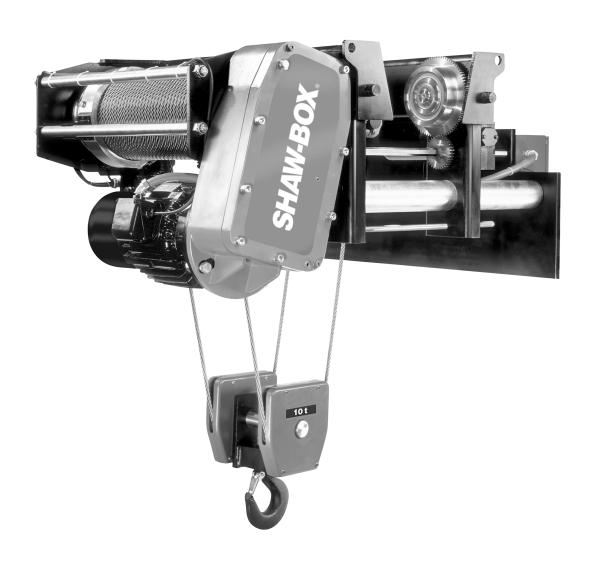
5 to 10 Tonnes Single Reeved

## World Series, Hoist

# **Price and Specification Book**

All Prices are F.O.B. Muskegon, MI Prices effective October 4, 2004



## **Important Information**

All prices are F.O.B. Muskegon, Michigan. Specifications, prices and deliveries are subject to change without notice. Suggested list prices are furnished as trade information only and not as a restriction on resale pricing. Orders subject to final acceptance at our General Offices, Muskegon, Michigan.

F.O.B. Point - Muskegon, Michigan.

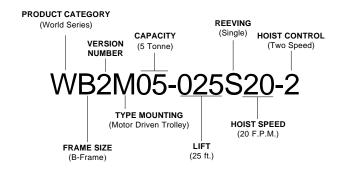
**Terms of Payment** – Net 30 days from date of invoice. Payable in U.S. dollars. Orders subject to Lift-Tech International's standard terms of sale.

Prices are firm for standard quoted deliveries.

Prices subject to change without notice.

When approved clearance diagrams are required, lead times given are from receipt of approved diagrams and not receipt of purchase order. We maintain branch offices and resident field sales representatives in principal cities. They are available to you, upon request, to assist in determining the correct equipment to best handle any job requirement. All inquiries regarding Customer Service and Order Entry should be directed to the Lift-Tech  $_{\text{TM}}$  Customer Service Departments. Reference the back cover for addresses and phone numbers.

#### **Hoist Catalog Numbering System**



#### Index

Subject	Page No.
Hoist Catalog Numbering System	2
Standard Hoist Specifications	3
Base Hoist Pricing	4
Options Pricing	5-6
Hoist Dimensions, Speeds and Horsepower 5 tonne Single Reeved (25 ft. lift) 5 tonne Single Reeved (40 ft. lift) 7½ tonne Single Reeved 10 tonne Single Reeved	
Bridge Girder Selections	11-13
Wheel Loading Summary	14-15

# Shaw-Box World Series Hoist

#### **Available Options**

Trolley: Soft Start

Single Speed Trolley Control Variable Frequency Control

Trolley Brake
Trolley Bumpers

**Different Traverse Speeds** 

Wider Flange Width on 5-Tonne B-Frame Models

Hoist: Mainline Contactor

Overcapacity Lift Protection

**Pushbutton Station** 

Rope Guide

Geared Limit Switch

#### **Standard Specifications**

Capacity: 5, 71/2 and 10 tonne

**Service Class:** Meets the duty cycle requirement of HMI H4

Service

Operation: Indoor

Power Supply: 460, 200, 230 or 575/3/60 - also 380/3/50

(reduce speeds by 1/6 for 50 Hz)

Wheels: Compound tread machined steel hardened to 220 BHN, 8" diameter for the 7% and 10 tonne models and 6% "

diameter for the 5 tonne model

**Flange Width Range:** Trolley flange width range for the  $7\frac{1}{2}$  & 10 tonne models is  $4\frac{5}{8}$  - 20" with a maximum flange thickness of 2". For the 5 tonne model width range is  $4\frac{5}{8}$  - 14" with a maximum flange thickness of  $1\frac{3}{4}$ " as standard

**Bumpers:** Optional

**Hoist Gearing:** Triple reduction, helical for the first two reductions, spur for the third, heat-treated alloy steel. All gearing is oil bath lubricated, contained in a vacuum cast aluminum gear case mounted outside of the rope drum

Mechanical Load Brake: None

**Rope Drum:** Steel machined up to 50% of rope's diameter. Rope secured to drum with three heavy Ductile Iron clamps

and three extra wraps

Sheaves: Machined steel

Rope Guide: Heavy duty metal rope guide is optional

Headroom: Low headroom design is standard

Hoist Motor Brake: D.C. disc rated at 200% of the motors

full load torque

Trolley Brake: Optional - retardation by non-locking worm

gear reducer

Trolley Traverse Gearing: Totally enclosed, oil-bath

lubricated single worm

Hoist Motor: Two speed, two winding with a 6:1 ratio 30

minute, TEFC, class F with TAS

Trolley Motor: Two speed, two winding with a 3:1 ratio 30

minute, TENV, class F with TAS

Control: Magnetic contactor type. Line fusing standard.

Pushbutton station not furnished as standard

**Control Enclosure:** Both hoist and trolley control are contained in one NEMA 4/12 panel mounted and wired in as

standard

Limit Switch: Upper block operated control circuit limit switch

Bearings: Antifriction type throughout

Paint: Control box & traverse gear case are powder coated. Enamel finish on hoist motor and brake, trolley frame, drum frame, lower block frame, counter weight and upper yoke

block

## **World Series Hoist**

#### **Base Hoist Pricing**

#### 5 Tonne - Low Headroom Single Reeved

		ŀ	Hoist			Trolley			
Catalog Number	Lift (ft)	Speed (fpm)	Motor (hp)	No. Ropes/ Dia.	Speed (fpm)	Motor (hp)	Wheel Dia. (in)	List Price	Wt. (lbs)
WB2M05-025S20-2	25	20/3.3	7.5/1.25	4-7/16	50/16.7	1/4 - 1/12	6-1/2	6928	1450
WB2M05-040S20-2	40	20/3.3	7.5/1.25	4-7/16	50/16.7	1/4 - 1/12	6-1/2	7584	1650

#### 5-Ton (US tons) - High Speed Hoist Option

For 5-ton heavy service applications requiring a fast hoisting speed, the C-frame hoist is available 2-part single reeved with a hoisting speed of 40/6.6 fpm. With exception of the headroom, the weights and dimensions are the same as for the 10-ton "C" frame World Series hoist.

	Hoist				Trolley					
Catalog Number	Lift (ft)	Speed (fpm)	Motor (hp)	No. Ropes/ Dia.	Headroom *	Speed (fpm)	Motor (hp)	Wheel Dia. (in)	List Price	Wt. (lbs)
WC2M05-050S40-2	50	40/6.6	15/2.5	2-9/16	*	60/20	1/2 - 1/6	8	12137	2750
Trolley Beam Flange Width - (B)								_		

Note: Lower block sheave pitch diameter will be 10-1/2".

37 - 1/2

\*Headroom (in)

The upper/lower geared limit switch will be a 4-element switch with an upper slow-down & stop and a lower slow-down & stop position. Due to the hoisting speed the live load impact factor will be 20% which may affect your girder selection.

36 - 1/4

36 - 7/8

Due to the fast hoisting speed this 5-ton hoist only has a rope guide as standard.

#### 71/2 Tonne - Low Headroom Single Reeved

37 - 3/8

	Hoist				Trolley				
Catalog Number	Lift (ft)	Speed (fpm)	Motor (hp)	No. Ropes/ Dia.	Speed (fpm)	Motor (hp)	Wheel Dia. (in)	List Price	Wt. (lbs)
WC2M07-025S24-2	25	24/4	15/2.5	4-9/16	50/16.7	1/2 - 1/6	8	11630	2700
WC2M07-040S24-2	40	24/4	15/2.5	4-9/16	50/16.7	1/2 - 1/6	8	12449	2950

#### 10 Tonne - Low Headroom Single Reeved

	Hoist				Trolley				
Catalog Number	Lift (ft)	Speed (fpm)	Motor (hp)	No. Ropes/ Dia.	Speed (fpm)	Motor (hp)	Wheel Dia. (in)	List Price	Wt. (lbs)
WC2M10-025S20-2	25	20/3.3	15/2.5	4-9/16	50/16.7	1/2 - 1/6	8	11794	2750
WC2M10-040S20-2	40	20/3.3	15/2.5	4-9/16	50/16.7	1/2 - 1/6	8	12613	3000

## **World Series Hoist**

## **Options Pricing**

#### **Hoist Options:**

Rope GuideAdd	\$131
Upper & lower geared control circuit limit switch	197
Add mainline contactor	393
Over capacity lift limit switch	328
575/3/60 hoist & trolley motors and controls (2-speed)	NC
Derating of a hoist capacity (new capacity plates from ½ - 9 tonnes in ½ tonne increments)	164
NEMA 4X Control Enclosure	
Fiberglass enclosure	582
Stainless steel enclosure	848
Bullard Hook	
For 5 ton hoist Add	759
For the 7½ or 10 ton hoist Add	2047
Adds to the headroom approximately 3.25" and will increase leadtime. Consult factory for specific details	
Add for Stainless Steel Wire Rope Add	P.O.A.

#### For pushbutton station (shipped loose)

Number of Buttons				al Adders Price
1 Speed	2 Speed	On-Off	25'	40'
	4	0	257	295
0	4	2	311	362
0	6	0	293	352
	6	2	344	402
	2	0	250	277
2	2	2	290	336
2	4	0	277	335
	4	2	329	387
4	2	0	252	303
4	2	2	304	354

(Pendant Stations Not Included with Base Hoist Price)
List prices are arranged by the various button combinations available per hoist lift

Price includes NEMA 4 pendant station with the button quantity listed, control and strain reliever cable for the hoist lift selected. The length of the cables will be approximately equal to the lift less 2½ feet.

The pendant will ship loose for field installation by others. Please give desired configuration with order.

## **World Series Hoist**

## **Options Pricing**

#### **Trolley Options:**

Add soft-start to standard 2 speed trolley	Add	\$313
Single speed trolley control without soft-start	Deduct	-(55)
Single speed trolley control with soft-start	Add	242
Variable frequency trolley control		
Electromotive P3 for 230 or 460/3/60	Add	853
Electromotive G+ for 575/3/60	Add	2132
Trolley brake, AC motor mounted disc type rated at 50% torque	Add	354
Trolley bumpers, four (4) rubber bumpers mounted two (2) at each end	Add	164
Faster trolley speeds (standard is 50/16.7 fpm)		
For 75/25 fpm	Add	136
5 tonne traverse changes from 1/4 to 1/2 hp		
7½ & 10 tonne traverse changes from 1/2 to 3/4 hp		

	Wheel Base	Beam	Wheel Load (lbs)					
Capacity	(in)	Flange Width	WL1	WL2	LH Pair	WL3	WL4	RH Pair
5 Tonne	16	3-1/4" PT	4067	4247	NA	1938	2253	NA
5 TOTITIE	38.125	3-1/4 PT	4457	6044	10501	951	1253	2204
5 Ton	16	3-1/4" PT	3745	3859	NA	1826	2050	NA
5 1011	38.125	3-1/4 PT	4075	5522	9597	900	1183	2083

	Trolley Beam Flange Width (B)								
Dimension	14-1/8	14-1/8 16 18 20							
С	24	23	22	21					
D	13-13/16	15-11/16	17-11/16	19-11/16					
Е	11-1/4	13-1/8	15-1/8	17-1/8					
М	66 - for 460 volts 68 - for 200, 230 & 575 volts								

#### **World Series Spare Parts Kit**

Applicable only when purchased with a World Series Hoist

Lift	5 tonne	7½ tonne	10 tonne
25'	1080	1493	1493
40'	1178	1635	1635
50'	1493	X	X

Kit includes the following hoist motion only parts:

Brake disc Transformer

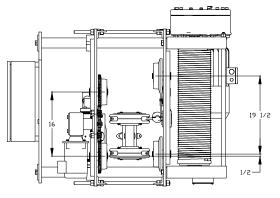
Brake hardware kit Wire rope assembly

Reversing contactor

## **World Series Hoist**

5 TONNE SINGLE REEVED MOTOR DRIVEN TROLLEY

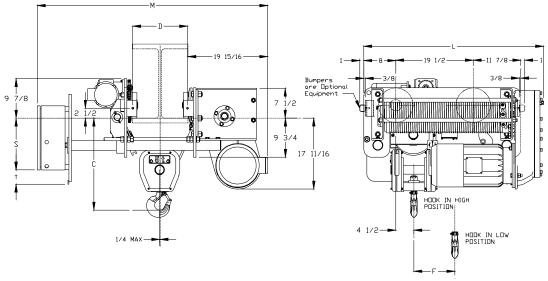
#### 25' Lift



Dimensions Affected by Beam Flange Width										
		Trolley Beam Flange Width - (B) *								
Dimension	4-5/8	4-5/8 6 8 10 12 14								
С	23-3/4	23-5/8	23-1/4	22-7/8	22-1/4	21-1/2				
D	4-5/16	5-11/16	7-11/16	9-11/16	11-11/16	13-11/16				
E	1-3/4	1-3/4 3-1/8 5-1/8 7-1/8 9-1/8 11-1/8								
М	460 Volt	t - 58" 0 & 575 V	'alt - 60"							

See page 7 for Illustration of dimension  ${\sf E}$  in relation to a beam

\*See options page for wider beam flange widths



#### **Dimensions Affected by Lift**

	Hoist		Tro	olley	200, 230 & 575 Volt			460 Volt				Max. Hiç W.L.*	gh Hook (lbs)		
Catalog Number	Max. Lift (ft)	Speed (fpm)	H.P.	Rope No. & Dia.	Speed (fpm)	H.P.	Wt. (lbs)	s	Т	s	Т	F	L	US (short) Tons	Metric Tonnes
WB2M05-025S20-2	25	20/3.3	7.5/1.25	4-7/16	50/16.7	1/4 - 1/12	1450	14-15/16	1-9/16	12-15/16	3-9/16	6	45-1/8	4043	4405

Weights shown are for standard hoists listed. For approximate shipping weights, add 150 lbs. to the net weight given. Consult factory for weights of special hoists. Dimensions shown are in inches unless otherwise noted.

When used on smaller beams, beam must be free of all obstructions, such as clips, suspension bolts and nuts. Trolley is capable of running on beams from 4-5/8" - 14" wide with a flange thickness of 13/4" as standard.

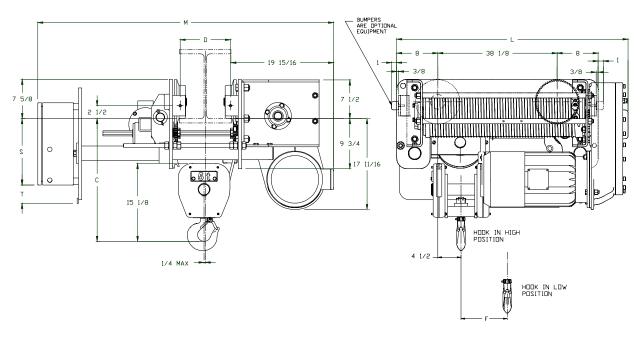
\*Estimated wheel load is stated in US pounds and does not include live or dead load impacts. Wheel load is the maximum produced on one (1) wheel at full load in the high hook position. Wheel load is based on a beam flange width of 14" and will change as the beam flange width changes. Refer to pages 13 & 14 for more detailed information.

## **World Series Hoist**

5 TONNE

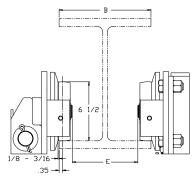
SINGLE REEVED MOTOR DRIVEN
TROLLEY

#### 40' Lift



Dimensions Affected by Beam Flange Width										
		Trolley Beam Flange Width - (B) *								
Dimension	4-5/8	6	8	10	12	14				
С	23-3/4	23-5/8	23-1/4	22-7/8	22-1/4	21-1/2				
D	4-5/16	5-11/16	11-11/16	13-11/16						
E	1-3/4	3-1/8	5-1/8	7-1/8	9-1/8	11-1/8				
М	460 Volt - 58" 200, 230 & 575 Volt - 60"									

<sup>\*</sup>See options page for wider beam flange widths



#### Dimensions Affected by Lift

	Dimensions Arested by Ent														
		١	Hoist		Tro	olley		200, 23 575 \		460 V	/olt				gh Hook * (lbs)
Catalog Number	Max. Lift	Speed (fpm)	H.P.	Rope No. & Dia.	Speed	H.P.	Wt.	s	т	s	т	_		US (short) Tons	Metric Tonnes
Number	(ft)	(ipiii)	п.г.	Dia.	(ipiii)	п.г.	(ing)	,		3	'	Г	_	10115	Tomiles
WB2M05-040S20-2	40	20/3.3	7.5/1.25	4-7/16	50/16.7	1/4 - 1/12	1650	14-15/16	1-9/16	12-15/16	3-9/16	9-11/16	60	4893	5360

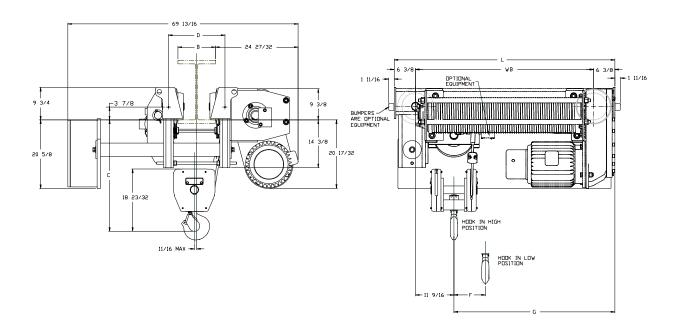
Weights shown are for standard hoists listed. For approximate shipping weights, add 150 lbs. to the net weight given. Consult factory for weights of special hoists. Dimensions shown are in inches unless otherwise noted.

When used on smaller beams, beam must be free of all obstructions, such as clips, suspension bolts and nuts. Trolley is capable of running on beams from 4-5/8" - 14" wide with a flange thickness of 13/4" as standard.

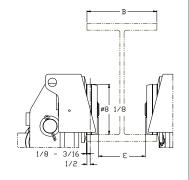
\*Estimated wheel load is stated in US pounds and does not include live or dead load impacts. Wheel load is the maximum produced on one (1) wheel at full load in the high hook position. Wheel load is based on a beam flange width of 14" and will change as the beam flange width changes. Refer to pages 13 & 14 for more detailed information.

## **World Series Hoist**

7½ TONNE SINGLE REEVED MOTOR DRIVEN TROLLEY



	Dimensions Affected by Beam Flange Width										
	Trolley Beam Flange Width - (B)										
Dimension	nsion 4-5/8 6 8 10 12 14 16 18 20										
С	31-3/8	31-11/32	31-1/8	31	30-27/32	30-7/32	29-15/32	28-7/32	25-31/32		
D	10-5/32	11-17/32	13-17/32	15-17/32	17-17/32	19-17/32	21-17/32	23-17/32	25-17/32		
E	E 25/32 2-5/32 4-5/32 6-5/32 8-5/32 10-5/32 12-5/32 14-5/32 16-5/3										



#### **Dimensions Affected by Lift**

	Hoist				Tro	olley							gh Hook * (lbs)
Catalog Number	Max. Lift (ft)	Speed (fpm)	H.P.	Rope No. & Dia.	Speed (fpm)	H.P.	Wt. (lbs)	WB	F	G	L	US (short) Tons	Metric Tonnes
WC2M07-025S24-2	25	24/4	15/2.5	4-9/16	50/16.7	1/2 - 1/6	2700	39-1/2	5-15/16	34-5/16	52-1/4	5989	6568
WC2M07-040S24-2	40	24/4	15/2.5	4-9/16	50/16.7	1/2 - 1/6	2950	53-1/2	9-7/16	48-5/16	66-1/4	6690	7337

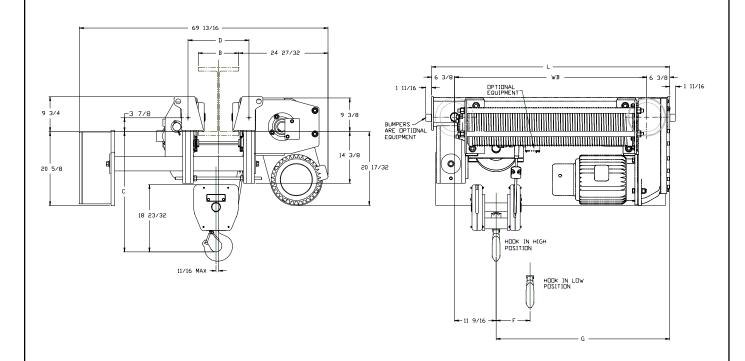
Weights shown are for standard hoists listed. For approximate shipping weights, add 200 lbs. to the net weight given. Consult factory for weights of special hoists. Dimensions shown are in inches unless otherwise noted.

When used on smaller beams, beam must be free of all obstructions, such as clips, suspension bolts and nuts. Trolley is capable of running on beams from 4-5/8" - 20" wide with a flange thickness of 2".

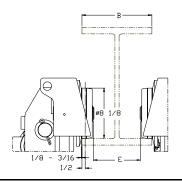
\*Estimated wheel load is stated in US pounds and does not include live or dead load impacts. Wheel load is the maximum produced on one (1) wheel at full load in the high hook position. Wheel load is based on a beam flange width of 15" and will change as the beam flange width changes. Refer to pages 13 & 14 for more detailed information.

## **World Series Hoist**

10 TONNE SINGLE REEVED MOTOR DRIVEN
TROLLEY



Dimensions Affected by Beam Flange Width										
	Trolley Beam Flange Width - (B)									
Dimension	4-5/8	6	8	10	12	14	16	18	20	
С	31-3/8	31-11/32	31-1/8	31	30-27/32	30-7/32	29-15/32	28-7/32	25-31/32	
D	10-5/32	11-17/32	13-17/32	15-17/32	17-17/32	19-17/32	21-17/32	23-17/32	25-17/32	
E	25/32	2-5/32	4-5/32	6-5/32	8-5/32	10-5/32	12-5/32	14-5/32	16-5/32	



<b>Dimensions</b>	Affected	by	Lift
-------------------	----------	----	------

	Hoist			Tro	olley							gh Hook * (lbs)	
Catalog Number	Max. Lift (ft)	Speed (fpm)	H.P.	Rope No. & Dia.	Speed (fpm)	H.P.	Wt. (lbs)	WB	F	G	L	US (short) Tons	Metric Tonnes
WC2M10-025S20-2	25	20/3.3	15/2.5	4-9/16	50/16.7	1/2 - 1/6	2750	39-1/2	5-15/16	34-5/16	52-1/4	7872	8644
WC2M10-040S20-2	40	20/3.3	15/2.5	4-9/16	50/16.7	1/2 - 1/6	3000	53-1/2	9-7/16	48-5/16	66-1/4	8794	9657

Weights shown are for standard hoists listed. For approximate shipping weights, add 200 lbs. to the net weight given. Consult factory for weights of special hoists. Dimensions shown are in inches unless otherwise noted.

When used on smaller beams, beam must be free of all obstructions, such as clips, suspension bolts and nuts. Trolley is capable of running on beams from 4-5/8" - 20" wide with a flange thickness of 2".

\*Estimated wheel load is stated in US pounds and does not include live or dead load impacts. Wheel load is the maximum produced on one (1) wheel at full load in the high hook position. Wheel load is based on a beam flange width of 15" and will change as the beam flange width changes. Refer to pages 13 & 14 for more detailed information.

## **World Series Hoist**

## Single Girder Top Running & Underhung Motor Driven Bridge Beam Selections For U.S. (Short) Tons and Metric Tonnes

The following girder selection charts were developed based on the following assumptions;

- 1. Section designation is in accordance with AISC.
- 2. Beam sizes listed are American wide flange (W) and channel (C) sections.
- 3. Use ASTM A 36 grade steel, first quality, free of rust and excessive mill scale
- 4. The bridge is designed in accordance with CMAA Specification 74, revised 2000 and is based on the following assumptions:

#### **US (Short) Tons**

#### **Metric Tonnes**

Rated Load (tons)	Hoist plus Trolley Dead Load (lbs)	* Trolley Wheel Diameter (in)	Allowable Flange Width (in)	Maximum Allowable Flange Thickness (in)
5	1680	6-1/2	4-5/8 - 20	1-3/4
7½	3000	8	4-5/8 - 20	2
10	3000	8	4-5/8 - 20	2

Rated Load (tonnes)	Hoist plus Trolley Dead Load (kg)	* Trolley Wheel Diameter (in)	Allowable Flange Width (in)	Maximum Allowable Flange Thickness (in)
5	762	6-1/2	4-5/8 - 20	1-3/4
7½	1361	8	4-5/8 - 20	2
10	1361	8	4-5/8 - 20	2

DLFB, DLFT, HLF and IFD are assumed to be 1.1, 1.1, .15 and .1 respectively Assumed additional dead load (for cross conductors) is10 lbs./ft. (4.5 kg/ft) The bridge is assumed to be an indoor bridge

- 5. If any of the above assumptions are exceeded contact the factory for beam selection.
- 6. No additional loading such as footwalks, platforms, cabs, machinery, etc., is allowed.
- 7. Beam substitution is allowed by going to an increased span, but **not** by going to an increased load.

## **World Series Hoist**

# Single Girder Top Running & Underhung Motor Driven Bridge Beam Selections For U.S. (Short) Tons

Span Thru		Wv	v/C
(ft)	W	W	С
	5 Ton Ra	ted Load	
20	W14X82	W18X71	C10X15.3
22	W16X89	W18X71	C10X15.3
24	W16X89	W18X71	C12X20.7
26	W21X93	W21X83	C12X20.7
28	W16X100	W21X83	C12X20.7
30	W16X100	W21X83	C12X20.7
32	W16X100	W21X93	C12X20.7
34	W18X119	W21X93	C12X20.7
36	W18X119	W21X93	C12X20.7
38	W18X119	W21X93	C12X20.7
40	W18X119	W21X93	C12X30
42	W18X119	W21X93	C15X33.9
44	W21X132	W24X103	C15X33.9
46	W21X132	W24X103	C15X33.9
48	W24X146	W24X103	C15X33.9
50	W27X161	W24X103	C15X33.9
52	W27X161	W24X103	C15X33.9
54	W30X173	W24X103	MC18X42.7
56	W27X178	W24X103	MC18X42.7
58	W30X191	W24X103	MC18X58
60	W30X211	W30X124	MC18X42.7

Span Thru		Wv	v/C
(ft)	w	W	С
	7½ Ton R	ated Load	
20	W18X119	W21X93	C12X20.7
22	W18X119	W21X93	C12X20.7
24	W18X119	W21X93	C12X30.0
26	W18X119	W21X93	C15X33.9
28	W18X130	W21X93	MC18X42.7
30	W18X130	W27X114 W18X119 W18X119 W27X129 W27X129 W27X129 W27X129	C15X33.9
32	W18X130		C15X33.9
34	W18X130		C15X40
36	W18X143		C15X33.9
38	W18X143		C15X33.9
40	W24X162		C15X33.9
42	W24X162	W27X129	C15X33.9
44	W24X162	W27X129	C15X33.9
46	W24X176	W27X129	C15X33.9
48	W27X178	W18X143	C15X33.9
50	W30X191	W30X148	C15X40
52	W33X201	W30X148	MC18X42.7
54	W30X211	W30X148	MC18X42.7
56	W30X211	W30X148	MC18X42.7
58	W30X235	W30X148	MC18X45.8
60	W33X241	W36X170	MC18X45.8

10 Ton Rated Load						
20	W18X130	W18X119	C15X33.9			
22	W18X130	W18X130	C15X33.9			
24	W18X130	W18X130	C15X33.9			
26	W18X143	W18X130	C15X33.9			
28	W18X143	W18X130	C15X33.9			
30	W18X143	W18X130	C15X33.9			
32	W24X162	W18X143	C15X33.9			
34	W21X166	W18X143	C15X33.9			
36	W21X166	W18X143	C15X33.9			
38	W21X166	W18X158	C15X33.9			
40	W24X176	W18X158	C15X33.9			
42	W27X194	W18X158	C15X33.9			
44	W27X194	W18X175	C15X33.9			
46	W27X194	W18X175	C15X33.9			
48	W30X211	W18X175	C15X33.9			
50	W30X211	W18X192	C15X40			
52	W36X230	W24X192	MC18X42.7			
54	W30X235	W24X192	MC18X42.7			
56	W33X241	W24X192	MC18X42.7			
58	W36X260	W24X192	MC18X42.7			
60	W36X280	W24X207	MC18X42.7			

## **World Series Hoist**

# Single Girder Top Running & Underhung Motor Driven Bridge Beam Selections For Metric Tonnes

Span Thru		Ww/C						
(ft)	W	W	С					
5 Tonne Rated Load								
20	W16X89	W21X83	C12X20.7					
22	W21X93	W21X83	C12X20.7					
24	W21X93	W21X83	C12X20.7					
26	W16X100	W21X93	C12X20.7					
28	W16X100	W21X93	C12X20.7					
30	W27X114	W21X93	C12X20.7					
32	W27X114	W21X93	C12X20.7					
32 34 36 38 40	W18X119 W18X119 W18X119 W18X130	W21X93 W21X93 W24X103 W24X103 W24X103	C12X20.7 C12X20.7 C12X20.7 C12X20.7 C12X20.7					
42	W18X130	W24X103	C12X30					
44	W18X143	W24X103	C15X33.9					
46	W24X146	W24X103	C15X33.9					
48	W24X146	W24X103	MC18X42.7					
50	W27X161	W24X103	MC18X42.7					
52	W30X173	W30X124	MC18X42.7					
54	W27X178	W30X124	MC18X42.7					
56	W30X191	W27X129	MC18X42.7					
58	W30X211	W27X129	MC18X42.7					
60	W30X211	W27X129	MC18X42.7					

Span Thru		Ww/C						
(ft)	w	W	С					
7½ Tonne Rated Load								
20	W18X119	W24X103	C12X20.7					
22	W18X119	W24X103	C12X20.7					
24	W18X130	W24X103	C12X20.7					
26	W18X130	W18X119	C15X33.9					
28	W18X130	W18X119	C15X33.9					
30	W18X130	W27X129	C15X33.9					
32	W18X143	W27X129	C15X33.9					
34	W18X143	W27X129	C15X33.9					
36	W18X143	W27X129	C15X33.9					
38	W24X162	W27X129	C15X33.9					
40	W24X162	W27X129	C15X33.9					
42	W24X162	W18X143	C15X33.9					
44	W24X176	W18X143	C15X33.9					
46	W30X191	W30X148	C15X33.9					
48	W30X191	W30X148	C15X40					
50	W33X201	W30X148	MC18X42.7					
52	W30X211	W30X148	MC18X42.7					
54	W30X211	W30X148	MC18X42.7					
56	W30X235	W30X148	MC18X42.7					
58	W33X241	W24X176	MC18X42.7					
60	W36X260	W24X176	MC18X42.7					

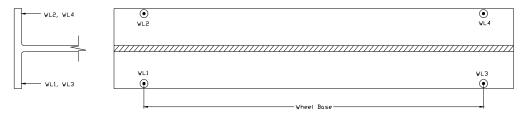
10 Tonne Rated Load						
20	W18X130	W18X130	C15X33.9			
22	W18X143	W18X130	C15X33.9			
24	W18X143	W18X130	C15X33.9			
26	W18X143	W18X143	C15X33.9			
28	W24X162	W18X143	C15X33.9			
30	W21X166	W18X143	C15X33.9			
32	W21X166	W18X143	C15X33.9			
34	W24X176	W18X158	C15X33.9			
36	W24X176	W18X158	C15X33.9			
38	W27X194	W18X158	C15X33.9			
40	W27X194	W18X175	C15X33.9			
42	W30X211	W18X175	C15X33.9			
44	W27X217	W18X175	C15X33.9			
46	W27X217	W18X192	C15X33.9			
48	W27X217	W18X192	C15X33.9			
50	W30X235	W24X192	MC18X42.7			
52	W30X235	W24X192	MC18X42.7			
54	W33X241	W24X207	MC18X42.7			
56	W36X260	W24X207	MC18X42.7			
58	W36X280	W24X207	MC18X42.7			
60	W36X300	W27X217	MC18X42.7			
N-	-	-	-			



## **World Series Hoist**

### **Wheel Load Summary**

Counterweight Side of Hoist



Drun Side of Hoist

Wheel Load Position and Designation

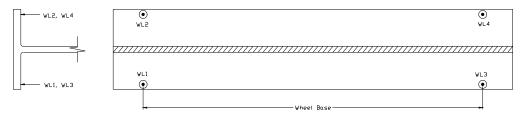
	Wheel Base	Beam Flange	Wheel Load (#)					*C. of G. Wheel	
Capacity	(in)	Width	WL1	WL2	LH Pair	WL3	WL4	RH Pair	Load Pairs
•		20"	4435	3942	8377	1910	2218	4128	5.282
	19½	14"	4405	3967	8372	1912	2221	4133	5.289
	&	10"	4364	4001	8365	1915	2225	4140	5.297
	16	8.5"	4339	4022	8360	1917	2228	4145	5.303
5		6"	4268	4080	8349	1922	2234	4156	5.318
Tonne		20"	5188	5313	10501	1163	1041	2204	6.614
		14"	5141	5360	10501	1149	1055	2204	6.614
	38.125	10"	5046	5455	10501	1122	1082	2204	6.614
		8.5"	4996	5505	10501	1107	1097	2204	6.614
		6"	4857	5644	10501	1067	1137	2204	6.614
		20"	4064	3597	7661	1782	2038	3819	5.323
	19½	14"	4043	3614	7657	1784	2039	3823	5.328
	&	10"	4002	3648	7650	1790	2040	3830	5.339
	16	8.5"	3980	3666	7646	1793	2041	3834	5.344
5		6"	3919	3716	7635	1802	2043	3845	5.359
Ton		20"	4747	4850	9597	1104	979	2083	6.800
	38.125	14"	4704	4893	9597	1091	992	2083	6.800
		10"	4617	4980	9597	1064	1019	2083	6.800
		8.5"	4571	5026	9597	1050	1033	2083	6.800
		6"	4443	5154	9597	1011	1072	2083	6.800
	39.5	20"	6223	6418	12641	3519	3108	6627	13.586
		15"	6073	6568	12641	3436	3191	6627	13.586
		10"	5773	6869	12642	3271	3356	6627	13.585
7.5		8.5"	5614	7027	12641	3184	3443	6627	13.586
Tonne	53.5	20"	6944	7170	14114	3004	2420	5424	14.852
		15"	6777	7337	14114	2934	2490	5424	14.852
		10"	6442	7672	14114	2796	2628	5424	14.852
		8.5"	6264	7849	14113	2722	2702	5424	14.853
	39.5	20"	5729	5851	11580	3297	2853	6150	13.701
		15"	5591	5989	11580	3220	2931	6151	13.703
		10"	5315	6265	11580	3065	3084	6149	13.700
7.5		8.5"	5169	6411	11580	2984	3166	6150	13.701
Ton	53.5	20"	6392	6535	12927	2840	2232	5072	15.076
		15"	6238	6690	12928	2774	2297	5071	15.073
		10"	5930	6998	12928	2644	2428	5072	15.075
		8.5"	5768	7160	12928	2575	2497	5072	15.075

<sup>\*</sup> Distance in inches from LH Wheel Pair Center Line

## **World Series Hoist**

### **Wheel Load Summary**

Counterweight Side of Hoist



Drun Side of Hoist

Wheel Load Position and Designation

	Wheel	Beam	Wheel Load (#)					*C. of G.	
Capacity	Base (in)	Flange Width	WL1	WL2	LH Pair	WL3	WL4	RH Pair	Wheel Load Pairs
		20"	7993	8450	16443	4315	4021	8336	13.288
	39.5	15"	7800	8644	16444	4213	4124	8337	13.289
10		10"	7413	9032	16445	4008	4328	8336	13.287
Tonne	53.5	20"	8923	9441	18364	3592	3094	6686	14.279
		15"	8707	9657	18364	3508	3179	6687	14.281
		10"	8275	10089	18364	3340	3346	6686	14.279
		20"	7335	7694	15029	4019	3681	7700	13.382
	39.5	15"	7157	7872	15029	3924	3777	7701	13.383
10		10"	6803	8227	15030	3734	3966	7700	13.381
Ton	53.5	20"	8187	8596	16783	3373	2843	6216	14.460
		15"	7989	8794	16783	3294	2922	6216	14.460
		10"	7593	9190	16783	3138	3079	6217	14.461

<sup>\*</sup> Distance in inches from LH Wheel Pair Center Line





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