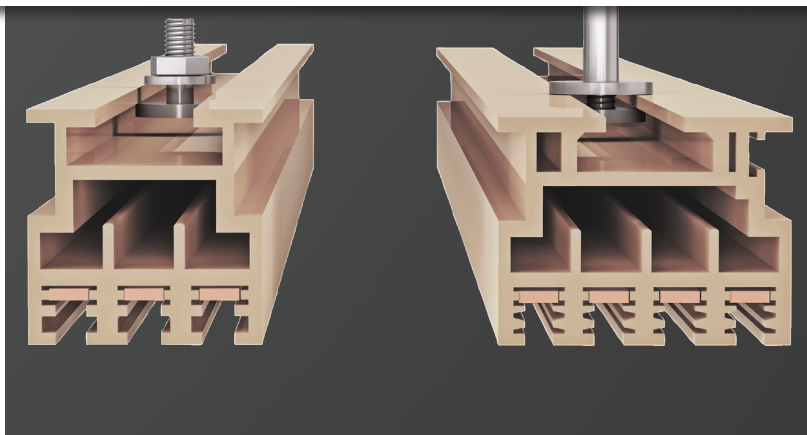
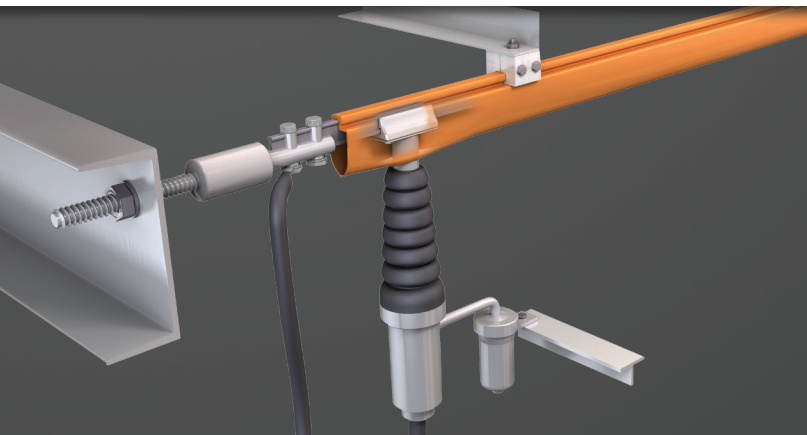


U-S SAFETY TROLLEY

Industrial and Manufacturing
Applications





The background of the entire page is a photograph of a large industrial facility, likely a manufacturing plant or warehouse. A prominent yellow overhead crane is visible at the top of the frame. The interior of the building features a high ceiling with a complex network of white structural beams and a large, translucent skylight that allows natural light to filter in, creating a bright and airy atmosphere. The perspective is looking upwards, emphasizing the scale and height of the structure.

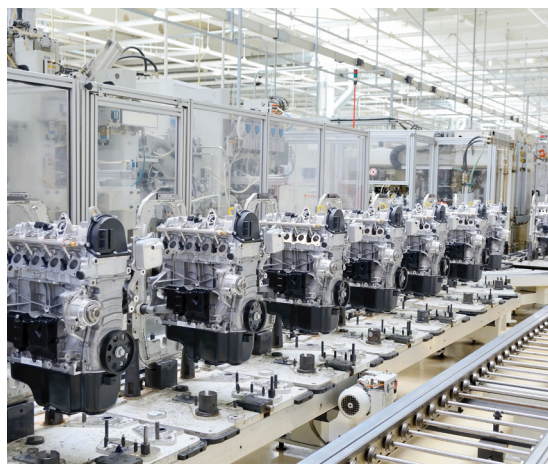
50 Years of Jointless, Durable, Continuous Mobile Power.

More than 50 years ago, U-S Safety Trolley engineers recognized that electrical joints were the most common source of problems in crane electrification. Today, joints remain the number one cause of maintenance and productivity issues. U-S Safety Trolley's four unique no-joint solutions continue to eliminate issues by providing seamless mobile electrification to the industrial and manufacturing sectors.

We invite you to learn more about our strong commitment to developing innovative products, and how we can deliver safe, reliable power to your facility.

U-S SAFETY TROLLEY

U-S Safety Trolley Solution	Continuous Current	Environment	Common Application	System Profile
Span-Guard	250 & 520 Amp	Indoor & Outdoor	Lock & dam installations, crane electrification, steel mills, paper mills, etc.	
Tri-Bar/Four-Bar	100 & 125 Amp	Indoor & Outdoor	Factory assembly lines, monorails, amusement park rides, aircraft hangar doors, crane & hoist electrification, etc.	
PowerGlide	90 Amp	Indoor Only	Aircraft hangar doors, overhead work station and jib crane electrification, etc.	
TightWire	90 Amp	Indoor Only	Light duty and overhead crane electrification, etc.	



Technical Data & System Ratings

Specifications	Span-Guard	Tri-Bar/Four-Bar	PowerGlide	TightWire
Ampacity	250/520	100/125	90	90
Voltage Up To	480V	600V AC or DC	480V AC or DC	600V AC or DC
Rated Short Circuit Capacity	10kAIC	10kAIC	10kAIC	10kAIC
Conductor Type	Copper	Copper	Copper	Copper
Frequency Ratings	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Collector Options	100/200/300/400A	35/70/125A	20/30A	40A
Temperature	-30°F (-34.4°C) to 250°F (121°C)	0°F (-17.7°C) to 130°F (54.4°C)	0°F (-17.7°C) to 135°F (57.2°C)	0°F (-17.7°C) to 135°F (57.2°C)
Housing Material	Flexible insulated PVC	Extruded PVC	Extruded aluminum (serves as 100% ground path)	Extruded PVC
System Weight	250A (copper+cover): 1 ft (.3 m) = 1.2 lbs (.54 kg) 520A (copper+cover): 1 ft (.3 m) = 1.5 lbs (.68 kg)	Tri-Bar: 1 ft (.3 m) = 1.5 lbs (.68 kg) Four-Bar: 1 ft (.3 m) = 1.9 lbs (2.82 kg)	4-poles: 1 ft (.3 m) = 1.45 lbs (2.15 kg)	4-poles: 1 ft (.3 m) = .75 lbs (1.11 kg)
Support Distance	Every 15-25 ft (4.5-7.6 m)	Every 5 ft (4.5 m)	Every 10 ft (3 m)	Every 10 ft (3 m)
Available Lengths	Up to 2000 ft (609 m)	Unlimited	Up to 450 ft (137.1 m)	Up to 450 ft (137.1 m)



SPAN-GUARD

Features

Superior design - continuous copper conductor and self-closing cover - NO ELECTRICAL JOINTS!

Available in 250 & 520 Amp sizes

Most reliable crane electrification system for indoor and outdoor applications

15-25 feet (5-8 meters) hanger spacing, suitable for roof trusses for support

Copper conductor and cover are factory assembled to length specifications, and shipped on a reel

Safe - avoids accidental contact with conductors

Optional green color coded hangers to easily identify ground conductors

Unsurpassed Durability

Heavy duty design and construction allow it to take abuses that other systems could not

Sustains high-wear applications and severe outdoor weather and temperatures

Easy Installation & Maintenance

Fewer parts, allowing for faster installation up-front, and less maintenance in the future

Advanced manufacturing methods make it possible to ship the conductor and cover in coil form to your exact length requirements

Span-Guard was the first continuous, joint-free electric conductor bar introduced. Span-Guard is uniquely designed without joints in the copper conductor. The flexible and fully-enclosed insulated cover provides the most reliable, highest quality conductor system on the market. The jointless conductor is ideal for cranes, hoists, and moving equipment where problems and downtime cannot be tolerated.

Capable of running joint-free at lengths up to 2,000 feet (610 meters), Span-Guard eliminates the power loss and overheating associated with the unreliable electrical joints of other heavy industrial power systems.

Advantages of Span-Guard:

- Eliminates the most common source of crane electrification problems: electrical joints
- Installs faster - 50% less time than jointed conductor bar systems
- Under tension - no expansion joints required
- Virtually maintenance free
- Corrosion resistant in harsh environments
- CSA approved

Span-Guard

PERFECT FOR

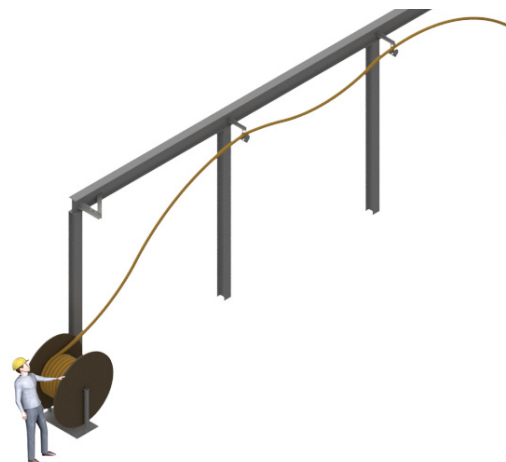
Crane Electrification

Lock & Dam Installations

Steel Mills & Paper Mills

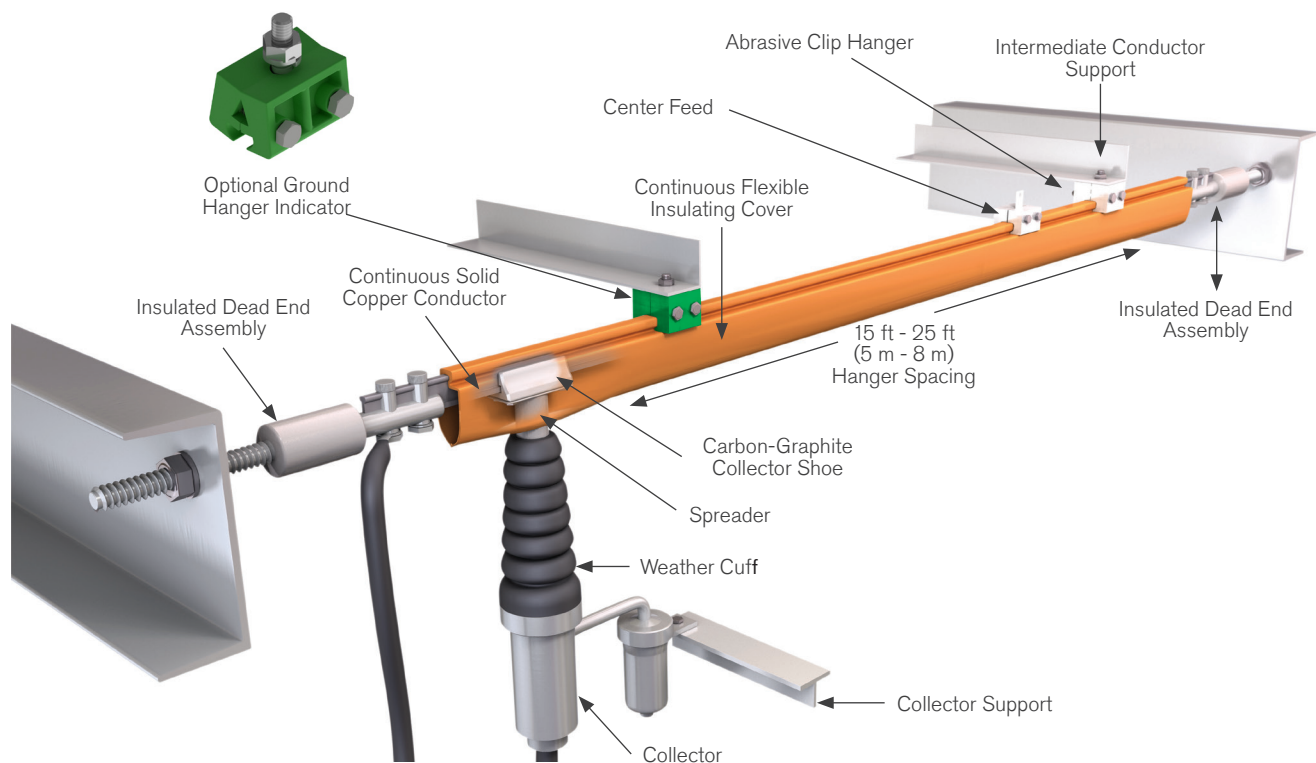
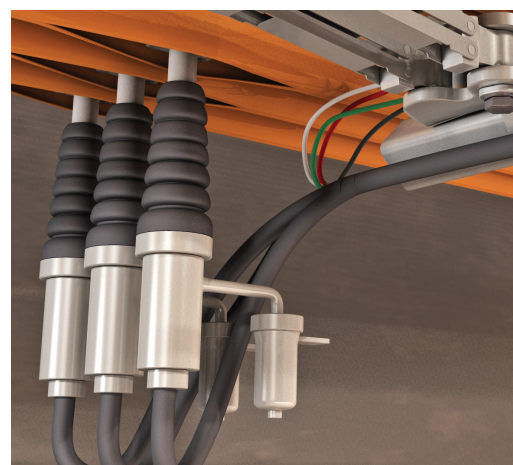
Chemical Plants

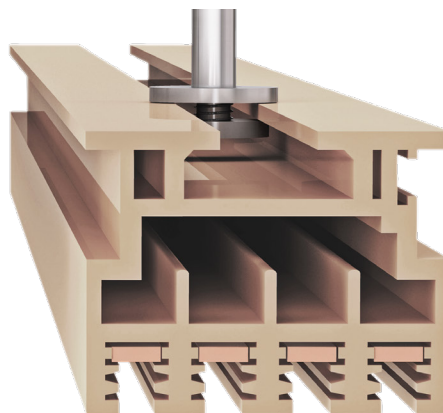
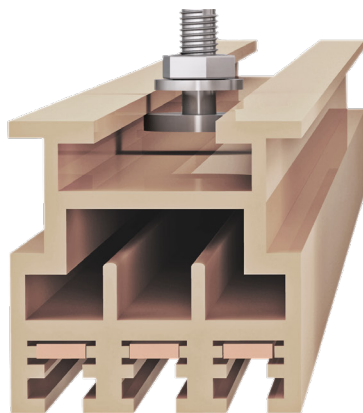
Industrial/Manufacturing Environments



100, 200, 300 & 400 Amp Collector

Spring-loaded collectors use a carbon-graphite shoe, making them more reliable and less costly to maintain than wheel-based trolley systems. The collectors automatically compensate for up-and-down and side-to-side misalignments between the trolley electrification bars and the crane runway.





TRI-BAR/FOUR-BAR

Features

Joint-free with the ability to be factory shaped into curves, ovals, and loops

Available in 100 & 125 Amp sizes

Rated to withstand both inside and outside environments

Custom systems are shipped for simple assembly and installation

Simple and straightforward installation and maintenance

Reduced hang-ups and derailments

Joint-Free Design

Continuous, joint-free electrical conductors for the entire length of the run - NO ELECTRICAL JOINTS

One-piece copper conductors are cut to each job requirement and shipped in a coil

Hassle-Free Crane Electrification

Can extend for hundreds of feet or meters using continuous copper conductors

Can be shaped to specifications and modified with switches, isolated zones, and disengagable trolleys

Eliminates issues related to loose joints, expansion, misalignment, fitted steel bars, etc.

Tri-Bar/Four-Bar continuous conductor bar systems have been a long-time favorite among our customers. The joint-free construction, easy installation and maintenance, and custom fabrications make this system the sensible choice in electric trolley bar systems.

When U-S Safety Trolley set out to design an electric trolley system, we kept two things in mind. *First* - most problems with mobile electrification arise at the conductor joints. *Second* - on trolley systems those problems, and even extended routine maintenance, create downtime. That costs customers money. We eliminated the conductor joints, simplified installation, and created the Tri-Bar/Four-Bar electric trolley product line.

Advantages of Tri-Bar/Four-Bar:

- Eliminates the threats that come with jointed systems, including loose, expanding and overheating joints
- Installs faster - 50% less time than jointed conductor bar systems
- Virtually maintenance free
- UL and CSA listed

Tri-Bar/Four-Bar

PERFECT FOR

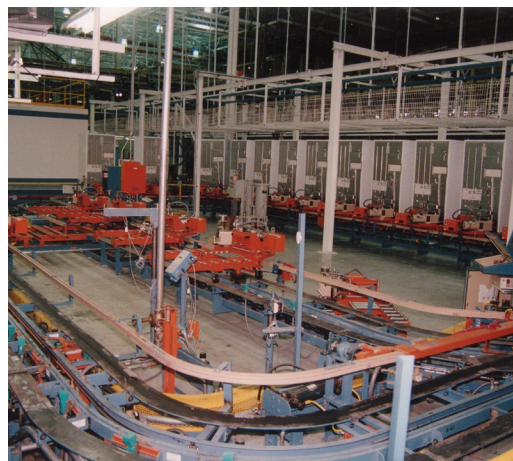
Crane Electrification

Assembly Lines (with hipot testing)

Cutting Tables and Sewing Lines (garment industry)

Hangar Doors

Monorails and Amusement Park Rides



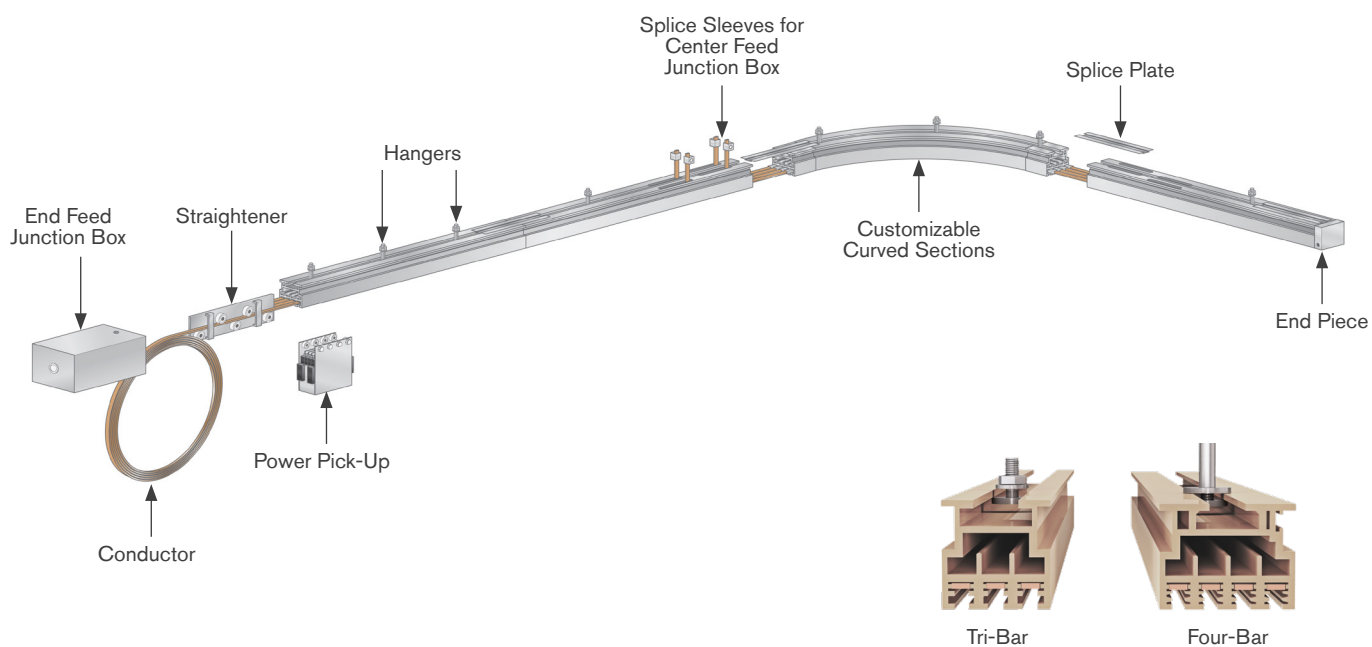
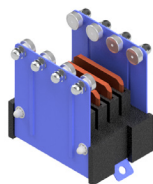
35, 70 & 125 Amp Collectors

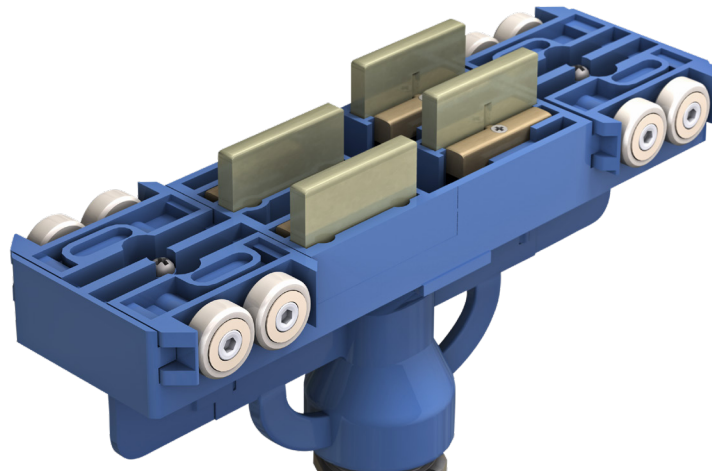
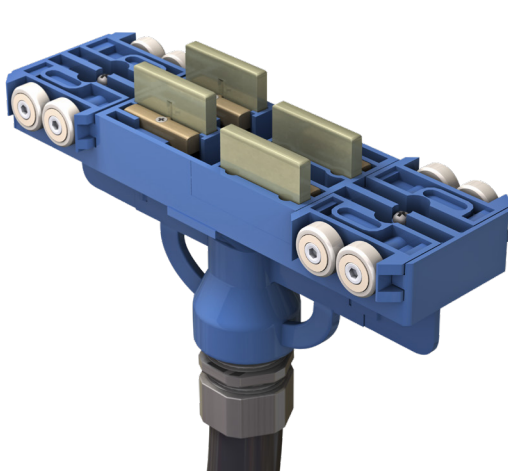
The spring loaded durable design is optimal for moving trolleys.



15, 30 & 50 Amp Power Pickups

This self-supported design has a built-in internal wiring box area. The unit rolls on bearings captive on the track. It also has fused J-Box options available.





POWERGLIDE

Features

Trolley with retractable wheels that mounts and dismounts anywhere with no tools

Available in 90 Amps

Meets most crane needs and is right-sized for hoists, monorails, and small cranes

Continuous solid copper, joint-free conductors, supplied in a roll

A single-piece insulator containing four conductors

Super compact and lightweight

Light weight aluminum housing

Sealing strips on housing to protect electrical parts from damaging debris

PowerGlide is a patented trolley system with retractable wheels that allows you to insert or remove the trolley anywhere along the conductor run. No more trap doors at the end of the electrical conductor run, or bending the bottom of the box track and forcing the trolley out. Just retract the trolley wheels for easy removal and inspection!

The 90 amp rating means that PowerGlide will fit most cranes, hoists, and monorails while still keeping a compact, lightweight design for easy installation. The aluminum housing and optional closure strip help to keep dirt and grime from any environment out of the power path.

Advantages of PowerGlide:

- Fast and easy to install
- Installation savings
- Maximum reliability
- Virtually maintenance free

PowerGlide

PERFECT FOR

Overhead Work Stations

Jib Crane Electrification

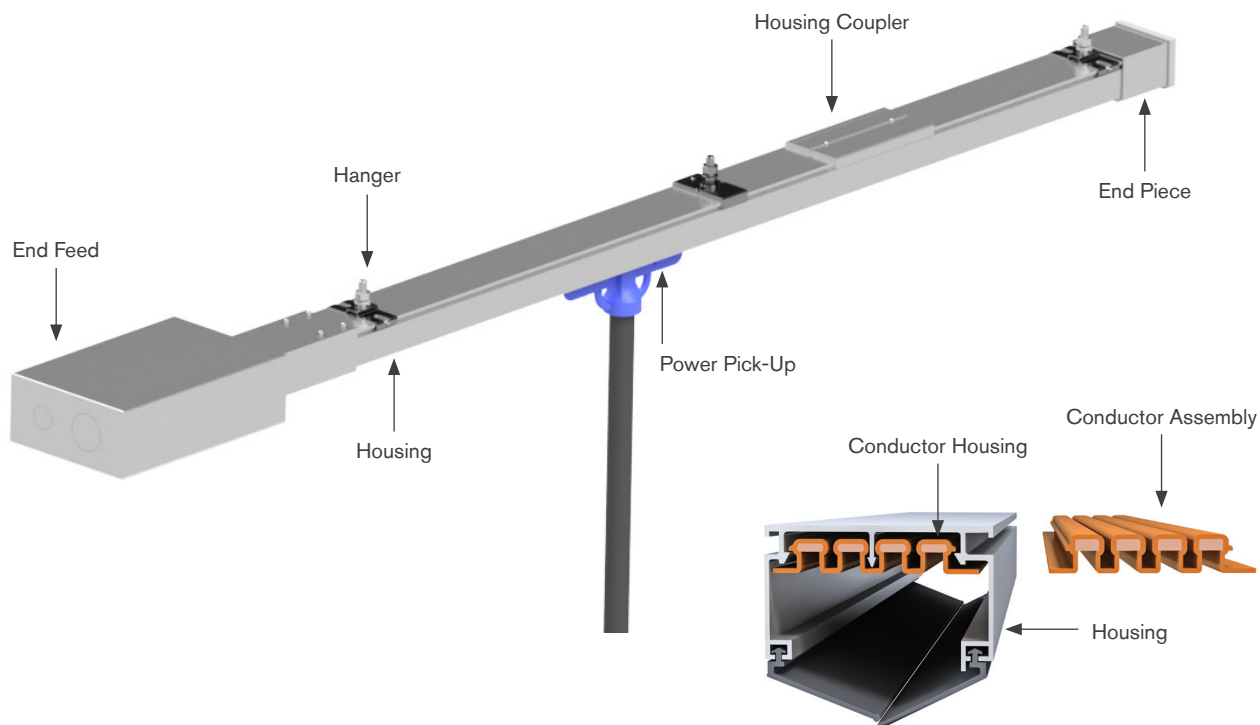
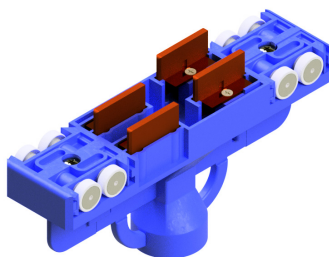
Aircraft Hangar Doors

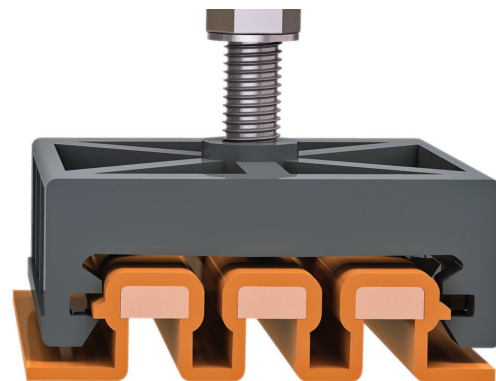
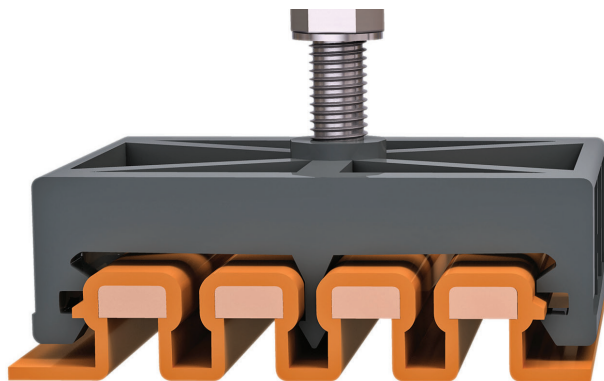
Industrial/Manufacturing Environments



20 & 30 Amp Collector

This patented trolley design collector has retractable wheels that allow it to be easily installed anywhere along the housing. It is also quick and easy to remove for maintenance.





TIGHTWIRE

Features

Continuous, joint-free conductors, shipped on a roll

Available in 90 Amps

Meets most crane needs and is right-sized for hoists, monorails, and small cranes

A single-piece preassembled PVC insulator containing four conductors

Solid copper conductors

Individual heavy-duty springs on all-thread rods on end-support brackets

Super compact and lightweight

Ideal for both main power and control lines

10 feet (3 meters) spacing between hangers reduces number of supports

TightWire is a continuous joint-free electrical conductor system that comes supplied on a portable roll. TightWire uses a single piece insulator containing 4 solid copper conductors. The system is compact and light weight, which makes it fast and easy to install. Spring tension is applied from the end assemblies which keep the system strong and straight. TightWire speeds up installation with its one-piece design. The assembly is supplied on a roll with no joints, to the exact total length needed for each project. The key to larger profits with TightWire is in labor savings. The time and cost of installing mounting brackets and hangers is cut in half.

Advantages of TightWire:

- Fast and easy to install
- Installation savings
- Maximum reliability
- Virtually maintenance free

TightWire

PERFECT FOR

Light duty & overhead crane electrification

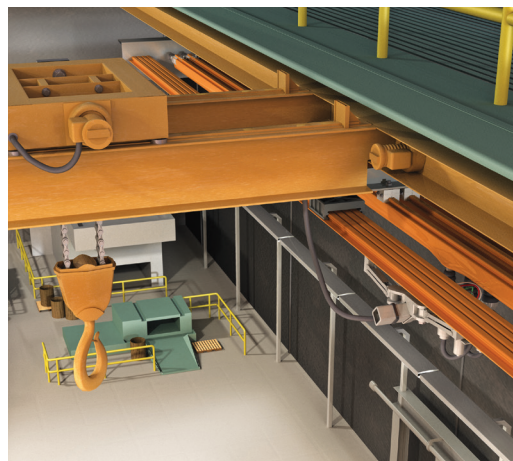
Industrial/manufacturing environments

Hoist Applications

Transfer Cars

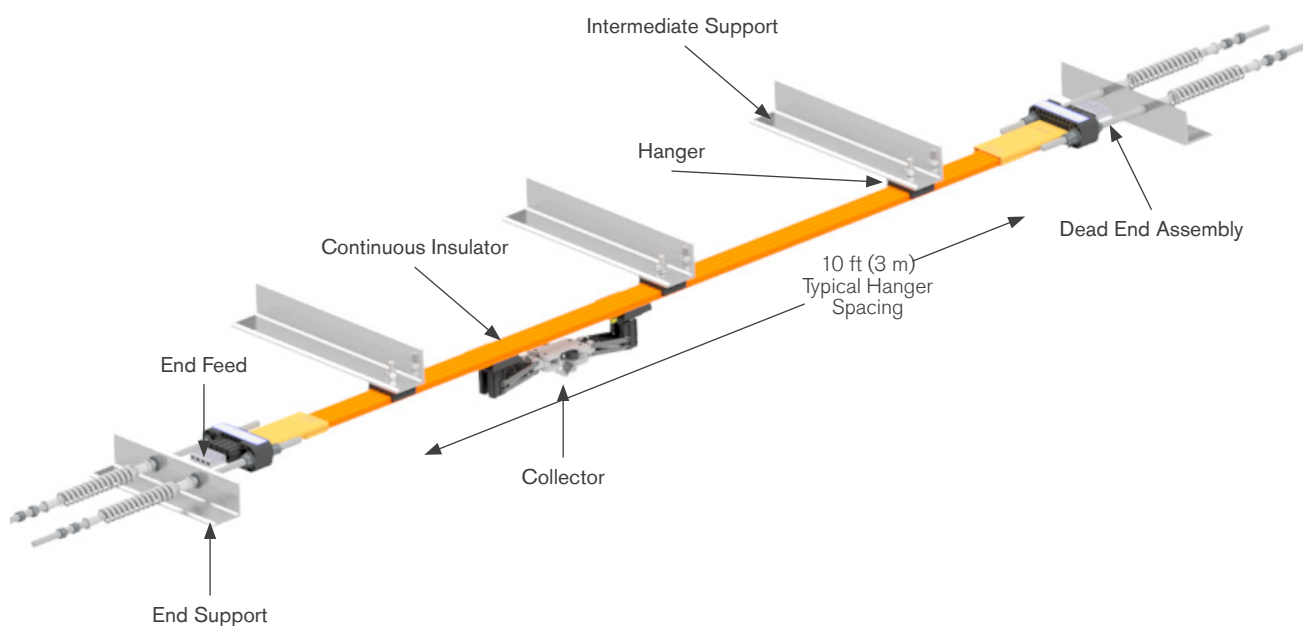
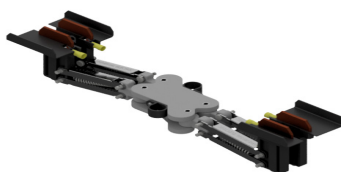
Automated Storage

Retrieval Cranes



40 Amp Collector

This collector features spring loaded arms for reliable connection. The rugged design is built to accommodate misalignments.



UNIVERSAL

GLOBAL SERVICES

U-S Safety Trolley certified technicians have the knowledge and expertise to ensure that your system is functioning at a best-in-class level.

AVAILABLE SERVICES

On-site system training

On-site U-S Safety Trolley installation support

System startup and certification

Extended warranties and enhanced service plans

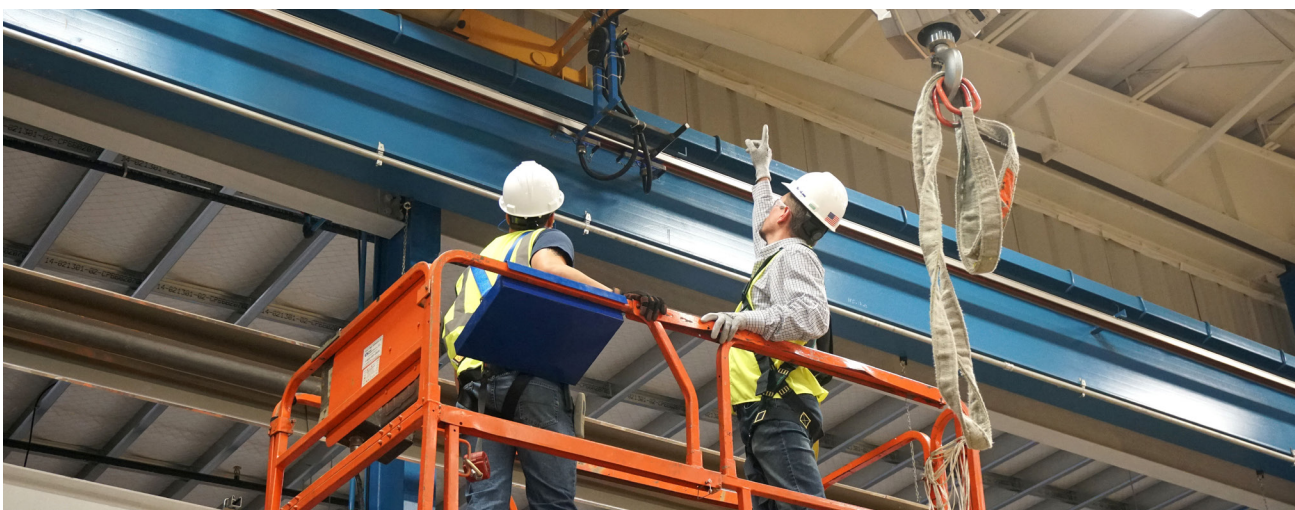
Arch flash engineering studies

Thermal imaging and reporting



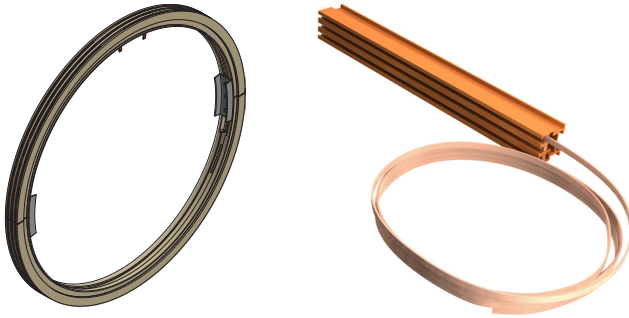
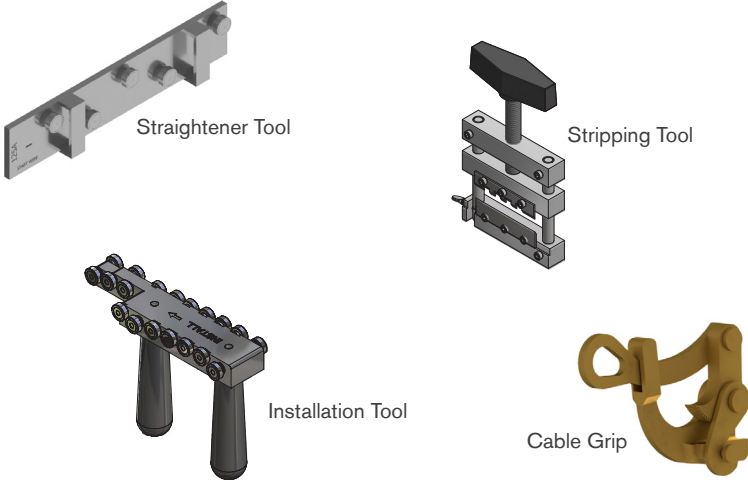
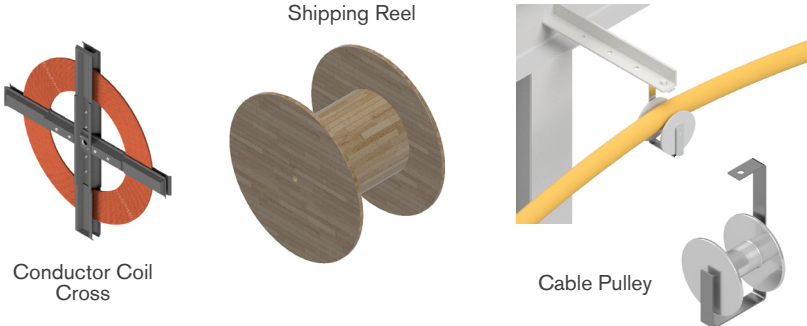
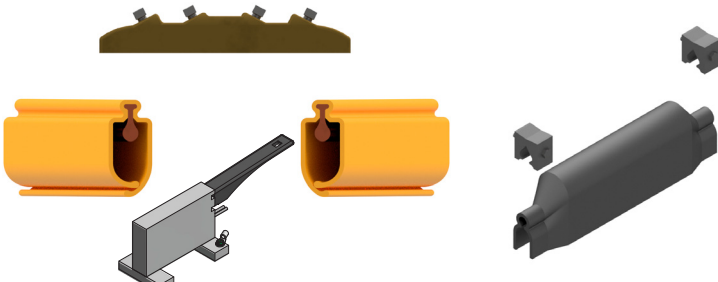
For more information on service offerings, ask your U-S Safety Trolley Sales Representative or download the detailed Statement of Work documents at:

<http://downloads.uecorp.com/services/>
or contact service@uecorp.com



Special Applications & Added Value

U-S Safety Trolley Parts & Accessories

Application	Description	Part Drawings
Customized Systems Engineering and manufacturing expertise to design and build complex curvatures and shapes, according to customer specifications.	Curved Systems Factory designed and installed components to enable easy field installation of any length and degree: 90 and 180 degree, radius of 18" (450 mm) or more, "S" curves, curve-straight, horizontal/vertical, angle cut.	
Installation Tools Proprietary and unique installation tools designed to assist you to perform a faster, proper installation.	Straightener Tool Tri-Bar/Four-Bar systems: recommended for 100 ft (40 m) or longer conductors. Installation Tool PowerGlide: Used to snap the insulator-copper into the housing for easy installation. Stripping Tool PowerGlide and TightWire Cable Grip Spanguard: Used to grip and pull each conductor into tension.	
Deposit Items Facilitate seamless transportation and shipping, and easier installation. Items are fully refundable upon return.	Conductor Coil Cross Tri-Bar/Four-Bar Shipping Reel Span-Guard Cable Pulley Span-Guard: to allow easier positioning and displacement of conductor and insulated cover.	
Repair Kits Designed to easily repair a damaged insulation section and/or to add an additional section to an existing system.	Repair Kit Includes all necessary components to easily field repair and/or replace an insulation cover section and to splice (2) conductors.	

*All accessories may not be available for all U-S Safety Trolley systems.

Universal Electric Corporation (UEC), the manufacturer of U-S Safety Trolley, has been a leader in power distribution since 1924. The company's founders led the way for many new technologies in the power distribution equipment industry. Today, this family tradition of innovation continues to pave the way for safer, more innovative and more reliable electrical power distribution systems. Visit www.USSafetyTrolley.com for your flexible power solutions.



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