- PLM
- PDM
- Simulation
- FEA
- Testing equipment
- Rapid prototyping equipment

Plus, our advanced engineering support teams can custom-build connectors to suit the most intricate of applications. From there, our trained factory sales force is committed to ensuring you have the products you need. In addition, knowledgeable technical support and customer service teams are standing by to answer your questions in person.

### About Bern Dibner

The founder of BURNDY®, Bern Dibner, fostered a lifelong dedication to science and technology in part through his collection of rare books and his work as an author. Dibner wrote more than 100 books and articles, including the *Heralds of Science*, a selection of what he considered to be the 200 most important books in the history of science. This collection is considered a valuable reference for students and scholars.



## Our Product Solutions: Connected From Bus to Grounding Grid

BURNDY® products include:

### Bolted Fittings

Our bolted terminals, T-connectors, splices and bus supports accommodate nearly any conductor. With various clamping element technologies, BURNDY® can provide easy-to-install, range-taking, hassle-free connectors for copper and aluminum substations.

### Welded Fittings

BURNDY® offers an extensive array of welded connectors for aluminum conductors, including terminals, T-connectors, splices and bus supports, plus A-frames. As with bolted fittings, an expansion line of connectors is available.

### EHV Fittings

BURNDY® has developed streamlined connectors to accommodate operating voltages of up to 1,100kV. In both bolted and welded configurations, BURNDY® products are designed for corona-free operation at their normal operating range.

### Grounding

Whatever your grounding needs (e.g., ground grid, fencing, etc.), there's a solution in The Grounding Superstore™, which offers a variety of compression, exothermic and mechanical grounding technology.



## Why Choose BURNDY®

*Experience. Technology. Answers.™*

Founded in 1924, BURNDY® has a history of industry-renowned customer and technical service, along with a reputation of engineering excellence, quality and reliability.

For the substation industry, BURNDY® offers:

- A wide range of products for bolted, welded, compression and implosive connections that can accommodate pipe sizes of up to 12 inches and cable sizes up to 4,000kcmil as well as all voltages up to 1,100kV
- State-of-the-art engineering capabilities, live technical services, 3D neutral files to support substation engineering needs and the development of connectors for even the most demanding configurations
- Leading technology, such as CAD, CAM, PLM, PDM, simulation, analytical software, testing facility equipment and Rapid Prototyping Equipment

**When looking for a substation solution, there is no substitute for BURNDY®. Why take the risk with anyone else?**



## Choose Just What You Need

### Terminals (Bolted, Welded and Compression)

Copper and aluminum terminal connectors are used for joining copper or aluminum tube conductors, and aluminum and copper cable conductors to flat equipment pads. Depending on the field application requirements, BURNDY® has or can engineer configurations to accommodate your needs.



### Couplers (Bolted and Welded)

Couplers are offered in high copper and aluminum alloy, and are used for joining tube-to-tube, cable-to-cable or tube-to-cable end to end.



### Bus Support (Bolted and Welded)

Bus supports are offered in high copper and aluminum alloy, and are used for mounting a wide range of cable or tube on post or pedestal type insulators. Bus supports can be used in both horizontal and vertical conductor configurations.



## Molding the Industry

All our technology and engineering comes together in our three complementary foundries that have more than 100 years of experience in high-quality castings. Located in Bethel, CT, USA; Toluca, Mexico; and Sao Paolo, Brazil, our foundries have the expert craftsmanship to perform complex castings.

In addition, to perform complex molding operations, BURNDY® has invested significantly in advanced equipment for efficient automated production and LEAN methodology approaches.



### T-Connectors/A-Frames (Bolted and Welded)

T-connectors/A-frame terminals are offered in high copper and aluminum alloy. T-connectors are used for joining tube-to-tube, tube-to-cable, cable-to-cable, tube or cable to a flat pad in a run-and-tap configuration as well as to accommodate a bus bar. A-frames are designed for tube-to-tube connections in a run-and-tap configuration.



### Stud Connectors (Bolted and Welded)

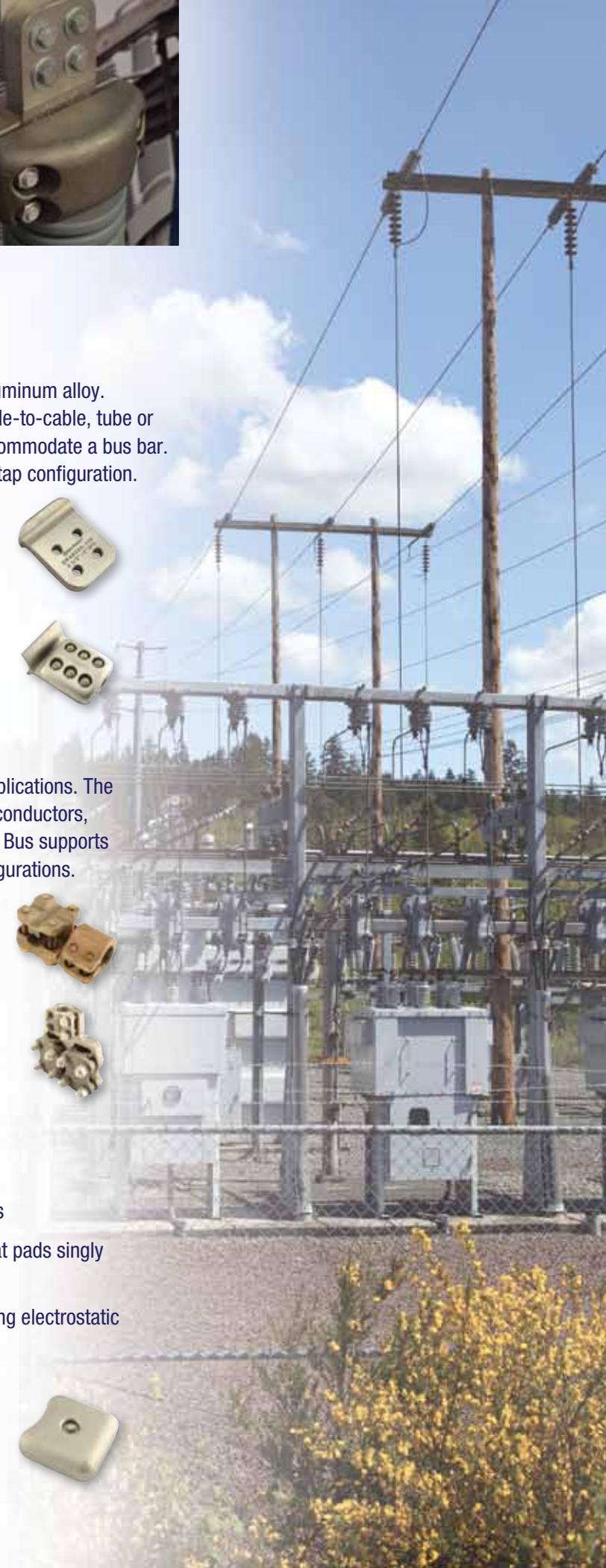
Copper and aluminum stud connectors are used in transformer applications. The connector is designed to accommodate copper or aluminum pipe conductors, copper or aluminum cable conductors, or terminal mounting pads. Bus supports can accommodate conductors in both vertical and horizontal configurations.



### Rigid Spacers, Shielding Caps and End Bells

BURNDY® also offers:

- Rigid spacers to accommodate various conductor-spacing ranges
- Shielding caps that cover hardware when bolting terminals to flat pads singly or back-to-back
- End bells that close the end of tube sealing out moisture, reducing electrostatic loss and eliminating hazards created by nesting birds





## Grounding Solutions

At BURNDY®, we know that all of your projects are unique—not every job requires the same tools. The Grounding Superstore™ is home to three versatile grounding systems:

### Mechanical Grounding Connectors

Ideal for direct burial in earth or embedding in concrete, our mechanical connectors are made of high-copper content alloy. Their nut-and-bolt design makes it easy to install all combinations of run and tap conductors. In addition, our mechanical connectors are designed for easy installation and outstanding durability.



### HYGROUND® Irreversible Compression Grounding System

This system was developed for performance excellence and long-term life expectancy. Built on well-proven design principles and technology that have been in existence for more than 60 years, HYGROUND® meets the most stringent safety and performance requirements, including those of OSHA and nuclear power plants. The complete system consists of high-quality tools, dies and connector combinations engineered to meet rigorous IEEE standards.



### BURNDYWeld® Exothermic Grounding

This permanent fusion or molecular weld provides a simple, portable, and efficient method of welding copper to copper and other metals without needing an external power source. The connection is a fusion weld that results in a molecular bond of virtually pure copper metal.



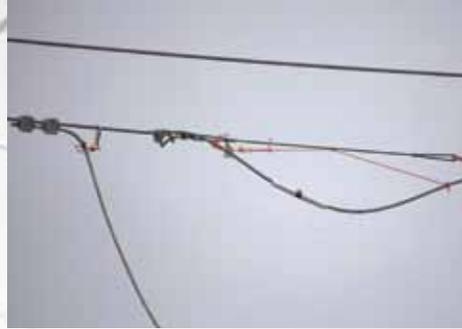
**BURNDY® is** an **Grounding Superstore™**

**The Grounding Superstore™ is home to three versatile grounding systems: Mechanical Grounding, BURNDYWeld® Exothermic Grounding and HYGROUND® Irreversible Compression Grounding.**

The Grounding Superstore™

**BURNDY®**

*Experience. Technology. Answers.™*



## IMPLO® Technology

Since implosive technology was first used commercially in North America in the 1960s, there has been significant evolution in the field. In fact, BURNDY® IMPLO® connections provide a vast improvement in mechanical and electrical performance of high-voltage transmission-line connections. In today's demanding transmission environment, these benefits are crucial; improving the entire flow of the project and requiring up to 60% less labor time for a typical installation.

Here's why:

- Lower project costs, thanks to faster project completion (IMPLO® sleeves can implode multiple connectors simultaneously), savings in installed costs and long-term reliability
- IMPLO® connectors can be installed in any terrain and climate, at ground-level or in the air
- The transformation of the connector barrel and strands into an optimum cross section leads to an efficient transfer of electrical power, thanks to the corrosion-free and corona-free compression
- IMPLO® dead ends, splices and other connectors can be used in live line work and in non-energized conditions



### Interested in Learning More?

**Call 1-800-346-4175 and a BURNDY® Customer Service Professional will answer the phone and your questions—without having to press 1 or any other numbers!**

We provide personal service to all of our customers. Instead of installing a canned voice and menu of options, we've focused resources on giving you immediate access to a BURNDY® representative.

Based in Londonderry, New Hampshire, our Customer Service Center is staffed from 8 a.m. to 8 p.m. Eastern Time, Monday through Friday. We also provide emergency services 24 hours a day, seven days a week, 365 days a year.



[www.burndy.com](http://www.burndy.com) | 1-800-346-4175

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Littleton, NH 03561  
1-800-426-8720



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