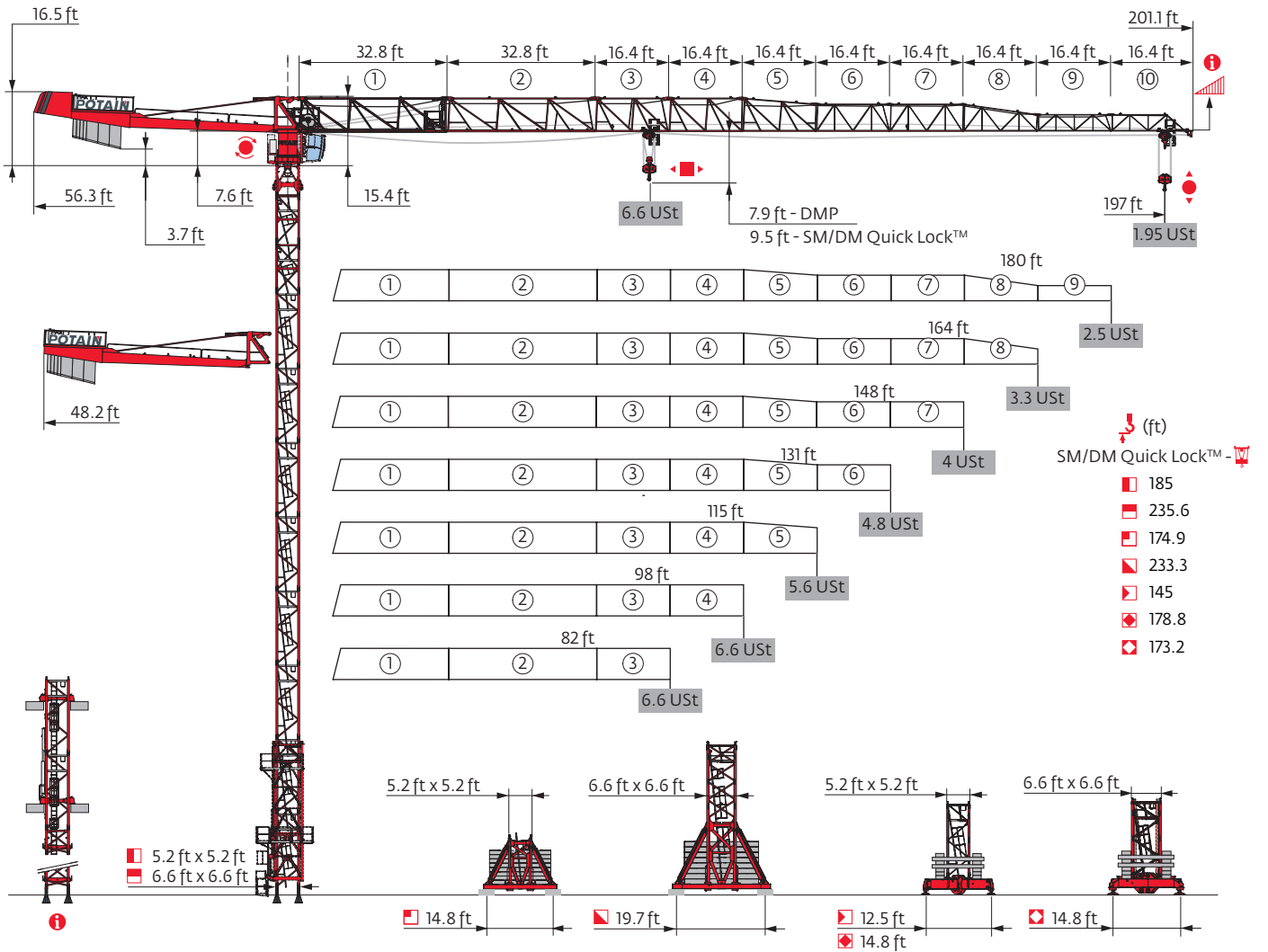


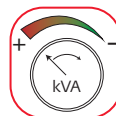
## MDT 159



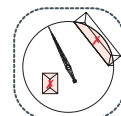
Potain Plus



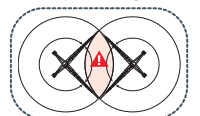
Power Control



Top Site



Top Tracing 3



Mast - Reactions

**5.2 ft City - P 41A**

Height (ft)	82	98	115	131	148	164	180	197
Height (ft)	185	174.2	174.2	168.6	163.4	163.4	163.4	163.4
Height/P <sub>r</sub> (ft)	185	174.2	174.2	168.6	163.4	163.4	163.4	163.4
Clearance	10.9 ft	2	1	1	2	0	0	0
	16.4 ft	10	10	10	9	10	10	10
F2 (USt)	● 126	126	125	123	121	122	125	127
	■ 207	174	175	167	153	161	167	173
F3 (USt)	● 100	99	97	91	89	89	93	95
	■ 181	147	147	138	124	132	138	144

**5.2 ft City - ZC 4230 - ZD 4230**

Height (ft)	82	98	115	131	148	164	180	197
Height (ft)	145	133.9	139.4	133.9	133.9	133.9	133.9	133.9
Height/P <sub>r</sub> (ft)	145	133.9	139.4	133.9	133.9	133.9	133.9	133.9
Clearance	10.9 ft	1	0	2	0	0	0	0
	16.4 ft	8	8	7	8	8	8	8
F1 (USt)	● 73	74	76	75	76	76	77	78
	■ 81	68	73	69	70	73	75	78

**5.2 ft City - ZD 4230**

Height (ft)	82	98	115	131	148	164	180	197
Height (ft)	161.4	155.8	155.8	150.3	150.3	150.3	150.3	150.3
Height/P <sub>r</sub> (ft)	161.4	155.8	155.8	150.3	150.3	150.3	150.3	150.3
Clearance	10.9 ft	1	2	2	0	0	0	0
	16.4 ft	9	8	8	9	9	9	9
F1 (USt)	● 69	70	71	70	71	71	72	73
	■ 86	75	75	71	71	74	77	81

**5.2 ft - P 41A**

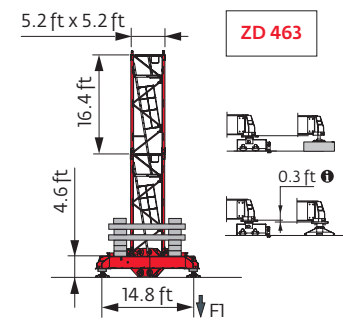
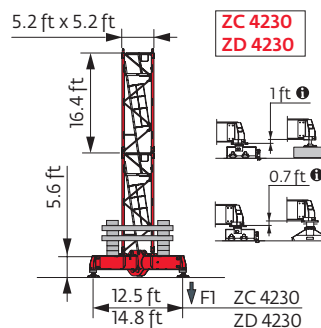
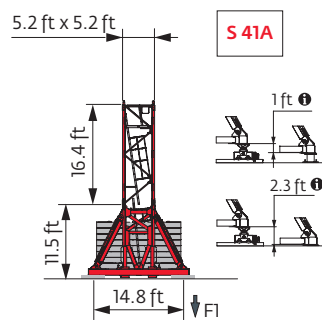
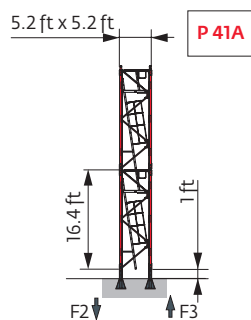
Height (ft)	82	98	115	131	148	164	180	197
Height (ft)	180.8	170	170	164.4	164.4	164.4	158.8	158.8
Height/P <sub>r</sub> (ft)	180.8	170	170	164.4	164.4	164.4	158.8	158.8
Clearance	6.6 ft	1	1	1	1	1	1	1
	10.9 ft	1	0	0	1	1	2	2
	16.4 ft	10	10	10	9	9	8	8
F2 (USt)	● 126	125	124	122	124	125	125	127
	■ 209	176	176	168	169	178	174	181
F3 (USt)	● 99	98	96	90	92	93	93	95
	■ 182	149	149	140	140	148	145	151

**5.2 ft - S 41A**

Height (ft)	82	98	115	131	148	164	180	197
Height (ft)	174.9	174.9	174.9	169.3	169.3	169.3	163.7	163.7
Height/P <sub>r</sub> (ft)	174.9	174.9	174.9	169.3	169.3	169.3	163.7	163.7
Clearance	6.6 ft	1	1	1	1	1	1	1
	10.9 ft	1	1	1	2	2	0	0
	16.4 ft	9	9	9	8	8	9	9
F1 (USt)	● 83	82	83	81	82	82	82	82
	■ 111	105	106	100	100	106	101	105

**5.2 ft - ZD 463**

Height (ft)	82	98	115	131	148	164	180	197
Height (ft)	178.8	173.2	173.2	168	162.4	162.4	162.4	162.4
Height/P <sub>r</sub> (ft)	178.8	173.2	173.2	168	162.4	162.4	162.4	162.4
Clearance	6.6 ft	1	1	1	1	1	1	1
	10.9 ft	2	0	0	1	2	2	2
	16.4 ft	9	10	10	9	8	8	8
F1 (USt)	● 87	81	81	79	79	80	82	83
	■ 120	103	103	98	93	98	102	106



**6.6 ft - P 602B**

Height (ft)	82	98	115	131	148	164	180	197
Height (ft)	235.6	235.6	235.6	235.6	235.6	235.6	230	230
Height/P <sub>r</sub> (ft)	235.6	235.6	235.6	235.6	235.6	235.6	230	230
6.6 ft	1	1	1	1	1	1	1	1
10.9 ft	0	0	0	0	0	0	1	1
16.4 ft	14	14	14	14	14	14	13	13
F2 (Ust)	● 151	156	154	156	159	160	161	163
	■ 332	326	327	329	330	337	328	333
F3 (Ust)	● 114	118	116	114	115	117	117	119
	■ 296	289	289	289	290	296	288	293

**6.6 ft - V 60A -**

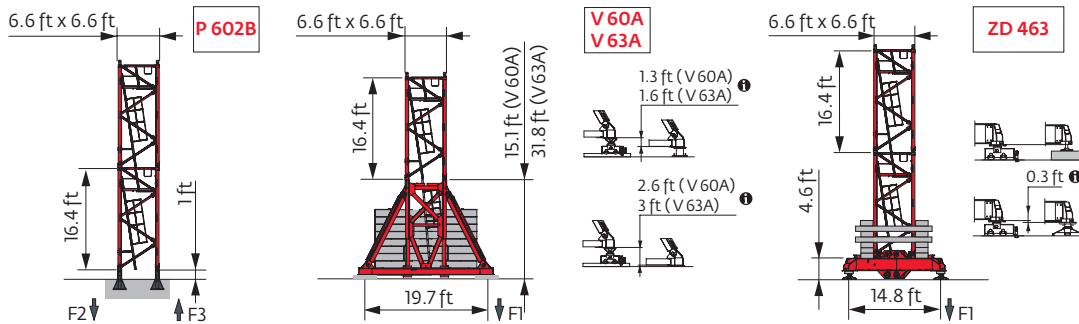
Height (ft)	82	98	115	131	148	164	180	197
Height (ft)	205.7	211.3	211.3	211.3	211.3	211.3	205.7	205.7
Height/P <sub>r</sub> (ft)	205.7	211.3	211.3	211.3	211.3	211.3	205.7	205.7
6.6 ft	1	1	1	1	1	1	1	1
10.9 ft	2	1	1	1	1	1	2	2
16.4 ft	10	11	11	11	11	11	10	10
F1 (Ust)	● 91	94	95	96	97	97	97	98
	■ 138	140	140	141	141	145	141	145

**6.6 ft - V 63A -**

Height (ft)	82	98	115	131	148	164	180	197
Height (ft)	233.3	233.3	233.3	233.3	233.3	233.3	233.3	227.7
Height/P <sub>r</sub> (ft)	233.3	233.3	233.3	233.3	233.3	233.3	233.3	227.7
6.6 ft	1	1	1	1	1	1	1	1
10.9 ft	0	0	0	0	0	0	0	1
16.4 ft	12	12	12	12	12	12	12	11
F1 (Ust)	● 112	114	114	115	116	117	118	117
	■ 178	174	175	175	175	180	182	178

**6.6 ft - ZD 463 -**

Height (ft)	82	98	115	131	148	164	180	197
Height (ft)	168	173.2	173.2	173.2	173.2	173.2	168	168
Height/P <sub>r</sub> (ft)	168	173.2	173.2	173.2	173.2	173.2	168	168
6.6 ft	1	1	1	1	1	1	1	1
10.9 ft	1	0	0	0	0	0	1	1
16.4 ft	9	10	10	10	10	10	9	9
F1 (Ust)	● 88	92	91	92	93	97	94	97
	■ 124	126	126	127	127	133	128	134



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.

**i** Motorized accesses: adapted mast compositions, base ballast and reactions.

Anchorage

**i**

Base ballast

**USt) / 5.2 ft City - ZC 4230 -**

AVAL (ft)	82	98	115	131	148	164	180	197
145	99.2							
139.4	93.7	99.2						
133.9	88.2	99.2	93.7	99.2	99.2	99.2	99.2	99.2
117.5	71.7	82.7	88.2	82.7	82.7	82.7	82.7	82.7
101.1	66.1	77.2	77.2	77.2	77.2	71.7	66.1	66.1
84.7 ↓	60.6	77.2	77.2	71.7	71.7	66.1	60.6	60.6
51.8	60.6	77.2	77.2	71.7	71.7	66.1	60.6	60.6

**USt) / 5.2 ft - S 41A -**

AVAL (ft)	82	98	115	131	148	164	180	197
174.9	125.7	112.4	112.4					
169.3	112.4	105.8	105.8	105.8	105.8	105.8		
163.7	99.2	99.2	99.2	99.2	99.2	99.2	105.8	105.8
147.3	79.4	86	86	86	86	86	92.6	92.6
130.9	66.1	72.8	72.8	72.8	72.8	72.8	72.8	72.8
114.5	52.9	59.5	59.5	59.5	59.5	59.5	59.5	59.5
98.1	46.3	52.9	52.9	52.9	52.9	46.3	46.3	46.3
81.7 ↓	39.7	52.9	52.9	52.9	46.3	46.3	39.7	39.7
48.9	39.7	52.9	52.9	52.9	46.3	46.3	39.7	39.7

**USt) / 6.6 ft - V 60A -**

AVAL (ft)	82	98	115	131	148	164	180	197
211.3	145.5 145.5 145.5 145.5 145.5							
205.7	145.5	132.3	132.3	132.3	132.3	145.5	145.5	145.5
189.3	119.1	105.8	105.8	105.8	105.8	105.8	119.1	119.1
172.9	92.6	79.4	79.4	79.4	79.4	79.4	92.6	92.6
156.5	66.1	52.9	52.9	52.9	52.9	52.9	66.1	66.1
140.1	39.7	39.7	39.7	39.7	39.7	39.7	52.9	39.7
123.7	26.5	39.7	39.7	39.7	39.7	39.7	39.7	39.7
107.3	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
90.9 ↓	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
58.1	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5

**USt) / 6.6 ft - ZD 463 -**

AVAL (ft)	82	98	115	131	148	164	180	197
173.2	132.3 126.8 126.8 126.8 137.8							
168	132.3	115.7	115.7	115.7	115.7	121.3	126.8	137.8
151.6	93.7	88.2	82.7	88.2	88.2	88.2	93.7	99.2
135.2	66.1	71.7	71.7	71.7	71.7	71.7	71.7	71.7
118.8	49.6	55.1	55.1	55.1	55.1	55.1	60.6	55.1
102.4	38.6	49.6	44.1	44.1	44.1	44.1	44.1	44.1
86 ↓	33.1	49.6	44.1	44.1	44.1	38.6	33.1	33.1
53.2	33.1	49.6	44.1	44.1	44.1	38.6	33.1	33.1

**USt) / 5.2 ft City - ZD 4230 -**

AVAL (ft)	82	98	115	131	148	164	180	197
161.4	88.2							
155.8	82.7	88.2	88.2					
150.3	77.2	82.7	82.7	88.2	88.2	88.2	88.2	88.2
133.9	66.1	71.7	71.7	71.7	71.7	77.2	77.2	
117.5	55.1	60.6	60.6	60.6	60.6	60.6	60.6	60.6
101.1	44.1	55.1	55.1	55.1	55.1	49.6	49.6	44.1
84.7	44.1	55.1	55.1	55.1	55.1	49.6	44.1	44.1
68.2	44.1	55.1	55.1	55.1	55.1	49.6	44.1	38.6
51.8	44.1	55.1	55.1	55.1	55.1	49.6	44.1	38.6

**USt) / 5.2 ft - ZD 463 -**

AVAL (ft)	82	98	115	131	148	164	180	197
178.8	132.3							
173.2	115.7	104.7	104.7					
168	110.2	99.2	99.2	99.2				
162.4	99.2	93.7	93.7	93.7	99.2	99.2	104.7	104.7
146	77.2	82.7	77.2	82.7	82.7	82.7	88.2	82.7
129.6	60.6	66.1	66.1	66.1	66.1	66.1	71.7	71.7
113.2	49.6	55.1	55.1	55.1	55.1	55.1	55.1	55.1
96.8	38.6	49.6	49.6	49.6	49.6	44.1	44.1	38.6
80.4	38.6	49.6	49.6	49.6	44.1	38.6	33.1	38.6
64	38.6	49.6	49.6	49.6	44.1	38.6	33.1	33.1
47.6	38.6	49.6	49.6	49.6	44.1	38.6	33.1	33.1

**USt) / 6.6 ft - V 63A -**

AVAL (ft)	82	98	115	131	148	164	180	197
233.3	198.4 198.4 198.4 198.4 198.4 198.4							
227.7	198.4	185.2	185.2	185.2	185.2	185.2	185.2	198.4
211.3	158.7	145.5	145.5	145.5	145.5	158.7	158.7	158.7
194.9	132.3	119.1	119.1	119.1	119.1	119.1	132.3	132.3
178.5	105.8	92.6	92.6	92.6	92.6	92.6	105.8	105.8
162.1	79.4	66.1	66.1	66.1	66.1	66.1	79.4	79.4
145.7	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
129.3	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7
112.9	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
96.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
80.1	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5

Load curves



SM/DM Quick Lock™ (ft)		72	82	89	98	105	115	121	131	138	148	154	164	171	180	187	197	ft
	6.6 USt	3.3 USt																
197	7.5 → 74.3	6.6	5.8	5.3	4.6	4.2	3.7	3.4	3.2	2.95	2.7	2.5	2.3	2.2	2	1.9	1.75	USt
	7.5 → 79.3	6.6	6.3	5.7	5	4.6	4	3.7	3.4	3.2	2.95	2.75	2.55	2.4	2.2	2.1	1.95	USt P+
180	7.5 → 77.7	6.6	6.2	5.6	4.9	4.5	4.1	3.8	3.4	3.3	3	2.85	2.6	2.5	2.3			USt
	7.5 → 83.7	6.6	6.6	6.2	5.4	5	4.4	4.1	3.7	3.5	3.3	3.1	2.85	2.7	2.5			USt P+
164	7.5 → 83.2	6.6	6.6	6.1	5.4	5	4.5	4.2	3.8	3.6	3.3	3.2	2.95					USt
	7.5 → 89.9	6.6	6.6	6.6	5.9	5.5	4.9	4.6	4.2	3.9	3.6	3.4	3.3					USt P+
148	7.5 → 90.4	6.6	6.6	6.6	6	5.5	5	4.6	4.2	4	3.6							USt
	7.5 → 97.6	6.6	6.6	6.6	6.5	6.1	5.4	5.1	4.6	4.3	4							USt P+
131	7.5 → 92.4	6.6	6.6	6.6	6.1	5.7	5.1	4.8	4.4									USt
	7.5 → 97.6	6.6	6.6	6.6	6.6	6.1	5.5	5.2	4.7									USt P+
115	7.5 → 93	6.6	6.6	6.6	6.2	5.7	5.1											USt
	7.5 → 98.4	6.6	6.6	6.6	6.6	6.1	5.5											USt P+
98	7.5 → 93	6.6	6.6	6.6	6.1													USt
	7.5 → 97.3	6.6	6.6	6.6	6.5													USt P+
82	7.5 → 82	6.6	6.6															USt
	7.5 → 82	6.6	6.6															USt P+

= - 0.11 USt max.

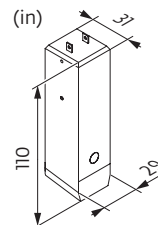


DMP (ft)		72	82	89	98	105	115	121	131	138	148	154	164	171	180	187	197	ft
	6.6 USt	3.3 USt																
197	7.5 → 74.5	6.6	5.8	5.3	4.6	4.2	3.7	3.4	3.1	2.85	2.6	2.45	2.2	2.1	1.9	1.8	1.65	USt
	7.5 → 79.6	6.6	6.4	5.7	5	4.6	4	3.7	3.4	3.1	2.85	2.65	2.4	2.3	2.1	2	1.8	USt P+
180	7.5 → 77.4	6.6	6.2	5.6	4.9	4.5	4	3.8	3.4	3.2	2.9	2.75	2.5	2.4	2.2			USt
	7.5 → 83.6	6.6	6.6	6.2	5.4	5	4.4	4.1	3.7	3.5	3.2	3	2.75	2.6	2.4			USt P+
164	7.5 → 83.6	6.6	6.6	6.2	5.4	5	4.5	4.2	3.8	3.6	3.3	3.1	2.85					USt
	7.5 → 90.1	6.6	6.6	6.6	5.9	5.5	4.9	4.6	4.2	3.9	3.6	3.4	3.2					USt P+
148	7.5 → 90.4	6.6	6.6	6.6	6	5.5	5	4.6	4.2	4	3.6							USt
	7.5 → 97.5	6.6	6.6	6.6	6.5	6.1	5.4	5.1	4.6	4.3	4							USt P+
131	7.5 → 92.4	6.6	6.6	6.6	6.1	5.7	5.1	4.8	4.4									USt
	7.5 → 98.6	6.6	6.6	6.6	6.6	6.2	5.6	5.2	4.8									USt P+
115	7.5 → 93	6.6	6.6	6.6	6.2	5.7	5.1											USt
	7.5 → 98.5	6.6	6.6	6.6	6.6	6.2	5.6											USt P+
98	7.5 → 93	6.6	6.6	6.6	6.1													USt
	7.5 → 98.4	6.6	6.6	6.6	6.6													USt P+
82	7.5 → 82	6.6	6.6															USt
	7.5 → 82	6.6	6.6															USt P+

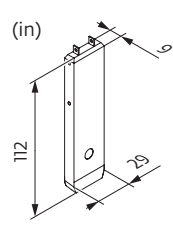
Jib weight & counter-jib ballast

ft	33 LVF (+/- 5%) (lb)	7,937 lb		2,425 lb		(lb)
		7,937 lb	2,425 lb	7,937 lb	2,425 lb	
197 ft	19,621	3	4	33,510		
180 ft	19,180	3	4	33,510		
164 ft	18,519	3	4	33,510		
148 ft	17,857	3	4	33,510		
131 ft	17,196	3	3	31,085		
115 ft	16,094	3	2	28,660		
98 ft	15,212	3	1	26,235		
82 ft	14,330	2	2	20,723		

CAU - 7,937 lb



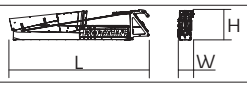
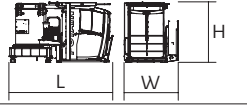

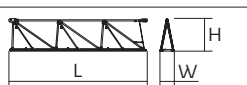
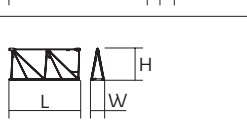
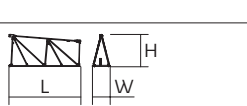
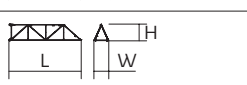
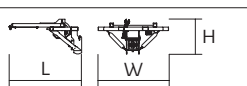
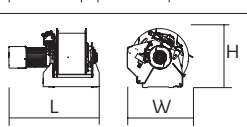
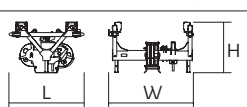
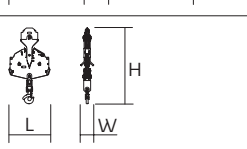
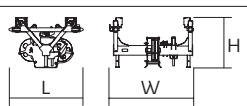
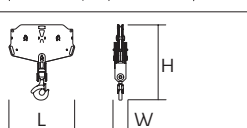
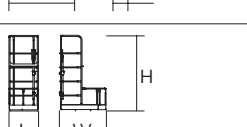
CAV - 2,425 lb


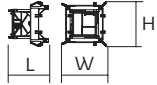

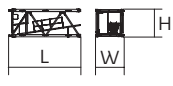

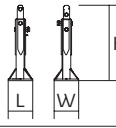
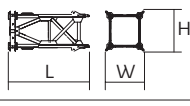
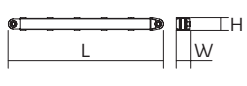
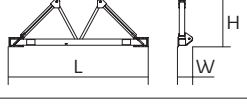

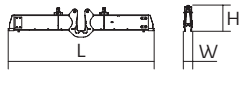
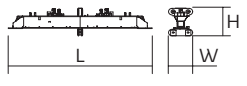
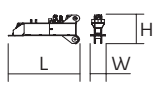


Dimensions and weight

Slewing crane part:  197 ft -  SM/DM Quick Lock™ -  33 LVF



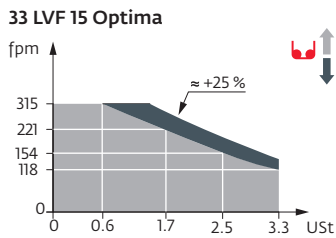
Slewing crane part		L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Counter-jib		38.9	4.4	8.2	11,023
Towerhead + cab	 Ultra View	14.2	7.4	8.1	13,338
Jib section	 ① 33 LVF 6 DVF	36	9.5	8.5	8,377
Jib section	 ②	33.6	3.4	7.8	3,217
Jib section	 ③ ④ ⑥ ⑦ ⑨	17.1 17 17 17 16.9	3.4 3.4 3.4 3.4 3.4	7.7 7.6 6.3 6.2 3.9	1,336 1,283 886 756 503
Jib section	 ⑤ ⑧	17 16.9	3.4 3.4	7.6 6.2	990 646
Jib section	 ⑩	16.7	3.4	3.8	417
Jib section		4.1	4	2	225
Hoisting winch (+ rope)	 33 LVF	4.5	3	2.9	2,150
Trolley	 SM/DM Quick Lock™ 6.6 USt	3.8	4.3	2.5	399
Pulley block	 SM/DM Quick Lock™ 6.6 USt	2.9	0.9	5.4	401
Trolley	 DMP 6.6 USt	3.8	4.3	2.5	399
Trolley	 DMP 6.6 USt	2.9	0.6	3.4	291
Trolley inspection platform		2.2	3.5	5.7	99

Crane tower		L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Telescopic cage T41 Telescopic cage T61		35.6 35.5	12.3 13.6	13.5 14.7	15,653 21,385
K40/K40-2 K60/K40-2		7.3 7.3	6.9 8.2	6.8 8.1	2,932 5,820
K 447E KM 447E KM 449E K 649B KM 649E		33.5 33.5 33.5 33.6 33.8	5.3 5.3 5.3 6.8 6.7	5.3 5.3 5.3 6.7 6.7	7,474 7,088 8,448 11,663 10,692
K 447A KMT 447A K 449A KMT 449A KR 649A KRMT 649A K 649A KMT 649A		17.1 17.1 17.1 17.1 17.2 17.2 17.2 17.2	5.5 5.5 5.5 5.5 6.9 6.9 6.8 6.8	5.3 5.3 5.3 5.3 6.8 6.8 6.7 6.7	4,079 3,847 4,916 4,696 7,165 6,724 6,184 5,666
K 447C K 649C KMT 649C KRMT 649C		11.3 11.7 11.7 11.7	5.5 6.8 6.8 6.9	5.3 6.7 6.7 6.8	2,998 4,376 4,542 5,401
Fixing angles		1.2 2.1	1.2 2.1	3.7 4.2	320 761
Basic mast unit		11.9 16.4 32.9	6.4 7.9 7.9	6.8 7.9 7.9	7,132 10,494 16,887
Struts		10.4 14.8 14.8	0.9 1 1.1	0.8 1 1.1	816 1,036 1,235
Half-bearer		16.7 22 22	2 2.3 2.3	5.8 7.6 7.6	2,315 4,057 4,101
Cross girder		18.5 21.8	2.7 2.7	3.4 3.4	3,505 4,035
Cross girder		18.5 21.8	1.5 1.5	4.4 4.4	4,178 4,707
Cross girder		25.1	3.8	4.5	7,904
1/2 Cross girder		11.2	2.3	4.4	3,649

Mechanisms

480 V - 60 Hz											hp	kW	
	33 LVF 15 Optima	fpm	118	154	221	315	59	79	116	157	33	22	1,001 ft
		USt	3.3	2.5	1.7	0.6	6.6	5	3.3	1.4			
	6 DVF 4 Optima	fpm	0 → 262 (6.6 USt) 0 → 328 (2.2 USt)								5.5	4	
	RVF 152 Optima+	rpm	0 → 0.8								2 x 5.5	2 x 4	

480 V (+6% -10%) 60 Hz	41 → 28 kVA	



These mast combinations meet the EN 14439 and ASME B30.3-2016 specifications for "out of service" wind conditions, provided the illustrated wind speed matches required design wind speed for the location of the tower crane. The "out of service" design wind speed was determined in accordance with ASCE 7-10, Figure 26.5-1A. 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 700-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
- Standard equipment
- Options
- Potain Plus function: Plus load curves
- Hook heights with Plus load curves
- Reactions in service
- Reactions out of service
- Total ballast weight
- Jib weight
- Lorry 44 ft
- Container High Cube 40 ft. and/or Flat Rack 20 ft.
- Hoisting
- Trolleying
- Slewing
- Travelling
- Required power
- Power Control Function: winch speeds adapted to the available power
- Consult us

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

