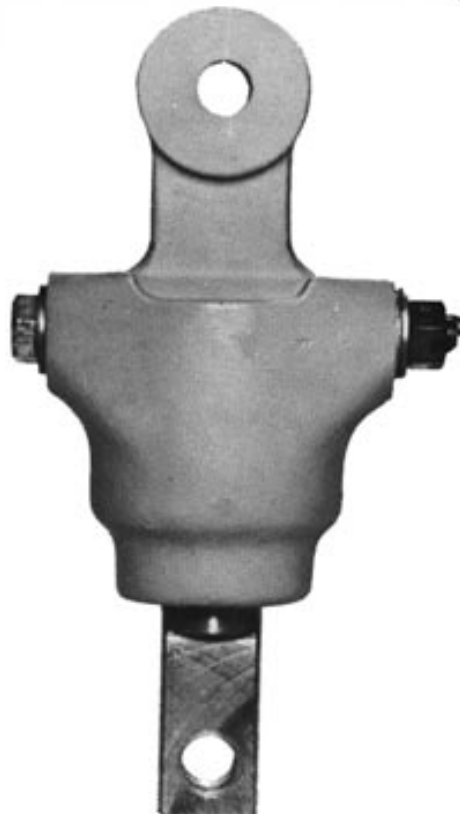
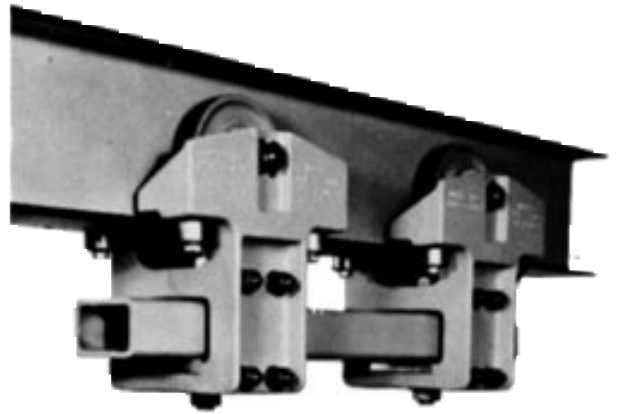




TEL: (517) 546-3220

ACCESSORIES & SPECIALIZED CUSTOM PRODUCTS





Accessory Products

- Low headroom end trucks
- Customized load bars
- Adjustable balance hanger
- Universal swivel assembly
- Counter thrust roller assembly
- Safety clevis assembly
- Insulated load link
- Dual hanging straps
- End stops
- Load links
- Transformer trolley bumper
- Suspension adjustable bar



Model Number

- | | |
|--------------------------------|------------|
| ■ Series MBC-500 | See page 3 |
| ■ Series MBC-1000-2/MBC-1000-3 | See page 4 |
| ■ Series MBC-1500-2/MBC-1500-3 | See page 5 |
| ■ Series MBC-2500 | See page 6 |

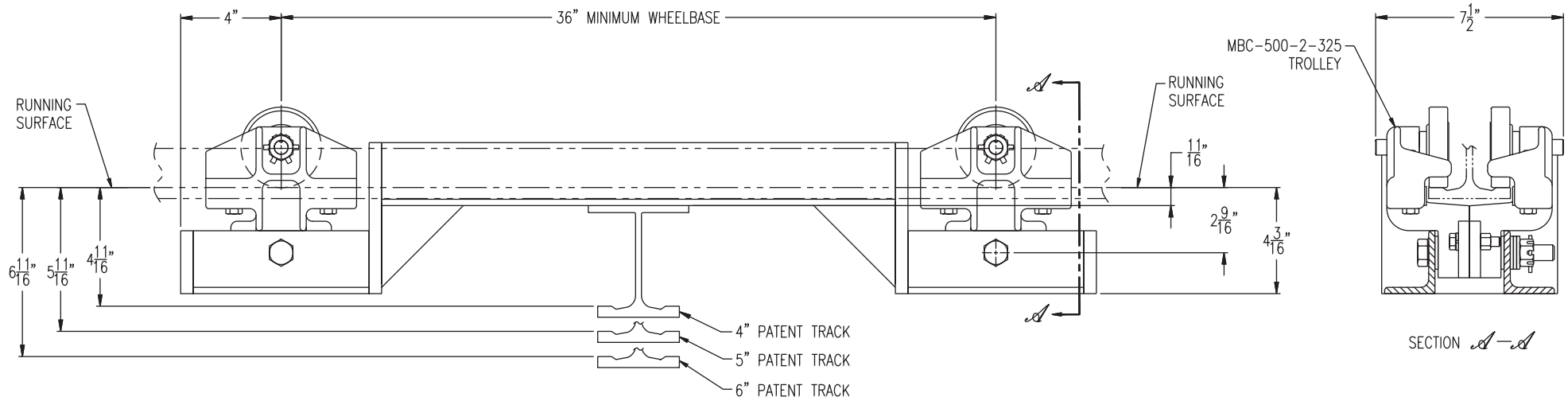
Application

- **Unified** low headroom end trucks are designed for use on bridge cranes that operate in an area of low headroom conditions.
- Or used as individual load bars to your specifications

Features

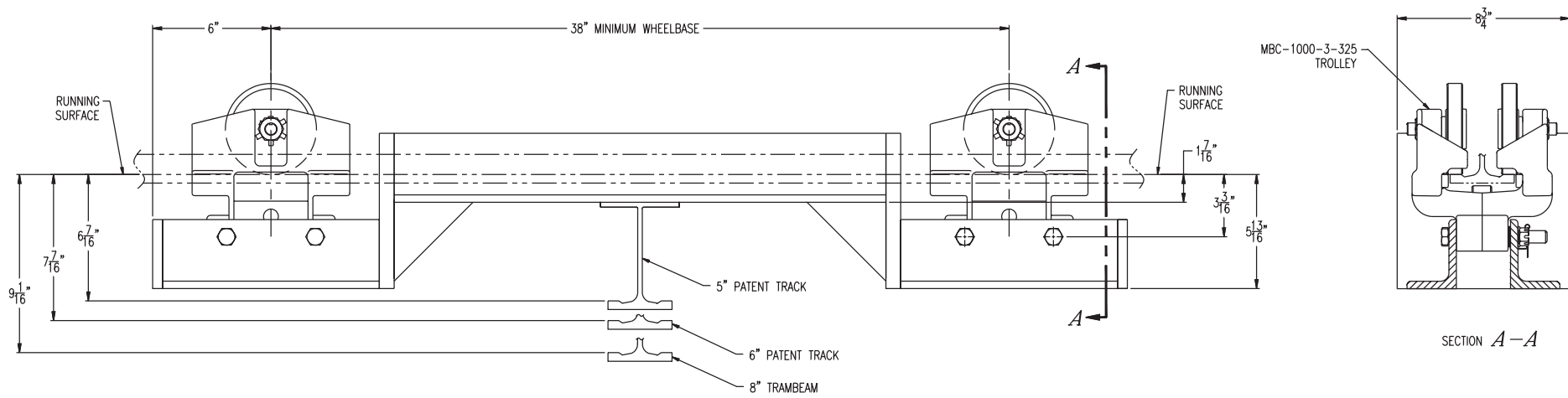
Unified low headroom end trucks are available with five trolley or carrier head adaptations.

- Series BT for bridge cranes with no overhang
- Series MBC-1000 for bridge cranes with no overhang or used in conjunction with MBC-1000-3 series end truck
- Series MBC-1000 for bridge cranes with overhang that requires an end truck with kick-up wheels
- Series AC-1027-1 for bridge cranes that operate on a curved runway or used singly as a load bar for curved monorail
- Series SAC-1020-1 for one end of bridge cranes where runway spans are not parallel



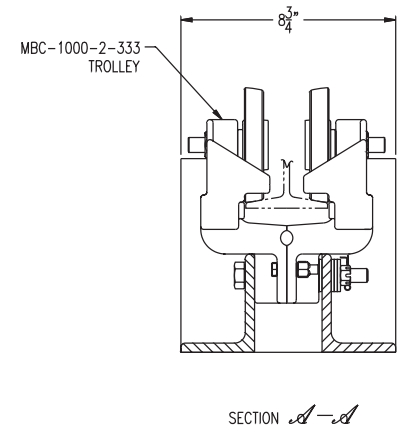
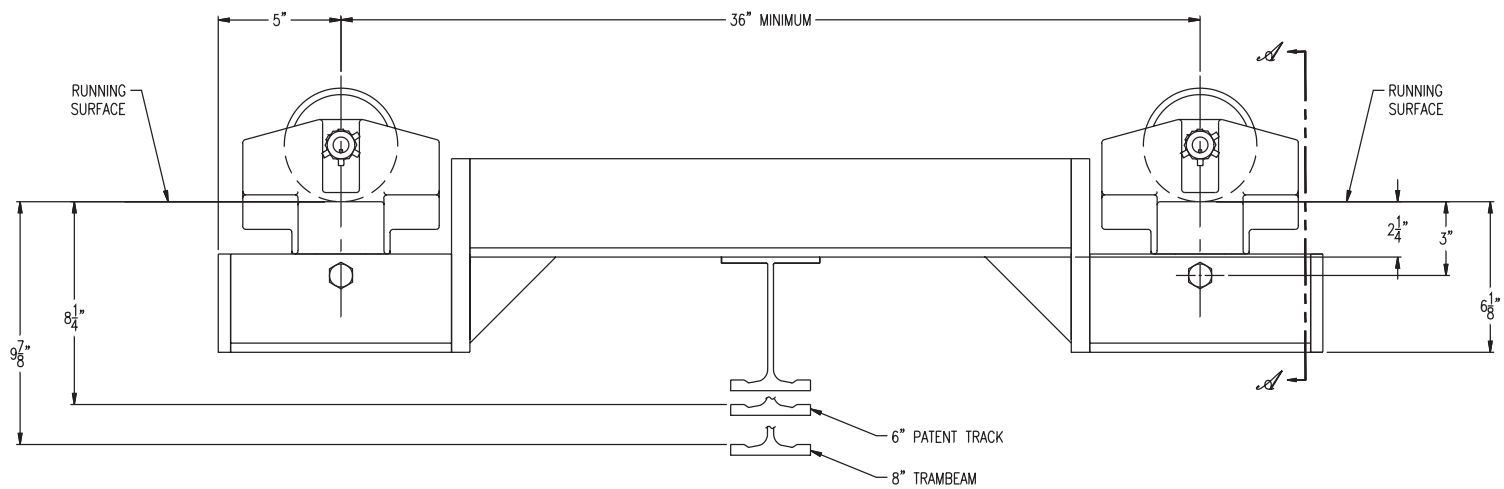
- OPTIONAL TROLLEYS:
- (1) MBC-500-2-4-266
 - (2) MBC-500-2-325
 - (3) MBC-500-2-333
 - (4) MBC-500-3-4-266
 - (5) MBC-500-3-325
 - (6) MBC-500-3-333

LIGHT LOAD LOW HEADROOM END TRUCK



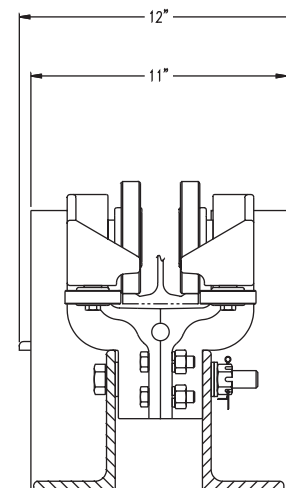
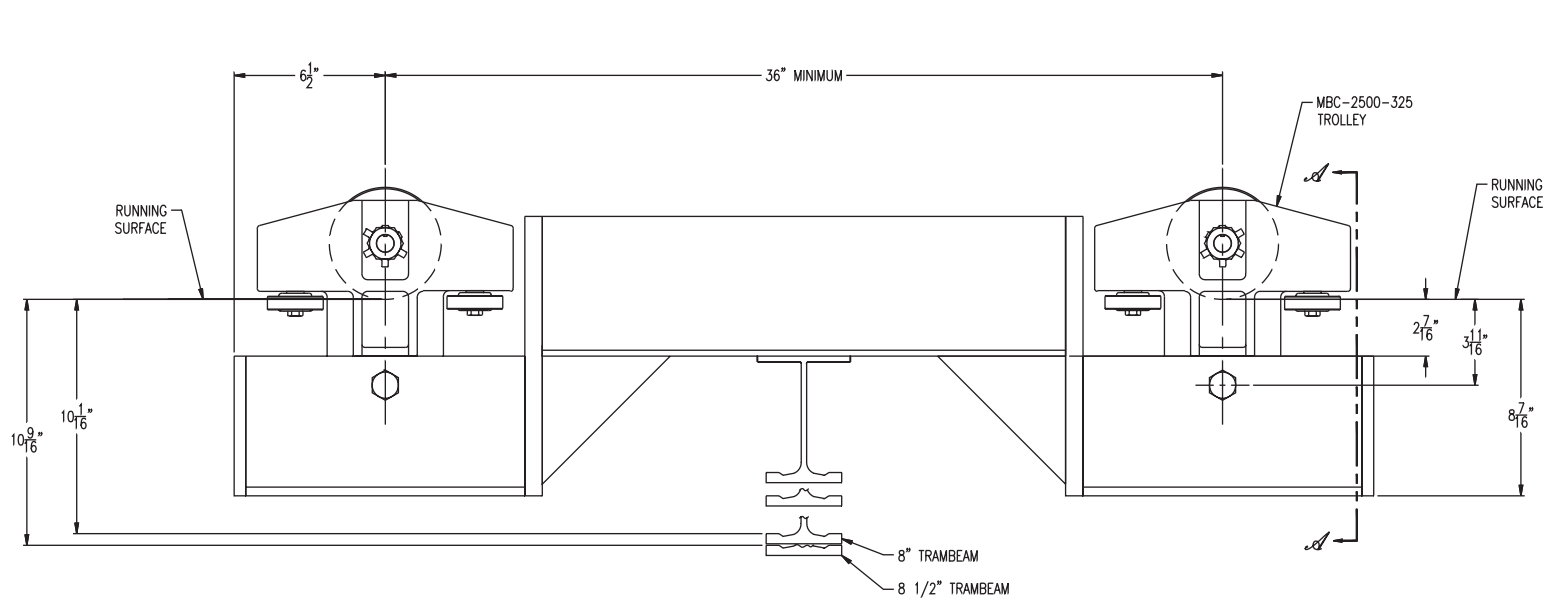
- OPTIONAL TROLLEYS:
- (1) MBC-1000-2-325
 - (2) MBC-1000-2-333
 - (3) MBC-1000-3-325
 - (4) MBC-1000-3-333

MEDIUM LOAD LOW HEADROOM END TRUCK



OPTIONAL TROLLEYS:
 (1) MBC-1500-3-325
 (2) MBC-1500-3-333
 (3) MBC-1500-2-325
 (4) MBC-1500-2-333

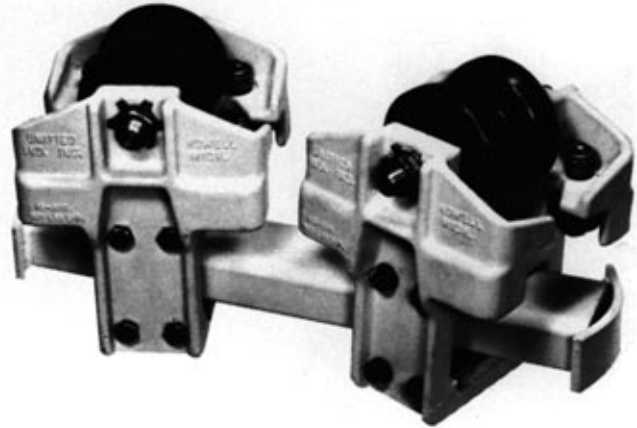
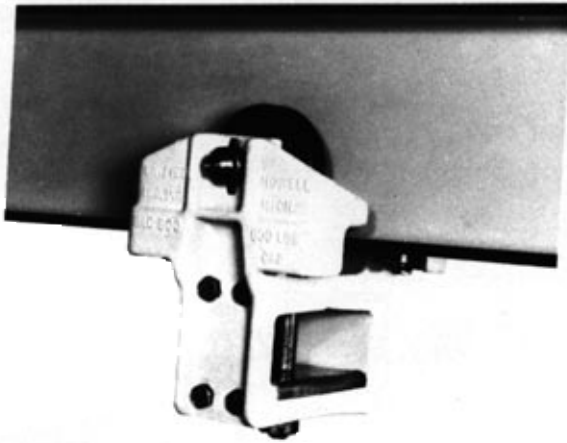
STANDARD LOAD LOW HEADROOM END TRUCK



SECTION A-A

OPTIONAL TROLLEYS:
 (1) MBC-2500-325
 (2) MBC-2500-333
 * DOUBLE BEARING WHEELS ALSO AVAILABLE

HEAVY LOAD LOW HEADROOM END TRUCK



Model Number

- AC-500-2 for operation on 3.25" or 3.33" flange flat rail or 3.33" flange 6" S-beam (12.5 lb.)
- AC-500-2-4 for operation on 2.66 flange 4" S-Beam (7.7 lb.)

Application

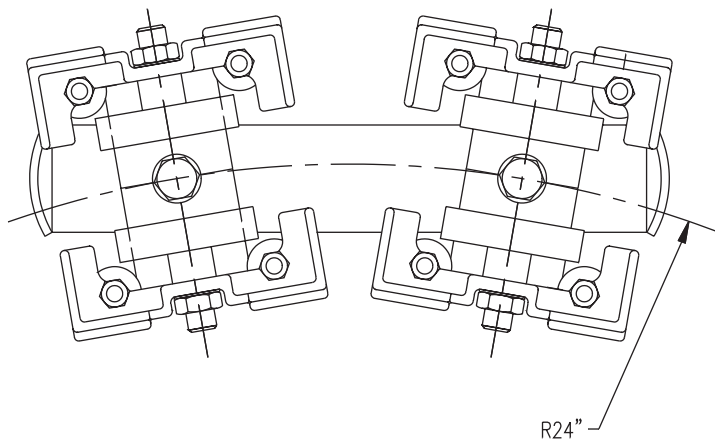
- Used in pairs for bridge crane end truck assemblies for negotiation curved runways
- Used in tandem as articulating load bars on horizontal and vertical curved monorail systems

Features

- High tensile almag alloy frames
- Integral built-in safety lugs
- Shielded side thrust roller protection
- Hardened ball bearing side thrust rollers
- Forged wheels 3.2" diameter flat or contoured induction hardened with permanently sealed precision ball bearings
- Load bearing brass wear plate
- Heat-treated steel pivot bolt

Options

- Standard conveyor wheels 3.2" diameter flat or contoured with lubricated ball bearings
- Can be furnished as an assembled end truck or load bar



TROLLEY SPECIFICATIONS:

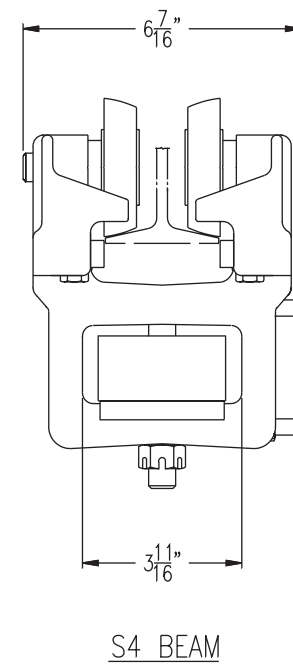
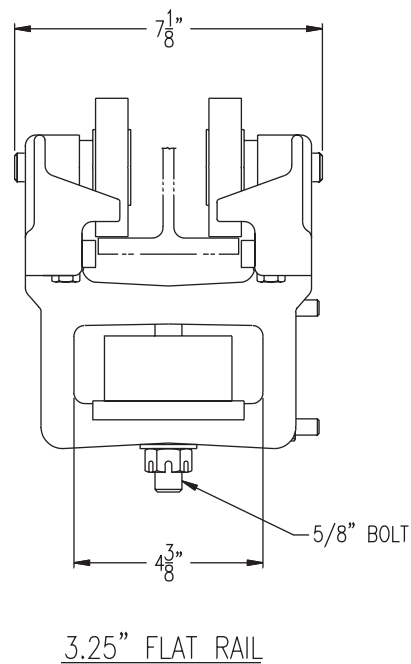
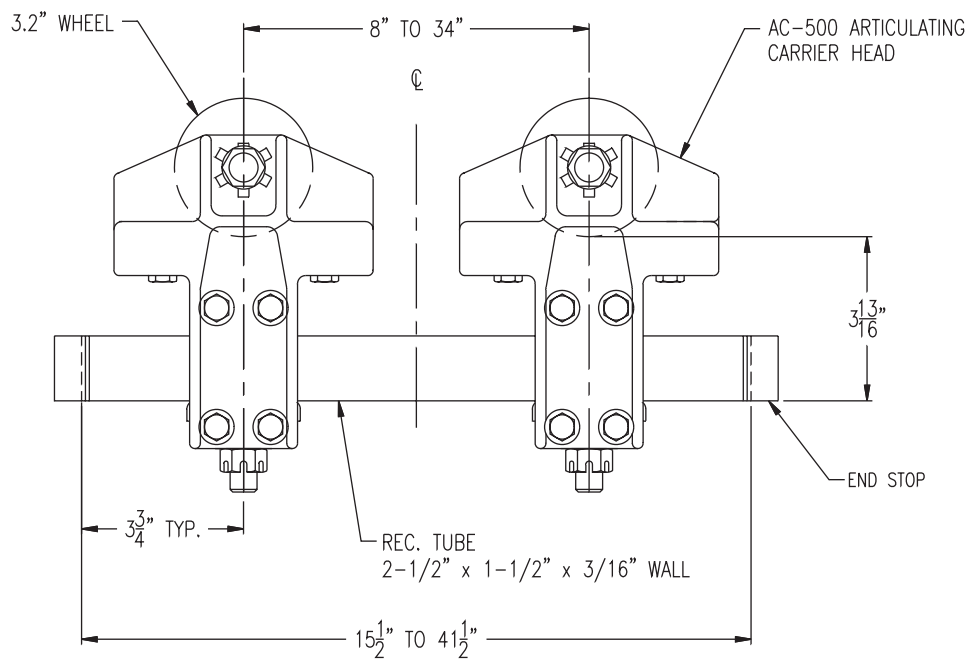
RATED LOAD: 1000 LBS (448Kgs)
 WEIGHT: 29.5 LBS (13.2Kgs)
 BODY: HIGH TENSILE ALMAG
 WHEELS: 3.2" [81.3] DIA.
 STUD: 5/8" [15] DIA.
 THRUST ROLLERS: BALL THRUST BEARINGS

NOTES:

WHEN ORDERING PLEASE SPECIFY EXACT WIDTH OF RUNNING SURFACE FLANGE.
 (1) 3.25" [82.6] FOR STANDARD FLAT RAIL.
 (2) 2.66" [67.6] FOR S4 BEAM.
 (3) 3.33" [84.6] FOR S6 BEAM

LABORATORY TESTING DATA:

YIELD STRENGTH: 11,500 LBS (5152 Kgs)
 ULTIMATE STRENGTH: 13,200 LBS (5913 Kgs)
 COMPLIES WITH O.S.H.A. SAFETY STANDARDS.

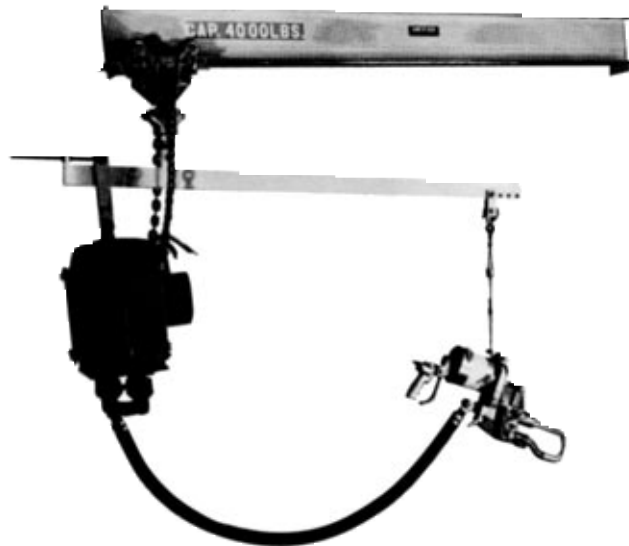




Adjustable Balance Hangers

Balancing Beam Hanger

With optional universal swivel assembly for portable gun welding stations.



Model Number

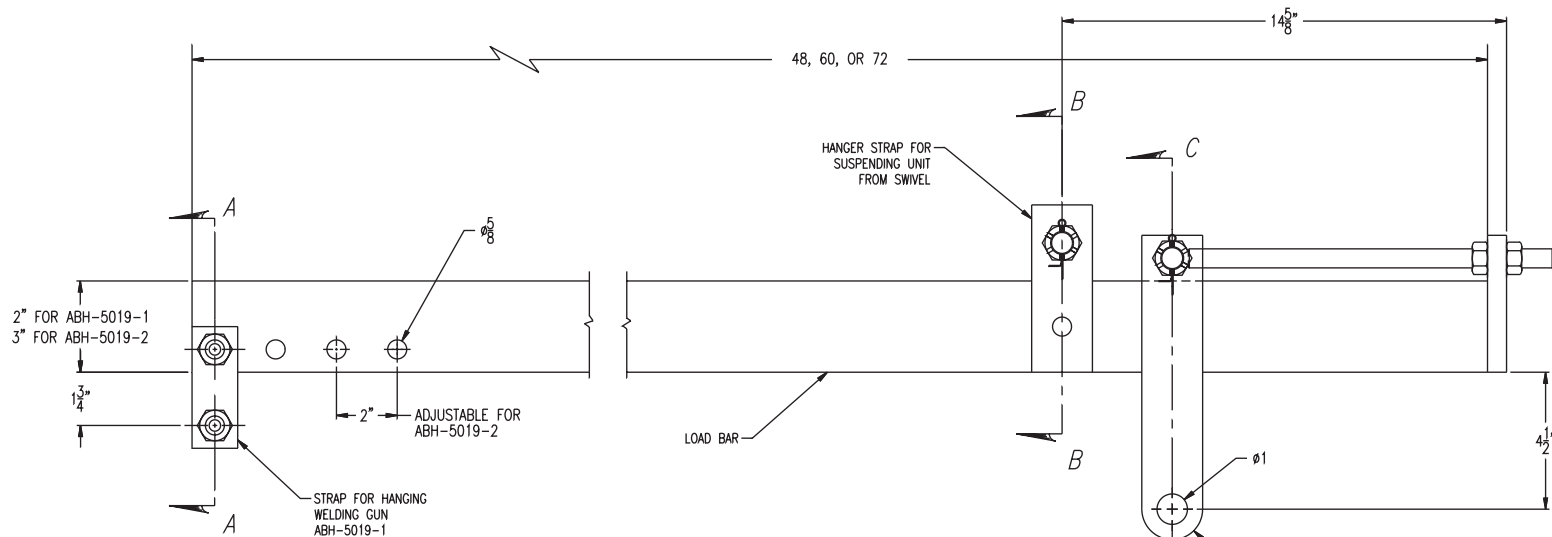
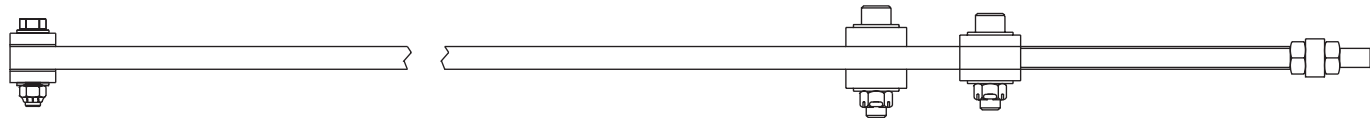
- | | |
|----------------------|------------------|
| ■ ABH-5019-1 (15060) | 4 foot long beam |
| ■ ABH-5019-3 (15070) | 5 foot long beam |
| ■ ABH-5019-2 (15080) | 6 foot long beam |

Application

Unified adjustable balance hangers are specifically designed to mount spotweld gun and transformer.

Features

- **Unified** balance hangers are fully adjustable for precise balancing
- Incorporate an insulated steel load link for hanging spotweld gun
- Includes a steel wear sleeve at spotweld gun hook mounting
- Available in either a 4, 5 or 6 foot long beams



2" FOR ABH-5019-1
3" FOR ABH-5019-2

A

$\phi 5/8$

ADJUSTABLE FOR
ABH-5019-2

STRAP FOR HANGING
WELDING GUN
ABH-5019-1

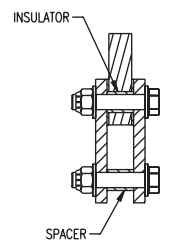
LOAD BAR

B

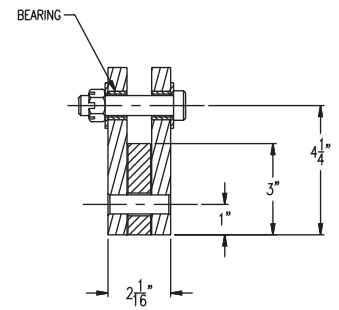
C

$\phi 1$

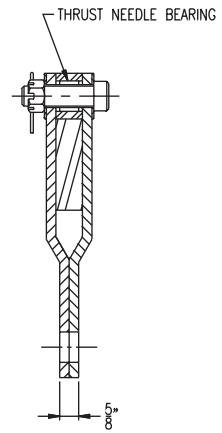
HANGER WITH 12"
ADJUSTMENT ROD TO
BALANCE WELDING GUN



SECTION A-A



SECTION B-B



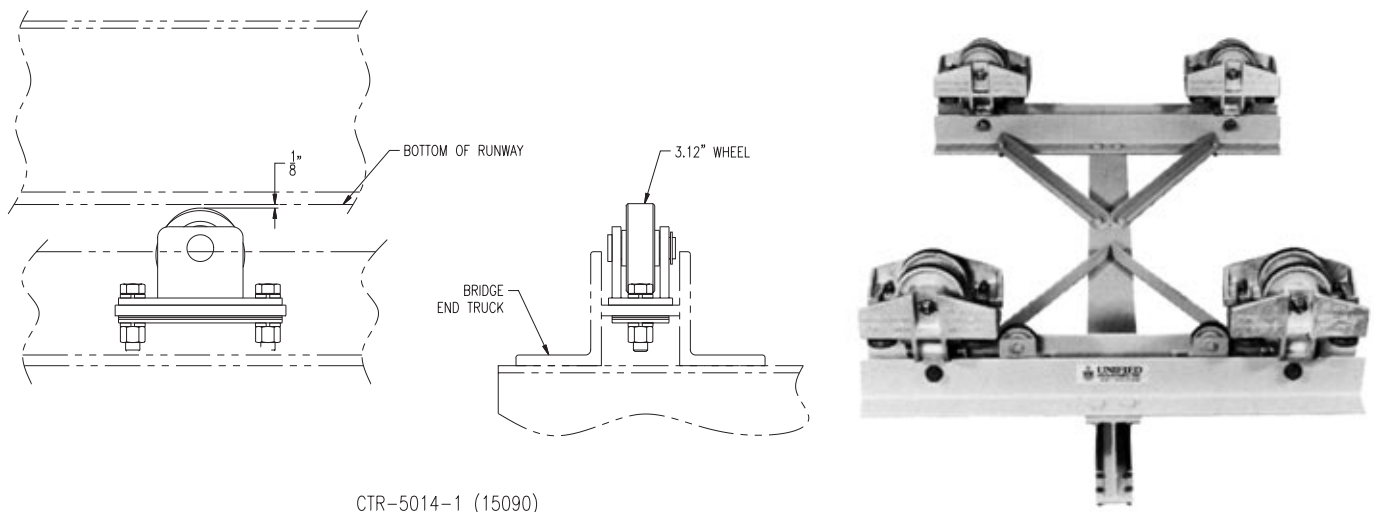
SECTION C-C

ABH-5019-1 (15060)

ABH-5019-2 (15070)



Counter Thrust Roller Assembly



Model Number

- CTR-5014-1 (15090)

Application

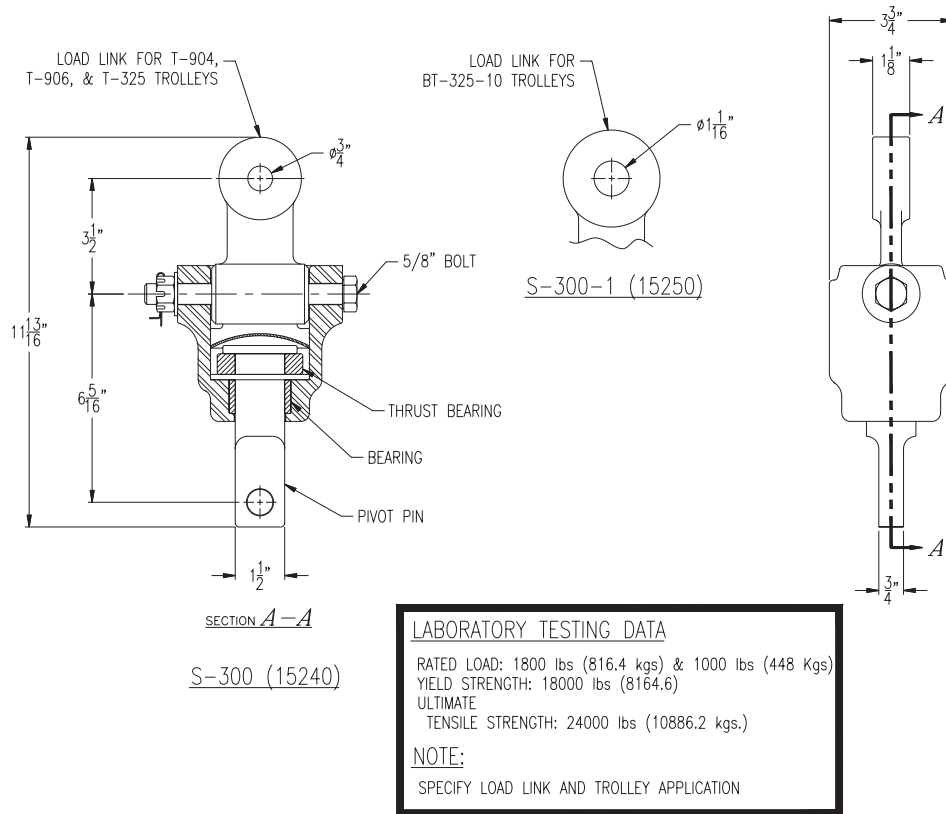
- Used singly or in pairs on bridge crane end trucks where wheel engages bottom surface of runway rail to absorb "kick-up" action when load is moved to extreme end of an overhang bridge beam

Features

- Large 3 1/8" dia. wheel
- Adjustable height for runway rail clearance



Universal Swivel Assemblies



Model Number

- S-300 For use on **Unified** trolley T-325, T-904 and T-906
- S-300-1 For use on **Unified** trolley BT-325-10 and BT-333-10

Features

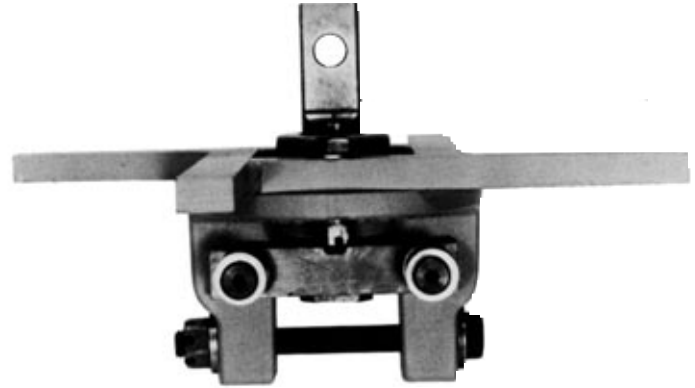
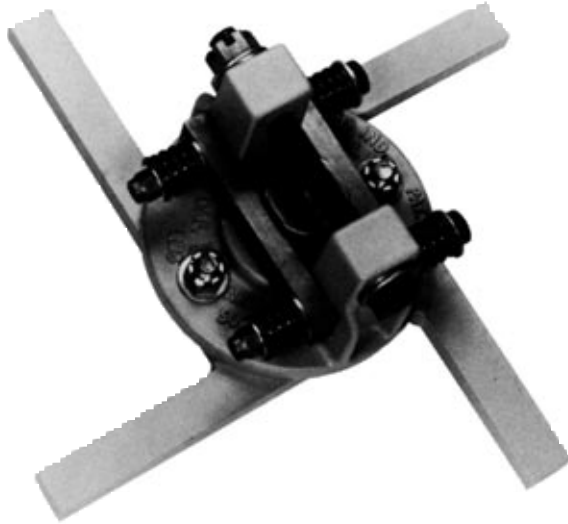
- Rotating shaft on universal swivel designed to fit standard transformer clevis
- Universal swivel permits suspended load to move in all three planes

Application

- **Unified** universal swivel assemblies are specifically designed for the suspension of transformer stations not exceeding 1800 pounds
- Also used for the suspension of portable tools, hoists and fixtures



Indexing Turn Stile



Model Number

- 5070-1 indexing turn stile, 500 pound ratio load
- 5060-1 indexing turn stile, 1000 pound capacity (specify type of attachment)
- 5066-1 indexing turn stile, 2000 pound ratio load

Application

Unified indexing units are used on endless chain conveyors — for engine dress up — progressive assembly — degreasing operation — parts transfer, etc.

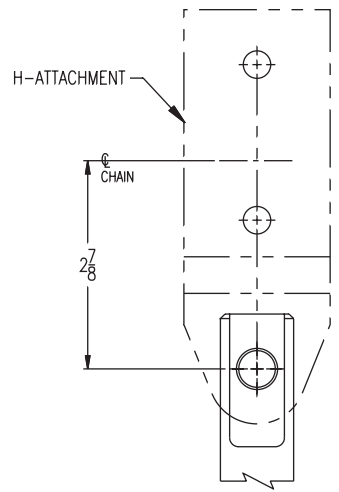
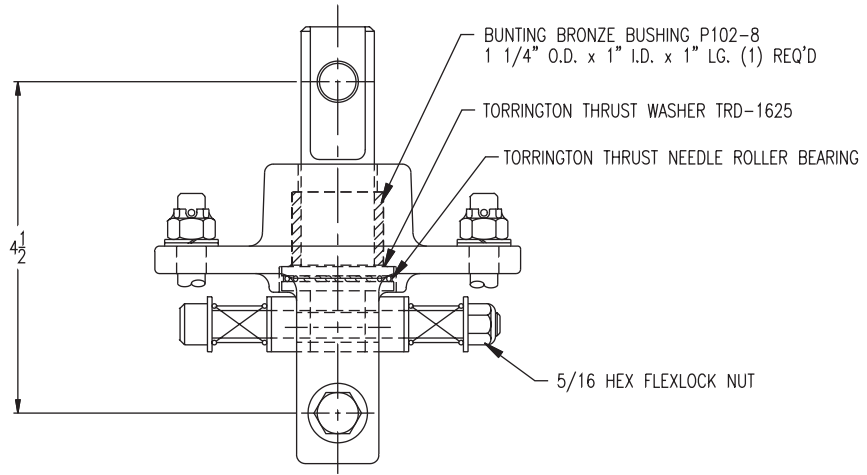
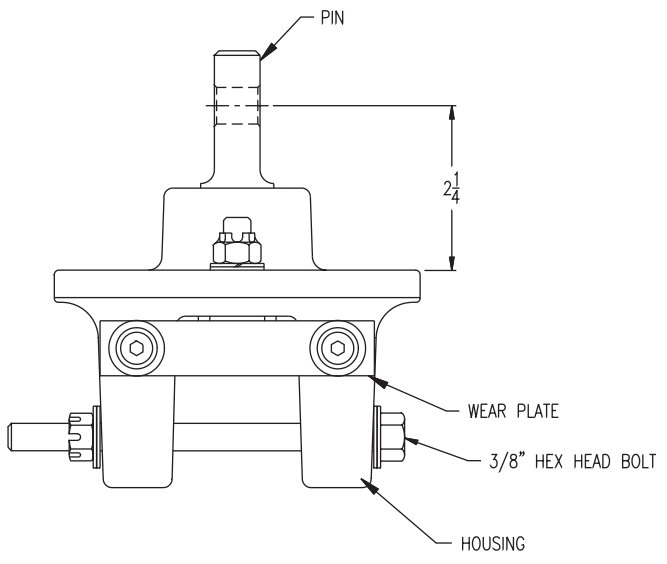
- 5070-1 500 #(15050)
- 5060-1 1000 #(15030)
- 5066-1 2000 #(15040)

Features

- Hardened rotating shaft with four flat areas giving positive location
- Two spring-loaded bronze pressure plates to minimize wear
- 90° degree positive location
- Universal 360° degree rotation
- Hardened roller thrust bearing
- Bronze bushing

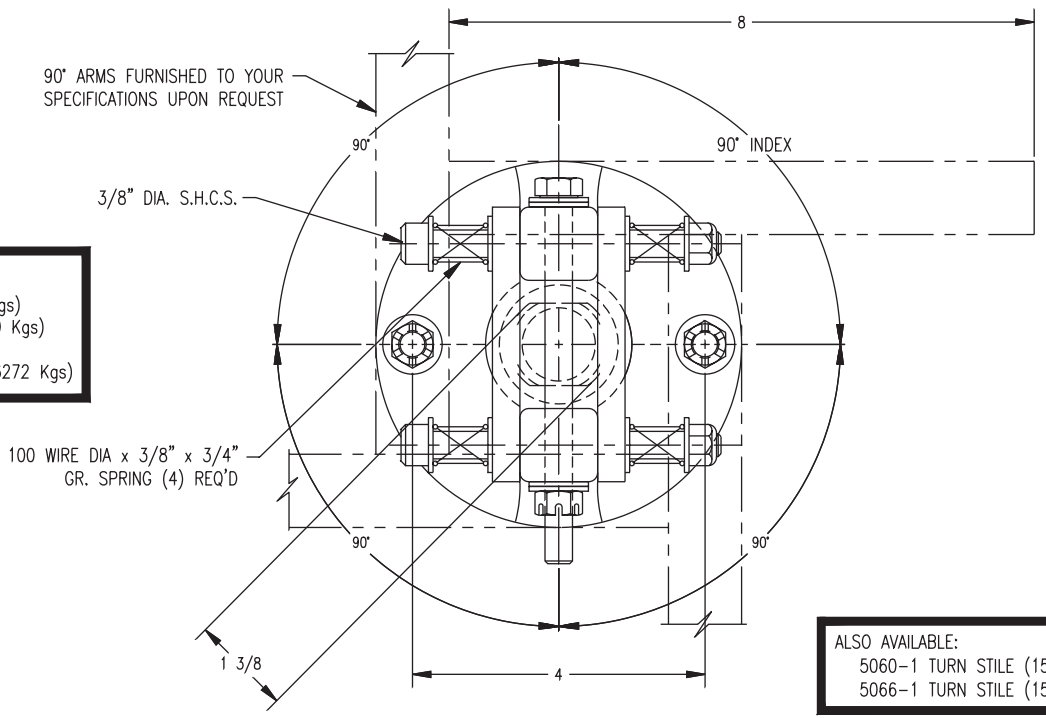
Options

- Lubrication fitting
- O-ring upper seal
- Lower adapter to your specifications
- Indexing arms four position, for automatic indexing



SUGGESTED TROLLEY ATTACHMENT

LAB TESTING DATA	
RATED LOAD:	500 LBS. (224 Kgs)
YIELD STRENGTH:	12,500 (5600 Kgs)
TANDEM ULTIMATE TENSILE STRENGTH:	14,000 (6272 Kgs)

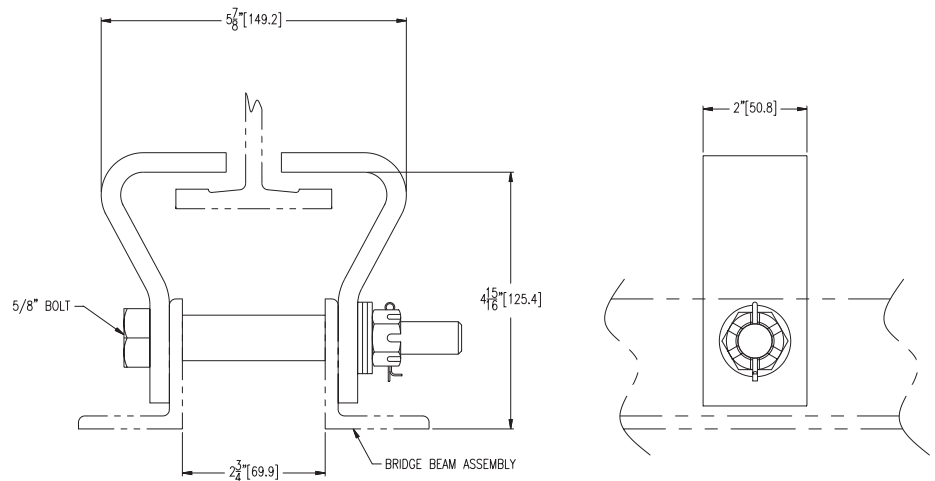


ALSO AVAILABLE:
 5060-1 TURN STILE (15030)-1000 LBS RATED LOAD
 5066-1 TURN STILE (15040)-2000 LBS RATED LOAD

5070-1 TURN STILE (15050)



Safety Clevis Assembly



SCA-5015-1 (15290)

Model Number

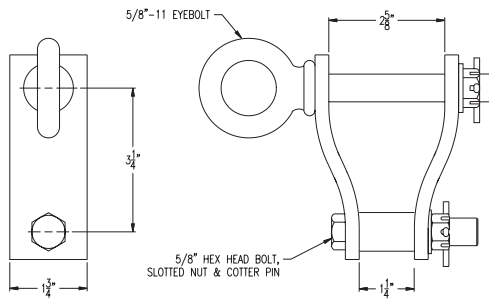
- SCA-5015-1 (15290)

Application

- Used on light load bridge crane end truck assemblies as standard equipment
- Used for auxiliary safety on medium load bridge cranes
- Used on load bars requiring additional safety
- Customized safety clevis can be furnished to your specifications
- 5015-1 (15290)

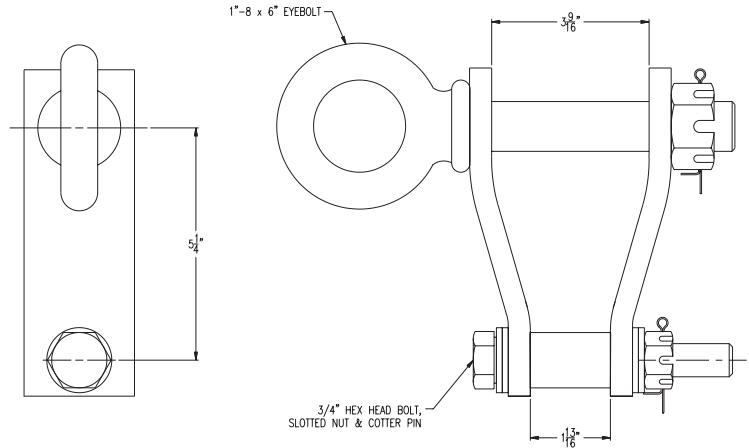


Dual Hanging Straps



DHS 5011-1 (15100)
FOR USE ON UNIFIED TROLLEYS
BT-325, BT-266, AND BT-333

DHS-5011-1 (15100)



DHS 5012-1 (15110)
FOR USE ON UNIFIED TROLLEYS
BT-325-10 & BT-333-10

DHS-5012-1 (15110)



Model Number

- DHS-5011-1 for use with **Unified** trolleys BT-325, BT-266 and BT-333
- DHS-5012-1 for use with **Unified** trolleys BT-325-10, BT-333-10, BT-325-10R and BT-33-10R

Application

- For suspension of balancers, hoists, portable tools, power tools, fixtures etc.

Features

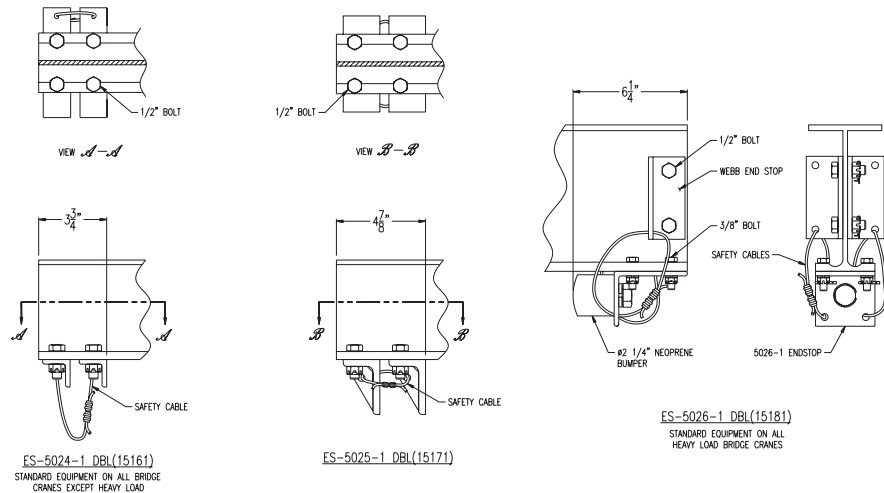
- Forged steel eyebolt or eyebolt and eyenut

Options

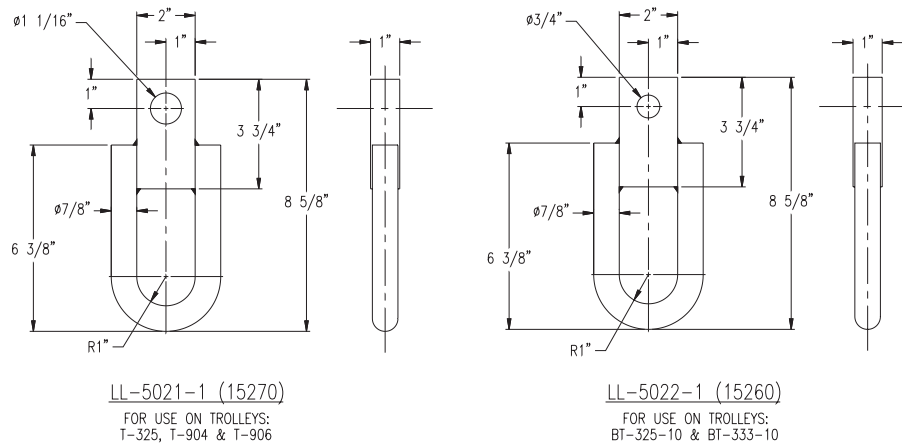
- Available with or without forged eyebolt and eyenut or with standard hex head bolt



End Stops



Load Links



Model Number

Unified standard redundant end stop

- ES-5024-1
- Furnished as standard equipment on all Unified bridge cranes except heavy load bridge crane

Unified runway redundant end stop

- ES-5025-1
- Attached with two 1/2" steel bolts
- Will take the impact of the carrier on the end truck or load bar rather than on the load wheel

Unified redundant neoprene bumper end stop

- ES-5026-1
- Furnished as standard equipment on all **Unified** heavy load bridge cranes
- Optional on other bridge cranes

Model Number

- LL-5021-1 for use on **Unified** trolleys T-325, T-904 & T-906
- LL-5022-1 for use on **Unified** trolleys BT-325-10 & BT-333-10

Application

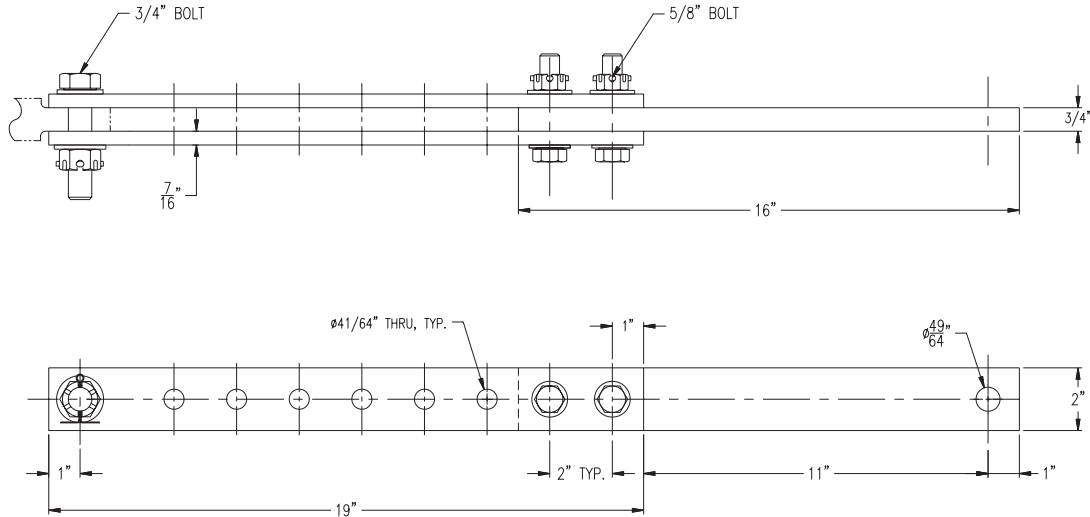
Used to suspend a variety of loads such as balancers, hoists, hooks, fixtures etc.

Dimension Redundant End Stops

- 5024-1 (15161)
- 5025-1 (15171)
- 5026-1 (15181)

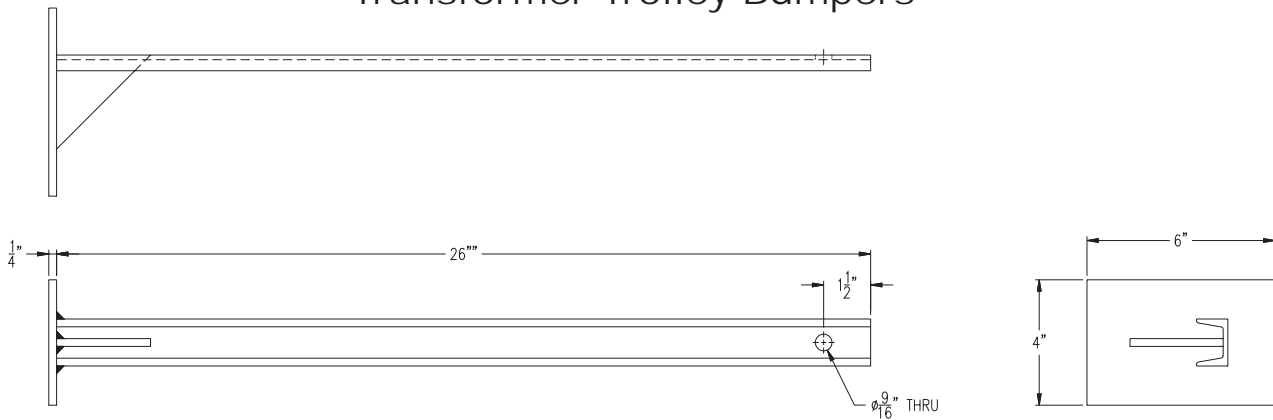


Suspension Adjustment Bar



SUSPENSION ADJUSTMENT BAR #SAB-5020-1 (15280)
 AVAILABLE IN VARIOUS LENGTHS TO YOUR SPECIFICATION

Transformer Trolley Bumpers



TRANSFORMER TROLLEY BUMPERS #TTB-5018-1 (62080)

TTB-5018-1 FOR USE ON TROLLEYS T-325,
 T-904 AND T-906

Model Number

- TTB-5018-1 for use on trolleys T-325, T-904 and T-906 (62080)

Application

- Used singly or in pairs to prevent damage to transformer station or any other suspended load

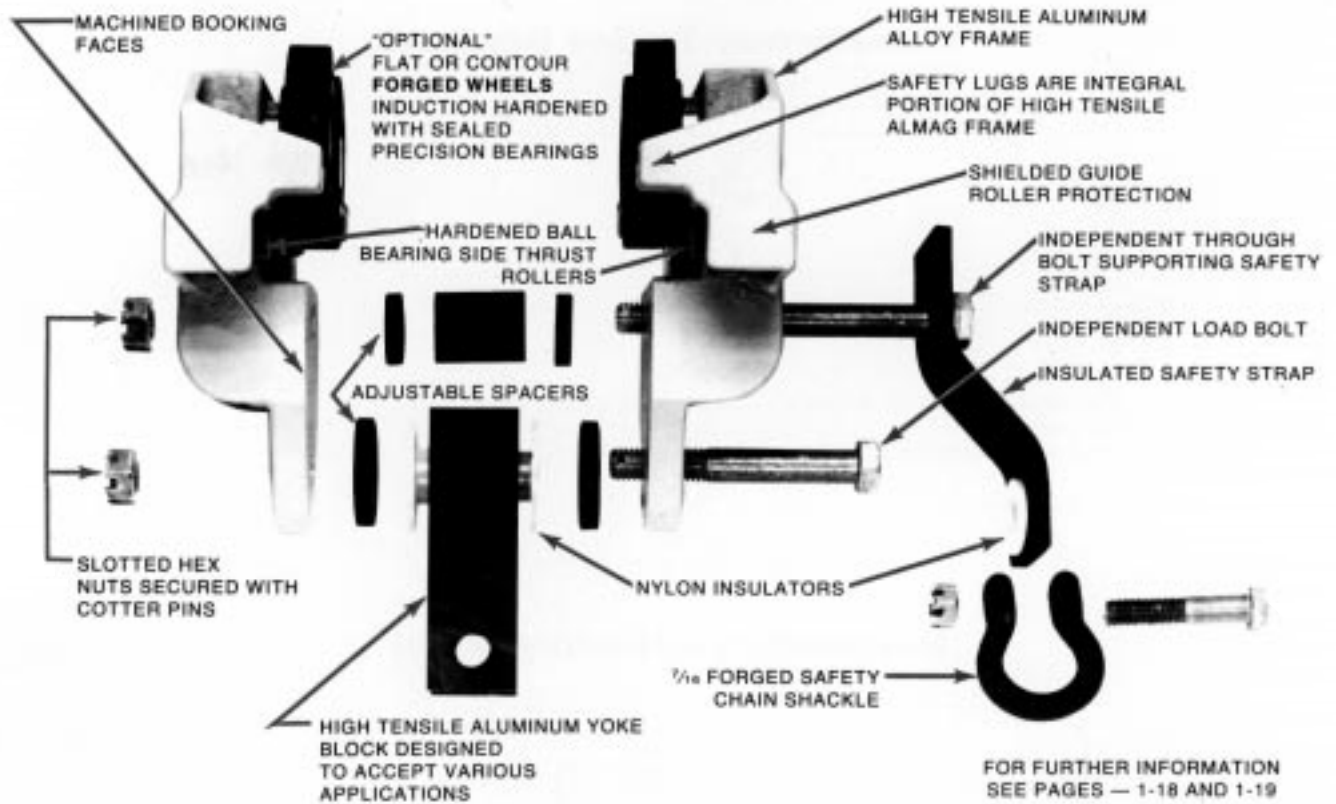
Model Number

- SAB-5020-1 (15280)

Application

- For extending suspended loads from bridge beam trolleys or monorail trolleys
- Available in various lengths to your specification

Unified Universal Insulated Trolley Assembly (Series UT-1000)



CAUTION

This bridge crane has a safe load rating, which has been clearly marked on both sides by the manufacturer. The total weight of the suspended load should never exceed 100% of this limit. The weight of all handling devices such as buckets, magnets, grabs, balancers, hoists, weldguns, etc. must be included as a part of the suspended load. The weight of such devices should therefore be determined and clearly marked.

Consideration should be given when installing hoisting devices. Load ratings for such devices may exceed the load rating of the bridge crane.

The operator should inspect this bridge crane for loose bolts and worn, cracked or distorted parts prior to use (inspection should include all handling devices and mounting equipment). Defective parts should be replaced with manufacturer-approved parts before use of bridge crane is resumed.

This bridge crane conforms to the safety standards of the U.S. Occupational Safety and Health Administration (OSHA). Any alteration of its structure or change in its rated load capacity may render null and void any manufacturer's warranties, expressed or implied.

Ref: Code of Federal Regulations,
U.S. Labor Dept. Book #29,
Parts 1900 to 1910.
Revised as of July, 1984.



UNIFIED INDUSTRIES IS PROUD TO ANNOUNCE OUR UNIFIED CUSTOM PATENT RAIL SECTIONS

Unified Custom Patent Rail Sections are available up to 20'-0" in length and three (3) different sizes: 4", 5" & 6" (see page 21 for cross-section).

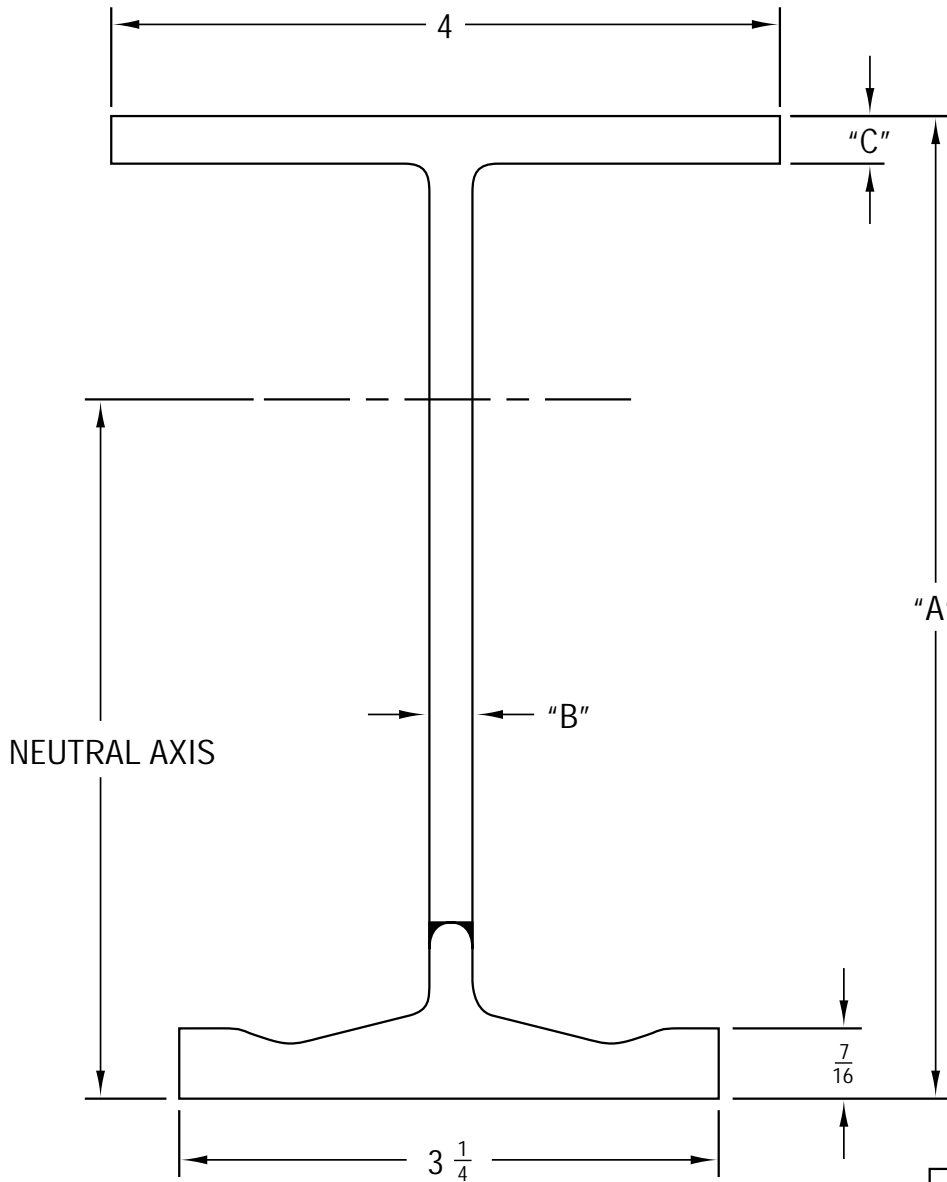
Unified Custom Patent Rails are compatible with our Unified Patent Rail Trolleys as shown in the "Standard Shapes Trolleys" Section of this catalog.

Unified Custom Patent Rails can be utilized in special circumstances such as: custom-built bridges and runways as illustrated in the "Manual Bridge Cranes" Section of this catalog.

Should you require further information concerning the "Unified Custom Patent Rail" Section or any other Unified Product, please consult the factory.

Unified Industries is also pleased to provide "Trambeam" patented rail sections in both light and heavy rail.

Note: Unified stocks all light rail sections and has to order all Heavy rail sections.
(see pages 22 & 23 for cross sections)

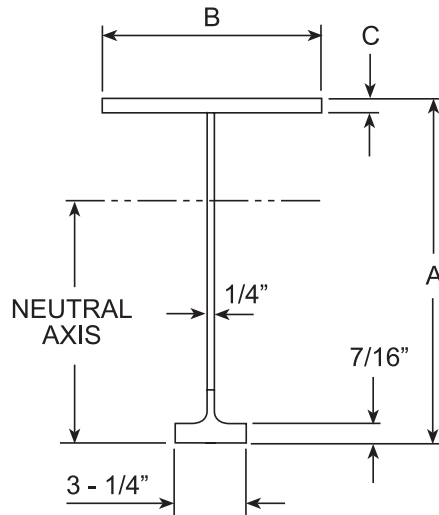


"A"	"B"	"C"
$4 \frac{7}{16}$	$\frac{15}{64}$	$\frac{9}{32}$
$5 \frac{7}{16}$	$\frac{15}{64}$	$\frac{1}{4}$
$6 \frac{7}{16}$	$\frac{15}{64}$	$\frac{1}{4}$

Light Rail Sections

Nos. 34011 through 34031 light rail sections are used for runway and monorail tracks and bridge girders. Dimensions and section properties are shown in the tables.

Nos. 34011 and 34016 tracks are manufactured in stock lengths of 41 feet. All other light rail tracks are manufactured in stock lengths of 41, 50 and 60 feet. They are cut to length and fabricated in any length up to the maximum stock length.



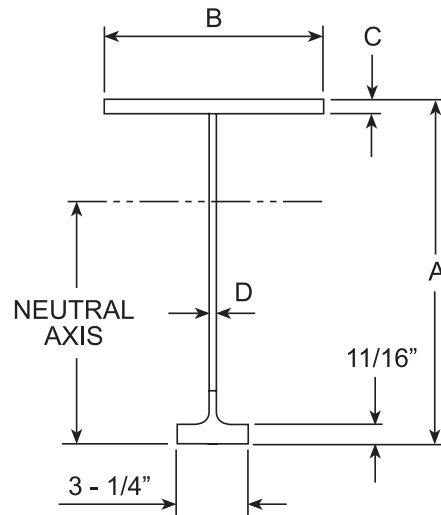
Item Number	Norminal Size and Weight	A	B	C
34011	8 @ 15.9	8-1/16	4	5/16
34016	8-1/2 @ 19.4	8-9/16	5	7/16
34021	10 @ 22.2	10-1/16	6	7/16
34026	11-1/2 @ 26.3	11-9/16	7	1/2
34031	13 @ 29.3	13-1/16	8	1/2

Item Number	Maximum Wheel Dia.(In)	Area (In. x 2)	Section Modulus (In. x 3)		Moment of Interia(In. x 4)	Neutral Axis (In.)
			Tension	Compression		
34011	5	4.672	12.920	11.585	49.247	3.812
34016		5.703	14.857	18.254	70.133	4.720
34021		6.515	18.799	25.656	109.171	5.807
34026		7.750	23.298	37.568	166.270	7.137
34031		8.625	27.924	48.310	231.148	8.278

Heavy Rail Sections

No. 34037 Nos. 34041 through 34066 heavy rail sections are used for runway and monorail tracks and bridge girders. No. 34038 sections are used for monorail curves. Dimensions and section properties are shown in the tables.

Nos. 34037 and Nos. 34041 through 34056 tracks are manufactured in stock lengths of 41, 50 and 60 feet. Nos. 34061 and 34066 tracks are manufactured to order. They are cut to length and fabricated in any length up to the maximum.



Item Number	Norminal Size and Weight	A	B	C	D
34037	12-1/2 @ 33.6	12-9/16	8	1/2	5/16
*34038	12-1/2 @ 30.2	12-9/16	6	1/2	5/16
34041	14 @ 38.5	14-1/16	8	5/8	5/16
34046	16 @ 42.7	16-1/16	9	5/8	5/16
34051	18 @ 50.3	18-1/16	10	5/8	3/8
34056	20 @ 55.0	20-1/16	11	5/8	3/8
34061	22-1/2 @ 61.4	22-9/16	12-1/2	5/8	3/8
34066	25 @ 67.8	25-1/16	14	5/8	3/8

Item Number	Maximum Wheel Dia.(In)	Area (In. x 2)	Section Modulus (In. x 3)		Moment of Inertia(In. x 4)	Neutral Axis (In.)
			Tension	Compression		
34037	8	9.888	34.440	48.781	253.605	7.364
*34038		8.888	33.251	39.324	226.337	6.807
34041		11.318	40.939	65.239	353.731	8.460
34046		12.568	49.889	84.012	502.776	10.078
34051		14.802	62.307	106.516	710.066	11.396
34056		16.177	73.512	130.069	942.276	12.818
34061		18.052	88.875	165.152	1303.680	14.669
34066		19.927	105.539	204.237	1743.910	16.524