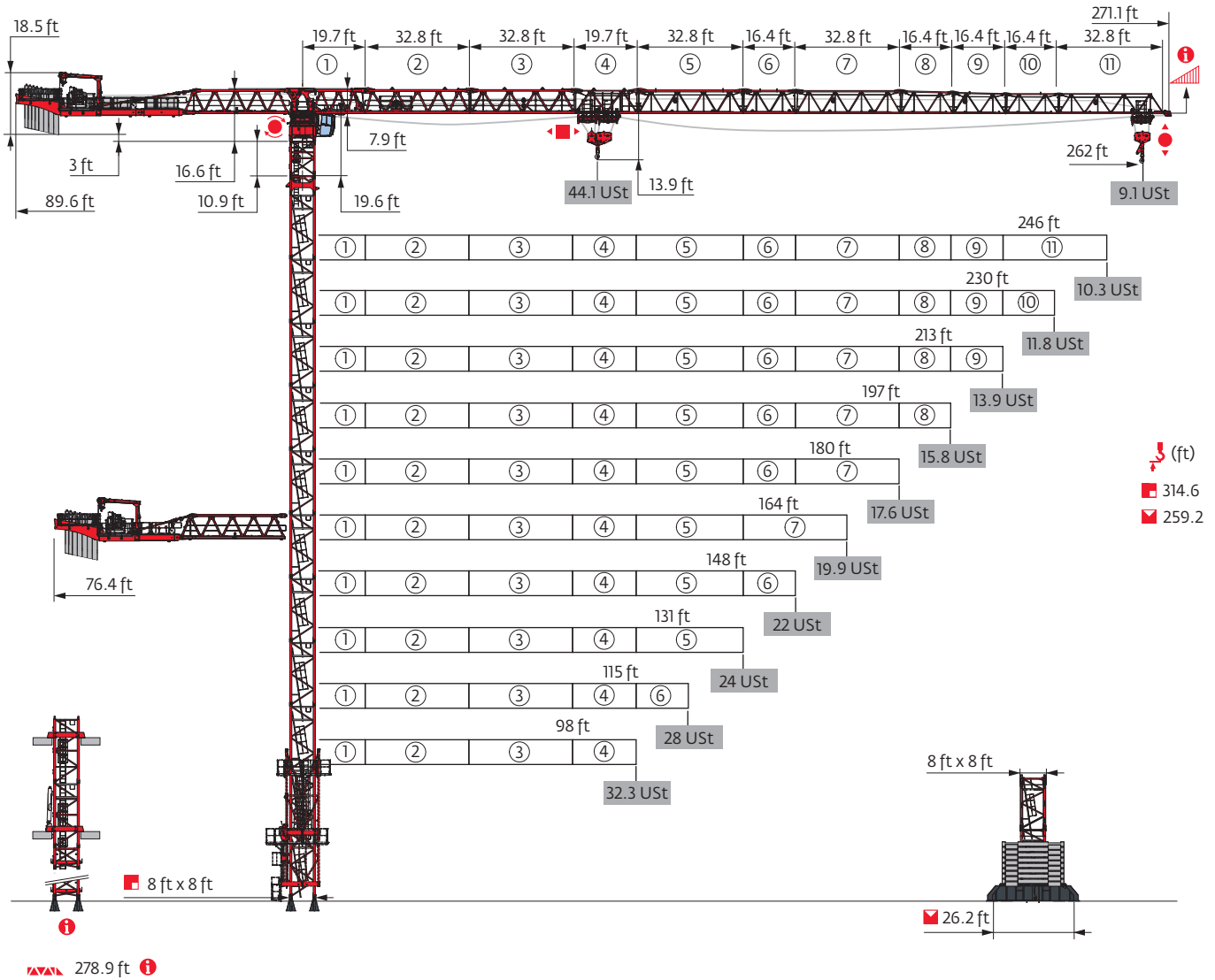


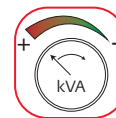
## MDT 809 M40



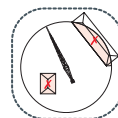
Potain Plus



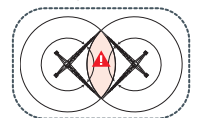
Power Control



Top Site



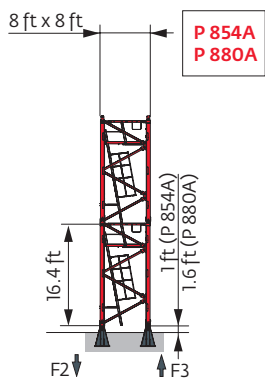
Anti-collision systems



Mast - Reactions

8 ft - P 854A											
Span (ft)	98	115	131	148	164	180	197	213	230	246	262
↓ (ft)	259.2	264.8	259.2	259.2	264.8	270.3	264.8	264.8	259.2	259.2	253.9
↓/P <sub>r</sub> (ft)	242.8	248.4	242.8	242.8	242.8	242.8	237.5	242.8	242.8	259.2	253.9
10.9 ft 6.2 ft 10.9 ft 16.4 ft	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1
	0	2	0	0	2	1	2	2	0	0	1
	15	14	15	15	14	15	14	14	15	15	14
F2 (Ust)	● 414	415	418	412	420	417	419	413	406	418	414
	■ 496	518	496	503	532	553	540	547	531	533	523
F3 (Ust)	● 275	271	271	262	266	262	264	257	251	260	256
	■ 379	395	370	375	399	420	406	412	398	396	386

8 ft - P 880A											
Span (ft)	98	115	131	148	164	180	197	213	230	246	262
↓ (ft)	309.1	314.6	303.8	309.1	309.1	314.6	309.1	309.1	309.1	309.1	303.8
↓/P <sub>r</sub> (ft)	292.7	292.7	292.7	292.7	287.4	292.7	276.3	292.7	292.7	309.1	303.8
10.9 ft 6.2 ft 10.9 ft 16.4 ft	1	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1
	0	2	1	0	0	2	0	0	0	0	1
	18	17	17	18	18	17	18	18	18	18	17
F2 (Ust)	● 505	507	501	499	499	492	498	482	490	509	506
	■ 789	859	761	784	783	849	795	773	807	829	805
F3 (Ust)	● 333	330	324	319	317	311	314	302	306	318	318
	■ 639	704	606	626	623	690	633	614	645	661	638



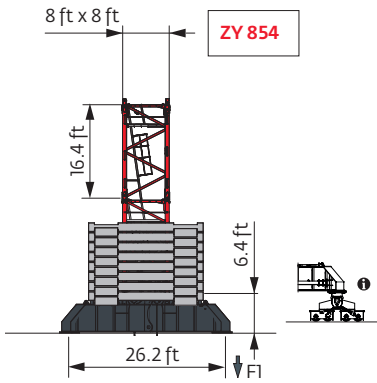
Note: When "ASCE" is noted in this data sheet it is referring to 115 mph Wind Zone, Exposure B, Design Wind Speed = 98 mph. See back cover for design wind speed calculations.

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

Other mast compositions - Please consult us

**8 ft - ZY 854 -**





W <sub>h</sub> (ft)	98	115	131	148	164	180	197	213	230	246	262	
$\bar{r}$ (ft)	242.8	259.2	237.2	259.2	253.6	253.6	242.8	248.4	248.4	248.4	242.8	
$\bar{r}/P_r$ (ft)	210	204.4	193.6	188	177.2	199.2	177.2	199.2	193.6	226.4	226.4	
	10.9 ft	1	1	1	1	1	1	1	1	1	1	
	6.2 ft	1	1	1	1	1	1	1	1	1	1	
	10.9 ft	1	1	2	1	2	2	1	0	0	0	1
	16.4 ft	13	14	12	14	13	13	13	14	14	14	13
FI (Ust)	● 230	242	229	247	242	240	237	243	244	240	243	
	■ 201	234	194	243	231	233	215	227	237	237	236	










Anchorage

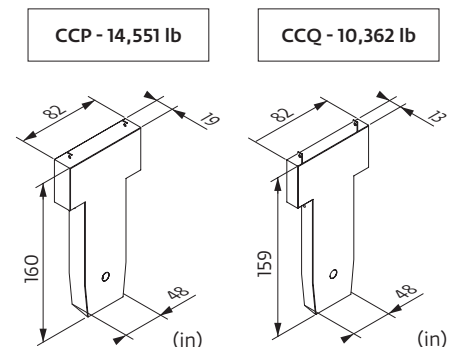


Base ballast

 (Ust) /  8 ft - ZY 854 - 											
 (ft)	98	115	131	148	164	180	197	213	230	246	262
259.2		145.5		145.5							
253.6		145.5		132.3	132.3	158.7					
248.4		145.5		132.3	132.3	158.7		172	172	172	
242.8	145.5	145.5		132.3	132.3	158.7	158.7	172	172	172	185.2
237.2	145.5	145.5	132.3	132.3	119.1	158.7	158.7	158.7	172	172	172
220.8	132.3	119.1	119.1	105.8	105.8	145.5	158.7	158.7	158.7	172	172
204.4	132.3	119.1	105.8	92.6	92.6	145.5	145.5	158.7	158.7	158.7	172
188	105.8	105.8	105.8	105.8	92.6	145.5	145.5	145.5	145.5	158.7	172
171.6	92.6	92.6	92.6	92.6	92.6	132.3	145.5	145.5	145.5	145.5	172
155.2	92.6	92.6	79.4	92.6	92.6	132.3	132.3	132.3	145.5	145.5	172
138.8	92.6	92.6	79.4	92.6	92.6	119.1	132.3	132.3	132.3	145.5	172
122.4	92.6	92.6	79.4	92.6	92.6	119.1	119.1	132.3	132.3	145.5	172
106	92.6	92.6	79.4	92.6	92.6	119.1	119.1	119.1	132.3	145.5	172
89.6	92.6	92.6	79.4	92.6	92.6	105.8	119.1	119.1	132.3	145.5	172
73.2	92.6	92.6	79.4	92.6	92.6	105.8	105.8	105.8	132.3	145.5	172
56.8	92.6	92.6	79.4	92.6	92.6	105.8	105.8	105.8	132.3	145.5	172






Counter-jib ballast

 (ft)	180 HPL™ 			320 LVF 			320 LVF GH 		
	14,551 lb	10,362 lb	 (lb)	14,551 lb	10,362 lb	 (lb)	14,551 lb	10,362 lb	 (lb)
262 ft	4	4	99,649	6	1	97,665	5	2	93,476
246 ft	6	1	97,665	5	2	93,476	4	3	89,287
230 ft	5	2	93,476	4	3	89,287	6	0	87,303
213 ft	4	3	89,287	4	3	89,287	5	1	83,114
197 ft	3	4	85,098	5	1	83,114	4	2	78,925
180 ft	4	2	78,925	4	2	78,925	5	0	72,753
164 ft	5	2	93,476	5	2	93,476	4	3	89,287
148 ft	4	3	89,287	6	0	87,303	5	1	83,114
131 ft	4	2	78,925	4	2	78,925	3	3	74,737
115 ft	4	1	68,564	4	1	68,564	3	2	64,375
98 ft	3	2	64,375	4	0	58,202	3	1	54,013








Load curves



 (ft)		56	66	82	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	220	230	236	246	253	262	ft		
 44.1 USt	 22 USt																											
262	13.8 → 61 13.8 → 65.3	108.8 - 117.5 116.8 - 126.2	44.1	40.5	31.1	24.9	23	22	21.2	19.4	18.3	16.9	16.1	14.9	14.2	13.3	12.7	11.9	11.5	10.8	10.4	9.8	9.5	9	8.7	8.3	USt	
			44.1	43.9	33.8	27.2	25.1	22.5	22	21.1	19.9	18.4	17.5	16.2	15.5	14.5	13.9	13.1	12.5	11.8	11.4	10.8	10.4	9.9	9.6	9.1	USt P+	
246	13.8 → 62.3 13.8 → 66.9	111.7 - 120.4 120.3 - 129.7	44.1	41.6	32	25.7	23.8	22	21.8	20	18.9	17.4	16.6	15.4	14.7	13.7	13.2	12.4	11.9	11.2	10.8	10.2	9.9	9.4		USt		
			44.1	44.1	34.9	28.1	26	23.4	22	21.7	20.6	19	18.1	16.8	16.1	15	14.4	13.5	13	12.3	11.9	11.2	10.8	10.3		USt P+		
230	13.8 → 64.6 13.8 → 69.6	116.1 - 124.7 125.4 - 134.7	44.1	43.3	33.4	26.9	24.9	22.3	22	20.8	19.7	18.2	17.3	16.1	15.4	14.4	13.8	13	12.5	11.8	11.3	10.7				USt		
			44.1	44.1	36.5	29.5	27.3	24.5	22.9	22	21.5	19.9	18.9	17.6	16.8	15.8	15.1	14.2	13.7	12.9	12.5	11.8				USt P+		
213	13.8 → 68.6 13.8 → 74.1	123.4 - 132.5 133.3 - 143.5	44.1	44.1	35.8	28.9	26.8	24.1	22.5	22	21.1	19.5	18.6	17.3	16.5	15.5	14.8	13.9	13.4	12.7						USt		
			44.1	44.1	39.2	31.7	29.4	26.4	24.7	22.5	22	21.3	20.3	18.9	18.1	17	16.3	15.3	14.7	13.9							USt P+	
197	13.8 → 69.9 13.8 → 75.8	126.2 - 135.6 136.3 - 147	44.1	44.1	36.7	29.7	27.5	24.7	23.1	22	21.6	20	19	17.7	16.9	15.9	15.2	14.3									USt	
			44.1	44.1	40.3	32.6	30.2	27.2	25.4	23.1	22	21.9	20.9	19.5	18.6	17.4	16.7	15.8									USt P+	
180	13.8 → 70.5 13.8 → 76.4	126.9 - 136.4 137.1 - 148	44.1	44.1	37	29.9	27.7	24.9	23.3	22	21.8	20.1	19.2	17.9	17.1												USt	
			44.1	44.1	40.6	32.9	30.5	27.4	25.6	23.3	22	22	21	19.6	18.8	17.6											USt P+	
164	13.8 → 71.5 13.8 → 76.1	129 - 138.6 139.1 - 149.7	44.1	44.1	37.7	30.5	28.2	25.4	23.7	22	22	20.5	19.5	18.2													USt	
			44.1	44.1	40.5	33	30.6	27.6	25.9	23.6	22.3	22	21.3	19.9													USt P+	
148	13.8 → 71.2 13.8 → 75.1	128.3 - 137.8 137.2 - 147.6	44.1	44.1	37.4	30.3	28.1	25.2	23.6	22	22	20.4															USt	
			44.1	44.1	39.9	32.5	30.2	27.2	25.5	23.2	22	22															USt P+	
131	13.8 → 73.8 13.8 → 76.1		44.1	44.1	39.1	31.7	29.4	26.4	24.7	22.5																	USt	
			44.1	44.1	40.7	33.2	30.9	27.9	26.2	24																	USt P+	
115	13.8 → 72.8 13.8 → 76.4		44.1	44.1	38.4	31.1	28.8	25.9																			USt	
			44.1	44.1	40.8	33.3	31	28																			USt P+	
98	13.8 → 72.2 13.8 → 75.1		44.1	44.1	38.2	30.9																					USt	
			44.1	44.1	39.9	32.3																						USt P+

$$USt = USt - 2.24 \text{ USt max.}$$









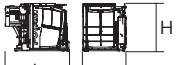
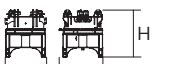





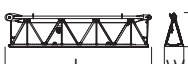
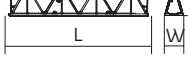
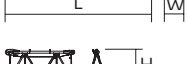





 (m)		56	66	82	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	220	230	236	246	253	262	ft		
 44.1 USt	 22 USt																											
262	11.2 → 60.7 11.2 → 65.1	107.8 - 110.1 115.8 - 118.2	44.1	40.2	30.9	24.7	22.8	20.9	19.5	17.7	16.6	15.2	14.3	13.2	12.5	11.6	11	10.2	9.8	9.1	8.7	8.1	7.8	7.3	7	6.6	USt	
			44.1	43.7	33.6	27	24.9	22.3	21.4	19.4	18.2	16.7	15.8	14.5	13.8	12.8	12.2	11.3	10.8	10.1	9.7	9.1	8.7	8.2	7.8	7.4	USt P+	
246	11.2 → 62.1 11.2 → 66.8	110.8 - 113.1 119.3 - 121.8	44.1	41.3	31.8	25.5	23.6	21.6	20.2	18.3	17.2	15.8	14.9	13.8	13.1	12.1	11.5	10.7	10.3	9.6	9.2	8.6	8.2	7.7			USt	
			44.1	44.1	34.7	27.9	25.8	23.1	22	20.1	18.9	17.4	16.4	15.2	14.4	13.4	12.8	11.9	11.4	10.7	10.2	9.6	9.2	8.7			USt P+	
230	11.2 → 64 11.2 → 69	114.2 - 116.6 123.4 - 126	44.1	42.8	33	26.5	24.5	22	21	19.1	17.9	16.4	15.5	14.3	13.6	12.6	12	11.2	10.7	10	9.6	9					USt	
			44.1	44.1	36	29	26.9	24.1	22.5	21	19.7	18.1	17.2	15.9	15.1	14	13.4	12.5	11.9	11.2	10.7	10.1					USt P+	
213	11.2 → 68.2 11.2 → 73.7	122.4 - 125 132.2 - 135.2	44.1	44.1	35.6	28.7	26.6	23.8	22.3	20.8	19.6	18	17	15.8	15	13.9	13.3	12.4	11.9	11.2							USt	
			44.1	44.1	39	31.5	29.2	26.2	24.5	22.3	21.6	19.8	18.8	17.4	16.6	15.4	14.7	13.8	13.2	12.4							USt P+	
197	11.2 → 69.7 11.2 → 75.4	125.2 - 128 135.3 - 138.5	44.1	44.1	36.5	29.5	27.3	24.5	22.9	21.4	20.1	18.5	17.5	16.2	15.4	14.4	13.7	12.8									USt	
			44.1	44.1	40	32.4	30	27	25.2	22.9	22	20.4	19.4	17.9	17.1	15.9	15.2	14.2									USt P+	
180	11.2 → 70.4 11.2 → 76.3	126.9 - 129.6 137.1 - 140.7	44.1	44.1	37	29.9	27.7	24.9	23.3	21.7	20.5	18.8	17.9	16.6	15.8	14.7											USt	
			44.1	44.1	40.6	32.9	30.5	27.4	25.6	23.3	22	20.7	19.7	18.3	17.5	16.3											USt P+	
164	11.2 → 71.5 11.2 → 76.1	129 - 131.7 139.1 - 142.2	44.1	44.1	37.7	30.5	28.2	25.4	23.7	22	22	20.9	19.2	18.2	16.9												USt	
			44.1	44.1	40.5	33	30.6	27.6	25.9	23.6	22.3	20.7	20	18.6													USt P+	
148	11.2 → 71.2 11.2 → 75.1	128.3 - 131.2 137.2 - 147.6	44.1	44.1	37.4	30.3	28.1	25.2	23.6	22	22	20.8	19.1														USt	
			44.1	44.1	39.9	32.5	30.2	27.2	25.5	23.2	22	22															USt P+	
131	11.2 → 73.9 11.2 → 76.2		44.1	44.1	39.1	31.7	29.4	26.4	24.7	22.5																	USt	
			44.1	44.1	40.7	33.2	30.9	27.9	26.2	24																	USt P+	
115	11.2 → 72.8 11.2 → 76.3		44.1	44.1	38.4	31.1	28.8	25.9																			USt	
			44.1	44.1	40.8	33.3	31	28																			USt P+	
98	11.2 → 72.3 11.2 → 75.2		44.1	44.1	38.2	30.9																					USt	
			44.1	44.1	39.9	32.3																						USt P+

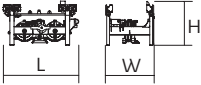

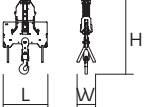

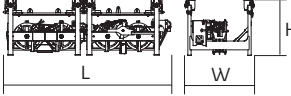



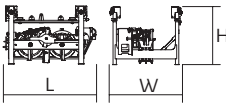

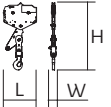

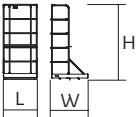


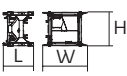

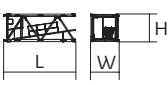

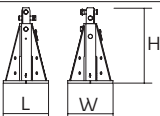
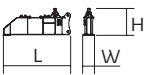

$$USt = USt - 1.86 \text{ USt max.}$$

Dimensions and weight

Slewing crane part:  262 ft -  180 HPL™



Slewing crane part		L (ft)	W (ft)	H (ft)	lb (+/- 5%)	
Counter-jib		25.9	7.4	7.4	23,171	
		39.4	7.4	7.4	31,978	
		34	4.5	8.1	21,142	
		39.7	21.9	13.7	27,040	
		52.8	21.9	13.7	35,891	
Hoisting winch (+ rope)	 180 HPL™ 320 LVF 320 LVF GH	16.2 16.8 18.4	6.6 7.3 7.2	6.6 7.3 7.8	20,459 21,437 31,150	
	Cab	 Ultra View	11	7.5	8.2	6,614
		Towerhead	 8 ft	8.5	8.2	9.7
	22.5		8.2	9.7	41,006	
Jib section	 ①		25.6	5.1	8.2	27,893
	 ②	34.5	7.3	8.2	27,133	
	 ③	34.1	4.8	8.1	18,683	
	 ④	20.9	4.5	7.9	8,754	
	 ⑤	34.4	4.5	7.8	10,983	
	 ⑦	33.9	4.5	7.5	7,043	
	 ⑪	33.2	4.5	6.4	3,103	
	 ⑥	17.8	4.5	7.7	4,859	
	 ⑧	17.3	4.5	7.3	3,013	
	 ⑨	17.3	4.5	6.8	2,175	
 ⑩	17.3	4.5	6.7	1,955		
	5.5	5.2	1.9	728		

			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Trolley			8.6	5.7	5.2	2,678
Pulley block			6.2	2.6	10.4	3,120
Trolley			13.8	5.9	4.9	3,219
Pulley block			7.5	1.1	9.7	2,888
Trolley			6.9	5.9	4.9	1,720
Pulley block			5	1.1	10	1,786
Trolley inspection platform			3.1	3.4	7	125
<b>Crane tower</b>						
T 851			36.7	15.9	19	34,723
K 85/K 85-2			7.3	10.7	8.2	7,937
KM 850.10B KM 850.14B KMT 850.10A KMT 850.14A K 88/K 85A2 KM 880.10A KMT 880.10A KMT 850.10C			33.9 33.9 17.5 17.5 17.5 17.8 17.8 12	8.3 8.3 8.3 8.3 8.2 8.3 8.3 8.3	8.2 8.2 8.2 8.2 8.2 8.3 8.6 8.2	22,201 24,670 12,015 13,206 18,281 18,453 19,180 9,326
Fixing angles		P 854A P 880A	3 3.3	3 3.3	4.9 6.2	2,072 3,536
1/2 Cross girder		ZY 854	18.7	3.2	7.4	14,176
Cross girder		ZY 854	39	4.7	7.4	30,865

Mechanisms

480 V - 60 Hz													hp	kW	
	180 HPL™100	fpm	107	131	174	274	323	53	66	89	143	161	180	132	1,745 ft
		USt	22	16.5	11	5.5	4	44.1	33.1	22	11	8.9			
	320 LVF 100 Optima	fpm	220	282	387	486	531	112	141	197	243	266	320	240	1,745 ft
		USt	22	16.5	11	7.5	6.6	44.1	33.1	22	15.7	14			
	320 LVF 100 GH Optima	fpm	220	279	369	436		112	141	187	218		320	240	3,488 ft
		USt	22	16.5	11	8		44.1	33.1	22	18.1				
	15 DVF 16 Optima	fpm	0 → 108 (44.1 USt) 0 → 164 (22 USt) 0 → 220 (11 USt) 0 → 328 (2.8 USt)									15	11		
	RVF 174 Optima +	rpm	0 → 0.7									4 x 10	4 x 7.5		

	IEC 60204-32		kVA
480 V (+6% -10%) 60 Hz		180 HPL™: 194 → 122 kVA 320 LVF: 306 → 178 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
- 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.

