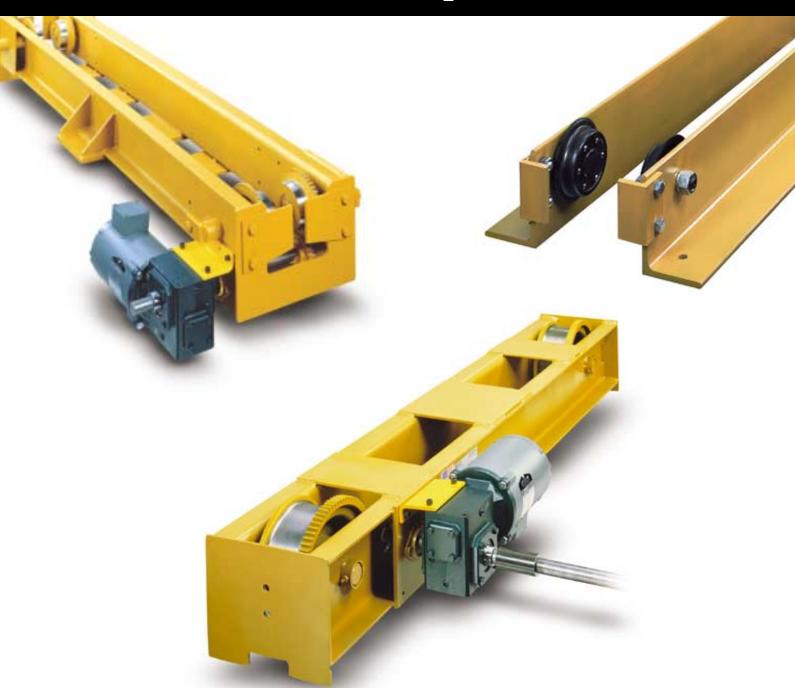


# YALE-LIFT-TECH...

**Crane Kits** 

1/4 - 5 Ton Capacity
Spans to 48 feet

# **Specifications**



This Yale•Lift-Tech bulletin contains specifications and clearances for single girder crane kits with spans to 48' and capacities to 5 ton. These bridge kits are available in a wide variety to meet the exact requirements of your crane application.

# Index Subject Page No. Underhung Push Type Kits 3-5 Hand Geared Kits 6-7 Motor Driven Kits 8-13 Top Running Push and Hand Geared Kits 14-16 Motor Driven Kits 17-22 General Information 23-24

# **Crane Component - Underhung Push Type Crane Bridge Kits**

### Capacity 1/2 - 5 tons/Spans to 36 feet

These Crane bridge kits contain all the parts needed to build underhung single girder crane bridges, except the bridge beam, cross shaft and trolley stop angles. An illustrated, easy-to-understand assembly manual is included in each kit.

#### Push type kits contain:

Each kit includes one pair of end trucks and the required hardware for attaching truck frames to bridge I-Beam.

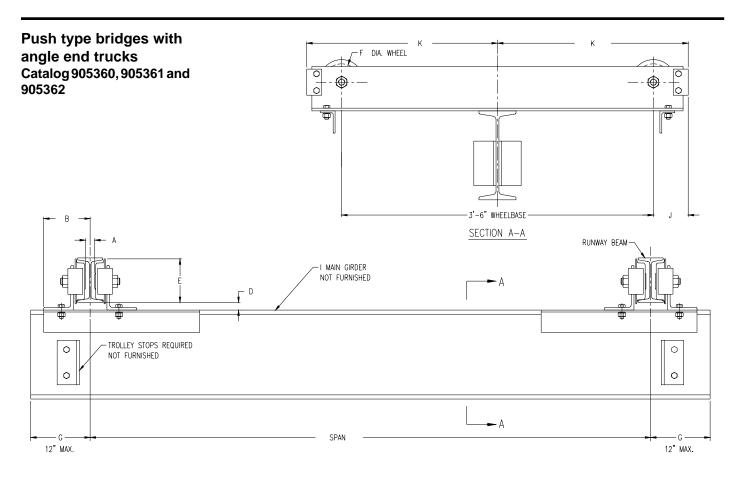
#### Material to be Purchased Locally:

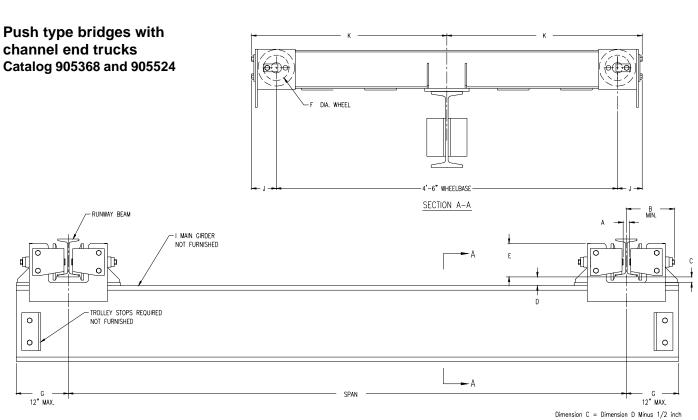
- One length of American Standard Section I-Beam or wide flange which must be a minimum length of 16 inches longer than the span for 3-ton bridge and 18-1/2 inches longer than the span for 5-ton bridge. See chart on page 5 to select proper beam size and the charts on page 4 for outline dimensions.
- Four trolley stop angles must be cut to size and attached to bridge beam.

### **Push Type Underhung Crane Kits**

Maximum Capacity (tons)	Maximum Span (ft)	Kit Code	Runway Beam Flange Adj. Range	Wheel Type	Wheel Size (in)	Max. Wheel Load Per Pair (lbs)	Approximate Shipping Wt. (lbs)
Angle Constru	ction Trucks						
1/2	30	905360		Pressed Steel Wheels			
1	24	905360	3" - 8"	Fressed Steel Wheels	4	1444	300
1	24	905360SR		Spark Resistant Wheels			
		905361	2.2/0" 0"	Pressed Steel Wheels	5		310
0	00	905362	3-3/8" - 8"	Forged Steel Wheels		0700	
2	30	905362PT	3-1/4"	Patented Track Wheels	4	2730	320
		905362SR	3-3/8" - 8"	Spark Resistant Wheels			
Channel Cons	truction Trucks						
		905368	3-3/8" - 5-1/2"				380
		905368W1	5-1/2" - 8"	Forged Steel Wheels			390
0	36	905368W2	8" - 10-1/2"				400
3		905368SR	3-3/8" - 5-1/2"	Spark Resistant Wheels	4	4240	202
		905368PT	3-1/4"	Patented Track Wheels			380
	24	905368S	3-3/8" - 5-1/2"	3' - 0" Short Wheelbase			330
		905524	4" - 6-1/4"				550
		905524W1	6-3/8" - 9"	Forged Steel Wheels			560
_	36	905524W2	9" - 11-1/2"		0.4/0	7500	570
5		905524PT	3-1/4"	Patented Track Wheels	6-1/2	7520	550
		905524SR	411 0 4/415	Spark Resistant Wheels			550
	24	905524S	4" - 6-1/4"	3' - 0" Short Wheelbase			495

# **Crane Component - Underhung Push Type Crane Bridge Kits**







# **Crane Component - Underhung Push & Hand Geared Crane Bridge Kits**

### Bridge Girder Beam Sizes For - Push or Hand Geared Crane\*\*

For				R	ated Capacity* (tor	ns)		
Spans to (ft)	1/4	1/2	1	1-1/2	2	3	4	5
10	S6x12.5	S7x15.3	S7x15.3	S8x18.4	S10x25.4	S12x40.8	S12x40.8	S12x40.8
12	S6x12.5	S7x15.3	S7x15.3	S10x25.4	S10x25.4	S12x40.8	S12x40.8	S18x54.7
14	S7x15.3	S7x15.3	S7x15.3	S10x25.4	S12x31.8	S12x40.8	S12x40.8	S18x54.7
16	S7x15.3	S7x15.3	S8x18.4	S10x25.4	S12x31.8	S12x40.8	S12x40.8	S18x54.7
18	S7x15.3	S7x15.3	S10x25.4	S10x25.4	S12x31.8	S12x40.8	S15x42.9	S18x54.7
20	S7x15.3	S8x18.4	S10x25.4	S12x31.8	S12x31.8	S12x40.8	S18x54.7	S18x54.7
22	S8x18.4	S10x25.4	S10x25.4	S12x31.8	S12x40.8	S18x54.7	S18x54.7	S20x66
24	S8x18.4	S10x25.4	S12x31.8	S12x40.8	S12x40.8	S18x54.7	S18x54.7	S20x66
26	S10x25.4	S10x25.4	S12x31.8	S12x40.8	S15x42.9	S18x54.7	S20x66	S24x80
28	S10x25.4	S10x25.4	S12x40.8	S12x40.8	S18x54.7	S20x66	S20x66	S24x80
30	S10x25.4	S12x31.8	S12x40.8	S18x54.7	S18x54.7	S20x66	S18x54.7C9x13.4	S24x80
32	S10x25.4	S12x31.8	S12x40.8	S18x54.7	S15x42.9C8x11.5	S18x54.7C9x13.4	S18x54.7C9x13.4	S20x66C9x13.4
34	S12x31.8	S12x40.8	S15x42.9	S18x54.7	S15x42.9C8x11.5	S18x54.7C9x13.4	S18x54.7C9x13.4	S20x66C9x13.4
36	S12x31.8	S12x40.8	S18x54.7	S15x42.9C8x11.5	S15x42.9C8x11.5	S18x54.7C9x13.4	S20x66C9x13.4	S20x66C9x13.4

<sup>\*</sup> Rated capacity is based on maximum combined hoist and trolley weights of 500 pounds for 1/4, 1/2 and 1 ton hoists; 1100 pounds for 1 1/2 and 2 ton hoists; 1600 pounds for 3 and 4 ton hoists; 2000 pounds for 5 ton hoists. Bridge designed in accordance with CMAA Specification No. 74.

### **Clearance Dimensions (in.) For Push Type Cranes**

			Runway	/ Beam S	Sizes**										
Product Code	Rated Capacity* (tons)	Max. Span (ft)	Min Beam Width	Min. Flange Width	Max. Flange Width	A	В	С	D	E	F Wheel Dia.	G Min.	н	J†	K
Push Typ	e Kit														
905360	1/2	30	S5x10	3		1-1/4	6-1/16		1-5/8	4-13/16	4				
905360	1	24	33210	3		1-1/4	0-1/10		1-5/6	4-13/16	4	8		4-3/4	2' - 1-3/4"
905361	2	30			8	1-3/8	6-1/4	_	1-1/16	5-7/8	5		_	4-3/4	2 - 1-3/4
905362	2	30	S6x12.5	3-3/8		1-1/4	6-11/16		1-9/16	5-13/16		0.4/4			
905368	3	36			5-1/2	1-1/8	7-13/16	15/16	1-7/16	5-1/8	4	8-1/4	14	4	2' - 7"
905524	5	36	S8x18.4	4	6-1/4	3/4	8-11/16	13/16	1-5/16	8	6-1/2	9-3/8	14-5/8	5-1/2	2' - 8-5/8"

<sup>\*\*</sup>Runway beam sizes shown indicate range of beams that trucks will fit. For proper runway size, consult qualified engineer or architect. End trucks for wider flange beams or 3-1/4" patented track are available.

<sup>\*\*</sup>Beam sizes listed are American Standard I-Beam and channel sections. Use ASTM A36 grade steel, first quality, free of rust and excessive mill scale.

Dimensions A, B, C, D and E are based on minimum beam.

<sup>†</sup> Dimension with rubber bumpers: 3 ton catalogs 905368 = 7 3/8 and 5 ton catalogs 905524 = 8-7/8.

### **Crane Component - Underhung Hand Geared Crane Bridge Kits**

#### Capacity 1/2 - 5 tons/Spans to 36 feet

These Crane bridge kits contain all the parts needed to build underhung single girder crane bridges, except the bridge beam, cross shaft and trolley stop angles. An illustrated, easy-tounderstand assembly manual is included in each kit.

#### Hand geared kits contain:

- End trucks (1 pair) complete with driving pinion and attachment hardware
- Cross shaft support (quantity based upon span)
- Drive couplings (quantity based upon span)
- · Chain wheel and chain guide
- 36 foot length of hand chain with open connecting link

#### Material to be Purchased Locally:

- One length of American Standard Section I-Beam or wide flange which must be a minimum length of 16 inches longer than the span for 3-ton bridge and 18-1/2 inches longer than the span for 5-ton bridge. See chart on page 5 to select proper beam size and the chart on page 7 for outline dimensions.
- Four trolley stop angles must be cut to size and attached to bridge beam.
- Hand Geared Bridges Only. One inch diameter cross shaft is required. Length depends on span and is determined by referring to outline dimensions on page 7.

				Kit Consists Of:  Cross Shaft Cross Shaft						
Max.	Max.		End Truck		s Shaft Assembly		s Shaft upling	Wheel Size	Max. Wheel Load	Approx.
Capacity (tons)	Span (ft)	Kit Code	Code Number	Qty.	Code Number	Qty.	Code Number	and Type	per pair (lbs)	Shipping wt. (lbs)
Standard										
	15	B03/15UHG		1		2		4" dia.		440
	22	B03/22UHG	905369	2		2		geared solid forged	4240	442
3	29	B03/29UHG	4' - 6" WB	3		3		steel	4240	446
	36	B03/36UHG		4	905373	3	905374	wheels		448
	15	B05/15UHG		1	905575	2	905574	6-1/2" dia.		520
5	22	B05/22UHG	905525	2		2		geared solid forged steel	7520	522
5	29	B05/29UHG	4' - 6" WB	3	]	3	]		7520	526
	36	B05/36UHG		4		3		wheels		528
Spark Resis	stant									
	15	B03/15UHGSR		1		2		411 11		480
3	22	B03/22UHGSR	905369SR	2		2		4" dia. geared	4240	482
3	29	B03/29UHGSR	4' - 6" WB	3		3		bronze wheels	4240	486
	36	B03/36UHGSR		4	905373	3	905374	WIICCIS		488
	15	B05/15UHGSR		1	905575	2	905574	0.4/0". "		570
5	22	B05/22UHGSR	905525SR <sup>2</sup>			2		6-1/2" dia. geared	7520	572
5	29	B05/29UHGSR	4' - 6" WB	3	† †	3	┦	bronze wheels	7520	576
	36	B05/36UHGSR		4		3		***10010		578

Kit Consists of: 904550 Hand Chain Wheel

36' Hand Chain

1 Hand Chain Link

2 End Trucks

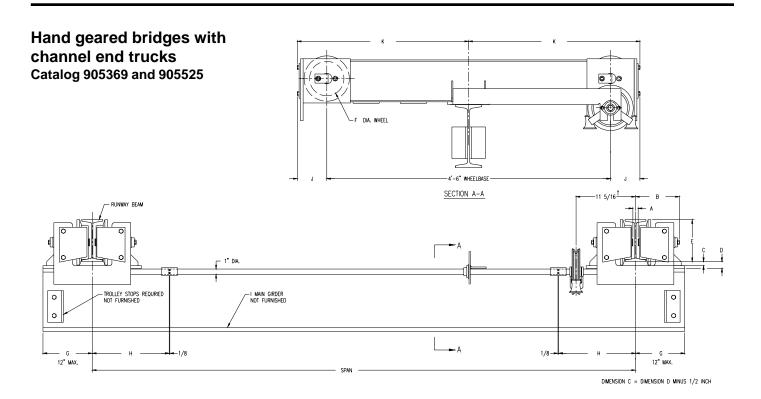
Cross Shaft Support as noted above

Cross Shaft Coupling as noted above

Shaft Diameter is 1"

For Runway Flange Widths of  $3^{3/8}$ " -  $5\frac{1}{2}$ " 3 ton For Runway Flange Widths of 4" - 61/4" 5 ton

### **Crane Components - Underhung Hand Geared Crane Bridge Kits**



### **Clearance Dimensions (in.)**

			Runway	/ Beam S	Sizes**										
Product Code	Rated Capacity (tons)	Max. Span (ft)	Min Beam Width	Min. Flange Width	Max. Flange Width	A	В	С	D	E	F Wheel Dia.	G Min.	н	J†	К
Hand Gea	red Type Er	nd Truck	s												
905369	3	36	S6x12.5	3-3/8	5-1/2	1-1/8	7-13/16	15/16	1-7/16	5-1/8	4	8-1/4	14	5-1/4	2' - 7"
905525	5	30	S8x18.4	4	6-1/4	3/4	8-11/16	13/16	1-5/16	8	6-1/2	9-3/8	14-5/8	5-1/2	2' - 8-5/8"

<sup>\*\*</sup>Runway beam sizes shown indicate range of beams that trucks will fit. For proper runway size, consult qualified engineer or architect. End trucks for wider flange beams or 3-1/4" patented track are available.

Dimensions A, B, C, D and E are based on minimum beam.

<sup>†</sup> Dimension with rubber bumpers: 3 ton catalogs 905369 = 7 3/8 and 5 ton catalogs 905525 = 8-7/8.

# **Crane Components - Underhung Motor Driven Crane Bridge Kits**

### Motor Driven with Single Drive

Capacity 1/4 to 3 ton/Spans to 36 feet

						Kit Consist	s Of:			Shipping bs)
Max. Capacity (tons)	Max. span (ft)	Speed (fpm)	Kit Code 1 Speed	End Trucks Code Number	Gear Reducer	Cross Shaft Support (Qty)	Cross Shaft Coupling (Qty)	Controls & Motors	1 Speed	2 Speed
		55	B03/08UC*55		905378					
	8	70	B03/08UC*70		905377	0			524	544
		110	B03/08UC*110		905376					
		55	B03/15UC*55		905378					
	15	70	B03/15UC*70		905377	1	2	1 each	544	564
		110	B03/15UC*110		905376			Control		
		55	B03/22UC*55		905378			1 each		
1/4 thru	22	70	B03/22UC*70	905369 4'-6" WB	905377	2		½ hp motor	564	584
3		110	B03/22UC*110		905376			1 each Disconnect		
		55	B03/29UC*55		905378					
	29	70	B03/29UC*70		905377	3		(see below)	586	606
		110	B03/29UC*110		905376		3			
		55	B03/36UC*55		905378		٦			
	36	70	B03/36UC*70		905377	4			606	626
		110	B03/36UC*110		905376					

For runway flange width of 3-3/8" - 5-1/2" Max wheel load per pair - 4240 lbs. Wheels - 4" diameter solid forged steel

\* **Specify:** 1 = Single Speed 2 = Two Speed

### **Motor and Controls for Single Drive Underhung Cranes**

	208 - 230 Volt			460 Volt		575 volt			
1/2 hp Motor (1) req'd	Control (1) req'd	Disconnect Switch (1) req'd	1/2 hp Motor (1) req'd	Control (1) req'd	Disconnect Switch (1) req'd	1/2 hp Motor (1) req'd	Control (1) req'd	Disconnect Switch (1) req'd	
Single Speed									
905381	44600301	905388	905381	44600303	905389	905382	44600304	905389	
Two Speed									
905394	44600341	905388	905395	44600343	905389	905396	44600344	905389	

Single phase available NEMA1 Enclosures Standard



# **Crane Components - Underhung Motor Driven Crane Bridge Kits**

### **Motor Driven with Single Drive**

Capacity 1/4 - 5 ton/Spans to 36 feet

						Kit Consist	s Of:			Shipping os)
Max. Capacity (tons)	Max. span (ft)	Speed (fpm)	Kit Code 1 Speed	End Trucks Code Number	Gear Reducer	Cross Shaft Support (Qty)	Cross Shaft Coupling (Qty)	Controls & Motors	1 Speed	2 Speed
		50	B05/08UC*50		905378					
	8	65	B05/08UC*65		905377	0			644	664
		100	B05/08UC*100		905376					
		50	B05/15UC*50		905378					
	15	65	B05/15UC*65		905377	1	2	1 each	664	684
		100	B05/15UC*100		905376			Control		
		50	B05/22UC*50		905378			1 each		
1/4 thru	22	65	B05/22UC*65	905525 4'-6" WB	905377	2		½ hp motor	684	704
5		100	B05/22UC*100		905376			1 each Disconnect		
		50	B05/29UC*50		905378					
	29	65	B05/29UC*65		905377	3		(see below)	704	724
		100	B05/29UC*100		905376		3			
		50	B05/36UC*50		905378					
	36	65	B05/36UC*65		905377	4			724	744
		100	B05/36UC*100		905376					

<sup>-</sup> For Runway Flange Widths of 4"-61/4"

### **Motor and Controls for Single Drive Underhung Cranes**

	208 - 230 Volt			460 Volt		575 volt			
1/2 hp Motor (1) req'd	Control (1) req'd	Disconnect Switch (1) req'd	1/2 hp Motor (1) req'd	Control (1) req'd	Disconnect Switch (1) req'd	1/2 hp Motor (1) req'd	Control (1) req'd	Disconnect Switch (1) req'd	
Single Speed									
905381	44600301	905388	905381	44600303	905389	905382	44600304	905389	
Two Speed									
905394	44600341	905388	905395	44600343	905389	905396	44600344	905389	

Single phase available

NEMA1 Enclosures Standard

Control panel includes mainline contactor, bridge fusing, reversing contactor and 115 volt control circuit transformer.

<sup>\*</sup>Specify: 1=Single Speed Max wheel load per pair - 7520 lbs.
2=Two Speed Wheels - 6½" diameter solid forged steel

# **Crane Components - Underhung Motor Driven Crane Bridge Kits**

### **Motor Driven with Dual Drive Underhung**

Capacity 1/4 - 3 ton/Spans to 48 feet

Max.	Max.		Kit		Kit Consists	Approximate Shi t Consists of Weight (lbs)		
Capacity (tons)	Span (ft)	Speed (fpm)	Code No.	End Truck Code No.	Gear Reducer (Qty 2)	Controls & Motors	1 Speed	2 Speed
		55	B03/36UD*55	905369	905378	1 each Control		
	36	70	B03/36UD*70		905377	2 each 1/2 hp Motor 1 each Disconnect	545	565
		110	B03/36UD*110	4' - 6" WB	905376	(See Below)		
3		55			Not Av	vailable		
	48	70	B03/48UD*70	905380	905377	1 each Control 2 each 1/2 hp Motor	645	CCE
		110	B03/48UD*100	6' - 0" WB	905376	1 each Disconnect (See Below)	645	665

For Runway Flange Widths of 3³/8"-5½"
 Single phase not available

#### Capacity 1/4 - 5 ton/Spans to 36 feet

Max.	Max.				Kit Consists (	Of:	Approx 9	Shipping lbs)
Capacity (tons)	Span (ft)	Speed (fpm)	Kit Code	End Truck Code Number	Gear Reducer (Qty 2)	Controls & Motors	1 Speed	2 Speed
Standard								
		50	B05/36UD*50		905378	1 each Control		
1/4 thru	36	65	B05/36UD*65	905525 4'-6" WB	905377	2 each ½ hp Motor 1 each Disconnect	665	685
5		100	B05/36UD*100		905376	(see below)		

For Runway Flange Widths of 4"-6¼"
 Single phase not available

### **Motor & Controls for Dual Drive Underhung Cranes**

			200 -	208 Volt Powe	er	23	0 Volt Power	
Max. Span (ft)	Travel Speed (fpm)	Number of Speeds	Motor 2 Req'd	Control 1 Req'd	Disconnect Switch 1 Req'd	Motor 2 Req'd	Control 1 Req'd	Disconnect Switch 1 Req'd
36	50, 70	Single	1/2 HP 905381	44600311	905388	1/2 HP 905381	44600311	905388
30	and 100	Two	1/2 HP 32879624	44600351	905388	1/2 HP 905394	44600351	905388
	50				Not Available			
48	70 and	Single	1/2 HP 905381	44600311	905388	1/2 HP 905381	44600311	905388
	100	Two	1/2 HP 32879624	44600351	905388	1/2 HP 905394	44600351	905388
			46	0 Volt Power		57	5 Volt Power	
36	50, 70	Single	1/2 HP 905381	44600313	905389	1/2 HP 905382	44600314	905389
30	and 100	Two	1/2 HP 905395	44600343	905389	1/2 HP 905396	44600344	905389
	50				Not Available			
48	70 and	Single	1/2 HP 905381	44600313	905389	1/2 HP 905382	44600314	905389
	100	Two	1/2 HP 905395	44600343	905389	1/2 HP 905396	44600344	905389

Single phase not available NEMA 1 Enclosures Standard

Control panel includes mainline contactor, bridge fusing, reversing contactor and 115 volt control circuit transformer.

<sup>\*</sup> **Specify:** 1 = Single Speed 2 = Two Speed

<sup>\*</sup> **Specify:** 1 = Single Speed 2 = Two Speed



# **Crane Component - Underhung Motor Driven Crane Bridge Kits**

# Bridge Girder Beam Sizes For Various Spans - Motor Driven Crane American Standard Wide Flange Beams

			BEAM	SIZES FOR VAR	IOUS SPANS			
Spans			(*	*) RATED LOAD	IN TONS of 2000	)#		
То	1/4	1/2	1	1-1/2	2	3	4	5
Push or	Hand Geared C	rane (54" Wheell	pase)					
10 ft.	W 6x12	W 6x12	W 8x15	W 10x19	W 12x22	W 10x30	W 14x38	W 18x46
12 ft.	W 6x12	W 6x12	W 8x15	W 10x19	W 12x22	W 12x35	W 18x40	W 18x46
14 ft.	W 6x12	W 6x12	W 8x15	W 10x19	W 10x26	W 12x35	W 18x40	W 18x46
16 ft	W 6x12	W 8x15	W 8x18	W 10x26	W 14x26	W 14x38	W 16x45	W 16x50
18 ft.	W 8x15	W 8x18	W 8x18	W 10x26	W 10x30	W 18x40	W 16x45	W 18x55
20 ft.	W 8x15	W 8x18	W 8x21	W 10x26	W 10x30	W 18x40	W 18x46	W 16x57
22 ft.	W 8x18	W 8x18	W 10x26	W 10x30	W 14x34	W 12x45	W 16x50	W 16x57
24 ft	W 8x18	W 8x21	W 10x26	W 10x30	W 12x35	W 16x45	W 16x50	W 16x57
26 ft	W 8x21	W 10x22	W 10x30	W 12x35	W 14x38	W 14x48	W 14x53	W 18x60
28 ft.	W 10x22	W 10x26	W 10x30	W 14x38	W 12x40	W 14x48	W 16x57	W 18x65
30 ft	W 10x22	W 10x26	W 14x34	W 12x40	W 14x43	W 14x53	W 18x65	W 18x71
32 ft.	W 10x26	W 10x30	W 12x35	W 14x43	W 14x48	W 18x60	W 16x67	W 16x77
34 ft.	W 10x26	W 12x30	W 14x38	W 14x48	W 14x48	W 18x65	W 16x67	W 16x77
36 ft.	W 10x30	W 14x34	W 12x40	W 14x48	W 14x53	W 16x67	W 16x77	W 16x89
Motor D	riven Crane (54"	Wheelbase)						
10 ft.	W 6x12	W 6x12	W 8x15	W 10x19	W 12x22	W 12x35	W 18x40	W 18x46
12 ft.	W 6x12	W 6x12	W 8x15	W 10x19	W 10x26	W 12x35	W 18x40	W 18x46
14 ft.	W 6x12	W 6x12	W 8x18	W 10x26	W 14x26	W 14x38	W 10x45	W 16x50
16 ft.	W 6x12	W 8x15	W 8x18	W 10x26	W 10x30	W 18x40	W 16x45	W 14x53
18 ft.	W 8x15	W 8x18	W 8x21	W 10x26	W 10x30	W 18x40	W 18x46	W 16x57
20 ft.	W 8x18	W 8x18	W 8x21	W 10x30	W 10x30	W 10x45	W 12x50	W 16x57
22 ft.	W 8x18	W 8x21	W 10x26	W 10x30	W 12x35	W 16x45	W 16x50	W 16x57
24 ft.	W 8x18	W 8x21	W 10x26	W 14x34	W 14x38	W 14x48	W 14x53	W 18x65
26 ft.	W 8x21	W 10x26	W 10x30	W 12x35	W 12x40	W 12x50	W 16x57	W 18x65
28 ft.	W 10x22	W 10x26	W 10x33	W 12x40	W 12x40	W 14x53	W 18x65	W 18x71
30 ft.	W 10x26	W 10x30	W 12x35	W 12x40	W 12x45	W 14x53	W 16x67	W 14x74
32 ft	W 10x26	W 10x30	W 14x38	W 12x45	W 14x48	W 14x61	W 16x67	W 16x77
34 ft.	W 10x30	W 14x34	W 12x40	W 14x48	W 14x53	W 16x67	W 16x67	W 16x89
36 ft.	W 10x30	W 12x35	W 12x40	W 14x53	W 14x61	W 16x67	W 16x77	W 16x89
Motor D	riven Crane Dua	I Drive - (72" Wh	eelbase)					
38 ft.	W 12x35	W 12x40	W 14x48	W 14x61	W 16x67	W 16x77	_	_
40 ft.	W 12x40	W 12x45	W 14x53	W 16x67	W 16x67	W 16x89	_	_
42 ft.	W 12x40	W 14-x48	W 14x61	W 16x67	W 16x67	W 18x86	_	
44 ft.	W 14x43	W 14x48	W 14x61	W 16x67	W 16x77	W 18x86	_	_
46 ft.	W 14x48	W 14x53	W 16x67	W 16x77	W 18x76	W 18x97	_	_
48 ft.	W 14x53	W 14x61	W 16x67	W 18x76	W 18x86	W 21x101	_	_

<sup>\*</sup> Rated load is based on maximum combined hoist and trolley weights of: 500 pounds for 1/4, 1/2 and 1 ton hoists; 1100 pounds for 1½ and 2 ton hoists; 1600 pounds for 3 and 4 ton hoists; 2000 pounds for 5 ton hoists. Bridge designed in accordance with latest edition of CMAA Specification No. 74, using Lift-Tech trolleys.



# **Crane Component - Underhung Motor Driven Crane Bridge Kits**

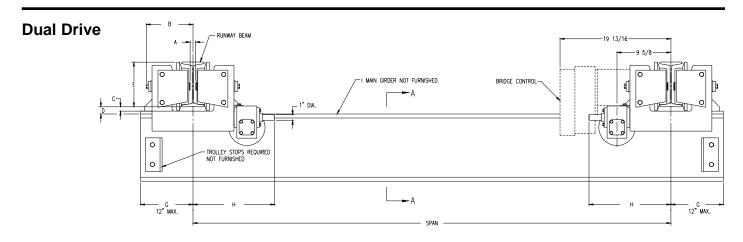
### Bridge Girder Selection Table "S" Beams (American Standard I-Beams and Channel Sections)

				(**) BEAM S	IZES FOR VARIOUS SP	ANS					
Spans				(*) RA	TED LOAD IN TONS of	2000#					
То	1/4	1/2	1	1-1/2	2	3	4	5			
Motor	Notor Driven Crane (54" Wheelbase)										
10 ft.	S 6x12.5	S 6x12.5	S 6x12.5	S 10x25.4	S 10x25.4	S 12x40.8	S 12x40.8	S 12x40.8			
12 ft	S 6x12.5	S 6x12.5	S 7x15.3	S 10x25.4	S 12x31.8	S 12x40.8	S 12x40.8	S 18x54.7			
14 ft.	S 6x12.5	S 6x12.5	S 7x15.3	S 10x25.4	S 12x31.8	S 12x40.8	S 12x40.8	S 18x54.7			
16 ft	S 6x12.5	S 7x15.3	S 8x18.4	S 10x25.4	S 12x31.8	S 12x40.8	S 18x54.7	S 18x54.7			
18 ft.	S 7x15.3	S 8x18.4	S 10x25.4	S 12x31.8	S 12x31.8	S 18x54.7	S 18x54.7	S 20x66			
20 ft.	S 7x15 3	S 8x18.4	S 10x25.4	S 12x31.8	S 12x40.8	S 18x54.7	S 18x54.7	S 20x66			
22 ft	S 8x18 4	S 10x25.4	S 12x31.8	S 12x40.8	S 12x40.8	S 18x54.7	S 20x66	S 20x66			
24 ft.	S 10x25.4	S 10x25.4	S 12x31.8	S 12x40.8	S 18x54.7	S 20x66	S 20x66	S 24x80			
26 ft.	S 10x25 4	S 10x25.4	S 12x40.8	S 18x54.7	S 18x54.7	S 20x66	S 18x54.7 w/C 9x13.4	S 24x80			
28 ft	S 10x25.4	S 12x31.8	S 12x40.8	S 18x54.7	S 12x40.8 w/C 8x11.5	S 18x54.7 w/C 9x13.4	S 18x54.7 w/C 9x13.4	S 20x66 w/C 9x13.4			
30 ft.	S 10x25.4	S 12x31.8	S 12x40.8	S 18x54.7	S 12x40.8 w/C 8x11.5	S 18x54.7 w/C 9x13.4	S 18x54.7 w/C 9x13.4	S 20x66 w/C 9x13.4			
32 ft.	S 12x31.8	S 12x40.8	S 18x54.7	S 12x40.8 w/C 8x11.5	S 15x42.9 w/C 8x11.5	S 18x54.7 w/C 9x13.4	S 18x54.7 w/C 10x15.3	S 20x66 w/C 9x13.4			
34 ft.	S 12x40.8	S 12x40.8	S 18x54.7	S 15x42.9 w/C 8x11.5	S 15x42.9 w/C 8x11.5	S 18x54.7 w/C 9x13.4	S 20x66 w/C 9x13.4	S 20x66 w/C 9x13.4			
36 ft.	S 12x40.8	S 12x40.8	S 12x31.8 w/C 9x13.4	S 15x42.9 w/C 8x11.5	S 15x42.9 w/C 8x11.5	S 18x54.7 w/C 12x20.7	S 20x66 w/C 9x13.4	S 20x66 w/C 12x20.7			

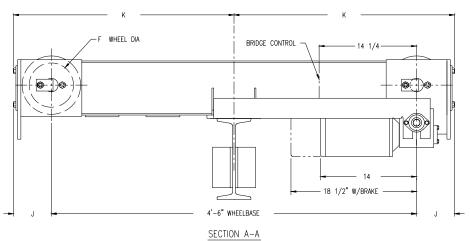
<sup>\*</sup> Rated load is based on maximum combined hoist and trolley weights of: 500 pounds for 1/4, 1/2 and 1 ton hoists; 1100 pounds for 1½ and 2 ton hoists; 1600 pounds for 3 and 4 ton hoists; 2000 pounds for 5 ton hoists. Bridge designed in accordance with latest edition of CMAA Specification No. 74, using Lift-Tech trolleys.

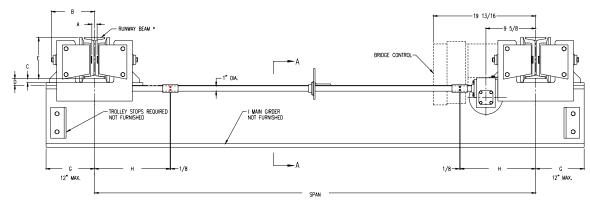
<sup>\*\*</sup> Beam sizes listed are American Standard I-Beam and Channel sections. Use ASTM A36 grade steel, first quality, free of rust and excessive mill scale.

# **Crane Component - Underhung Motor Driven Crane Bridge Kits**



### **Single Drive**





### **Clearance Dimensions (in.)**

		*	Runwa	y Beam S	Sizes**											Max. Wheel	Approx.
Product Code	Rated Capacity (tons)	Max. Span (ft)	Min Beam Width	Min. Flange Width	Max. Flange Width	A	В	С	D	E	F Wheel Dia.	G Min.	н	J†	к	Load Per Pair (lbs)	Shipping Wt (lbs)
905369	1/4 - 3	36	S6x12.5	3-3/8	5-1/2	1-1/8	7-13/16	15/16	1-7/16	5-1/8	4	8-1/4	14	4	2' - 7"	4240	400
905525	5	36	S8x18.4	4	6-1/4	3/4	8-11/16	13/16	1-5/16	8	6-1/2	9-3/8	14-5/8	5-1/2	2' - 8-5/8"	7520	480

<sup>\*\*</sup>Runway beam sizes shown indicate range of beams that trucks will fit. For proper runway size, consult qualified engineer or architect. End trucks for wider flange beams or 3-1/4" patented track are available.

Dimensions A, B, C, D and E are based on minimum beam.

<sup>†</sup> Dimension with rubber bumpers: 3 ton catalogs 905369 = 7 3/8 and 5 ton catalogs 905525 = 8-7/8.

<sup>\*</sup> For spans from 36' up to 48' consult factory.

# **Crane Component - Top Running Push & Hand Geared Crane Bridge Kits**

# Push & Hand Geared Type Kits Capacity 1/2 - 5 tons/Spans to 36 feet

Crane bridge kits contain all the parts needed to build top running single girder crane bridges, except for the bridge beam, cross shaft (when required) and trolley stop angles.

#### Push type kits contain:

- End trucks (1 pair)
- Complete attachment hardware



#### Hand geared kits contain:

- End trucks (1 pair) complete with driving pinion and attachment hardware
- Cross shaft support (quantity based upon span)
- Drive couplings (quantity based upon span)
- · Chain wheel and chain guide
- 36 foot length of hand chain with open connecting link

#### Material to be purchased locally:

- American standard section I-beam or wide flange that is at least 9 1/4" longer than the bridge span
- Four trolley stop angles must be cut to size and attached to bridge beam
- For hand geared bridges only: 1" diameter cross shaft to match span. Please refer to dimension chart on page 16

### **Push Type Top Running Kits**

Kit Code	Maximum Capacity (tons)	Maximum Span (ft)	Description	Maximum Wheel Load Per Pair (lbs)	Approximate Shipping Wt. (lbs)	
904535		20	8" Ductile Iron Wheels 4'-6" WB		450	
904535SR	5	36 5	8" Spark Resistant Wheels 4'-6" WB	6500	450	
904535S		24	8" Ductile Iron Wheels 3'-0" Short Wheel Base		405	

Each kit includes one pair of end trucks and the required hardware to attach truck frames to bridge I-beam.



# **Crane Component - Top Running Push & Hand Geared Crane Bridge Kits**

### **Hand Geared Top Running**

Capacity 1/4 - 5 tons/Spans to 36 feet

					Kit Con	sists Of:				
Max.	Max.		End Truck		s Shaft Assembly	Cross Shaft Coupling		Approx.	Wheel Size	Max. Wheel Load
Capacity (tons)	Span (ft)	Kit Code	Code Number	Qty.	Code Number	Qty.	Code Number	Shipping wt. (lbs)	and Type	per pair (lbs)
Standard										
	15	B05/15TH		1		2		500	8" dia.	
1/4	22	B05/22TH	904536 4' - 6" WB	2	904540	2	905374	515	geared ductile iron	6500
thru 5	29	B05/29TH		3		3		532		
	36	B05/36TH		4		3		549		
Spark Resis	stant									
	15	B05/15THSR		1		2		550	8" dia. geared bronze	
1/4	22	B05/22THSR	904536SR	2	004540	2	005074	565		6500
thru 5	29	B05/29THSR	4' - 6" WB	3	904540	3	905374	582		
	36	B05/36THSR		4		3		599		

Kit Consists of: 904550 Hand Chain Wheel

36' Hand Chain 1 Hand Chain Link 2 End Trucks

Cross Shaft Bearing as noted above Cross Shaft Coupling as noted above

Shaft Diameter is 1"

### Bridge Girder Beam Sizes For Push or Hand Geared Cranes\*\*

For					Rated Capacity* (t	ons)		
Spans to (ft)	1/4	1/2	1	1-1/2	2	3	4	5
10	S6x12.5	S7x15.3	S7x15.3	S8x18.4	S10x25.4	S12x40.8	S12x40.8	S12x40.8
12	S6x12.5	S7x15.3	S7x15.3	S10x25.4	S10x25.4	S12x40.8	S12x40.8	S18x54.7
14	S7x15.3	S7x15.3	S7x15.3	S10x25.4	S12x31.8	S12x40.8	S12x40.8	S18x54.7
16	S7x15.3	S7x15.3	S8x18.4	S10x25.4	S12x31.8	S12x40.8	S12x40.8	S18x54.7
18	S7x15.3	S7x15.3	S10x25.4	S10x25.4	S12x31.8	S12x40.8	S15x42.9	S18x54.7
20	S7x15.3	S8x18.4	S10x25.4	S12x31.8	S12x31.8	S12x40.8	S18x54.7	S18x54.7
22	S8x18.4	S10x25.4	S10x25.4	S12x31.8	S12x40.8	S18x54.7	S18x54.7	S20x66
24	S8x18.4	S10x25.4	S12x31.8	S12x40.8	S12x40.8	S18x54.7	S18x54.7	S20x66
26	S10x25.4	S10x25.4	S12x31.8	S12x40.8	S15x42.9	S18x54.7	S20x66	S24x80
28	S10x25.4	S10x25.4	S12x40.8	S12x40.8	S18x54.7	S20x66	S20x66	S24x80
30	S10x25.4	S12x31.8	S12x40.8	S18x54.7	S18x54.7	S20x66	S18x54.7C9x13.4	S24x80
32	S10x25.4	S12x31.8	S12x40.8	S18x54.7	S15x42.9C8x11.5	S18x54.7C9x13.4	S18x54.7C9x13.4	S20x66C9x13.4
34	S12x31.8	S12x40.8	S15x42.9	S18x54.7	S15x42.9C8x11.5	S18x54.7C9x13.4	S18x54.7C9x13.4	S20x66C9x13.4
36	S12x31.8	S12x40.8	S18x54.7	S15x42.9C8x11.5	S15x42.9C8x11.5	S18x54.7C9x13.4	S20x66C9x13.4	S20x66C9x13.4

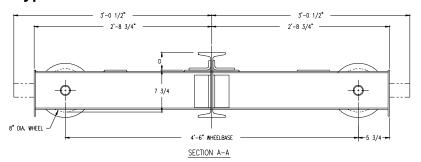
<sup>\*</sup> Rated capacity is based on maximum combined hoist and trolley weights of 500 pounds for 1/4, 1/2 and 1 ton hoists; 1100 pounds for 1 1/2 and 2 ton hoists; 1600 pounds for 3 and 4 ton hoists; 2000 pounds for 5 ton hoists. Bridge designed in accordance with CMAA Specification No. 74.

<sup>\*\*</sup>Beam sizes listed are American standard I-Beam and channel sections. Use ASTM A36 grade steel, first quality, free of rust and excessive mill scale.

# **Crane Component - Top Running Push & Hand Geared Crane Bridge Kits**

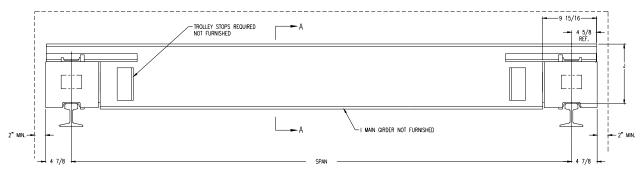
### **Outline Dimensions**

### **Push Type**

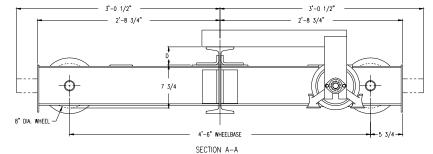


Beams (Depth)	D
6", 7", 8", 10" & 12"	3-1/4"
15", 18" & 20"	4-3/4"

J=7-3/4" + D + 3"

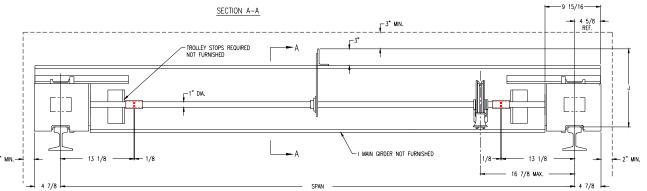


### **Hand Geared**



Beams (Depth)	D
6", 7", 8", 10" & 12"	3-1/4"
15", 18" & 20"	4-3/4"

J=7-3/4" + D + 3"





# **Crane Component - Top Running Motor Driven Crane Bridge Kits**

# Motor Driven with Single Drive Capacity 1/4 - 5 ton/Spans to 36 feet

					Kit Consists Of:						
Max. Capacity (tons)	Max. Span (ft)	Speed (fpm)	Kit Code	End Truck Code Number	Gear Reducer	Cross Shaft Support (Qty)	Cross Shaft Coupling (Qty)	Controls & Motors	1 Speed	2 Speed	
Standard											
		50	B05/08TC*50		905378						
	8	70	B05/08TC*70		905377	0			529	554	
		100	B05/08TC*100		905376						
		50	B05/15TC*50		905378						
	15	70	B05/15TC*70		905377	1	2	1 each	544	569	
		100	B05/15TC*100		905376			Control			
1/4		50	B05/22TC*50		905378			1 each			
thru	22	70	B05/22TC*70	904536 4'-6" WB	905377	2		½ hp Motor	559	584	
5		100	B05/22TC*100		905376			1 each			
		50	B05/29TC*50		905378			Disconnect			
	29	70	B05/29TC*70		905377	3		(see below)	576	601	
		100	B05/29TC*100		905376		3				
		50	B05/36TC*50		905378		3				
	36	70	B05/36TC*70		905377	4			591	616	
		100	B05/36TC*100		905376						

\*Specify: 1=Single Speed 2=Two Speed

### **Motor & Controls for Single Drive Top Running Cranes**

	208 - 230 Volt			460 Volt		575 volt						
1/2 hp Motor (1) req'd	Control (1) req'd	Disconnect Switch (1) req'd	1/2 hp Motor (1) req'd	Control (1) req'd	Disconnect Switch (1) req'd	1/2 hp Motor (1) req'd	Control (1) req'd	Disconnect Switch (1) req'd				
Single Speed												
905381	44600381	905388	905381	44600383	905389	905382	44600384	905389				
Two Speed	Two Speed											
905394	44600391	905388	905395	44600393	905389	905396	44600394	905389				

Single Phase Available

NEMA 1 Enclosures Standard

Control panel includes mainline contactor, bridge fusing, reversing contactor and 115 volt control circuit transformer.

# **Crane Component - Top Running Motor Driven Crane Bridge Kits**

### Motor Driven with Dual Drive Capacity 1/4 to 5 ton/Spans to 48 feet

						Approximate Shipping Weight (lbs)				
Max. Capacity (tons)	Max. Span (ft)	Speed (fpm)	Rail Size (# / yd)	Kit Code Number	End Truck Code Number	Gear Reducer (Qty. 2)	Controls & Motor	1 Speed	2 Speed	
	50 B05/36TD*50 905378 1 each Control		1 each Control							
	36	70 100	25 to 40	B05/36TD*70	904536 4' - 6" WB	905377	2 each 1/2 hp Motor 1 each Disconnect	575	615	
5				B05/36TD*100	4 -0 WD	905376	(See Page 19)			
5			50				Not Avail	lable		
	48	48 70	40	B05/48TD*70	904549	905377	1 each Control 2 each 3/4 hp Motor	675	715	
		100		B05/48TD*100	6' - 0" WB	905376	1 each Disconnect (See Page 19)	0/5	/15	

\*Specify:

1=Single Speed 2=Two Speed



**Top Running Single Drive Kit** 



**Top Running Dual Drive Kit** 

# **Crane Component - Top Running Motor Driven Crane Bridge Kits**

### **Motor & Controls for Dual Drive Top Running Cranes**

			20	00 - 208 Volt Pow	er		230 Volt Power			
Max. Span (ft)	Travel Speed (fpm)	No. of Speeds	Motor 2 Req'd	Control 1 Req'd	Disconnect Switch 1 Req'd	Motor 2 Req'd	Control 1 Req'd	Disconnect Switch 1 Req'd		
36	50, 70	Single	1/2 hp 905381	44600326	905388	1/2 hp 905381	44600326	905388		
30	and 100	Two	1/2 hp 32879624	44600336	905388	1/2 hp 905394	44600336	905388		
	50	-		Not Available			Not Available			
	70	Single	1/2 hp 905381	44600326	905388	1/2 hp 905381	44600326	905388		
48	70	Two	1/2 hp 32879624	44600336	905388	1/2 hp 905394	44600336	905388		
	100	Single	3/4 hp 32879542	44600329	905388	3/4 hp 32879542	44600329	905388		
	100	Two	3/4 hp 32879643	44600339	905388	3/4 hp 32879635	44600339	905388		

			460 Volt Power 575 Volt Power					
Max. Span (ft)	Travel Speed (fpm)	No. of Speeds	Motor 2 Req'd	Control 1 Req'd	Disconnect Switch 1 Req'd	Motor 2 Req'd	Control 1 Req'd	Disconnect Switch 1 Req'd
36	50, 70	Single	1/2 hp 905381	44600383	905389	1/2 hp 905382	44600384	905389
30	and 100	Two	1/2 hp 905395	44600393 905389 1/2 hp 905396 44600394	905389			
	50	-	Not Available			Not Available		
	70	Single	1/2 hp 905381	44600383	905389	1/2 hp 905382	44600384	905389
48		Two	1/2 hp 905395	44600393	905389	1/2 hp 905396	44600394	905389
	100	Single	3/4 hp 32879542	44600327	905389	3/4 hp 32879543	44600328	905389
	100	Two	3/4 hp 32879636	44600337	905389	3/4 hp 32879637	44600338	905389

Single Phase Not Available NEMA 1 Enclosures Standard

Control panel includes mainline contactor, bridge fusing, reversing contactor and 115 volt control circuit transformer.



# **Crane Component - Top Running Motor Driven Crane Bridge Kits**

### Bridge Girder Beam Sizes For Top Running Motor Driven Cranes American Standard I-Beams and Channel Selections

(**) BEAM SIZES FOR VARIOUS SPANS									
Spans	(*) RATED LOAD IN TONS OF 2000#								
То	1/4	1/2	1	1-1/2	2	3	4	5	
Motor	Motor Driven Crane - 54" Wheelbase								
10 ft.	S 6x12.5	S 6x12.5	S 6x12.5	S 10x25.4	S 10x25.4	S 12x40.8	S 12x40.8	S 12x40.8	
12 ft.	S 6x12.5	S 6x12.5	S 7x15.3	S 10x25.4	S 12x31.8	S 12x40.8	S 12x40.8	S 18x54.7	
14 ft.	S 6x12.5	S 6x12.5	S 7x15.3	S 10x25.4	S 12x31.8	S 12x40.8	S 12x40.8	S 18x54.7	
16 ft.	S 6x12.5	S 7x15.3	S 8x18.4	S 10x25.4	S 12x31.8	S 12x40.8	S 18x54.7	S 18x54.7	
18 ft.	S 7x15.3	S 8x18.4	S 10x25.4	S 12x31.8	S 12x31.8	S 18x54.7	S 18x54.7	S 20x66	
20 ft.	S 7x15.3	S 8x18.4	S 10x25.4	S 12x31.8	S 12x40.8	S 18x54.7	S 18x54.7	S 20x66	
22 ft.	S 8x18.4	S 10x25.4	S 12x31.8	S 12x40.8	S 12x40.8	S 18x54.7	S 20x66	S 20x66	
24 ft.	S 10x25.4	S 10x25.4	S 12x31.8	S 12x40.8	S 18x54.7	S 20x66	S 20x66	S 24x80	
26 ft.	S 10x25.4	S 10x25.4	S 12x40.8	S 18x54.7	S 18x54.7	S 20x66	S 18x54.7 w/C 9x13.4	S 24x80	
28 ft.	S 10x25.4	S 12x31.8	S 12x40.8	S 18x54.7	S 12x40.8 w/C 8x11.5	S 18x54.7 w/C 9x13.4	S 18x54.7 w/C 9x13.4	S 20x66 w/C 9x13.4	
30 ft.	S 10x25.4	S 12x31.8	S 12x40.8	S 18x54.7	S 12x40.8 w/C 8x11.5	S 18x54.7 w/C 9x13.4	S 18x54.7 w/C 9x13.4	S 20x66 w/C 9x13.4	
32 ft.	S 12x31.8	S 12x40.8	S 18x54.7	S 12x40.8 w/C 8x11.5	S 15x42.9 w/C 8x11.5	S 18x54.7 w/C 9x13.4	S 18x54.7 w/C 10x15.3	S 20x66 w/C 9x13.4	
34 ft.	S 12x40.8	S 12x40.8	S 18x54.7	S 15x42.9 w/C 8x11.5	S 15x42.9 w/C 8x11.5	S 18x54.7 w/C 9x13.4	S 20x66 w/C 9x13.4	S 20x66 w/C 9x13.4	
36 ft.	S 12x40.8	S 12x40.8	S 12x31.8 w/C 9x13.4	S 15x42.9 w/C 8x11.5	S 15x42.9 w/C 8x11.5	S 18x54.7 w/C 20x20.7	S 20x66 w/C 9x13.4	S 20x66 w/C 12x20.7	

<sup>\*</sup> Rated capacity is based on maximum combined hoist and trolley weights of 500 pounds for 1/4, 1/2 and 1 ton hoists: 1100 pounds for 1-1/2 and 2 ton hoists; 1600 pounds for 3 and 4 ton hoists; 2000 pounds for 5 ton hoists. Bridge designed in accordance with CMAA Specification No. 74. Use ASTM A36 grade steel, first quality, free of rust and excessive mill scale.

<sup>\*\*</sup> Beam sizes listed are American Standard I-Beam and Channel sections. Use ASTM A36 grade steel, first quality, free of rust and excessive mill scale.

# **Crane Component - Top Running Motor Driven Crane Bridge Kits**

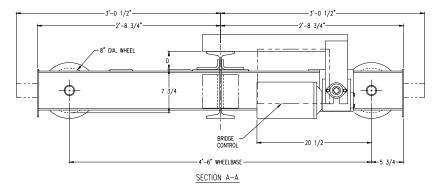
### **American Standard Wide Flange Beam Selections**

			BEAM S	SIZES FOR VAR	IOUS SPANS			
Spans (*) RATED LOAD IN TONS OF 2000#								
To	1/4	1/2	1	1-1/2	2	3	4	5
Push or H	Push or Hand Geared Crane - 54" Wheelbase							
10 ft.	W 6x12	W 6x12	W 8x15	W 10x19	W 12x22	W 10x30	W 14x38	W 18x46
12 ft.	W 6x12	W 6x12	W 8x15	W 10x19	W 12x22	W 12x35	W 18x40	W 18x46
14 ft.	W 6x12	W 6x12	W 8x15	W 10x19	W 10x26	W 12x35	W 18x40	W 18x46
16 ft.	W 6x12	W 8x15	W 8x18	W 10x26	W 14x26	W 14x38	W 16x45	W 16x50
18 ft.	W 8x15	W 8x18	W 8x18	W 10x26	W 10x30	W 18x40	W 16x45	W 18x55
20 ft.	W 8x15	W 8x18	W 8x21	W 10x26	W 10x30	W 18x40	W 18x46	W 16x57
22 ft.	W 8x18	W 8x18	W 10x26	W 10x30	W 14x34	W 12x45	W 16x50	W 16x57
24 ft.	W 8x18	W 8x21	W 10x26	W 10x30	W 12x35	W 16x45	W 16x50	W 16x57
26 ft.	W 8x21	W 10x22	W 10x30	W 12x35	W 14x38	W 14x48	W 14x53	W 18x60
28 ft.	W 10x22	W 10x26	W 10x30	W 14x38	W 12x40	W 14x48	W 16x57	W 18x65
30 ft.	W 10x22	W 10x26	W 14x34	W 12x40	W 14x43	W 14x53	W 18x65	W 18x71
32 ft.	W 10x26	W 10x30	W 12x35	W 14x43	W 14x48	W 18x60	W 16x67	W 16x77
34 ft.	W 10x26	W 12x30	W 14x38	W 14x48	W 14x48	W 18x65	W 16x67	W 16x77
36 ft.	W 10x30	W 14x34	W 12x40	W 14x48	W 14x53	W 16x67	W 16x77	W 16x89
Motor Driv	ven Crane - Sin	gle Drive - 36" a	nd 54" Wheelbas	se				
10 ft.	W 6x12	W 6x12	W 8x15	W 10x19	W 12x22	W 12x35	W 18x40	W 18x46
12 ft.	W 6x12	W 6x12	W 8x15	W 10x19	W 10x26	W 12x35	W 18x40	W 18x46
14 ft.	W 6x12	W 6x12	W 8x18	W 10x26	W 14x26	W 14x38	W 10x45	W 16x50
16 ft.	W 6x12	W 8x15	W 8x18	W 10x26	W 10x30	W 18x40	W 16x45	W 14x53
18 ft.	W 8x15	W 8x18	W 8x21	W 10x26	W 10x30	W 18x40	W 18x46	W 16x57
20 ft.	W 8x18	W 8x18	W 8x21	W 10x30	W 10x30	W 10x45	W 12x50	W 16x57
22 ft.	W 8x18	W 8x21	W 10x26	W 10x30	W 12x35	W 16x45	W 16x50	W 16x57
24 ft.	W 8x18	W 8x21	W 10x26	W 14x34	W 14x38	W 14x48	W 14x53	W 18x65
26 ft.	W 8x21	W 10x26	W 10x30	W 12x35	W 12x40	W 12x50	W 16x57	W 18x65
28 ft.	W 10x22	W 10x26	W 10x33	W 12x40	W 12x40	W 14x53	W 18x65	W 18x71
30 ft.	W 10x26	W 10x30	W 12x35	W 12x40	W 12x45	W 14x53	W 16x67	W 14x74
32 ft.	W 10x26	W 10x30	W 14x38	W 12x45	W 14x48	W 14x61	W 16x67	W 16x77
34 ft.	W 10x30	W 14x34	W 12x40	W 14x48	W 14x53	W 16x67	W 16x67	W 16x89
36 ft.	W 10x30	W 12x35	W 12x40	W 14x53	W 14x61	W 16x67	W 16x77	W 16x89
Motor Driv	ven Crane - Dua	al Drive - 72" Wh	eelbase					
38 ft.	W12x35	W12x40	W14x48	W14x61	W16x67	W16x77	W16x89	W18x97
40 ft.	W12x40	W12x45	W14x53	W16x67	W16x67	W16x89	W18x86	W21x101
42 ft.	W12x40	W14x48	W14x61	W16x67	W16x67	W18x86	W18x97	W21x101
44 ft.	W14x43	W14x48	W14x61	W16x67	W16x77	W18x86	W21x101	W21x111
46 ft.	W14x48	W14x53	W16x67	W16x77	W18x76	W18x97	W21x101	W21x111
48 ft.	W14x53	W14x61	W16x67	W18x76	W18x86	W21x101	W21x111	W21x122

<sup>\*</sup> Rated capacity is based on maximum combined hoist and trolley weights of 500 pounds for 1/4, 1/2 and 1 ton hoists: 1100 pounds for 1-1/2 and 2 ton hoists; 1600 pounds for 3 and 4 ton hoists; 2000 pounds for 5 ton hoists. Bridge designed in accordance with CMAA Specification No. 74. Use ASTM A36 grade steel, first quality, free of rust and excessive mill scale.

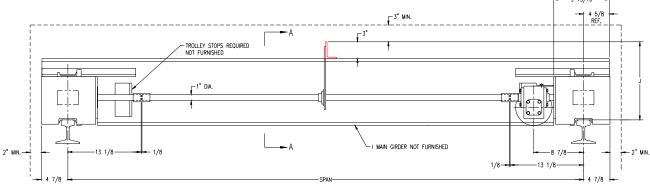
# **Crane Component - Top Running Motor Driven Crane Bridge Kits**

### **Single Drive**

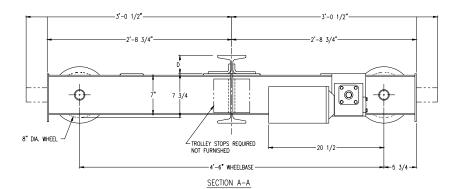


Beams (Depth)	D
6", 7", 8", 10" & 12"	3-1/4"
15", 18" & 20"	4-3/4"

J=7-3/4" + D + 3"

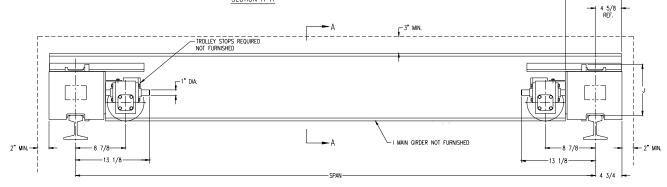


### **Dual Drive - 36' Spans\***



Beams (Depth)	D
6", 7", 8", 10" & 12"	3-1/4"
15", 18" & 20"	4-3/4"

J=7-3/4" + D + 3"



<sup>\*</sup> For spans from 36' up to 48' consult factory.

### Hand Geared & Motorized Crane Components

#### **Top Running**

End truck frames are steel channel box section weldment for a strong, rigid construction. End truck plates serve as rail sweeps for bridge protection and anti-drop stops, as required by CMAA Specification No. 74. The standard truck wheelbase is 4'-6" or 6'-0", suitable for spans to 36 feet or 48 feet respectively, meeting the CMAA span to wheelbase ratio limit of 8 to 1. Wheels are 8" diameter of high strength ductile iron, with a hardness of 220 BHN. Wheels have cylindrical tread designed for a minimum recommended rail of ASCE 20 lbs. Maximum size runway rail for minimum CMAA Specification No. 74 float of 3/4" is ASCE 45 lbs. Width between wheel flanges is 2-3/4". Wheel bearings are lifetime lubricated precision ball bearings. They provide a minimum of 5000 hours performance in accordance with CMAA Specification No. 74. Maximum allowable wheel load (determined in accordance with CMAA Specification No. 74) is 6500 pounds (per pair).

#### **Underhung**

The end truck is a rigid steel weldment, reinforced at the wheel axles and girder connection. The truck is welded of formed channel sides and structural steel plates complete with welded girder pads and end plates forming a rigid "U" shaped structure. The wheels are solid forged steel and rotate on two sealed lifetime-lubricated ball bearings. The wheels are heat treated with a hardness of 300 BHN. The single flange wheels have a compound tread for operation on American Standard I-beam or wide flange beams. Wheel diameter is 4 inch on 3 ton trucks and 6 ½ inch on 5 ton trucks. Patented track wheels are available for both capacities. The push type and geared type underhung end trucks are designed in accordance with CMAA Specification No. 74. The maximum wheel load is determined in accordance with CMAA Specification No. 74.

#### **Gear Reducers**

A right-angle, shaft mounted worm drive gear reducer can be mounted at either end of the bridge. The gear reducers can be mounted on either top running or underhung end trucks. Traverse reducer provides stopping motion of the bridge within a distance in feet equal to 10 percent of full load speed in feet per minute (traveling at maximum speed with maximum rated load).

	3-Ton 36' Span	3-Ton 48' Span	5-Ton 36' Span	5-Ton 36' Span	5-Ton 48' Span	Catalog
	<u>Underhung</u>	<u>Underhung</u>	<u>Underhung</u>	Top Running	Top Running	<u>Number</u>
Traverse Speed	110 fpm	110 fpm	100 fpm	100 fpm	100 fpm	905376
Traverse Speed	70 fpm	70 fpm	65 fpm	70 fpm	70 fpm	905377
Traverse Speed	55 fpm	_	50 fpm	50 fpm	_	905378

#### **Cross Shaft Support**

The cross shaft support, with its antifriction lifetime-lubricated bearings, support the cross shaft. For hand geared and single drive motor driven cranes, cross shafts are required. The cross shafts are to be 1" diameter AISI 1018 cold drawn steel.

#### **Cross Shaft Coupling**

The cross shaft couplings connect the cross shaft to the pinion shaft at each end truck, as well as couple sections of cross shaft.

#### Motor

Drive motor is a ½ or a ¾ horsepower, NEMA design 30-minute rated TENV with Class "F" insulation squirrel cage motor. The motor is provided with thermal overload protection as standard, C-faced mounted to the gear reducer. Single speed, two speed, three phase, and single phase motors (½ hp only) are available. Voltages available in single and two speed are 208-230-460-575 volt-3ph-60Hz, Voltages available in single speed only are 115-230 volt-1ph-60 Hz. Consult factory for any other special speeds or voltages that are not shown.

#### **Control Panel**

The control panels include mainline contactor, 115-volt control circuit transformer with fused secondary terminal strip, bridge fusing and reversing contactor in a NEMA 1 enclosure. NEMA 4/12 panels are available as an option.

#### **Fused Disconnect Switch**

Fused disconnect switch box has positive power disconnect and crane fusing. NEMA 1 enclosure is standard with NEMA 4/12 available as an option.

#### **Bridge Brake (optional)**

Bridge brake is a disc type that is available as an option. The bridge's standard drive reducer is a worm that will stop the crane within the CMAA and OSHA requirements.

# Hand Geared & Motorized Crane Components

#### **Electronic Acceleration Control (optional)**

The electronic acceleration control is a solid state device for controlling the torque and time of acceleration of the bridge crane. The electronic acceleration control provides a more controlled acceleration and is less load sensitive than conventional ballast resistors.

### Air Motor Drive Package – Catalog Number 904558 (optional)

Air motor drive packages are available in capacities up to 5 tons and spans to 36 feet. They can be mounted on the formed channel type end trucks that have geared wheels and drive pinions. Only one drive is required. The package includes air motor, gear reducer, control head with pendant throttle and air hose assembly with an 8'drop. Variable traverse speeds from 0-70 fpm are achievable. Filter, lubricator and regulator are recommended options.

#### **Bridge Bumpers (optional)**

Heavy duty rubber bumpers help cushion bridge end stop impact.

#### Other Options Available

Variable Frequency Control
Ballast Resistors
Thermal Overload Relays
Spark Resistance (Hand-geared and push type trucks)
Patented track



### WARNING

Improper application, installation, and use of crane kits can result in personal injury.

#### TO AVOID INJURY:

DO read, apply and install per assembly manual.

DO install trolley stops.

DO NOT exceed maximum capacity

DO NOT use to lift people or loads over people.

### **Notes**

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414 West Broadway Ave. P.O. Box 769 Muskegon, Michigan 49443-0769