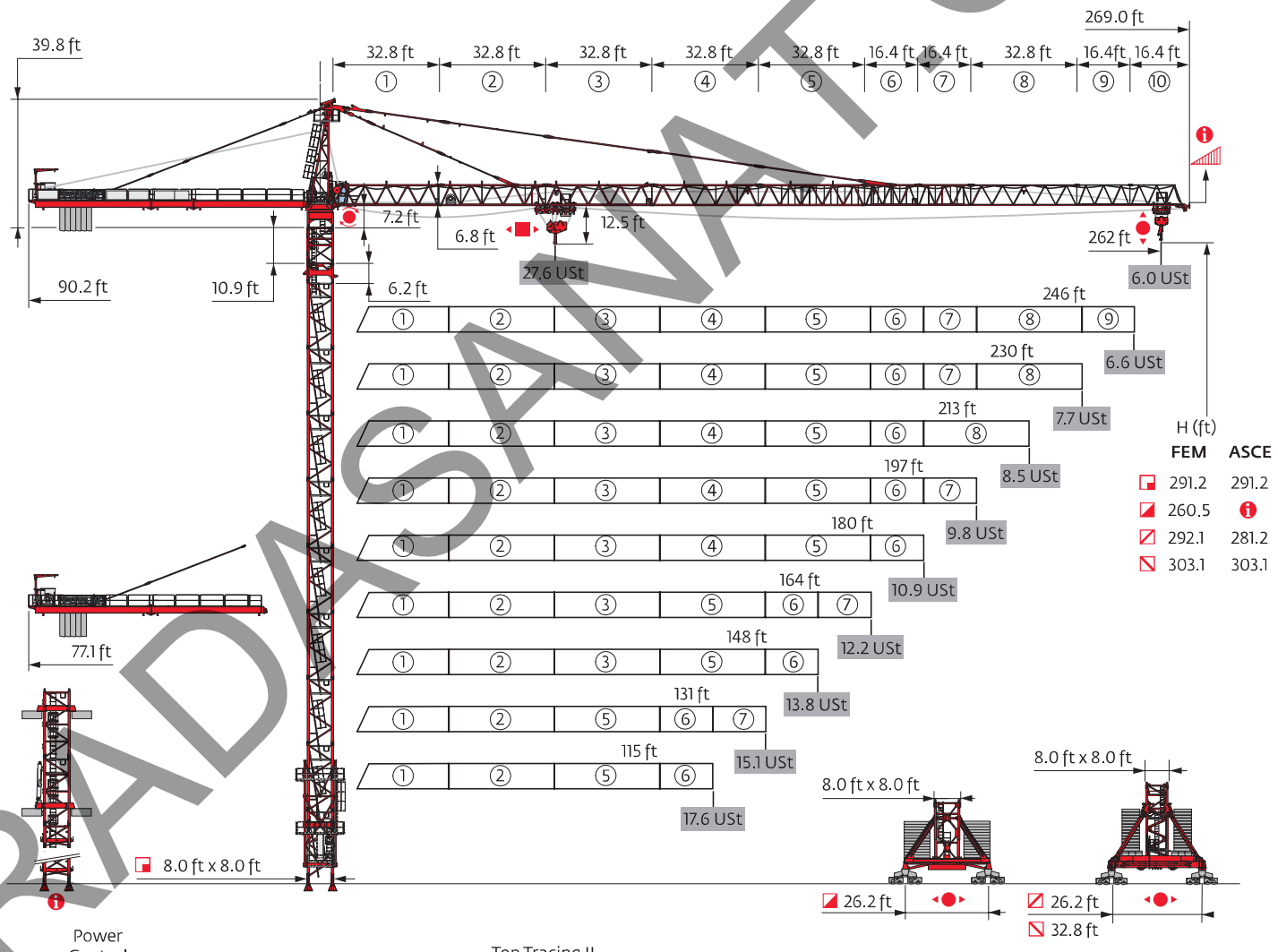
Manitowoc

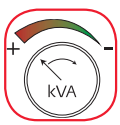
MD 560 B M25

Data Sheet

FEM 1.001-A3
ASCE 7-10

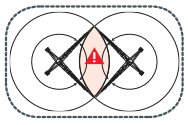


Power Control



CraneSTAR Fleet

Top Tracing II

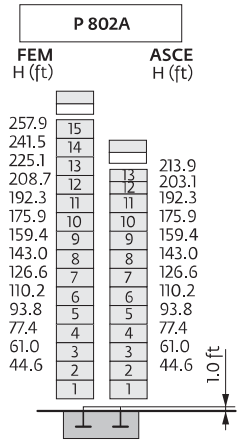


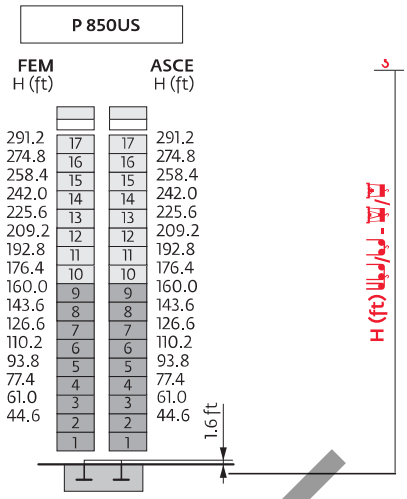
Values have been rounded

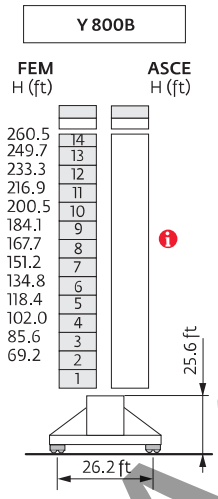
Mast

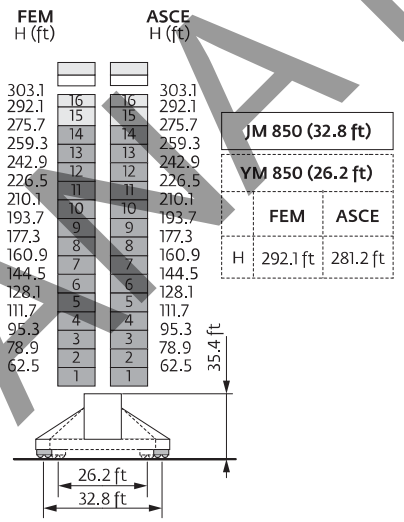
8.0 ft

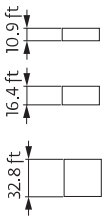
115 ft → 262 ft

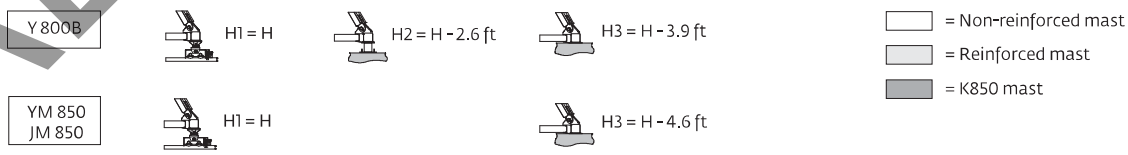








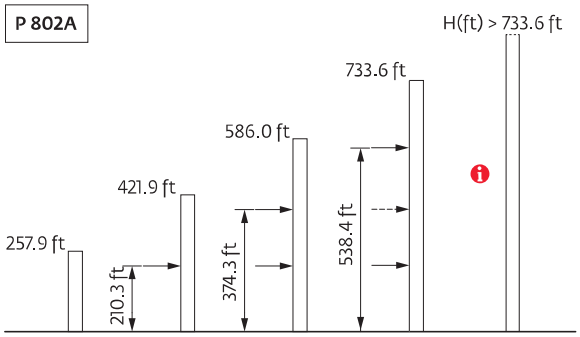




Note: When "ASCE" is noted in this data sheet it is referring to 115 mph Wind Zone, Exposure B, Design Wind Speed = 98 mph.
See back cover for design wind speed calculations.

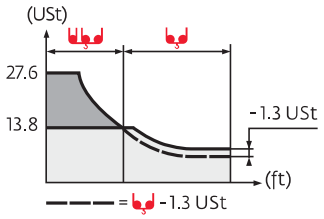
Anchorages (Consult us for ASCE 7-10 values)

P 802A

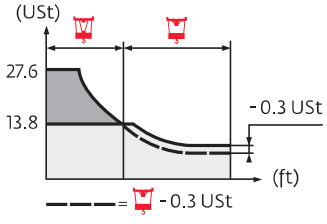


Load charts

262 ft	12.3	▶	69	72	82	89	98	105	115	123	132	148	164	180	197	213	230	246	262	ft
			27.6	26	22.4	20.5	18.1	16.6	15.0	13.8	13.8	12.1	10.7	9.6	8.6	7.8	7.1	6.5	6.0	USt
246 ft	12.3	▶	69	72	82	89	98	105	115	124	134	148	164	180	197	213	230	246	ft	
			27.6	26.2	22.6	20.6	18.2	16.9	15.1	13.8	13.8	12.2	10.8	9.7	8.7	7.9	7.2	6.6	USt	
230 ft	12.3	▶	72	82	89	98	105	115	130	140	148	164	180	197	213	230	ft			
			27.6	23.8	21.7	19.3	17.9	16.0	13.8	13.8	13.0	11.5	10.3	9.3	8.5	7.7	USt			
213 ft	12.3	▶	73	82	89	98	105	115	130	141	148	164	180	197	213	ft				
			27.6	23.9	21.8	19.3	17.9	16.1	13.8	13.8	13.1	11.6	10.4	9.4	8.5	USt				
197 ft	12.3	▶	75	82	89	98	105	115	136	147	148	164	180	197	ft					
			27.6	25.0	22.9	20.3	18.8	16.9	13.8	13.8	13.7	12.1	10.9	9.8	USt					
180 ft	12.3	▶	76	82	89	98	105	115	136	147	148	164	180	ft						
			27.6	25.1	23.0	20.4	18.8	17.0	13.8	13.8	13.8	12.2	10.9	USt						
164 ft	12.3	▶	76	82	89	98	105	115	131	137	148	164	ft							
			27.6	25.2	23.1	20.5	19.0	17.1	14.6	13.8	13.8	12.2	USt							
148 ft	12.3	▶	76	82	89	98	105	115	131	136	148	ft								
			27.6	25.2	23.0	20.4	19.0	17.0	14.4	13.8	13.8	USt								
131 ft	12.3	▶	76	82	89	98	105	115	131	ft										
			27.6	25.4	23.1	20.5	19.1	17.1	14.6	USt										
115 ft	12.3	▶	76	82	89	98	105	115	ft											
			27.6	25.4	23.1	20.5	19.0	17.1	USt											



262 ft	9	▶	70	72	82	89	98	105	115	126	129	131	148	164	180	197	213	230	246	262	ft
			27.6	26.5	22.9	20.9	18.5	17.2	15.4	13.8	13.8	13.4	11.7	10.3	9.1	8.2	7.4	6.6	6.1	5.5	USt
246 ft	9	▶	70	72	82	89	98	105	115	128	130	131	148	164	180	197	213	230	246	ft	
			27.6	26.7	23.1	21.2	18.7	17.4	15.7	13.8	13.8	13.7	11.8	10.4	9.3	8.3	7.5	6.7	6.2	USt	
230 ft	9	▶	73	82	89	98	105	115	131	134	136	148	164	180	197	213	230	ft			
			27.6	24.4	22.3	19.7	18.3	16.5	14.1	13.8	13.8	12.6	11.0	9.8	8.8	8.0	7.3	USt			
213 ft	9	▶	74	82	89	98	105	115	131	135	137	148	164	180	197	213	ft				
			27.6	24.5	22.4	19.8	18.4	16.6	14.2	13.8	13.8	12.6	11.1	9.9	8.9	8.0	USt				
197 ft	9	▶	77	82	89	98	105	115	131	140	143	148	164	180	197	ft					
			27.6	25.6	23.5	20.8	19.3	17.4	14.9	13.8	13.8	13.2	11.7	10.5	9.4	USt					
180 ft	9	▶	77	82	89	98	105	115	131	141	143	148	164	180	ft						
			27.6	25.7	23.6	20.9	19.4	17.5	15.0	13.8	13.8	13.3	11.8	10.5	USt						
164 ft	9	▶	77	82	89	98	105	115	131	141	144	148	164	ft							
			27.6	25.8	23.7	20.9	19.5	17.5	15.0	13.8	13.8	13.3	11.8	USt							
148 ft	9	▶	77	82	89	98	105	115	131	141	144	148	ft								
			27.6	25.8	23.6	20.9	19.5	17.5	15.0	13.8	13.8	13.3	USt								
131 ft	9	▶	78	82	89	98	105	115	131	ft											
			27.6	25.9	23.7	21.1	19.6	17.6	15.1	USt											
115 ft	9	▶	77	82	89	98	105	115	ft												
			27.6	25.9	23.7	21.1	19.5	17.6	USt												



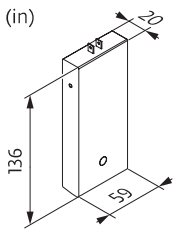
Base ballast

8.0 ft	Y 800B	H (ft)	260.5	249.6	233.3	216.8	200.5	184.1	167.7	151.2	134.8	118.4	102.0	85.6	69.2
	FEM	(USt)	119.0	105.8	92.6	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
	ASCE	(USt)													
	YM 850	H (ft)	292.1	281.2											
	FEM	(USt)	172.0	-											
	ASCE	(USt)	-	145.5											
	JM 850	H (ft)	303.1	292.1	275.7	259.3	242.9	226.5	210.1	193.7	177.3	160.9	144.5	128.1	111.7	95.3	78.9	62.5
	FEM	(USt)	132.3															
	ASCE	(USt)	132.3															

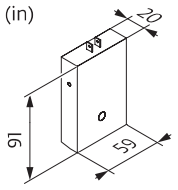
Counter-jib ballast

	(lb) (+/- 5%)		100 LVF			180 LVF GH		
			13,228 lb	8818 lb	(lb)	13,228 lb	8818 lb	(lb)
262 ft	56,582	57,618	6	0	79,366	4	2	70,548
246 ft	55,314	56,350	5	1	74,957	3	3	66,139
230 ft	53,859	54,895	5	1	74,957	2	4	61,729
213 ft	51,643	52,679	5	0	66,139	1	5	57,320
197 ft	50,905	51,941	5	0	66,139	2	3	52,911
180 ft	48,755	49,780	4	1	61,729	1	4	48,502
164 ft	45,239	46,275	5	0	66,139	2	3	52,911
148 ft	43,089	44,126	4	1	61,729	2	3	52,911
131 ft	39,121	40,157	2	3	52,911	1	3	39,683
115 ft	37,412	38,449	1	4	48,502	0	4	35,274

CBC - 13,228 lb



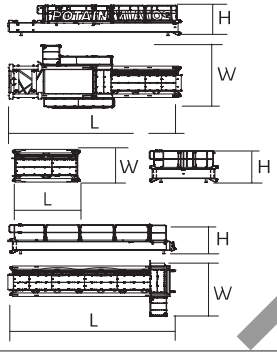
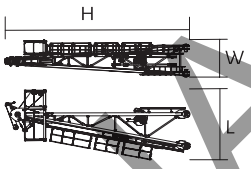
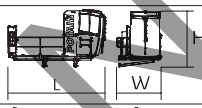
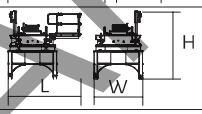
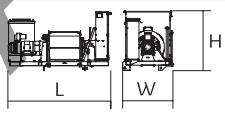
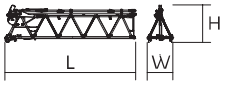
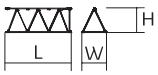
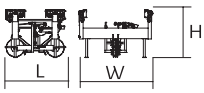
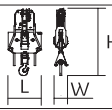
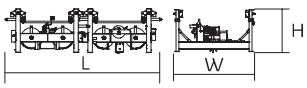
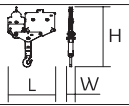
CBD - 8818 lb



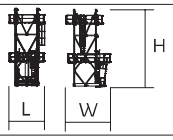
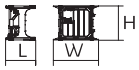
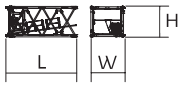
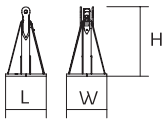
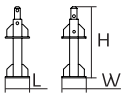
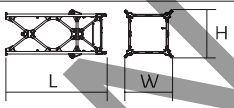
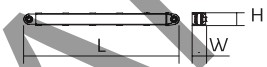
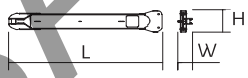
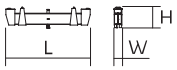
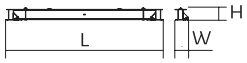
Component weights

Crane upper : 262 ft - - 100 LVF

x 14
x 10

			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Counter-jib			38.4	13.5	6.4	14,308
			13.8	6.6	6.4	4365
			36.2	11.7	6.8	10,858
Towerhead			11.0	6.5	32.3	19,731
Cab		UltraView	16.4	8.2	9.1	4134
Pivot		8.0 ft	12.1	9.5	12.7	24,670
Hoisting winch (+ rope)		100 LVF 180 LVF GH	10.4 14.0	5.2 6.3	5.7 6.2	9138 20,349
Jib section		① ②10 DVF ③ ④ ⑤ ⑧	34.0 33.9 33.5 33.6 33.6 33.5	9.7 6.2 6.2 6.2 6.2 6.2	10.2 7.7 7.9 7.6 7.6 6.6	11,354 10,737 6537 5897 6162 2987
Jib section		⑥ ⑦ ⑨ ⑩	17.5 17.2 17.0 16.9	6.2 6.2 6.2 6.2	7.2 6.7 6.5 6.5	3748 2271 1202 1102
Trolley		27.6 USt	5.9	7.4	4.7	1676
Hook block		27.6 USt	3.9	1.4	7.8	1874
Trolley		27.6 USt	13.5	7.2	3.8	2635
Hook block		27.6 USt	6.0	1.1	7.7	1995

Component weights

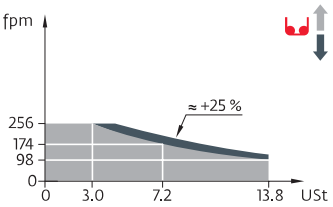
			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Climbing cage		☐ 8.0 ft	15.2	19.0	33.6	28,484
K 849/K 849 Climbing mast		☐ 8.0 ft	7.0	10.7	8.2	6581
KRMT 849A KRMT 849C		☐ 8.0 ft	17.2 11.7	8.4 8.4	8.3 8.3	9017 7066
Fixing angles		P 802A	2.5	2.5.	4.2	1193
Fixing angles		P 850US	2.3	2.3	5.5	2127
Chassis mast		Y 800B	19.8	9.6	9.6	19,004
Struts		Y 800B	18.1	1.6	1.5	2447
1/2 Side member		Y 800B	18.6	4.1	2.4	3351
Side member		Y 800B	39.4	4.1	2.4	6724
Ballast support		Y 800B	12.3	1.2	3.0	2392
Chassis beam		Y 800B	28.5	2.7	2.4	4938

Mechanisms

480 V - 60 Hz											hp	kW	
	100 LVF 63 Optima	fpm	98	174	240	256	49	89	121	128	100	75	2382 ft
		USt	13.8	7.2	4.9	3.0	27.6	14.3	9.7	6.0			
	180 LVF 63 GH Optima	fpm	174	302	397	538	627	92	167	233	302	315	180	132	3937 ft
		USt	13.8	7.2	4.9	3.0	1.8	27.6	14.3	9.7	6.0	5.5			
	10 DVF 10	fpm	0 → 210 (27.6 USt) 0 → 328 (13.8 USt) 0 → 361 (6.9 USt)								10	7.4	
	RVF 173 Optima+	rpm	0 → 1								3 x 10	3 x 7.5	
Y 800B	RT 584 A1 - 2V	fpm	28 - 56								8 x 8.4	8 x 6.2	

IEC 60204-32	kVA
480 V (+6% -10%) 60 Hz	100 LVF : 117 kVA 180 LVF GH : 181 → 109 kVA

100 LVF 63 Optima



Key

- Jib elevation
- Standard equipment
- Options
- Reactions in service
- Reactions out of service
- Weight without load, without ballast, with jib and max. height
- Total ballast weight
- Truck 44 ft
- Container High Cube 40 ft, and/or Flat Rack 20 ft
- Tightened anchorage frame
- Loosened anchorage frame
- Hoisting
- Trolleying
- Slewing
- Travelling
- Required power
- Power Control function: Hoisting speeds adapted to the available power
- Consult us

Notes

Note: These mast combinations meet the EN 14439 and ASME B30.3-2012 specifications for "out of service" wind conditions, provided the illustrated wind speed matches required design wind for the location of the tower crane. The "out of service" design wind speed was determined in accordance with ASCE 7-10, Figure 26.5-A. The wind velocity, used for this configuration was 98 mph (158 kph), which represents a nominal design 3-second wind gust at 33 ft (10 m) above ground for Exposure B category A. Factor of 0.85 was applied to the 50-year ultimate design wind speed of 115 mph (185 kph), per ASCE 37-02, with the assumption that this crane is considered a temporary structure used during a construction period of 2 years or less.

Constant improvement and engineering progress make it necessary that we reserve the right to make specification, equipment and price changes without notice. Illustrations shown may include optional equipment and accessories, and may not include all standard equipment.

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