

PRODUCT SELECTION GUIDE

INTRODUCTION

For more than 60 years, Spanguard Corporation – formerly known as U-S Safety Trolley – has been a leader in customizable, flexible power distribution for industrial applications. Recognizing that electrical joints were the most common source of failure in crane electrification, our engineers developed the unique no-joint conductor solution – providing clear advantages to meet the demands of industry:

- Eliminates downtime caused by joint-related issues
- Installs in significantly less time than jointed conductor bar systems
- Operates under tension – no expansion joints required
 - Virtually maintenance-free
- Corrosion resistant in harsh environments

SPAN-GUARD

Plant managers, engineers, crane operators, and others with extensive crane experience know that electrical joints are the most common source of crane electrification problems. Electrical joints become loose over time, overheat, expand and contract, causing a loss of power and worse. Span-Guard was the first continuous electric conductor bar introduced. Our uniquely designed joint-free copper conductor with patented self-sealing vinyl cover continues to be the most reliable, high quality conductor system on the market. Ideal for cranes, hoists, and moving equipment where problems and the associated downtime cannot be tolerated.

TRI-BAR / FOUR-BAR

Tri-Bar / Four-Bar continuous electrical conductor bar systems have been a longtime favorite among customers. The joint-free construction, easy installation and maintenance, and custom fabrications make the Tri-Bar/Four-Bar the sensible choice in electric trolley bar systems. This product is commonly used in various types of assembly line manufacturing, aircraft hangar doors, amusement park rides, workstations, and monorails.

* Spanguard reserves the right to update its information at any given time. Download the latest version of this guide and other information @ spanguard.net

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SPAN-GUARD

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TRI-BAR / FOUR-BAR

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SPAN-GUARD 2025 SYSTEM SIZING APPLICATION

● WHAT'S DIFFERENT?

For over 60 years, Span-Guard conductor systems were published with nominal ratings of 250A and 520A. These values reflected the conservative engineering practices of the period. The load calculation requirements defined in NFPA 70 (NEC) Article 610 have not changed. What has changed is the convention for publishing conductor capacities. Current industry practice specifies ratings at an assumed ambient temperature of 20 °C, measured over a 9 m (~30 ft) length.

Span-Guard conductors remain unchanged. The adjustment reflects only a shift in rating methodology, not in product design or performance.

● DUTY CYCLE

Span-Guard conductors provide power to equipment with a variety of load spectrum and duty cycles. Very few cranes will utilize a runway conductor branch over a 60% duty cycle. Even cranes used in refuse, magnet or bucket service use the principal energy load, (hoisting up), no more than 50% of the time. Unless the current load of the "second largest motor or group of motors" approaches the running current of the main hoist, there is little chance the load remains above 40% of demand otherwise. As with any other application, a close analysis of your actual configuration and environment will pay great dividends in the end. Call us for assistance, we're always happy to help.

● POWER FEED & LOCATION NUMBER

Splice cover issues. Burned spots on your runway electrification. What you're really seeing is a massive voltage drop problem. We welcome you to contact the factory for proper feed point count and locations to avoid such problems. Power feed location is dependent upon the voltage drop you've allowed in your assumptions. The difference between 3% and 5% almost doubles your allowable run length. Since aluminum and steel systems have voltage drop losses that are 40% - 460% higher than copper, and are often "applied" from a catalog rather than engineered losses, they are often overlooked. Let us engineer your system to avoid any problems.

● DETERMINING LOAD (L)

Calculation of motor loads can be found in NEC 610.14(E). Examples of sizing the system to your crane loads below:

1. For a single crane operating on its own conductor system, use the nameplate full-load ampere rating of the largest motor or group of motors for any single crane function, plus 50% of the nameplate full-load ampere rating of the next largest motor or group of motors.
2. For multiple cranes operating on the same conductor system, use the same method for a single crane for each crane. Add the results and multiply by the appropriate demand factor from Table 610.14(E) to determine the Load (L).

TABLE 610.14 (E)

# OF HOISTS / CRANES	DEMAND FACTOR
2	0.95
3	0.91
4	0.87
5	0.84
6	0.81
7	0.78

● SYSTEM SELECTION CHARTS / CALCS (RES & IMP AT 20°C)

250A SYSTEM	RES 0.211Ω/1000 m IMP 0.225Ω/1000 m				
80.8 mm ² 159.5 kCM	DUTY CYCLE %				
TEMP (C°/F°)	100%	80%	60%	40%	20%
20°/68°	395	440	498	552	602
39°/86°	364	422	478	530	578
40°/104°	330	383	433	480	524
50°/122°	288	334	378	420	458
60°/140°	269	312	354	392	427

* 60% Duty cycle
based on a Qp4/
Kp=0.5/750,000
cycles, or CMAA
Load class/cycles
L3/N3/K=0.7
90° rise

520A SYSTEM	RES 0.088Ω/1000 m IMP 0.203Ω/1000 m				
206.5 mm ² 407.5 kCM	DUTY CYCLE %				
TEMP (C°/F°)	100%	80%	60%	40%	20%
20°/68°	740	816	925	1010	1090
39°/86°	660	783	888	970	1046
40°/104°	520	710	805	879	948
50°/122°	475	620	703	768	828
60°/140°	390	579	657	717	774

HICAP SYSTEM	RES 0.055Ω/1000m IMP 0.186Ω/1000m				
329.3 mm ² 649.9kCM	DUTY CYCLE %				
TEMP (C°/F°)	100%	80%	60%	40%	20%
20°/68°	1350	1510	1693	1845	1950
39°/86°	1200	1450	1625	1770	1872
40°/104°	950	1314	1473	1605	1697
50°/122°	860	1148	1287	1400	1482
60°/140°	650	1072	1202	1310	1385

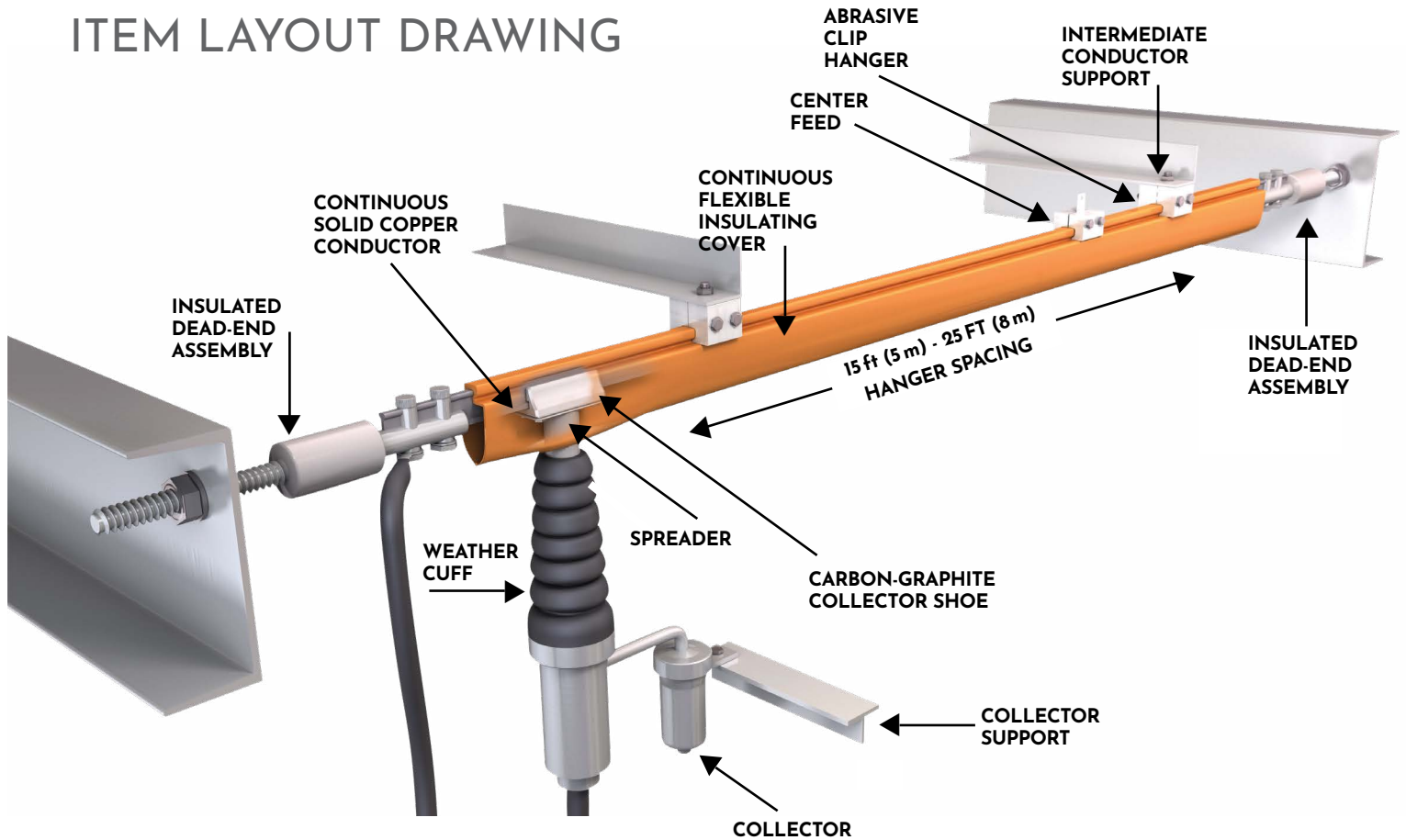


SPAN-GUARD



SPAN-GUARD

ITEM LAYOUT DRAWING

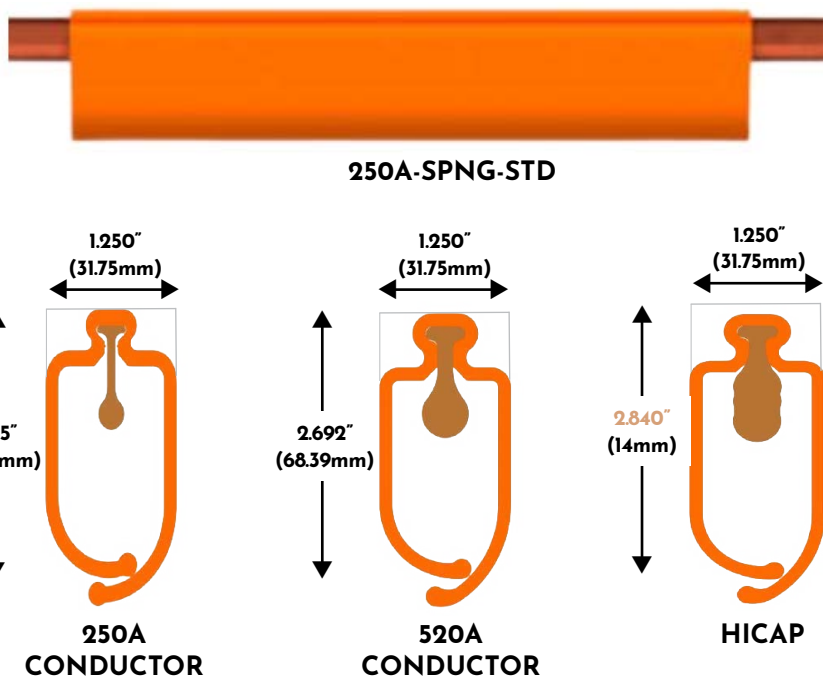


100, 200, 300 & 400 Amp Spring-Loaded Collectors use a carbon graphite shoe, making them more reliable and less costly to maintain than wheel-based trolley systems. The collectors automatically compensate for vertical and horizontal misalignments between the trolley electrification bars and the crane runway.



CONDUCTOR & COVER

Span-Guard consists of a flexible, extruded cover and copper conductor. The flexible cover acts as an insulator, safely preventing contact with any live conductors. Available in a range of ratings, from **270A to 1900A at 600V AC/DC**, Span-Guard also tolerates a wide range of temperatures. The cover and conductor can be supplied in continuous lengths up to **2000 ft (610 m)** long or unlimited length with splices or precut.



CATALOG #	PRODUCT DESCRIPTION	WEIGHT / FT (.3M)
250A-SPNG-STD	250-552 Amp - Solid Copper & Pre-Assembled Cover	.85 lbs (0.37 kg)
250A-SPNG-LT	250-552 Amp - Solid Copper & Pre-Assembled Low Temperature Cover	.85 lbs (0.37 kg)
250A-COPPER	250-552 Amp - Solid Copper - Conductor Only	.4 lbs (0.18 kg)
250A-COVER-STD	250-552 Amp - Standard Cover Only	.45 lbs (0.20 kg)
250A-COVER-LT	250-552 Amp - Low Temperature Cover Only	.2 lbs (0.09 kg)
520A SPNG-STD	520-1010 Amp - Solid Copper & Pre-Assembled Cover	1.5 lbs (0.68 kg)
520A SPNG-LT	520-1010 Amp - Solid Copper & Pre-Assembled Low Temperature Cover	1.5 lbs (0.68 kg)
520A COPPER	520-1010 Amp - Solid Copper - Conductor Only	1.1 lbs (0.50 kg)
520A COVER-STD	520-1010 Amp - Standard Cover Only	.52 lbs (0.24 kg)
520A COVER-LT	520-1010 Amp - Low Temperature Cover Only	.2 lbs (0.09 kg)
HICAP SPNG-LT	1050-1845 Amp - Solid Copper & Pre-Assembled Low Temperature Cover	2.4 lbs (1.09 kg)
HICAP COPPER	1050-1845 Amp - Solid Copper Conductor Only	1.9 lbs (0.86 kg)
HICAP COVER-LT	1050-1845 Amp - Solid Copper Cover Only	.5 lbs (0.18 kg)

DEAD END ASSEMBLY & FEEDS

The **Dead End Assembly** begins and ends each run of Span-Guard. The copper conductor is inserted into the Dead End and clamped using the **(2) u-bolts supplied**. The Dead End Assembly allows for safe mounting and it is used for final tensioning of the system. Stainless Steel options are available for harsh or acidic environments.

Center Feeds provide power and can be installed anywhere on the Span-Guard run. Feeds consist of a **Copper Lug, Insulated Cover and Shrink Tube** to insulate the copper stab after installation of the supply cable.



INSULATED DEAD END ASSEMBLY

CATALOG #	PRODUCT DESCRIPTION	WEIGHT/UNIT
DE-250	250 Amp Conductor Dead End Assembly	3.05 lbs (1.38 kg)
DE-250SS	250 Amp Conductor Dead End Assembly Stainless Steel	3.05 lbs (1.38 kg)
DE-520	520 Amp Conductor Dead End Assembly	4.15 lbs (1.89 kg)
DE-520SS	520 Amp Conductor Dead End Assembly Stainless Steel	4.15 lbs (1.89 kg)



CENTER FEED

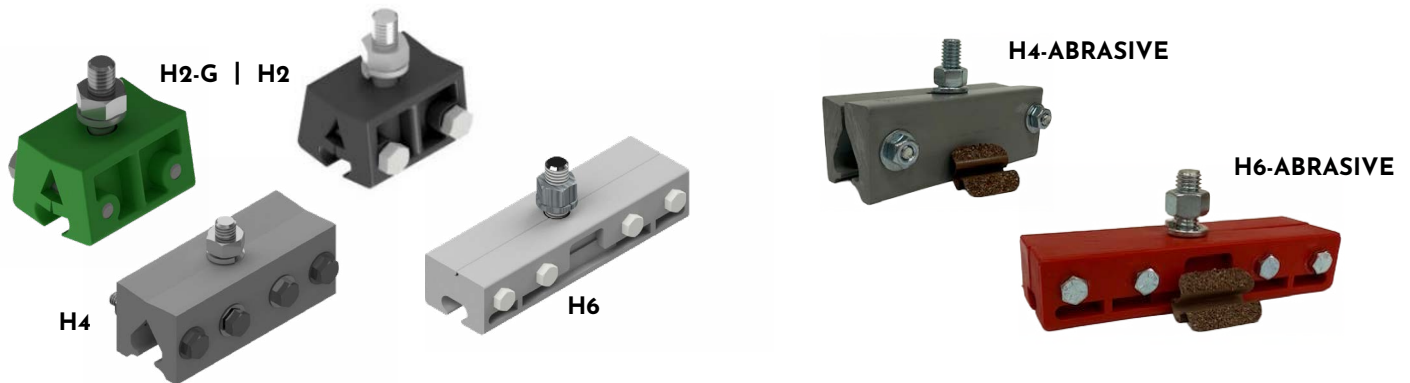
CATALOG #	PRODUCT DESCRIPTION	WEIGHT/UNIT
CF-250	250 Amp Conductor Center Feed	.77 lbs (0.35 kg)
CF-250SS	250 Amp Conductor Center Feed Stainless Steel	.77 lbs (0.35 kg)
CF-520	520 Amp Conductor Center Feed	1.72 lbs (0.78 kg)
CF-520SS	520 Amp Conductor Center Feed Stainless Steel	1.72 lbs (0.78 kg)

HANGERS

Hangers should be used at every support, roughly every 15 ft to 25 ft (5 m to 8 m). H2 and H4 hangers use a 3/8-16 bolt for mounting to supports, while the H6 uses a 1/2-13 bolt.

Our **Insulated Hangers**' unique design is meant to cover and grip, but not squeeze the conductor, to allow for thermal expansion, eliminating the need for any expansion zone. **Acidic Atmosphere Hangers** are also available for areas that come in contact with harsh chemicals.

Abrasive Hangers are mounted where the crane or equipment travels the most. They file the top of the collector shoe as it wears to insure the collector rides smoothly along the conductor rail.



CATALOG #	HANGER PRODUCT DESCRIPTION	WEIGHT/UNIT
H2	250 Amp Conductor Hanger	.2 lbs (0.09 kg)
H2SS	250 Amp Conductor Stainless Steel Acid Atmosphere	.2 lbs (0.09 kg)
H2-G ND	250 Amp Conductor Hanger Acid Atmosphere Green	.2 lbs (0.09 kg)
H2SS-G ND	250 Amp Conductor Stainless Steel Acid Atmosphere Green	.2 lbs (0.09 kg)
H4	250 Amp Conductor Hanger	.65 lbs (0.29 kg)
H4SS	250 Amp Conductor Hanger Stainless Steel	.4 lbs (0.18 kg)
H6	520 Amp Conductor Hanger	.4 lbs (0.18 kg)
H6SS	520 Amp Conductor Stainless Steel Acid Atmosphere	.54 lbs (0.24 kg)
H6-G ND	520 Amp Conductor Hanger Acid Atmosphere Green	.4 lbs (0.18 kg)
H6SS-G ND	520 Amp Conductor Stainless Steel Acid Atmosphere Green	.4 lbs (0.18 kg)
H1	250 Amp 520 Wind Clip	.13 lbs (0.06 kg)
H4-ABRASIVE	250 Amp Conductor Abrasive Hanger	.47 lbs (0.21 kg)
H4SS-ABRASIVE	250 Amp Conductor Stainless Steel Abrasive Hanger	.4 lbs (0.18 kg)
H6-ABRASIVE	520 Amp Conductor Abrasive Hanger	.65 lbs (0.29 kg)
H6SS-ABRASIVE	520 Amp Conductor Stainless Steel Abrasive Hanger	.65 lbs (0.29 kg)
1098	Replacement Clip For H4/H4SS - Abrasive Hanger	.1 lbs (0.06 kg)
2045	Replacement Clip For H6/H6SS - Abrasive Hanger	.1 lbs (0.06 kg)

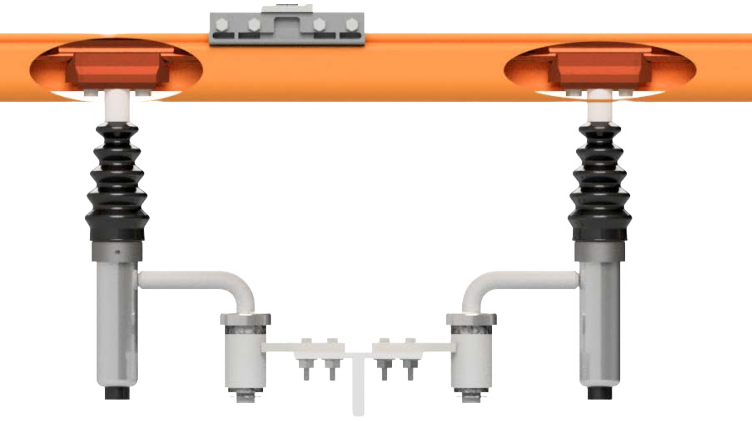
COLLECTOR & COLLECTOR SHOES

Spring-Loaded Collectors pick up power from each of the Span-Guard runs and deliver it to the moving equipment. They can travel 6" (152 mm) vertically or horizontally to adjust for any misalignment and easy installation.

*** Standard Collector Lead is 20" (508 mm) ***

Additional length is available upon request. Stainless Steel, Dual Arm Adaptor and Stainless Steel Arms are available. For custom barrel & arm lengths (eg. 2276, AxBx) consult with factory.

Collector Shoes come pre-installed on Span-Guard Collectors and ordered separately. Riding along the conductor, the collector shoe transfers electricity from the conductor to the equipment. Copper/graphite composition requires no lubrication.



100-SHOE



C100-WC1

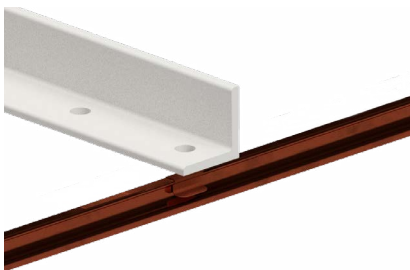
CATALOG #	COLLECTORS * & SHOE ** PRODUCT DESCRIPTION	WEIGHT/UNIT
C100-WC1	100 Amp Collector For 250 Amp Conductor	1.95 lbs (0.88 kg)
C100SS-WC1	100 Amp Collector Stainless Steel For 250 Amp Conductor	1.95 lbs (0.88 kg)
C100HSS-WC1	100 Amp Heated Collector Stainless Steel For 250 Amp Conductor	2.1 lbs (0.95 kg)
C200-WC1	200 Amp Collector For 250 Amp Conduct	2.4 lbs (1.09 kg)
C200SS-WC1	200 Amp Collector Stainless Steel For 250 Amp Conductor	2.4 lbs (1.09 kg)
C300-WC2	300 Amp Collector For 520 Amp Conductor	5.5 lbs (2.49 kg)
C300SS-WC2	300 Amp Collector Stainless Steel For 520 Amp Conductor	5.5 lbs (2.49 kg)
C400-WC2	400 Amp Collector For 520 Amp Conductor	6.35 lbs (2.88 kg)
C400SS-WC2	400 Amp Collector Stainless Steel For 520 Amp Conductor	6.35 lbs (2.88 kg)
DUAL 100/400	Dual Arm Adaptor Plate (bolts to existing collector arm)	1.35 lbs (0.61 kg)
100-SHOE	100 Amp Collector Shoe For 250 Amp Conductor	.20 lbs (0.09 kg)
200-SHOE	200 Amp Collector Shoe For 250 Amp Conductor	.40 lbs (0.18 kg)
400-SHOE	300/400 Amp Collector Shoe For 520 Amp Conductor	.65 lbs (0.29 kg)

**** Add "ABS" to Catalog # for Abrasive Shoes | Add "SER" to Catalog # for Serrated Shoes ****

SUPPORTS

Intermediate Supports are predrilled from the factory to accommodate proper spacing for the conductors. Supports are to be welded in place every 15 to 25 ft (5 to 8 m) for proper support of the Span-Guard system.

End Supports are predrilled from the factory to accommodate proper spacing for the conductors, and should be installed at both ends of a Span-Guard run. End Supports are supplied as a pair (2 each per order), and are welded in place. * **Please specify 3-Hole or 4-Hole Conductor for End Supports.**



INT-SPT-250

INTERMEDIATE CONDUCTOR SUPPORT

CATALOG #	PRODUCT DESCRIPTION	WEIGHT/UNIT
INT-SPT-250	250 Amp Conductor Intermediate Support	2.85 lbs (1.29 kg)
INT-SPT-520	520 Amp Conductor Intermediate Support	4.60 lbs (2.09 kg)



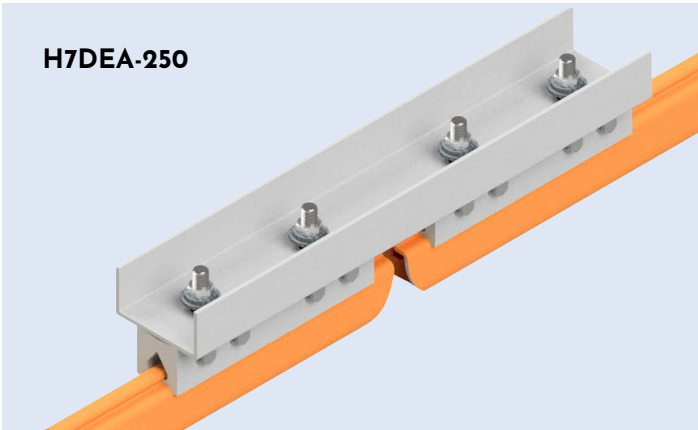
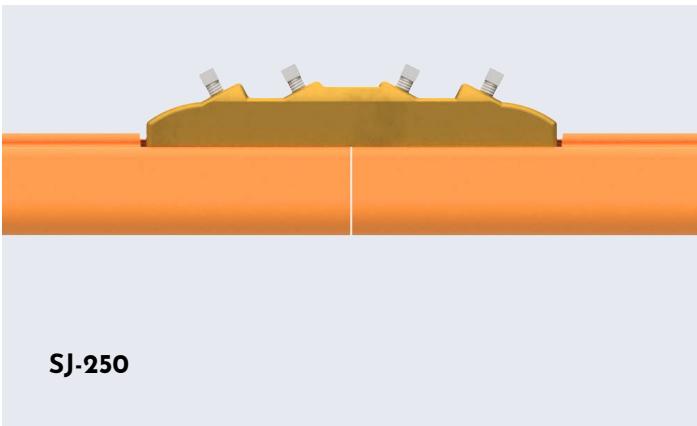
END-SPT-250

END CONDUCTOR SUPPORT

CATALOG #	PRODUCT DESCRIPTION	WEIGHT/UNIT
END-SPT-250	* 250 Amp Conductor End Supports (Pair)	34.30 lbs (15.61 kg)
END-SPT-520	* 520 Amp Conductor End Supports (Pair)	34.42 lbs (15.56 kg)
F1	250A System 4th Ground Conductor Ext Bracket	1.13 lbs (0.51 kg)
F2	520A System 4th Ground Conductor Ext Bracket	1.42 lbs (0.65 kg)

SYSTEM MODIFICATIONS

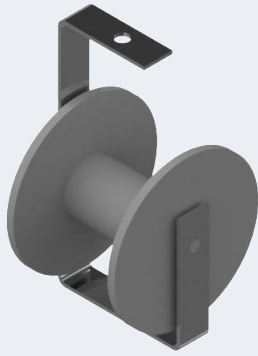
Splice Joints are utilized to extend an existing runway, make repairs, or create a maintenance-isolated zone. Typically used when systems exceed 2000 ft (610 m), they functionally join two conductor/cover pieces to form a continuous piece.



SPLICE JOINT

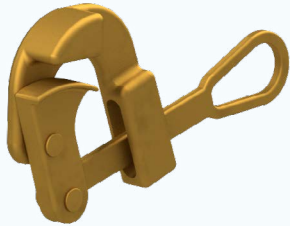
CATALOG #	PRODUCT DESCRIPTION	WEIGHT/UNIT
SJ-250	250 Amp Conductor Splice Joint	1.6 lbs (0.73 kg)
SJ-520	520 Amp Conductor Splice Joint	1.7 lbs (0.77 kg)
H7DEA-250	250 Amp Conductor for Isolation or Maintenance Bay	2 lbs (.90 kg)
H7DEA-520	520 Amp Conductor for Isolation or Maintenance Bay	2 lbs (.90 kg)

PULLEYS are used for installation only. Mounted on the outer hole of each intermediate support, they help guide the Span-Guard during the installation process and are removed once installation is complete. Available in **Aluminum** and **NEW Rubber** options.



DEPOSIT ITEMS

Deposit Items are for temporary use only and can be returned for a full refund.



CABLE GRIP is used to hold and grip the Span-Guard while tensioning the system.



HEATING TOOL KIT is used to splice cover pieces together. Two cover ends are pressed against each side of the heating element, and then vulcanized together for one continuous piece.

REELS are provided for easy shipment and installation.

20" Reel Capacity:

250 Amp Conductor & Cover Lengths < 1200' (365 m)

500 Amp Conductor & Cover Lengths < 900' (274 m)

30" Reel Capacity:

250 Amp Conductor & Cover Lengths < 1201-1800 ft (366-549 m)

500 Amp Conductor & Cover Lengths < 901-1300 ft (274-396 m)



** DEPOSIT ITEMS

CATALOG #	PRODUCT DESCRIPTION	WEIGHT/UNIT
PULLEY	Span-Guard Installation Cable Pulley	.3 lbs (0.14 kg)
HTK-1	Heating Tool Kit	2 lbs (0.91 kg)
GRIP	Cable Grip	3.9 lbs (1.77 kg)
REEL-20	20" Reel (See above for capacity)	200 lbs (91 kg)
REEL-30	30" Reel (See above for capacity)	260 lbs (118 kg)



TRI-BAR | FOUR-BAR



TRI-BAR / FOUR-BAR

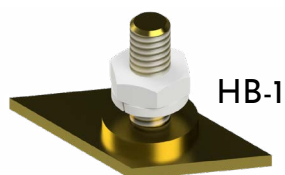
● TEMPERATURE RANGE & EXPANSION

Tri-Bar and Four-Bar systems are recommended for operating temperatures between 0°F (-18°C) & 130°F (54°C). For applications outside this range, consult the factory.

Where temperature variation exceeds 20°F (-7°C), conductor expansion must be considered. A 20 ft (6 m) housing section expands approximately 1/4 in (6.3 mm) per 50 °F (10°C). On crane bridges and runways, install an HB-1 hanger bolt near the center of each 20 ft (6 m) housing section and use SHB-1 sliding hanger bolts at all other locations.

Allow expansion space between each plastic housing section. For example, with an operating temperature range of 30°F (-1°C) to 100°F (38°C), the recommended gap between 20 ft (6 m) housing sections is:

100°F (38°C)	0"
65°F (18°C)	3/16"
30°F (-1°C)	3/8"

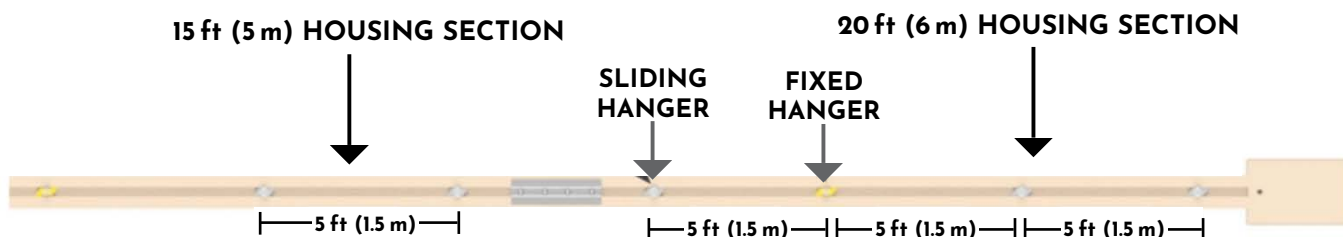


HB-1



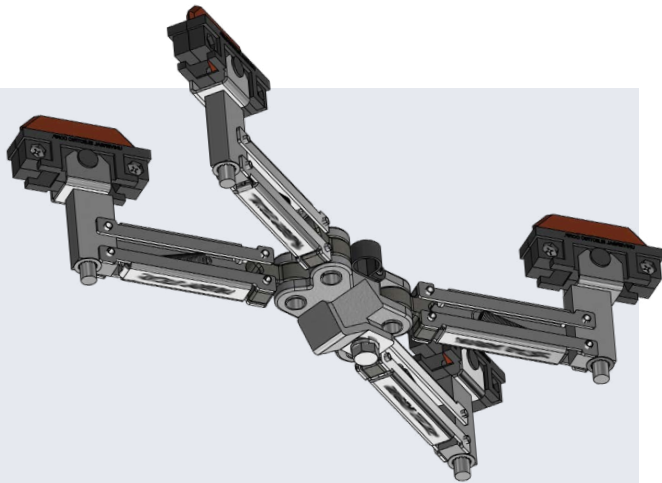
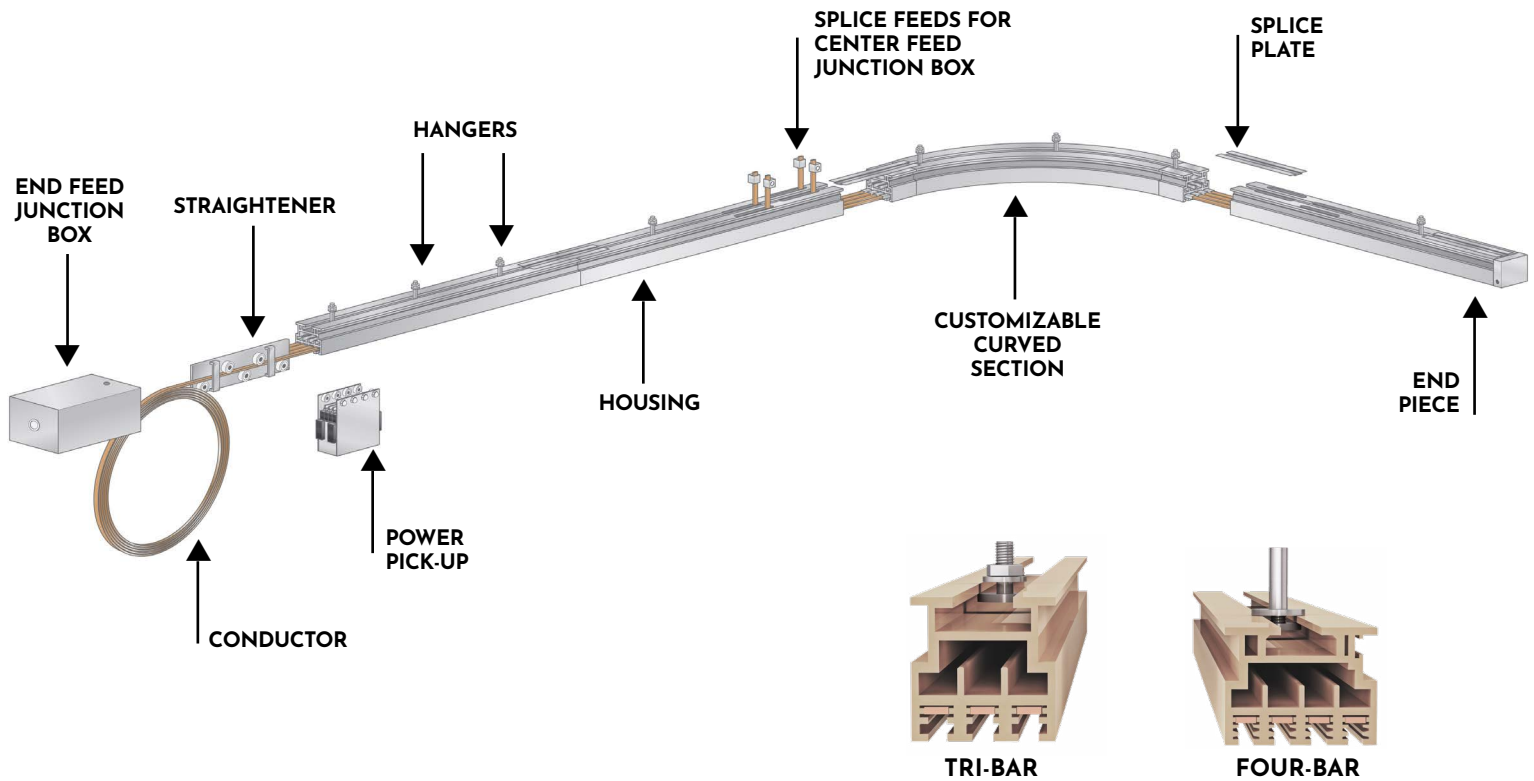
SHB-1

Fixed Hanger Bolt (**HB-1**) per housing section.
Space Sliding Hanger Bolts (**SHB-1**) 5 ft (1.5 m) apart.



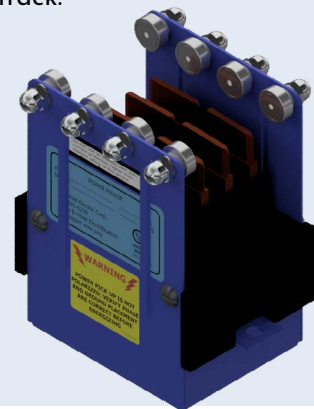
TRI-BAR / FOUR-BAR

SYSTEM LAYOUT DRAWING



35, 70 & 125 Amp Spring Loaded Collectors
durable design is optimal for moving trolleys.

15 & 30 Amp Power Pickups
self-supported design with built-in wiring box area. The unit rolls on bearings captive on the track.



STRAIGHT HOUSING & CONDUCTOR

Housing is supplied in 20 ft (6 m) lengths, with the last section cut as required for correct total system length. Custom lengths available upon request.

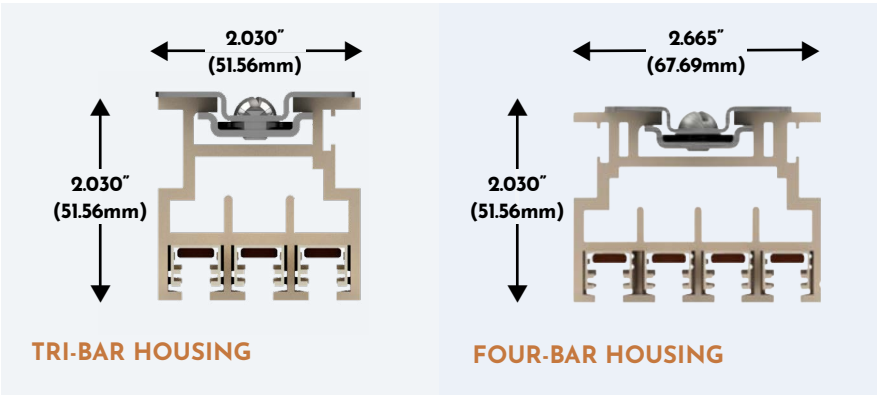
Tri-Bar / Four-Bar Jointless Conductor is available in either 100 or 125 amp copper and comes supplied on a reel. The conductor is fed through the housing channels after the housing structure has been installed and secured in place.



FBHS-XX

INSULATED STRAIGHT HOUSING

CATALOG #	PRODUCT DESCRIPTION	WEIGHT / FT (.3M)
TBHS-XX	Tri-Bar Housing Straight	1.1 lbs (0.50 kg)
FBHS-XX	Four-Bar Housing Straight	1.1 lbs (0.50 kg)



125C

COPPER CONDUCTOR

CATALOG #	PRODUCT DESCRIPTION	WEIGHT / FT (.3M)
125C	125 Amp Copper Conductor	0.22 lbs (0.10 kg)

CURVED HOUSING

Custom Sections can be manufactured in radii as small as 18" (457 mm), customizable to any curve, oval or circular configuration. Copper is pre-installed inside curved housing, ready for field assembly.

UFBC125-072-180-INT1

- U = Universal
- FB = Four-Bar
- C = Curve
- 125 = 125 Amps
- 72 = 72" Inside Radius
- 180 = 180°F Arc
- INT = Internal Polarization
- 1 = Bar Face Down

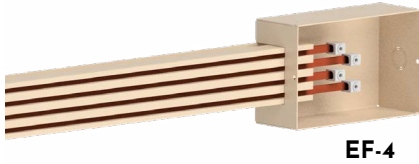
CONFIGURING THE CURVE

SYSTEM	U Universal			
PRODUCT TYPE	TB Tri-Bar		FB Four-Bar	
CURVE	C = Curve			
AMPS	100 100 Amps		125 125 Amps	
INSIDE RADIUS	XXX "INCHES			
ARC	XXX °F			
POLARIZATION	INT Internal	EXT External	TOP Top	BOT Bottom
ORIENTATION	1 = Bar Face Down	2 = Bars Face Out		3 = Bars Face In

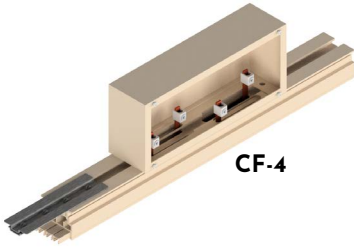
UFBC125-072-90-INT1

UFBC125-072-180-TOP2

POWER FEEDS & END PIECE



EF-4



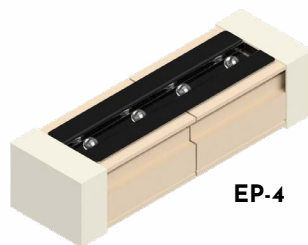
CF-4

End Feeds and Center Feeds provide power to the entire Tri-Bar/Four-Bar system. The **Junction Box** is used to enclose the End Feed or Center Feed connections. The metal box has a removable side with bolts that fasten it to the system. **Appropriate hardware – nuts, washers, lugs, etc. – is also provided.**

End Pieces are installed at the end of every Tri-Bar / Four-Bar run to insulate the conductors and end the run.

END & CENTER FEEDS

CATALOG #	PRODUCT DESCRIPTION	WEIGHT/UNIT
EF-3	Tri-Bar End Feed	3 lbs (1.4 kg)
CF-3	Tri-Bar Center Feed	7 lbs (1.2 kg)
EF-4	Four-Bar End Feed	3 lbs (1.4 kg)
CF-4	Four-Bar Center Feed	7 lbs (1.2 kg)
JBCF-4	Junction Box Center Feed	3.92 lbs (1.78 kg)
JB	Junction Box Only	3.92 lbs (1.78 kg)
JB EF-4	Junction Box with End Feed for Conductor	2.92 lbs (1.32 kg)



EP-4

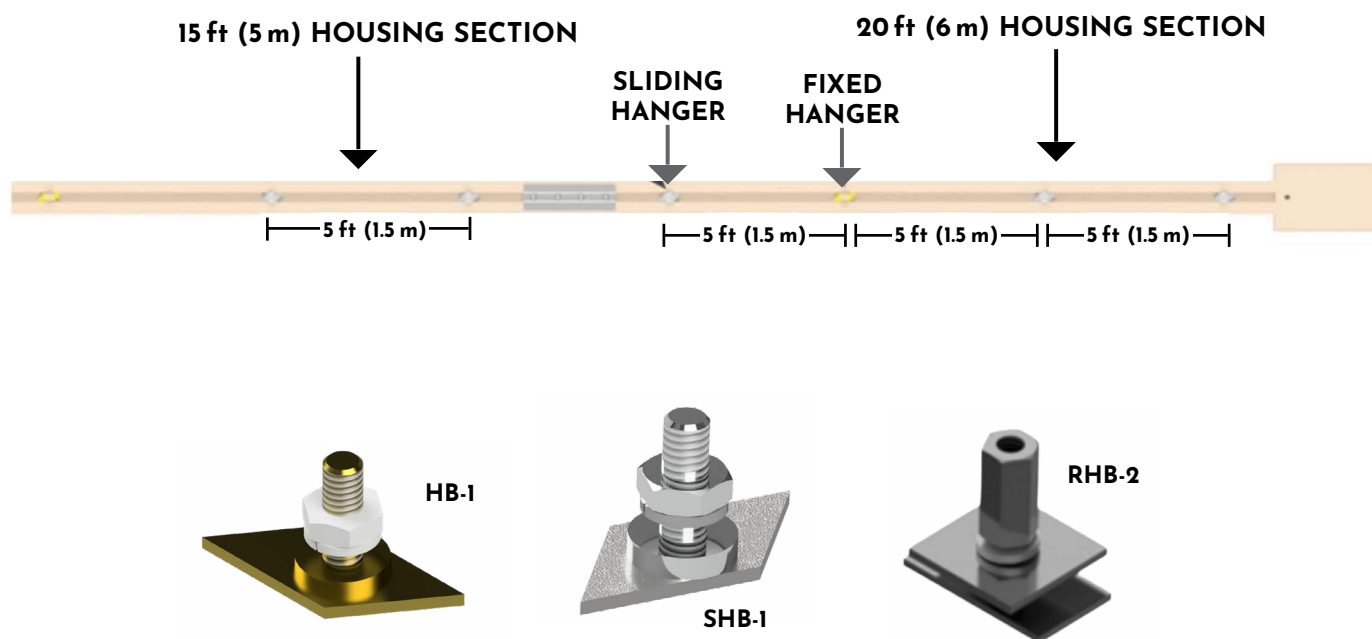
END PIECE

CATALOG #	PRODUCT DESCRIPTION	WEIGHT/UNIT
EP-3	Tri-Bar End Piece	1.0 lbs (0.45 kg)
EP-4	Four-Bar End Piece	1.0 lbs (0.45 kg)
EC-4	Four-Bar End Cap Only	.04 lbs (0.02 kg)

HANGERS / MOUNTING SUPPORT

Hangers are used to support the system. A variety of hangers are available, including types that twist-in or slide in from the end, threaded rod coupler hangers, beam clamps and ceiling bracket hangers.

Fixed Hanger Bolt (HB-1) per housing section. **Sliding Hanger Bolts (SHB-1)** should be spaced 5 ft (1.5 m) apart.



HANGERS

CATALOG #	PRODUCT DESCRIPTION	WEIGHT/UNIT
HB-1	Fixed Hanger Twist-In 5/16" Stud	0.10 lbs (0.04 kg)
SHB-1	Sliding Hanger Twist-In 5/16" Stud	0.10 lbs (0.04 kg)
HB-2	Fixed Hanger 2" (51 mm) Long 5/16" Stud	0.10 lbs (0.04 kg)
SHB-2	Sliding Hanger 2" (51 mm) Long 5/16" Stud	0.10 lbs (0.04 kg)
RHB-2	Rod Mount Hanger 3/8" All-Thread	
BHB-2	Fixed Hanger & Beam Clamp	
BSHB-2	Sliding Hanger & Beam Clamp	



COLLECTOR & SHOES

Self-Supported Power Pickup Collectors use roller bearings to maneuver the track. An internal wiring box is built into the unit and variations of Power Pickups are available for different needs. **Collector shoes are included.**

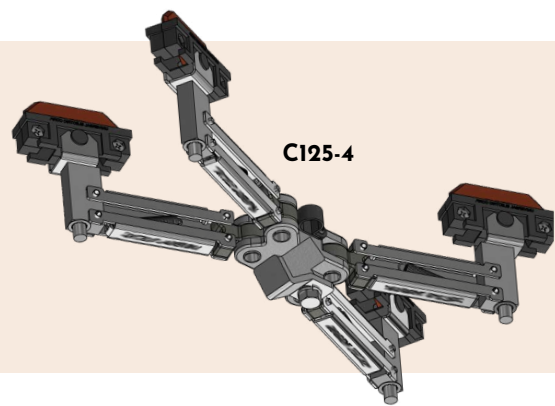
All Tri-Bar / Four-Bar Power Pickups are 600V Maximum.

POWER PICKUP

CATALOG #	PRODUCT DESCRIPTION	RATING	WEIGHT/UNIT
PP3-15-3PD	15 Amp Tri-Bar Power Pickup (Deep Box)	15A	1.5 lbs (0.68 kg)
PP3-30-3PD	30 Amp Tri-Bar Power Pickup (Deep Box)	30A	1.5 lbs (0.68 kg)
PP3-50-3PD	50 Amp Tri-Bar Power Pickup (Deep Box)	50A	1.5 lbs (0.68 kg)
PP4-15-4PD	15 Amp Four-Bar Power Pickup (Deep Box)	15A	2.0 lbs (0.90 kg)
PP4-30-4PD	30 Amp Four-Bar Power Pickup (Deep Box)	30A	2.0 lbs (0.90 kg)
PP4-50-4PD	50 Amp Four-Bar Power Pickup (Deep Box)	50A	2.0 lbs (0.90 kg)
PP4-15-4PD ABS	15 Amp Four-Bar Power Pickup (Deep Box) Abrasive	15A	2.0 lbs (0.90 kg)
PP4-15-4P	15 Amp Four-Bar Power Pickup (Standard Box)	15A	2.1 lbs (0.95 kg)
PP4-30-4P	30 Amp Four-Bar Power Pickup (Standard Box)	30A	2.1 lbs (0.95 kg)
PP4-30-4PD-3F	Fused Power Pick-Up (3) 30 Amp Class CC Fuse Holders (Fuses Not Included)	30A	2.4 lbs (1.10 kg)
PP4-30-4W-4PD	Pre-Wired Power Pick-Up, 10AWG/4-Wire SO Cord (5ft (1.5m) Length)	30A	6.10 lbs (2.8 kg)

COLLECTORS & SHOES

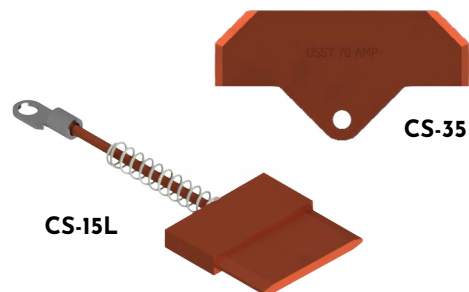
Supported Collectors mount to the equipment using a 1" (25 mm) square bar. It can account for up to 4" (102 mm) horizontal and 4.5" (114 mm) vertical misalignment, in either a 3- or 4-shoe configuration.



CATALOG #	SUPPORTED COLLECTOR PRODUCT DESCRIPTION	RATING	WEIGHT
C35-3	35 Amp Tri-Bar Collector	35A	3 lbs (1.4 kg)
C70-3	70 Amp Tri-Bar Collector	70A	3 lbs (1.4 kg)
C125-3	125 Amp Tri-Bar Collector	125A	3 lbs (1.4 kg)
C35-4	35 Amp Four-Bar Collector	35A	4 lbs (1.8 kg)
C70-4	70 Amp Four-Bar Collector	70A	4 lbs (1.8 kg)
C125-4	125 Amp Four-Bar Collector	125A	4 lbs (1.8 kg)

REPLACEMENT SHOES

Collector Shoes come pre-installed on both the Supported Collector and Power Pickup, but can also be ordered separately. The shoes ride back and forth along the conductor to transfer electricity from the conductor to the crane, or other pieces of equipment being supported. Shoes are made of copper graphite and **require no lubricant**.



CATALOG #	* SHOE PRODUCT DESCRIPTION	RATING
CS-15L	15 Amp Power Pickup Collector Shoe Left	15A
CS-15R	15 Amp Power Pickup Collector Shoe Right	15A
CS-35/70	35/70 Amp Collector Shoe	35/70A
CS-50	50 Amp Collector Shoe	50A
CS-125	125 Amp Collector Shoe Left	125A

* Add "ABS" to Catalog # for Abrasive Shoes *

SPLICE SECTION & ACCESSORIES

Splice Sections are used to extend a system or repair a damaged section. They are supplied in **2 ft (0.6 m)** sections, or can be installed in longer sections if requested.

Additional Tri-Bar / Four-Bar **Accessories & Parts** are also available. Call us for details.



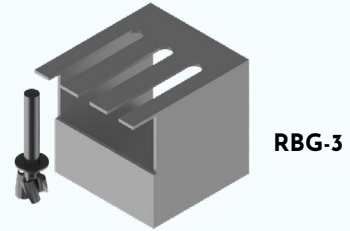
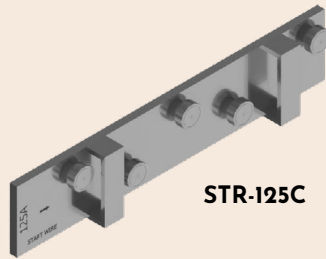
SPLICE SECTION & PARTS

CATALOG #	PRODUCT DESCRIPTION	WEIGHT
SS-3	Tri-Bar Splice Section	3 lbs/ft (1.4 kg/.3 m)
SS-4	Four-Bar Splice Section	4 lbs/ft (1.8 kg/.3 m)
EG-3	Tri-Bar Entrance Guide Attaches to End of Housing when Power Pickup is to Enter & Exit Continually	3.87 lbs (1.76 kg)
EG-4	Four-Bar Entrance Guide Attaches to End of Housing when Power Pickup is to Enter & Exit Continually	3.87 lbs (1.76 kg)
PY-1	Pulling Yoke	.87 lbs (0.39 kg)
SP-1	Splice Plate	.49 lbs (0.22 kg)
IS-1	Insulator Sleeve (Repair Sections Only)	.01 lbs (0.004 kg)

DEPOSIT ITEMS

Deposit Items are for temporary use only and can be returned for a full refund.

Used to straighten copper conductors before insertion into the Tri-Bar / Four-Bar housing, the **STRAIGHTENER TOOL** is helpful with any installation. Highly recommended for conductor lengths of 100 ft (30 m) or more.



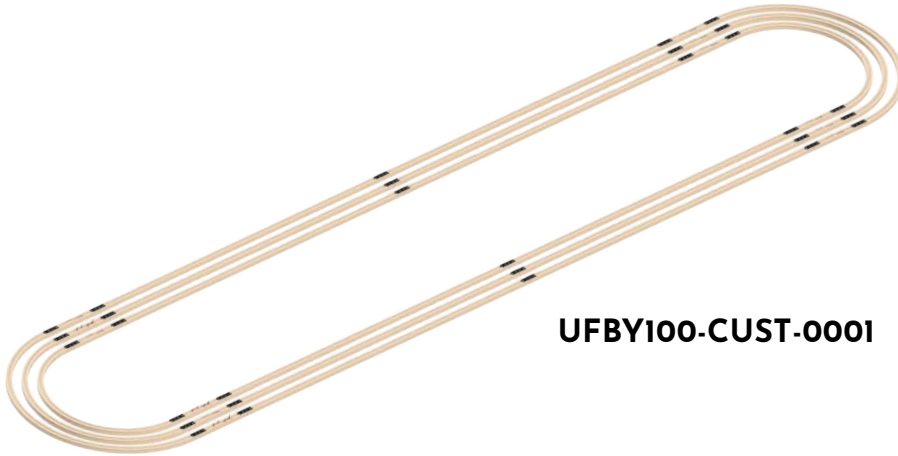
ROUTER BIT GUIDE is used only for field cutting when joining and repairing two damaged sections.

DEPOSIT ITEMS

CATALOG #	PRODUCT DESCRIPTION	WEIGHT/UNIT
STR-125C	125 Amp Copper Straightener Tool	0.6 lbs (0.27 kg)
RBG-3	Tri-Bar Housing Router Bit & Guide	0.4 lbs (0.18 kg)
RBG-4	Four-Bar Housing Router Bit & Guide	0.4 lbs (0.18 kg)

CUSTOM SYSTEM

Custom systems are available on request, including ovals, curves, and other monorail layouts. Each system is supplied with engineered drawings to ensure precise alignment and reliable installation.



UFBY100-CUST-0001

U = Universal
FB = Product Type
Y = System
100 = 100 Amps
CUST = Customer Code
0001 = Variation

CUSTOM SYSTEM

SYSTEM	U Universal	
PRODUCT TYPE	TB Tri-Bar	FB Four-Bar
SYSTEM	Y System	
AMPS	125 125 Amps	
CUSTOMER CODE	Custom Code Assigned to Customer System	
VARIATION	0001 Variation	

CONTACT US



sales@spanguard.net



(570) 948-2627



14 N Main Street, Tioga,
Pennsylvania, USA 16946

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CORPORATION
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