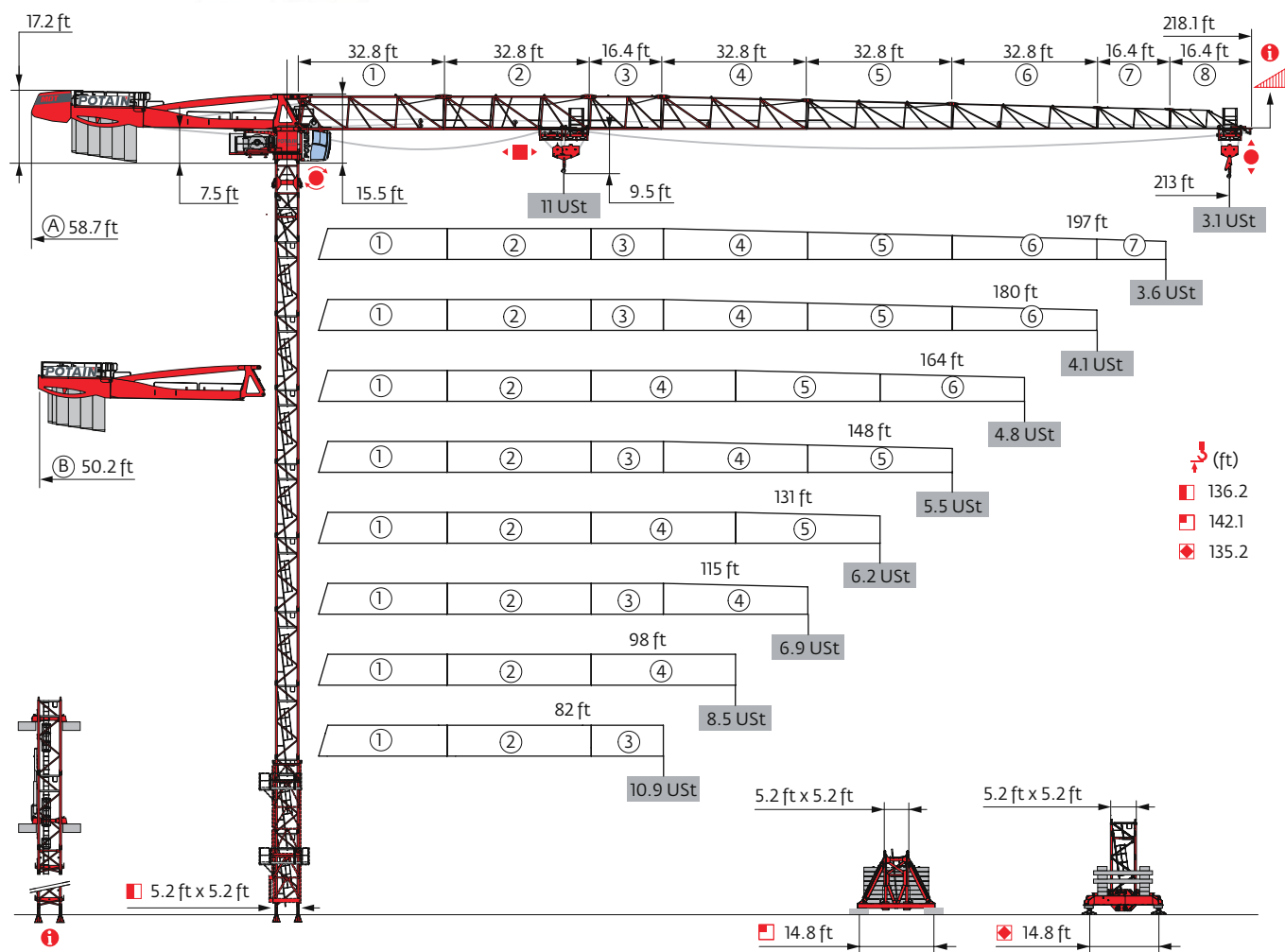


POTAIN®

by **Manitowoc**



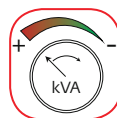
MDT 249 J10



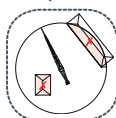
Potain Plus



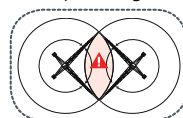
Power Control



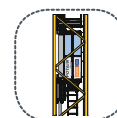
Top Site



Top Tracing 3



CabLIFT



TCL

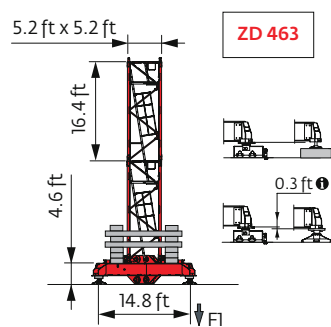
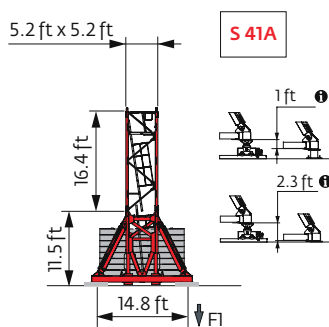
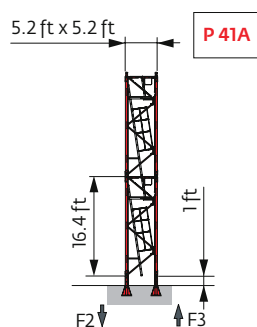


Mast - Reactions

5.2 ft City - P 41A									
MAST (ft)	82	98	115	131	148	164	180	197	213
 (ft)	136.2	136.2	130.6	130.6	136.2	136.2	125.3	125.3	125.3
 /P+ (ft)	136.2	136.2	130.6	130.6	136.2	136.2	125.3	125.3	125.3
 10.9 ft	2	2	0	0	2	2	1	1	1
 16.4 ft	7	7	8	8	7	7	7	7	7
F2 (USt)	● 145	144	136	138	137	137	137	136	138
	■ 107	105	98	96	115	116	103	102	110
F3 (USt)	● 111	109	101	101	93	93	93	91	93
	■ 73	71	62	60	77	78	64	62	70

5.2 ft City - S 41A - 									
MAST (ft)	82	98	115	131	148	164	180	197	213
 (ft)	141.1	141.1	141.1	141.1	141.1	141.1	135.5	130.2	135.5
 /P+ (ft)	141.1	141.1	141.1	141.1	141.1	141.1	135.5	130.2	135.5
 10.9 ft	0	0	0	0	0	0	1	2	1
 16.4 ft	8	8	8	8	8	8	7	6	7
F1 (USt)	● 86	86	87	87	85	85	88	86	88
	■ 71	71	73	72	73	74	74	71	77

5.2 ft City - ZD 463 - 									
MAST (ft)	82	98	115	131	148	164	180	197	213
 (ft)	134.2	134.2	134.2	134.2	134.2	134.2	128.6	123.4	128.6
 /P+ (ft)	134.2	134.2	134.2	134.2	134.2	134.2	128.6	123.4	128.6
 10.9 ft	0	0	0	0	0	0	1	2	1
 16.4 ft	8	8	8	8	8	8	7	6	7
F1 (USt)	● 84	83	83	83	82	82	84	82	85
	■ 67	67	68	68	68	69	69	65	72



 Motorized accesses of CabLIFT and TCL types: Adapted mast compositions, base ballast and reactions.

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.

5.2 ft - P 41A									
RAIL (ft)	82	98	115	131	148	164	180	197	213
(ft)	131.9	131.9	126.3	131.9	131.9	131.9	126.3	120.7	120.7
/P+ (ft)	131.9	131.9	126.3	131.9	131.9	131.9	126.3	120.7	120.7
	6.6 ft	1	1	1	1	1	1	1	1
	10.9 ft	1	1	2	1	1	2	0	0
	16.4 ft	7	7	6	7	7	6	7	7
F2 (Ust)	● 144	142	136	141	136	135	140	135	137
	■ 108	106	103	108	116	117	116	102	111
F3 (Ust)	● 110	108	100	104	92	92	95	90	91
	■ 74	71	67	71	77	79	77	63	71

5.2 ft - S 41A - 									
RAIL (ft)	82	98	115	131	148	164	180	197	213
(ft)	142.1	136.8	136.8	136.8	142.1	142.1	131.2	125.7	131.2
/P+ (ft)	142.1	136.8	136.8	136.8	142.1	142.1	131.2	125.7	131.2
	6.6 ft	1	1	1	1	1	1	1	1
	10.9 ft	1	2	2	1	1	0	1	0
	16.4 ft	7	6	6	7	7	7	6	7
F1 (Ust)	● 90	86	87	87	89	89	87	85	88
	■ 78	73	76	75	81	81	75	71	78

5.2 ft - ZD 463 - 									
RAIL (ft)	82	98	115	131	148	164	180	197	213
(ft)	135.2	135.2	129.9	129.9	135.2	135.2	129.9	124.3	124.3
/P+ (ft)	135.2	135.2	129.9	129.9	135.2	135.2	129.9	124.3	124.3
	6.6 ft	1	1	1	1	1	1	1	1
	10.9 ft	1	1	2	2	1	2	0	0
	16.4 ft	7	7	6	6	7	6	7	7
F1 (Ust)	● 87	85	83	83	85	85	87	84	85
	■ 73	72	70	69	75	75	75	70	72

Anchorage



Base ballast

⚖️ (USt) / 🏠 5.2 ft City - S 41A - 🚧									
⚖️ (ft)	82	98	115	131	148	164	180	197	213
141.1	99.2	99.2	99.2	99.2	92.6	92.6			
135.5	99.2	92.6	92.6	92.6	86	86	92.6		92.6
130.2	92.6	92.6	92.6	86	79.4	79.4	86	92.6	86
113.8	79.4	72.8	72.8	72.8	66.1	66.1	72.8	72.8	72.8
97.4	72.8	66.1	59.5	66.1	59.5	52.9	52.9	59.5	66.1
81	72.8	59.5	59.5	59.5	59.5	52.9	46.3	52.9	66.1
64.6	72.8	59.5	59.5	59.5	59.5	52.9	46.3	52.9	59.5

⚖️ (USt) / 🏠 5.2 ft City - ZD 463 - 🚧									
⚖️ (ft)	82	98	115	131	148	164	180	197	213
134.2	93.7	88.2	88.2	88.2	82.7	82.7			
128.6	88.2	88.2	82.7	82.7	77.2	77.2	82.7		82.7
123.4	82.7	82.7	82.7	77.2	71.7	71.7	77.2	77.2	77.2
107	71.7	66.1	66.1	66.1	55.1	55.1	60.6	60.6	66.1
90.6	66.1	60.6	55.1	55.1	55.1	49.6	44.1	55.1	60.6
74.2	66.1	55.1	55.1	55.1	55.1	49.6	44.1	49.6	60.6
57.7	66.1	55.1	55.1	55.1	55.1	49.6	44.1	49.6	60.6

⚖️ (USt) / 🏠 5.2 ft - S 41A - 🚧									
⚖️ (ft)	82	98	115	131	148	164	180	197	213
142.1	105.8				99.2	99.2			
136.8	105.8	99.2	99.2	99.2	92.6	92.6			
131.2	99.2	92.6	92.6	92.6	86	86	92.6		92.6
125.7	92.6	92.6	86	86	79.4	79.4	86	86	86
109.3	79.4	72.8	72.8	72.8	66.1	66.1	72.8	72.8	66.1
93.2	66.1	66.1	59.5	66.1	59.5	59.5	52.9	59.5	66.1
76.8	66.1	59.5	52.9	59.5	59.5	52.9	46.3	52.9	66.1
60.4	66.1	59.5	52.9	59.5	59.5	52.9	46.3	52.9	66.1

⚖️ (USt) / 🏠 5.2 ft - ZD 463 - 🚧									
⚖️ (ft)	82	98	115	131	148	164	180	197	213
135.2	99.2	93.7			88.2	88.2			
129.9	93.7	88.2	88.2	88.2	82.7	82.7	88.2		
124.3	88.2	82.7	82.7	82.7	77.2	77.2	82.7	82.7	82.7
107.9	71.7	71.7	66.1	66.1	60.6	60.6	66.1	66.1	66.1
91.5	66.1	60.6	55.1	60.6	55.1	55.1	49.6	55.1	60.6
75.1	66.1	55.1	55.1	55.1	55.1	49.6	44.1	49.6	60.6
58.7	66.1	55.1	55.1	55.1	55.1	49.6	44.1	49.6	60.6

Load curves



		(ft)	56	66	72	82	89	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	ft
		11 USt																					
		5.5 USt																					
213	10 → 64	114 - 123	11	10.6	9.5	8.2	7.5	6.6	6.1	5.5	5.5	5.1	4.8	4.5	4.2	3.9	3.7	3.5	3.4	3.1	3	2.85	USt
	10 → 66	119 - 128	11	11	9.9	8.5	7.8	6.9	6.4	5.7	5.5	5.4	5.1	4.7	4.5	4.2	4	3.7	3.6	3.4	3.2	3.1	USt P+
197	10 → 67	119 - 129	11	11	10.1	8.7	7.9	7	6.4	5.8	5.5	5.4	5.1	4.7	4.5	4.2	4	3.7	3.6	3.3			USt
	10 → 69	125 - 135	11	11	10.5	9.1	8.3	7.3	6.8	6.1	5.7	5.5	5.4	5	4.8	4.4	4.2	4	3.8	3.6			USt P+
180	10 → 68	122 - 131	11	11	10.2	8.8	8.1	7.1	6.6	5.9	5.5	5.5	5.2	4.8	4.6	4.2	4	3.8					USt
	10 → 70	128 - 138	11	11	10.7	9.3	8.5	7.5	7	6.3	5.9	5.5	5.5	5.1	4.9	4.5	4.3	4.1					USt P+
164	10 → 70	127 - 136	11	11	10.7	9.3	8.5	7.5	6.9	6.2	5.8	5.5	5.4	5	4.8	4.4							USt
	10 → 74	134 - 144	11	11	11	9.8	9	7.9	7.4	6.6	6.2	5.7	5.5	5.4	5.1	4.8							USt P+
148	10 → 73	131 - 141	11	11	11	9.6	8.8	7.8	7.2	6.5	6.1	5.5	5.5	5.2									USt
	10 → 77	140 - 148	11	11	11	10.2	9.3	8.3	7.7	6.9	6.5	5.9	5.6	5.5									USt P+
131	10 → 74		11	11	11	9.9	9	8	7.4	6.6	6.2	5.7											USt
	10 → 78		11	11	11	10.5	9.6	8.5	7.9	7.1	6.7	6.1											USt P+
115	10 → 71		11	11	10.9	9.4	8.6	7.6	7	6.3													USt
	10 → 75		11	11	11	10	9.2	8.2	7.6	6.8													USt P+
98	10 → 73		11	11	11	9.6	8.8	7.7															USt
	10 → 77		11	11	11	10.3	9.4	8.4															USt P+
82	10 → 75		11	11	11	10																	USt
	10 → 81		11	11	11	10.8																	USt P+

= - 0.53 USt max.

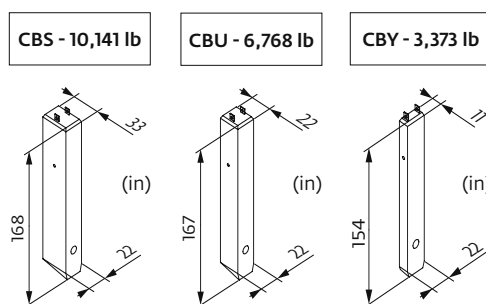


		(ft)	56	66	72	82	89	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	ft
		11 USt																					
		5.5 USt																					
213	8 → 64	115 - 117	11	10.7	9.6	8.3	7.5	6.6	6.1	5.5	5.3	4.8	4.5	4.1	3.9	3.6	3.4	3.2	3	2.85	2.7	2.55	USt
	8 → 66	120 - 122	11	11	9.9	8.6	7.9	7	6.5	5.8	5.5	5.1	4.8	4.4	4.2	3.9	3.7	3.4	3.3	3	2.9	2.75	USt P+
197	8 → 67	121 - 123	11	11	10.1	8.7	8	7	6.5	5.8	5.5	5.1	4.8	4.4	4.2	3.9	3.7	3.4	3.2	3			USt
	8 → 70	127 - 129	11	11	10.6	9.1	8.4	7.4	6.9	6.2	5.8	5.4	5.1	4.7	4.5	4.1	3.9	3.7	3.5	3.3			USt P+
180	8 → 68	123 - 126	11	11	10.3	8.9	8.1	7.2	6.7	6	5.6	5.2	4.9	4.5	4.3	4	3.8	3.5					USt
	8 → 71	130 - 133	11	11	10.8	9.4	8.6	7.6	7.1	6.4	6	5.5	5.3	4.9	4.6	4.3	4.1	3.8					USt P+
164	8 → 71	128 - 131	11	11	10.8	9.3	8.5	7.6	7	6.3	5.9	5.5	5.2	4.8	4.5	4.2							USt
	8 → 74	136 - 139	11	11	11	9.9	9	8	7.5	6.7	6.3	5.7	5.5	5.1	4.9	4.5							USt P+
148	8 → 73	133 - 135	11	11	11	9.7	8.9	7.8	7.3	6.5	6.1	5.6	5.4	5									USt
	8 → 77	141 - 144	11	11	11	10.3	9.4	8.4	7.8	7	6.6	6	5.7	5.4									USt P+
131	8 → 75		11	11	11	9.9	9.1	8.1	7.5	6.7	6.3	5.7											USt
	8 → 79		11	11	11	10.6	9.7	8.6	8	7.2	6.8	6.2											USt P+
115	8 → 72		11	11	11	9.5	8.7	7.7	7.1	6.4													USt
	8 → 76		11	11	11	10.1	9.3	8.2	7.7	6.9													USt P+
98	8 → 73		11	11	11	9.7	8.8	7.8															USt
	8 → 78		11	11	11	10.4	9.5	8.5															USt P+
82	8 → 76		11	11	11	10.1																	USt
	8 → 81		11	11	11	10.9																	USt P+

= - 0.14 USt max.

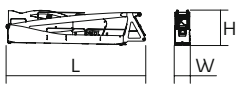
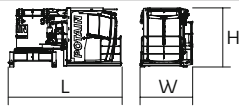
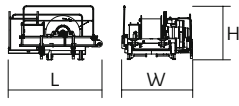
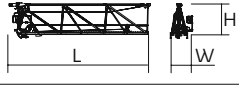
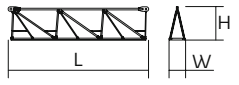
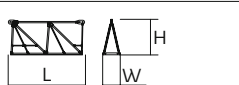
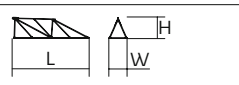
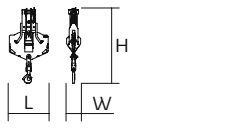
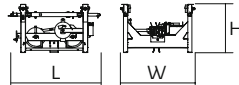
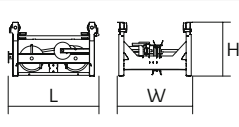
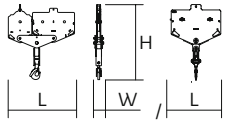
Jib weight & counter-jib ballast

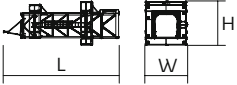
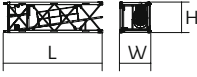
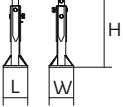
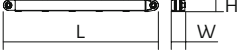
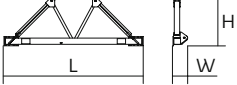
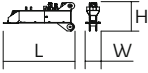
	(lb) (+/- 5%)								
				10,141 lb	3,373 lb	(lb)	6,768 lb	3,373 lb	(lb)
213 ft	27,183	26,610	27,326	5	1	54,079	7	2	54,123
197 ft	26,698	26,125	26,841	5	1	54,079	7	2	54,123
180 ft	25,838	25,331	25,993	5	0	50,706	7	1	50,750
164 ft	23,744	23,237	23,898	4	2	47,311	6	2	47,355
148 ft	24,030	23,523	24,185	4	2	47,311	6	2	47,355
131 ft	21,936	21,429	22,090	4	1	43,938	6	1	43,982
115 ft	21,605	21,098	21,760	4	0	40,565	5	2	40,587
98 ft	19,775	19,268	19,930	3	2	37,170	5	1	37,214
82 ft	18,695	18,188	18,850	3	1	33,797	4	2	33,819



Dimensions and weight

Slewing crane part :  213 ft -  -  50 LVF

Slewing crane part			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Counter-jib		Ⓐ Ⓑ	36.1 36.1	3.8 3.8	8.1 8.1	19,213 18,629
Towerhead + cab		5.2 ft	15.6	7.5	8.3	17,372
Hoisting winch (+ rope)		50 LVF 75 LVF	10.6 10.6	8.1 8.1	6.2 6.2	7,319 9,304
Jib section		① 6 DVF	35.5	5.6	8.9	7,760
Jib section		② ④ ⑤ ⑥	33.8 33.5 33.6 33.4	3.9 3.9 3.9 3.9	7.9 7.8 6.9 6	5,335 3,439 2,723 1,753
Jib section		③ ⑦	17.3 16.7	3.9 3.9	7.8 5	2,116 683
Jib section		⑧	16.7	3.9	4.6	485
Trolley		 11 USt	6.1	5	3.4	882
Pulley block		 11 USt	3.3	1.4	6.6	694
Trolley		 11 USt	5.2	5	3.2	463
Trolley		 11 USt  5.5 USt	5.6 6.1	5 5	3.4 3.2	540 520
Pulley block		 11 USt  5.5 USt	5.4 3.6	0.7 0.5	5.6 4.9	717 430

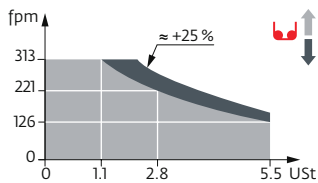
Crane tower			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Telescopic cage		□ 5.2 ft	36.8	13.1	11.7	14,220
K40/K40		□ 5.2 ft	7.3	6.9	6.8	3,208
K 447B K 447E KM 447E KM 449E		□ 5.2 ft	33.5 33.5 33.5 33.5	5.5 5.3 5.3 5.3	5.3 5.3 5.3 5.3	7,606 7,474 7,088 8,444
K 447A KMT 447A K 449A KMT 449A		□ 5.2 ft	17.1 17.1 17.1 17.1	5.5 5.5 5.5 5.5	5.3 5.3 5.3 5.3	4,079 3,847 4,916 4,696
K 447C		□ 5.2 ft	11.3	5.5	5.3	2,998
Fixing angles		P 41A	1.2	1.2	3.7	293
Basic mast unit		S 41A	11.9	6.4	6.8	6,537
Struts		S 41A	10.4	0.9	0.8	489
Half-bearer		S 41A	16.7	2	5.8	2,524
Cross girder		ZD 463	25.1	3.8	4.5	7,904
1/2 Cross girder		ZD 463	11.2	2.3	4.4	3,649

Mechanisms

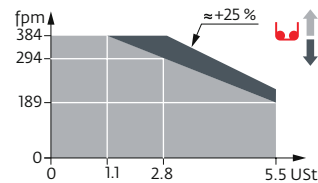
480 V - 60 Hz											hp	kW	
	50 LVF 25 Optima	fpm	126	166	221	313	66	85	115	157	50	37	1,827 ft
		USt	5.5	4.1	2.8	1.1	11	8.3	5.5	2.5			
	75 LVF 25 Optima	fpm	189	231	294	384	98	120	154	192	75	55	2,936 ft
		USt	5.5	4.1	2.8	1.1	11	8.3	5.5	2.6			
	6 DVF 4 Optima	fpm	0 → 164 (11 USt) 0 → 328 (6.6 USt) 0 → 394 (3.3 USt)								5.5	4	
	RVF 162 Optima+	rpm	0 → 1								2 x 7.5	2 x 5.5	
													

	IEC 60204-32		kVA
480 V (+6% -10%) 60 Hz		50 LVF: 58 → 38 kVA 75 LVF: 78 → 48 kVA	
			

50 LVF 25 Optima



75 LVF 25 Optima



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.

	Jib elevation		Total ballast weight		Travelling
	Standard equipment		Jib weight		Required power
	Options		Lorry 44 ft		Power Control Function: winch speeds adapted to the available power
	Potain Plus function: Plus load curves		Container High Cube 40 ft, and/or Flat Rack 20 ft		Consult us
	Hook heights with Plus load curves		Hoisting		
	Reactions in service		Trolleying		
	Reactions out of service		Slewing		

 This commercial document is not legally binding. For any technical information, please refer to the corresponding instructions.

