

SOLUTIONS FOR

Transportation & Infrastructure



FORWARD MOMENTUM

The Power of Partnership

Nothing in the transportation industry stands still and neither does Hubbell. We've been a part of the industry since the 1880's, when we first began providing engineered product solutions. Ever since, we've worked to solidify our industry commitment through innovative products and solutions for infrastructure, passenger terminals and the railbeds. We encourage all our customers to take advantage of our expertise. In fact, you may be able to reduce both time and cost when our experienced sales team helps you select the best solution for your application and provides technical training. The end result is enhanced overall system performance and reliability.



Product	Hubbell	Competitor 1	Competitor 2	Competitor 3	Competitor 4	Competitor 5
Junction Boxes and Box Pads	●		●			
Flat Pads	●		●			
H20 Rated Boxes	●		●			
Polymer Concrete Cable Through	●		●			
Exothermic Grounding	●	●			●	
Mechanical Grounding	●	●			●	
Compression Grounding	●				●	
Street Light Connectors	●			●		
Break-Away Connectors	●			●		
Submersible Connectors	●				●	
Compression Lugs	●				●	●
Rail Grounding	●	●				●
Railcar Bus Bar	●	●				
Catenary Connectors	●				●	
Copper Braid Shunts	●	●			●	

Strength, performance, quality, and outstanding customer service characterize all **Hubbell** enclosure and cable accessory products. Transportation applications such as Rail, DOT, and Marine have unique challenges and requirements, so Hubbell is proud to offer a wide selection of enclosures, cable accessory, and equipment foundation products for these markets. In addition to our core products and options, Hubbell can customize a solution for your project and application.



BURNDY has a reputation for being a leader in innovation in engineering and manufacturing high quality compression connectors, grounding products, and installation tooling. Today, BURNDY® brings this rich tradition of product innovation to the transportation industry.



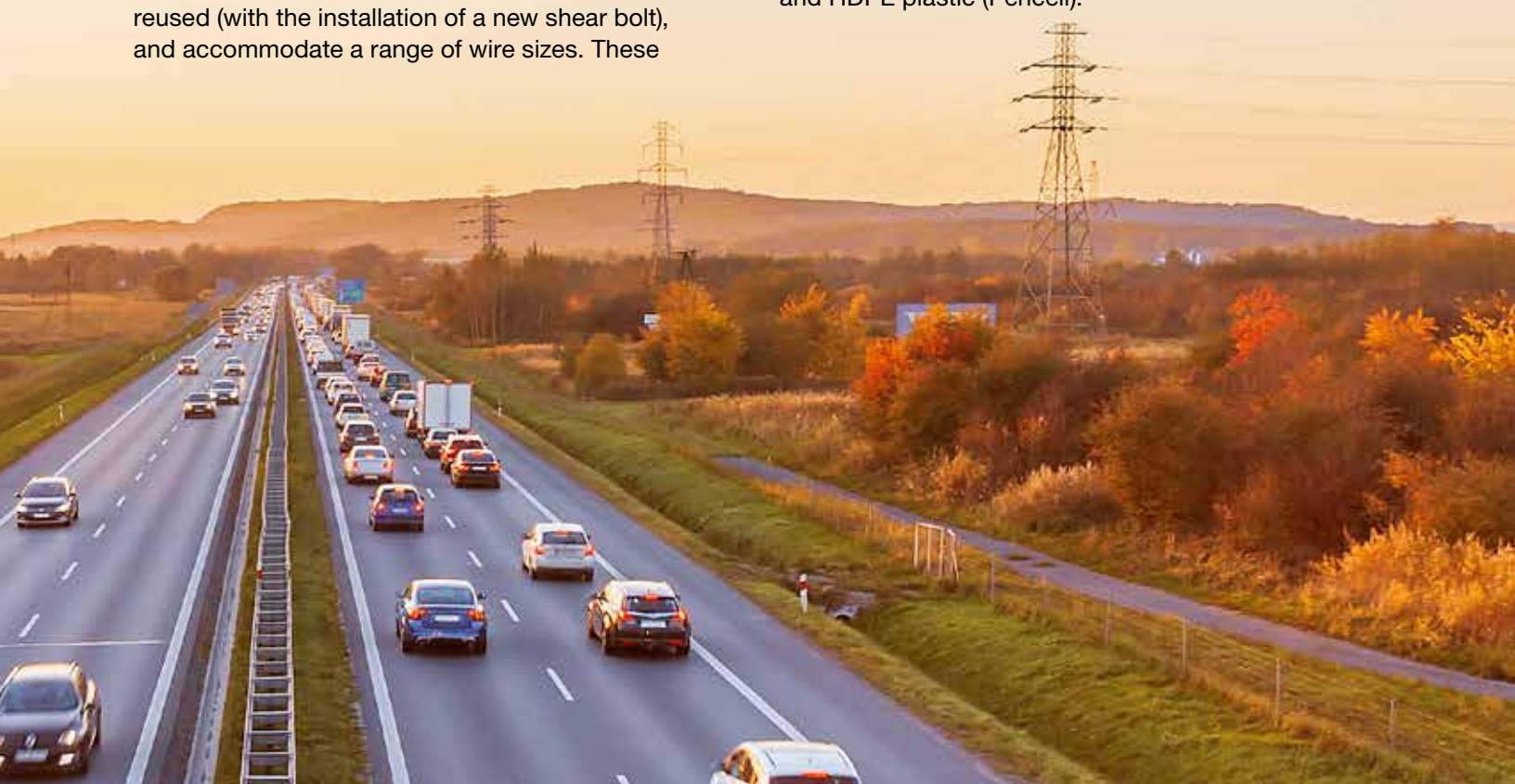
Connector Products, Inc. (CPI)

Our products were developed in cooperation with engineers and operations professionals in the field. They are simple, safe, and sustainable. Our connectors require no special tooling to install or remove, in some cases can be reused (with the installation of a new shear bolt), and accommodate a range of wire sizes. These



high-performance, low-resistance connectors prevent the loss of energy during current transfer. In addition to the industry-proven mechanical wedge style tap connectors for distribution and catenary lines, CPI also offers a full line of ground grid connectors, fiber optic OPGW connectors, hotline tap connectors, and third rail mass transit connectors.

Hubbell Power Systems acquired **Armorcast** in 2020 and the **Quazite** Brand in 2006. Today, we manufacture a variety of enclosures for the electric utility, communications, C&I, and water markets to provide safe, durable and cost-effective housing for utility systems equipment. Hubbell products are tested to meet applicable standards, including ANSI/SCTE specifications for underground enclosure integrity. Our products are manufactured in the USA and Mexico. Hubbell enclosures can be made from a variety of durable materials. These options help Hubbell meet our customers' stringent and unique applications. These options include our reinforced polymer concrete (Quazite), fiberglass with polymer concrete lids (FRP) and HDPE plastic (Pencell).



FORWARD ROTATION

Railway System



1 MEDIUM & LARGE COMPRESSION TERMINALS & SPLICES

BURNDY® HYDENT™ uninsulated copper and aluminum compression terminals and splices for all sizes and applications



2 GROUNDING SOLUTIONS

BURNDY® manufactures Compression, Mechanical, and Exothermic grounding connectors for virtually all grounding applications



3 BURNDY® BRAID

Our fully customizable braids are an economical and efficient means of protecting electrical equipment from the potentially harmful effects of shock or vibration



4 ABOVE GRADE AND DIRECT BURIAL RATED MULTI-TAP CONNECTOR

Insulated, dual rated connectors are for use in networks up to 600V



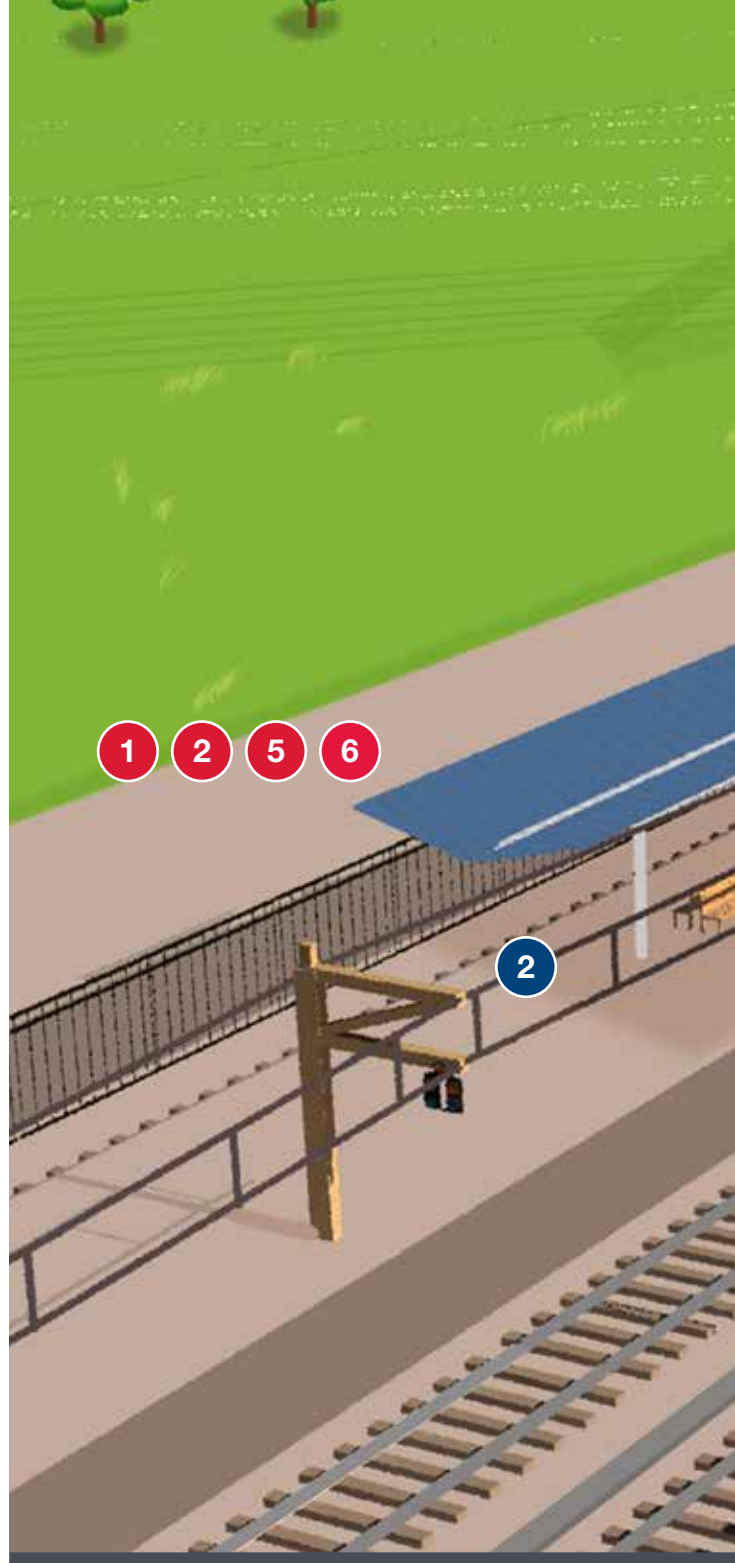
5 COLD SHRINK/HEAT SHRINK

BURNDY® offers a full line of both black and clear shrink products to insulate our terminal lugs and splice products to provide a 100% BURNDY® Engineered Connection



6 BURNDY® UNIRAP™ CABLE TIES

Choose from a wide array of colors, tensile strengths ranging from 18 to 900 pounds and latching mechanisms ready to be secured



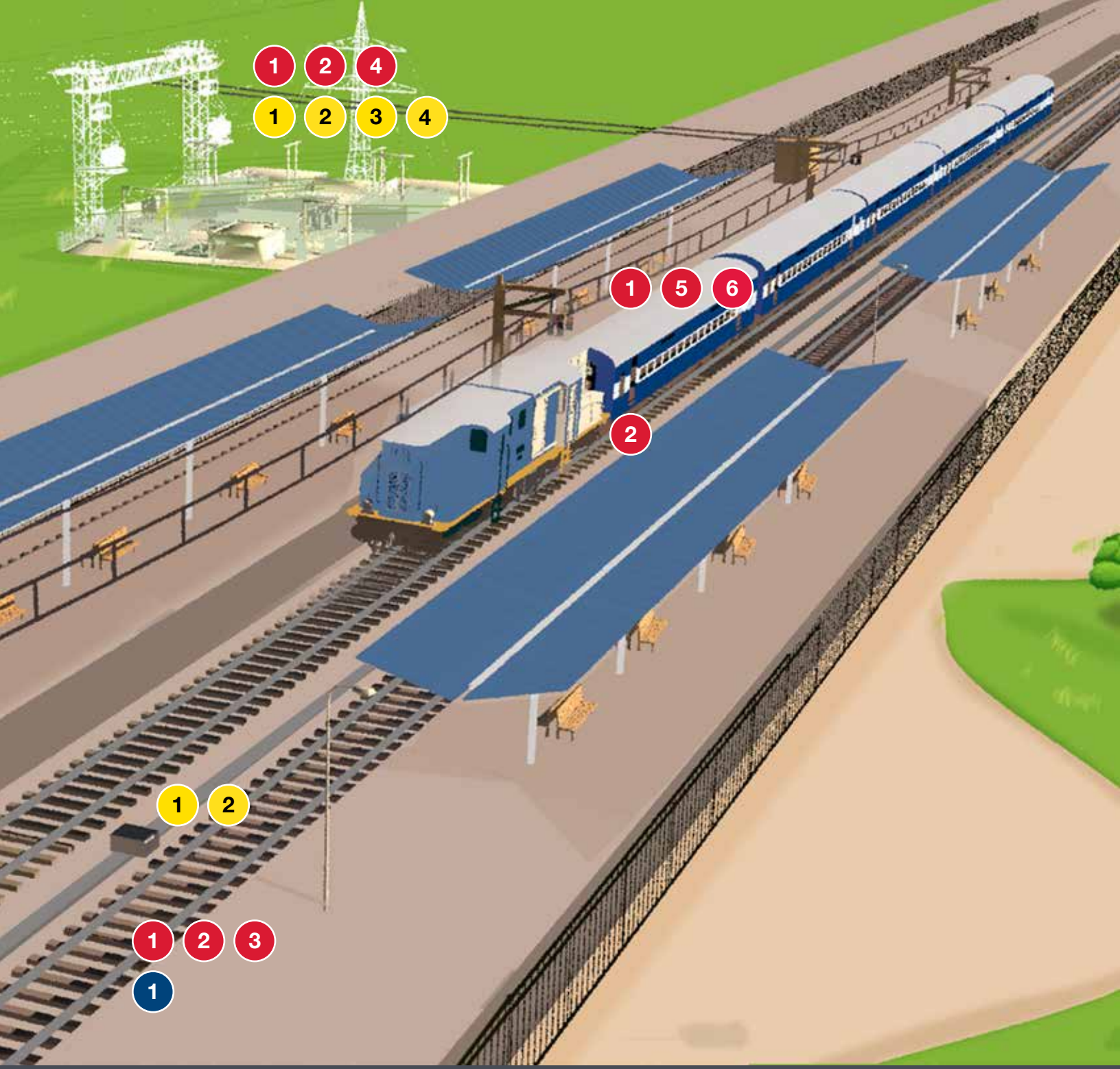
1 RAIL BONDING CONNECTORS

A permanent connection for a copper conductor to a variety of rails used in Heavy Rail Mass Transit systems



2 OVERHEAD CATENARY CONNECTORS

Aluminum wedge tap Connectors consist of a spring "C"-Body and wedge combined with a "shear-head" bolt



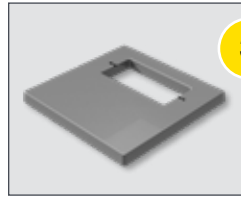
1 UNDERGROUND JUNCTION BOXES

Hubbell manufactures underground enclosures to meet a wide variety of specifications, load requirements, security features, and options



2 TRENCH

Hubbell offers a wide variety of trench options that allow for scalable networks of underground cable pathways in a variety of sizes and load capabilities



3 FLAT PADS/WORK PADS

Flat pads and work pads are available in a multitude of sizes with or without throat openings to accommodate specific equipment

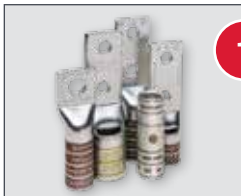


4 BOX PADS

Similar to flat pads, box pads elevate equipment above grade and are customizable with various throat openings

LEADING THE WAY

Roadway System



1 MEDIUM & LARGE COMPRESSION TERMINALS & SPLICES

BURNDY® HYDENT™ uninsulated copper and aluminum compression terminals and splices for all sizes and applications



2 BREAK-AWAY STREET LIGHT CONNECTOR

Ideal for street lights, parking lots, and other outdoor electrical fixtures – available in in-line and “Y” Type configurations



3 GROUNDING SOLUTIONS

BURNDY® manufactures Compression, Mechanical, and Exothermic grounding connectors for virtually all grounding applications



4 CRIMPIT™ STREET LIGHT CONNECTOR

Designed to tap small lighting wires from secondaries, this connector can be gripped in tool and slipped over line for easier installation



5 ABOVE GRADE AND DIRECT BURIAL RATED MULTI-TAP CONNECTOR

Insulated, dual rated connectors are for use in networks up to 600V



6 COLD SHRINK/HEAT SHRINK

BURNDY® offers a full line of both black and clear cold shrink products to insulate our terminal lugs and splice products to provide a 100% BURNDY® Engineered Connection



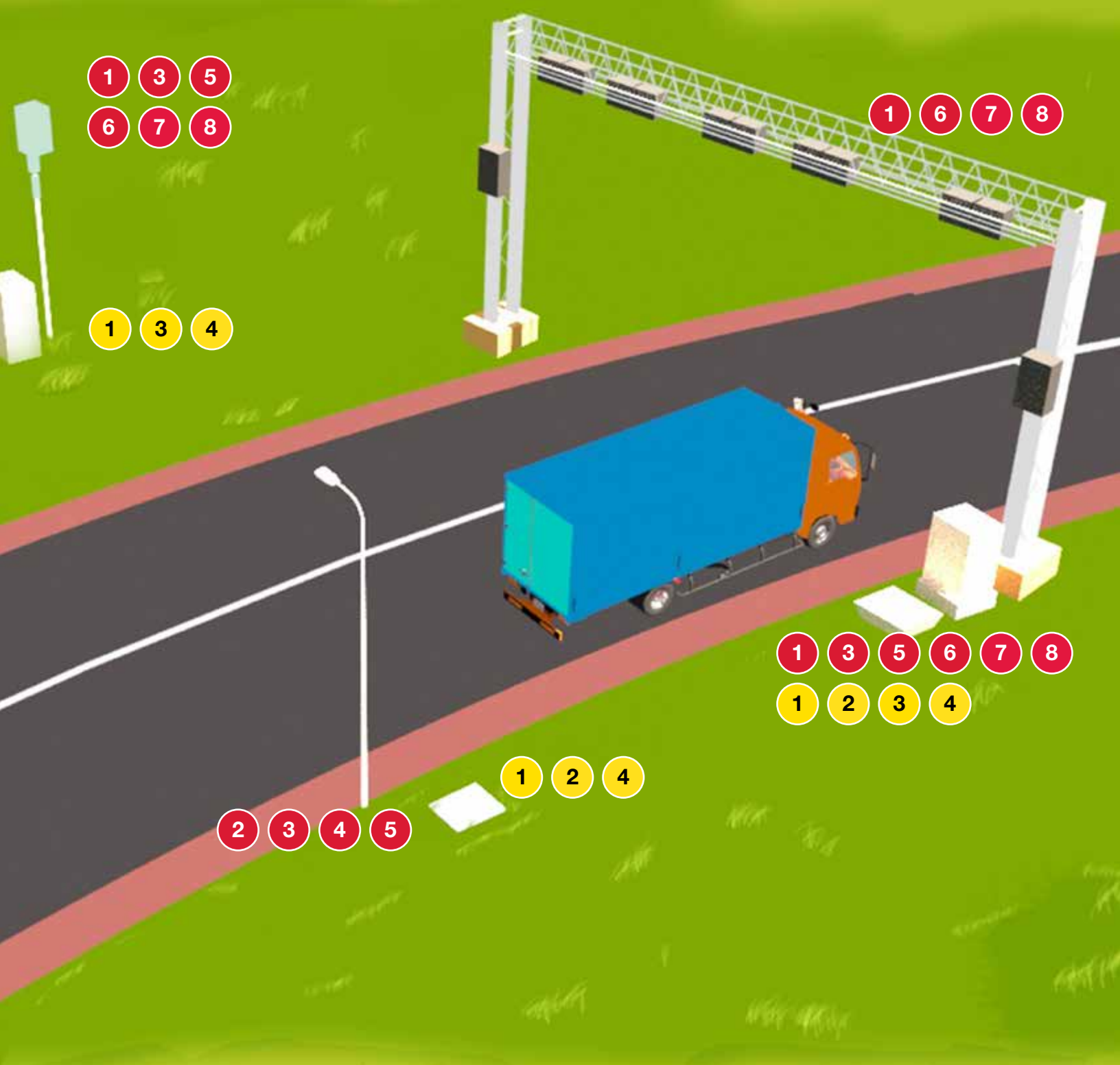
7 SMALL TERMINALS

Small copper solderless terminals, splices and disconnects which accommodate wire ranges #26 AWG to #10 AWG



8 BURNDY® UNIRAP™ CABLE TIES

Choose from a wide array of colors, tensile strengths ranging from 18 to 900 pounds and latching mechanisms ready to be secured



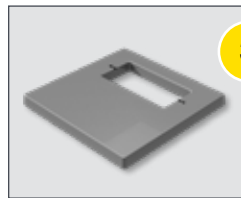
1 UNDERGROUND JUNCTION BOXES

Hubbell manufactures underground enclosures to meet a wide variety of specifications, load requirements, security features, and options



2 H2O RATED BOXES

Hubbell offers AASHTO H20 rated boxes for applications outside of the roadway



3 FLAT PADS/WORK PADS

Flat pads and work pads are available in a multitude of sizes with or without throat openings to accommodate specific equipment



4 TRAFFIC CONTROL BASES

Various size traffic control bases are available for common traffic signaling devices, bases allow for easy installation and quick replacement



QUAZITE ENCLOSURES

Strength, Performance, Quality & Durability

Transportation and infrastructure applications have unique challenges and requirements, so Hubbell is proud to offer a wide selection of enclosures and equipment foundation products. In addition to our core products and options, Hubbell can customize a solution for your project and application.

QUAZITE® ENCLOSURES

- **PC1212** The workhorse enclosure for street lighting and a wide variety of municipal applications. This 12-inch depth box can be stacked and meets ANSI/SCTE Tier 15 specifications.



- **PG1324** Quazite® manufactures a variety of small polymer concrete enclosures that meet ANSI/SCTE Tier 22 specifications in sizes from 10x15 up to 17x30. These enclosures are the industry leader in quality and availability.



- **PG3048** Quazite® is the industry leader in medium- and large-size enclosures from 24x36 up to 48x96. Also designed to meet ANSI/SCTE Tier 22, these enclosures can be customized with split covers, conduit penetrations, cable racking, and many other options.

- **PR2700** Quazite® manufactures round enclosures including the 27-inch and the 39-inch, both in a variety of depths. These enclosures are ideal for cable looping and also meet ANSI/SCTE Tier 22 specifications.



- **PC1012 (Median Wall Box)** Quazite® also furnishes unique box configurations, such as median wall boxes specifically designed for DOT applications.



Quazite®





QUAZITE FRP

- **Corrugated Wall Box** Quazite® FRP offers fiberglass constructed sidewalls paired with polymer concrete rings and covers. These FRP alternatives provide a wide variety of L X W dimensions. FRP also provides larger vault sizes, up to 78x96, and offers customizable configurations to meet job specifications.
- **3200 Round** Round boxes are also available in Quazite® FRP, including 20-inch, 27-inch, 32-inch and 39-inch. These enclosures meet ANSI/SCTE Tier 22 specifications.



PENCELL

- **PE9A** PenCell provides High Density Polyethylene (HDPE) construction, including small “flower pot” enclosures in 6-inch and 9-inch sizes. These enclosures are ideal for ground well applications and any specification requiring small, low-load enclosures.
- **DT1730** HDPE is also used to meet DOT specifications, and can be configured to meet ANSI/SCTE Tier 15 and even Tier 22. PenCell DT enclosures are available in 11x18, 12x12, 13x24, 17x30, 24x36, and 30x48.

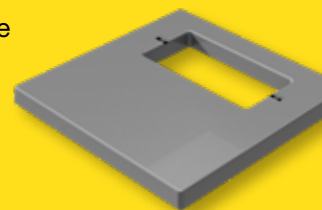
QUAZITE® H20

Offered in 13x24 and 17x30 sizes, the Quazite® H20 assemblies are designed to meet AASHTO H20 specifications and meet the M306 test requirements. Installed with cast-in-place concrete, these enclosures are available in 12-, 18- and 24-inch depths and are ideal for applications adjacent to roadways and off-highway deliberate traffic areas including parking lots.



QUAZITE

- **Traffic Control Base** Offering the industry’s broadest line of traffic signal cabinet bases, Hubbell is sure to have a core product that satisfies even your toughest application requirements. Hubbell’s polymer concrete box pads offer high strength and durability while being a tenth to a third the weight of precast concrete alternatives.
- **Box Pad** Hubbell has a wide range of polymer concrete and fiberglass box pads designed to accommodate the transformer/switchgear cabinets of most manufacturers. Hubbell box pads meet or exceed the loading requirements of most single and three phase transformer manufacturers.
- **Flat Pad** Functioning as an equipment foundation, flat pads are light weight, non-conductive and remain stable under freeze and thaw cycles. The available SPLITT-PAD® equipment flat pad design makes retrofit installations easy, and eliminates the need to discontinue service during installation.





QUAZITE ENCLOSURES

Customize Your Space

Quazite® features several different accessories for its boxes, including cable racks, unistrut racks, pulleys, knockouts, coiling brackets, and terminators. Knockouts are pre-scored at the factory, allowing for easy break out without the need for special tools. Pulleys feature a forged-steel eye-nut and a steel-reinforcing plate.

HOLES

Conduit sizes: 2", 3", 4" electrical, 4" telephone, 5", and 6". Other hole sizes available

KNOCKOUTS

Conduit sizes: 2", 3", 4" electrical, 4" telephone, 5", and 6". Other hole sizes available

TERMINATORS

Conduit sizes: 2", 3", 4" electrical, 4" telephone, 5", and 6". Other hole sizes available

STRUT RACKS

Box and cover struts available

CABLE RACKS & RACK HOOKS

Cable racks: 12", 18", 24", 30", 36" lengths
Cable rack hooks: 7-1/2", 10" lengths

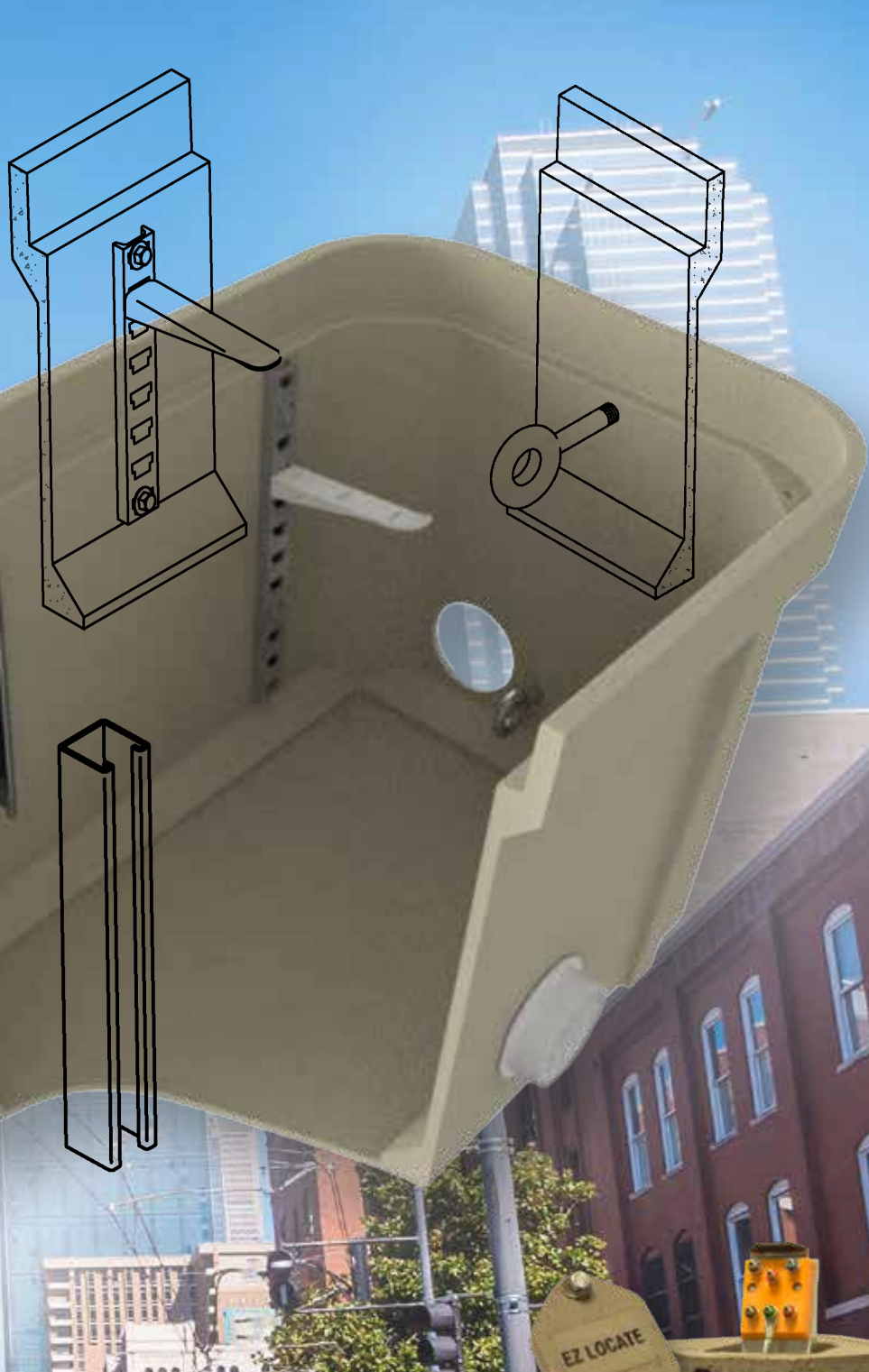
PULLING EYES

Available ratings: 1,500 lbs, 3,000 lbs and 10,000 lbs

MOUSEHOLES

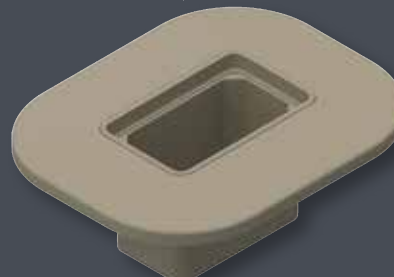
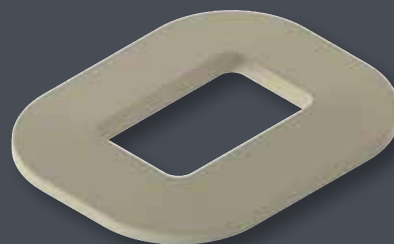
Mouseholes standard sizes: 2-1/2"x4", 4"x4", 6"x8". Other sizes available





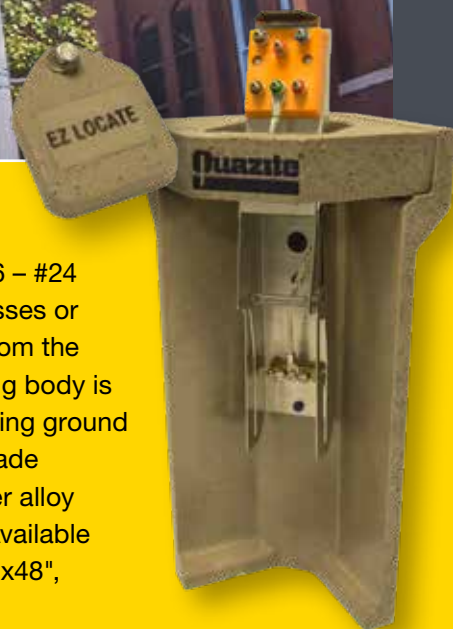
INNOVATING YOUR INSTALL — BOX COLLARS SAVE TIME AND MONEY

Hubbell's new Quazite® box collars could literally revolutionize how you install Quazite® PG series boxes. Framing, pour-in-place concrete, and multiple site visits are all eliminated by using a box collar. Reduce contractor costs by as much as 50%. Installation takes a few minutes, and box collars provide strength, security, and a clean installation in non-deliberate traffic locations.



EZ LOCATE

The EZ Locate System allows the #6 – #24 AWG ground wires / bonding harnesses or tracer wires to be quickly isolated from the grounding electrode. The telescoping body is made from stainless steel; the isolating ground switch is made from engineering-grade thermo-plastic and tin-plated copper alloy components to prevent corrosion. Available sizes: 13"x24", 17"x30", 24"x36", 30"x48", and 48"x48".





ON SOLID GROUND

Three Grounding Solutions

We introduced the first mechanical connector, the first network underground system and the first compression grounding system, just to name a few. No matter the option you choose, you'll know you're getting quality products that meet and exceed industry standard performance guidelines, in all conditions. BURNDY® has an American-made solution for virtually every grounding application.

HYGROUND® COMPRESSION

- BURNDY® HYGROUND® is the safest, most cost-effective, time-efficient and easily inspected grounding system available today. A BURNDY® HYGROUND® compression connection can be made in three minutes.
- The efficiency and consistency of installing a BURNDY® HYGROUND® compression grid translates to tremendous labor savings.



BURNDY® HYGROUND helps you keep your entire jobsite on schedule. Compression connections can be made in even the most inclement weather conditions— rain, wind or snow.

J-RAILROAD CONNECTOR

Mechanical clamp connectors designed for use in power, contact or running rail applications. Connectors are cast of a high conductivity copper alloy, tin-plated, and assembled with high-strength DURIUM™ hardware. Connectors designed for extended service life.



MECHANICAL

Our easy-to-install mechanical grounding products are known for their quality and durability in even the most extreme conditions.

Manufactured from a high copper alloy, BURNDY® connectors are designed to last for the life of an electrical grounding system— 40 years or more.



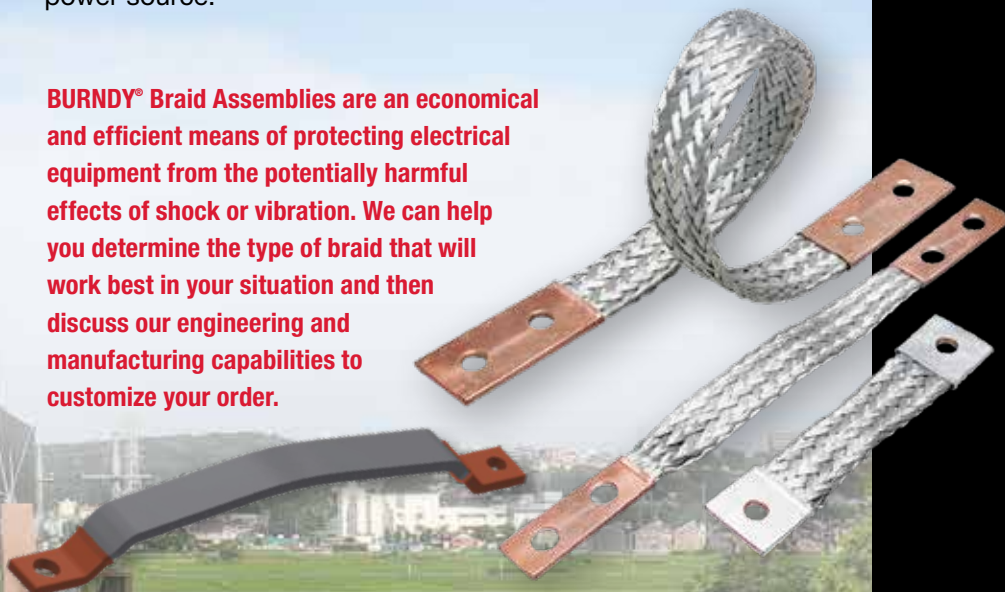
thermOweld® EXOTHERMIC

The industry-leading line of exothermic grounding products and accessories is well documented: the

safety of the contained, high-temperature reaction; the irreversible connection; the lack of loosening or corrosion at the weld site; and no need for an outside power source.



BURNDY® Braid Assemblies are an economical and efficient means of protecting electrical equipment from the potentially harmful effects of shock or vibration. We can help you determine the type of braid that will work best in your situation and then discuss our engineering and manufacturing capabilities to customize your order.



TANK TRUCK/ RAILCAR GROUNDING

Air flowing over an object's surface or liquids flowing through a pipe during loading and unloading vehicles/railcars build up a charge. For that voltage to be discharged, the vehicle must be connected to the ground through a copper or steel wire that's attached to an electrode in the ground. Loading/ Unloading procedures during transfers involves connecting the truck or railcar to the Earth (grounding) before any other operations. This system should have circuits that prevent the transfer of the fuel if the ground connection has not been made. BURNDY® has many different options to help discharge static electricity that can build up.





POWERING TRANSPORTATION

Working Together at All Stops of the Journey

Hubbell provides reliable installation products to the rail industry, to keep trains, metros and mass transit networks on track.

MEDIUM & LARGE COMPRESSION TERMINALS & SPLICES

BURNDY® HYDENT™ uninsulated copper and aluminum compression terminals and splices are designed to provide a fast and easy installation.

As part of the BURNDY® Engineered System, HYDENT™ connectors are marked with the wire size and type; die index; color coding; and the proper number and location of crimps. Once properly installed, the BURNDY® connector is embossed with the die number, making it easy to visually inspect. Other plating, tongue angles and narrow tongue widths are available. Contact BURNDY® for information.



BURNDY OFFERS A FULL LINE OF BOTH BLACK AND CLEAR COLD SHRINK PRODUCTS.

Our silicone rubber cold shrink tubing using ripcord technology saves labor and overhead costs while improving safety by eliminating the need for a heat gun or torch. Similar to our clear heat shrink, clear cold shrink tubing provides for visual inspection. These cold-applied splice sealing products offer excellent insulation and moisture proof sealing for in-line cable connector systems or elbow to cable jacket applications.



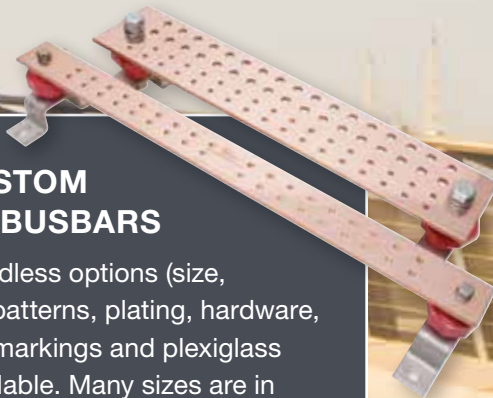
BREAK-AWAYS FOR TRANSFORMER CONNECTORS

UL Listed Submersible Fused Break-Away connector available in In-Line and "Y" type configurations. Range taking from #4 - #14 AWG. Ideal for street lights, parking lots, and other outdoor electrical fixtures.



UL LISTED CUSTOM GROUND AND BUSBARS

We offer virtually endless options (size, configuration, hole patterns, plating, hardware, and more). Special markings and plexiglass covers are also available. Many sizes are in stock and we offer fast turnaround on custom designs. Contact our customer service at quotes@thermoweld.com to get a quote today!



HEAVY DUTY CUSTOM COMPRESSION CONNECTORS

We manufacture copper and aluminum connectors to meet virtually any application. We work with OEM's, transit authorities, and contractors to ensure we match the correct connector design that works best for the application. We offer 45 and 90 degree configurations, custom pad mounting configurations, special plating options, centerform and offset pads and more.



DIRECT BURIAL RATED MULTIPLE TAP CONNECTOR

BURNDY® UNITAP™ rubber insulated, dual rated connectors are for use in networks up to 600V. Suitable in light fixture pole bases in commercial, industrial, or residential markets. Distribution within strip malls, for use in any multi-tenant facility. No taping or heat shrink required.





BURNDY® TOOLING

Work Smart, Work Strong

At BURNDY®, we work every day to provide superior crimping and cutting solutions for our customers. Our goal is to provide the most ergonomic products that allow you to perform your work safely and reliably in accordance with the highest conformance standards in the electrical industry.

THE MARK OF EXCELLENCE

Our dies, connectors and tools, when used together, form a trusted UL Listed connection. We proudly back our UL Listing. We earned it by passing rigorous testing and evaluations that demonstrate compliance with nationally recognized safety standards. **Connections made with the BURNDY® Engineered System are backed with a 5-year warranty.** We stand behind our tools. BURNDY® tools are designed, tested and assembled in the U.S.A. Our PATRIOT® line of battery tools also has a lifetime warranty on the INFINITY DRIVE® transmission.



The BURNDY® UL and CSA Certified Engineering Lab tests our products to many industry and customer standards including UL, CSA, ANSI, IEC, ASTM, IEEE, OSHA and ISO standards.

BURNDY® provides comprehensive training on all of our tools and connector products to ensure that proper, inspectable crimps can be performed with confidence every time.

- **BURNDY® Engineered System Training (BEST) Program**

- Ask your BURNDY® Field Representative about our installer training program
- Installers trained on proper techniques to ensure accurate connector-tool-die selection and installation
- Each installer provided with a dated card

BURNDY® TOOLING SOLUTIONS

- Battery actuated crimping and cutting tools with associated dies (Makita® battery platform)
- Self-contained hydraulic crimping and cutting tools
- Remote hydraulic crimping and cutting tools (i.e., pumps, hoses and heads)
- Wide selection of mechanical and ratchet hand tools

EASILY ACCESSED TOOL REPAIR

- Calibration and repair services for tools and dies
- Localized BURNDY® Tool Service Centers
- Technical application assistance
- Loaner tools



THE NEW PATRIOT® PAT750T3



TRACK:
Map location of crimps



TRACE: Flag individual crimps with comments

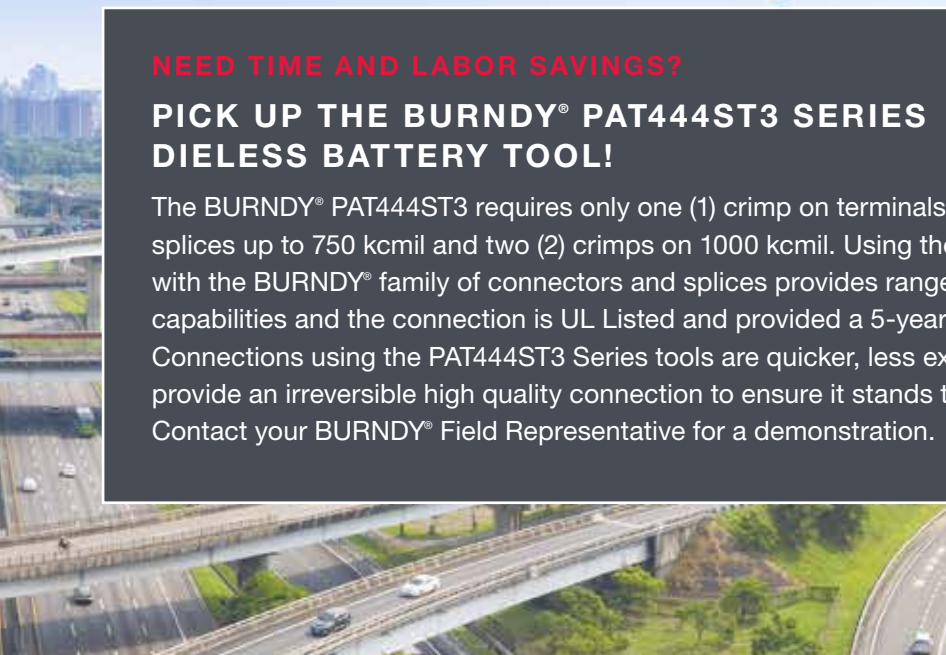


TRANSMIT:
Sync data to the cloud

NEED TIME AND LABOR SAVINGS?

PICK UP THE BURNDY® PAT444ST3 SERIES DIELESS BATTERY TOOL!

The BURNDY® PAT444ST3 requires only one (1) crimp on terminals and splices up to 750 kcmil and two (2) crimps on 1000 kcmil. Using the PAT444ST3 with the BURNDY® family of connectors and splices provides range taking capabilities and the connection is UL Listed and provided a 5-year warranty. Connections using the PAT444ST3 Series tools are quicker, less expensive, and provide an irreversible high quality connection to ensure it stands the test of time. Contact your BURNDY® Field Representative for a demonstration.





CONNECTOR PRODUCTS INC.

Rail Bonding Connections

CPI designs and manufactures products for the Mass Transit market. What began as the leading third rail grounding connector has expanded into overhead clamps for power and communication applications. Capabilities range from reliable mechanical connections through the latest shear-bolt technology. With quality and innovation our products lead the industry.

WEDGE TAP CONNECTORS

Consisting of a spring like "C" body and wedge combined with "shear-head" bolt. They offer a high performance connection that has low resistance, durable and easy to install. The spring body of the connector will flex and maintain a constant force as thermal cycling causes conductors to expand and contract.



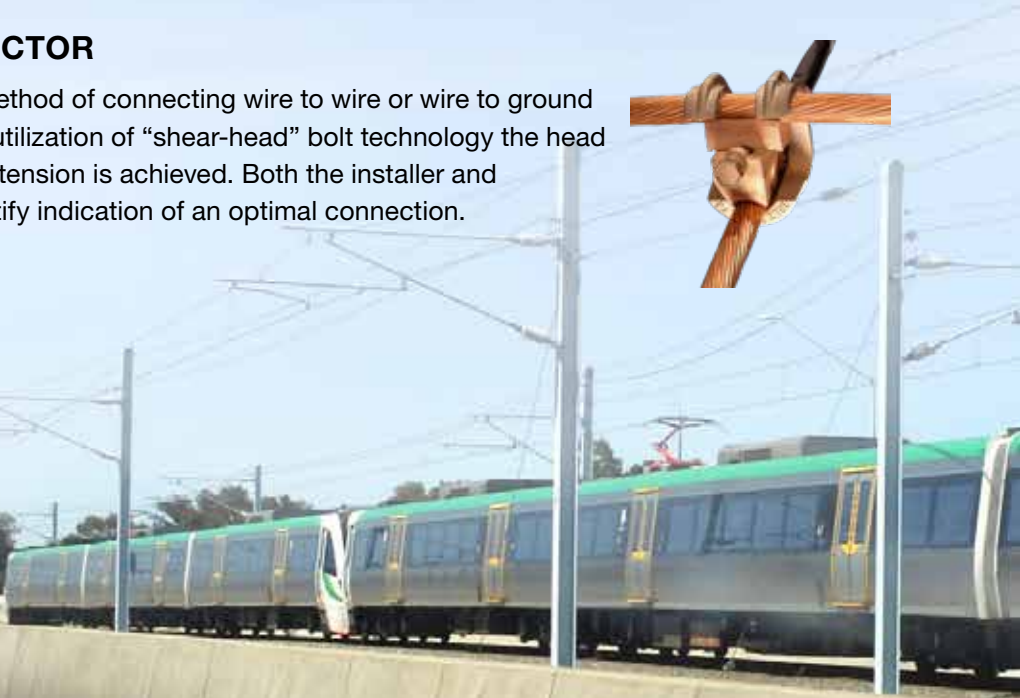
STIRRUP CONNECTORS

Designed for connecting aluminum or copper conductors. Stirrups are designed to protect the main line conductor from damage and arcing as hotline clamps are connected and disconnected.



GROUND GRID CONNECTOR

A fast, safe and dependable method of connecting wire to wire or wire to ground rod connections. Through the utilization of "shear-head" bolt technology the head is properly torqued and spring tension is achieved. Both the installer and inspector have an easy to identify indication of an optimal connection.





ARMORCAST

Enclosures for Transportation

Since 1966, Armorcast Products has been the innovative leader in supplying the transportation industry with secure and protective enclosures. Providing below and above grade ground boxes and vaults of all shapes and sizes. Armorcast continues to be the sought after source for enclosures from numerous utilities, municipalities, contractors, state agencies and communication companies.

PRODUCT FEATURES

- Ease of installation
- High load carrying capacity
- High impact resistance
- Tamper-proof fasteners
- Superior weathering resistance
- Excellent chemical resistance
- Excellent insulating properties for cold climate installations

POLYMER CONCRETE CABLE TROUGH

Armorcast Products cable trough are manufactured using high density polymer concrete material. Cable trough provide railroad, mass transit and power plants with durable and cost effective enclosures for power and fiber optic cables.



For more information
or to locate your local
Hubbell BURNDY Factory
Sales Representative,
visit www.hubbell.com

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