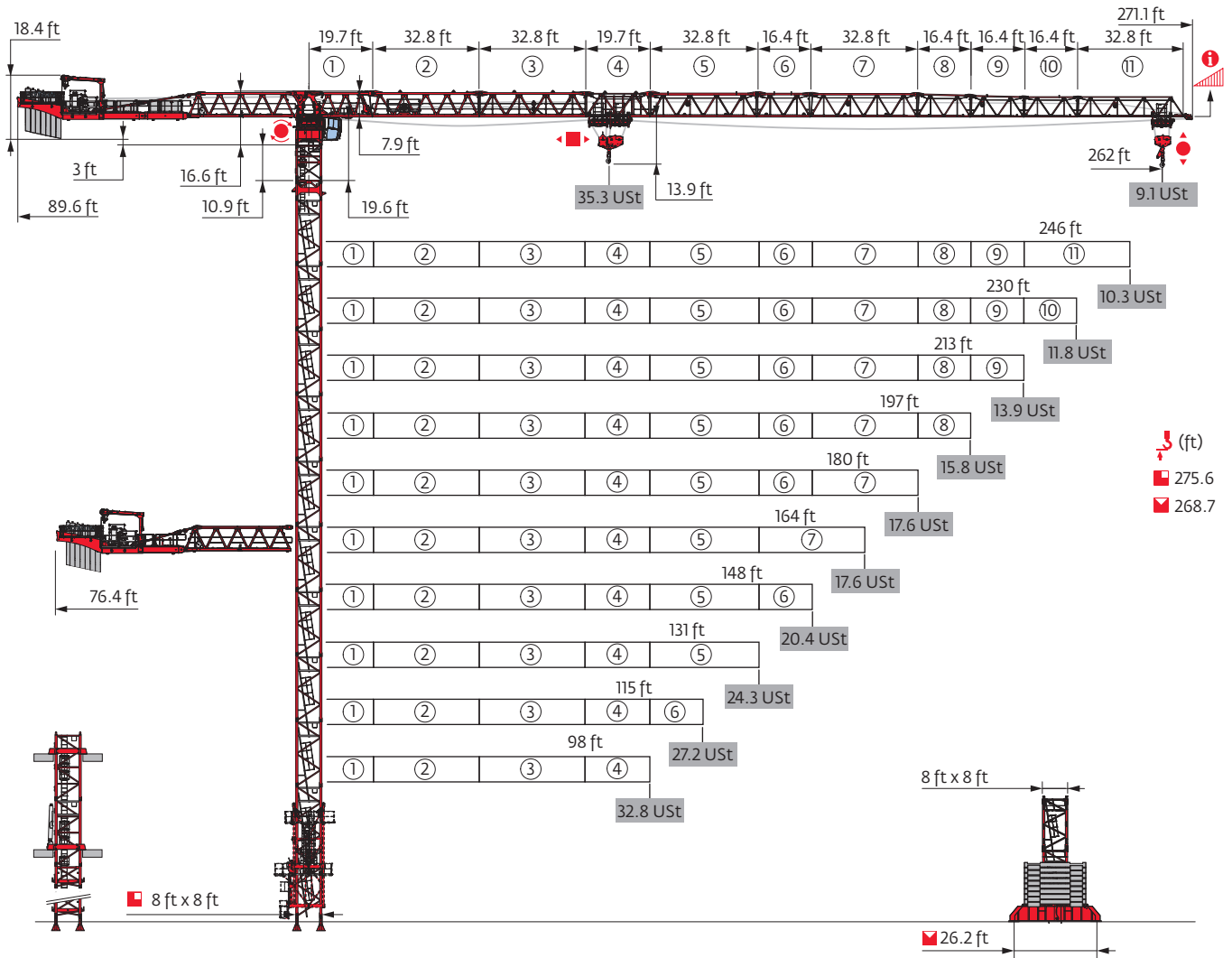



MDT 809 M32



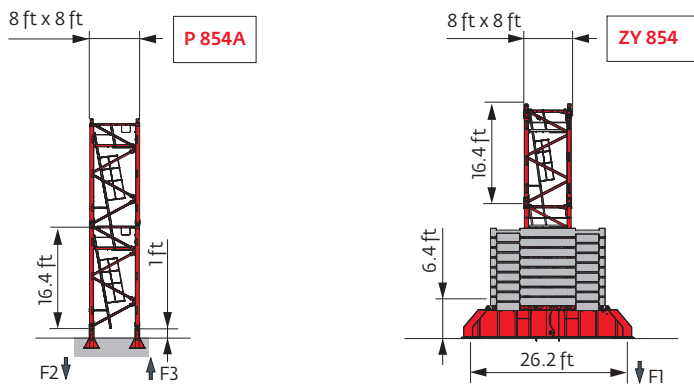
Mast - Reactions

8 ft - P 854A											
Height (ft)	98	115	131	148	164	180	197	213	230	246	262
\bar{P}_r (ft)	270.3	259.2	264.8	264.8	275.6	270.3	264.8	264.8	259.2	259.2	253.9
\bar{P}_r/P_r (ft)	253.9	248.4	248.4	242.8	264.8	242.8	248.4	242.8	259.2	259.2	253.9
Cab-IN	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	0	2	2	0	1	2	2	0	0
	16.4 ft	15	15	14	14	16	15	14	14	15	14
F2 (Ust)	● 411	404	410	409	406	412	401	409	413	401	397
	■ 543	489	524	533	569	553	539	547	525	532	522
F3 (Ust)	● 273	267	266	262	254	262	251	257	260	248	244
	■ 423	370	397	402	435	420	407	412	389	397	387

8 ft - ZY 854 - 											
Height (ft)	98	115	131	148	164	180	197	213	230	246	262
\bar{P}_r (ft)	268.7	263.1	252.3	263.1	257.9	252.3	246.7	246.7	246.7	246.7	241.5
\bar{P}_r/P_r (ft)	213.9	235.9	192.3	197.5	252.3	192.3	186.7	192.3	225.1	230.3	230.3
Cab-IN	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	2	0	2	0	1	2	0	0	0	0
	16.4 ft	14	15	13	15	14	13	14	14	14	13
F1 (Ust)	● 244	242	232	242	231	233	233	235	236	234	236
	■ 265	243	222	251	239	229	220	223	231	235	235

 Motorized accesses of Cab-IN 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.



Anchorage



Base ballast

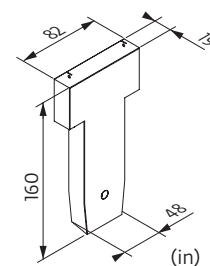
⚙️ (Ust) / 8 ft - ZY 854 - ⚙️

⚙️ (ft)	98	115	131	148	164	180	197	213	230	246	262
268.7	172										
263.1	158.7	158.7		145.5							
257.9	158.7	158.7		145.5	132.3						
252.3	158.7	145.5	145.5	132.3	145.5	158.7					
246.7	145.5	145.5	145.5	132.3	132.3	158.7	172	172	185.2	185.2	
241.5	145.5	145.5	145.5	132.3	132.3	158.7	172	172	172	185.2	198.4
225.1	132.3	145.5	132.3	119.1	119.1	158.7	158.7	172	172	172	185.2
208.7	132.3	132.3	105.8	105.8	105.8	158.7	158.7	158.7	158.7	172	185.2
192.3	119.1	119.1	119.1	105.8	105.8	145.5	158.7	158.7	158.7	172	185.2
175.9	105.8	105.8	105.8	92.6	92.6	145.5	145.5	145.5	158.7	172	172
159.5	92.6	92.6	92.6	92.6	92.6	132.3	145.5	145.5	145.5	172	172
143	92.6	92.6	92.6	79.4	92.6	132.3	132.3	145.5	145.5	172	158.7
126.6	92.6	92.6	92.6	79.4	79.4	132.3	132.3	132.3	145.5	172	158.7
110.2	92.6	92.6	92.6	79.4	79.4	119.1	132.3	132.3	145.5	172	158.7
93.8	92.6	92.6	92.6	79.4	79.4	119.1	119.1	132.3	145.5	172	158.7
77.4	92.6	92.6	92.6	79.4	79.4	119.1	119.1	132.3	145.5	172	158.7
61	92.6	92.6	92.6	79.4	79.4	105.8	105.8	132.3	145.5	172	158.7

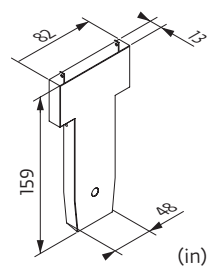
Counter-jib ballast

⚙️ (ft)	180 HPL™			320 LVF GH		
	14,551 lb	10,362 lb	⚙️ (lb)	14,551 lb	10,362 lb	⚙️ (lb)
262 ft	7	0	101,854	5	2	93,476
246 ft	6	1	97,665	4	3	89,287
230 ft	5	2	93,476	6	0	87,303
213 ft	4	3	89,287	5	1	83,114
197 ft	6	0	87,303	4	2	78,925
180 ft	4	2	78,925	5	0	72,753
164 ft	6	1	97,665	4	3	89,287
148 ft	4	3	89,287	5	1	83,114
131 ft	5	1	83,114	3	3	74,737
115 ft	4	1	68,564	3	2	64,375
98 ft	4	0	58,202	3	1	54,013

CCP - 14,551 lb



CCQ - 10,362 lb



Load curves
















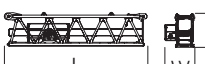

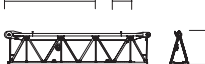
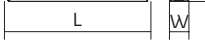
	▽▽▽▽▽ (ft)		72	82	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	220	230	236	246	253	262	ft
	↔ 35.3 USt	↔ 17.6 USt																								
262	14.8 → 73.8	129.7 - 142.4	35.3	31.1	24.9	23	20.6	19.2	17.6	17.6	16.9	16.1	14.9	14.2	13.3	12.7	11.9	11.5	10.8	10.4	9.8	9.5	9	8.7	8.3	USt
	14.8 → 79.1	139.3 - 153	35.3	33.8	27.2	25.1	22.5	21	19	17.9	17.6	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	14.8 → 75.5	133.5 - 146.1	35.3	32	25.7	23.8	21.3	19.9	18	17.6	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		
	14.8 → 81.3	143.7 - 157.5	35.3	34.9	28.1	26	23.4	21.8	19.8	18.6	17.6	17.6	16.8	16.1	15	14.4	13.5	13	12.3	11.9	11.2	10.8	10.3	USt P+		
230	14.8 → 78.3	138.9 - 151.6	35.3	33.4	26.9	24.9	22.3	20.9	18.9	17.8	17.6	17.3	16.1	15.4	14.4	13.8	13	12.5	11.8	11.3	10.7	USt				
	14.8 → 84.4	149.7 - 164	35.3	35.3	29.5	27.3	24.5	22.9	20.8	19.6	17.9	17.6	17.6	16.8	15.8	15.1	14.2	13.7	12.9	12.5	11.8	USt P+				
213	14.8 → 83.1	147.6 - 161.1	35.3	35.3	28.9	26.8	24.1	22.5	20.4	19.2	17.6	17.6	17.3	16.5	15.5	14.8	13.9	13.4	12.7	USt						
	14.8 → 89.8	159.1 - 174.4	35.3	35.3	31.7	29.4	26.4	24.7	22.5	21.2	19.4	18.4	17.6	17.6	17	16.3	15.3	14.7	13.9	USt P+						
197	14.8 → 85	151 - 164.8	35.3	35.3	29.7	27.5	24.7	23.1	21	19.8	18.1	17.6	17.6	16.9	15.9	15.2	14.3	USt								
	14.8 → 92	162.7 - 178.7	35.3	35.3	32.6	30.2	27.2	25.4	23.1	21.8	20	18.9	17.6	17.6	17.4	16.7	15.8	USt P+								
180	14.8 → 85.5	151.9 - 165.8	35.3	35.3	29.9	27.7	24.9	23.3	21.2	19.9	18.3	17.6	17.6	17.1	16	USt										
	14.8 → 91.4	163.7 - 180.4	35.3	35.3	32.4	30.1	27.1	25.4	23.2	21.9	20.1	19	17.6	17.6	17.6	USt P+										
164	14.8 → 84.6	150.3 - 164	35.3	35.3	29.5	27.4	24.6	23	20.9	19.7	18	17.6	17.6	USt												
	14.8 → 88.7		35.3	35.3	31.3	29	26	24.4	22.2	20.9	19.2	18.2	17.6	USt P+												
148	14.8 → 86.4		35.3	35.3	30.3	28.1	25.2	23.6	21.4	20.2	18.5	USt														
	14.8 → 91.4		35.3	35.3	32.5	30.2	27.3	25.6	23.4	22.1	20.4	USt P+														
131	14.8 → 89.8		35.3	35.3	31.7	29.4	26.4	24.7	22.5	USt																
	14.8 → 94.2		35.3	35.3	33.6	31.3	28.3	26.5	24.3	USt P+																
115	14.8 → 88.3		35.3	35.3	31.1	28.8	25.9	USt																		
	14.8 → 91.2		35.3	35.3	32.4	30.1	27.2	USt P+																		
98	14.8 → 87.8		35.3	35.3	30.9	USt																				
	14.8 → 92.2		35.3	35.3	32.8	USt P+																				

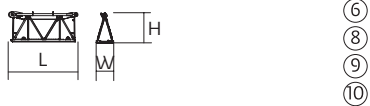

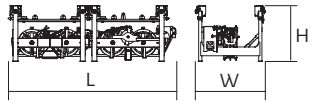

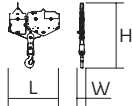

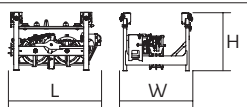

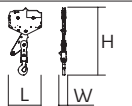

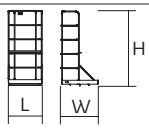
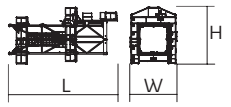

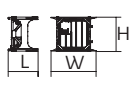

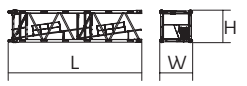

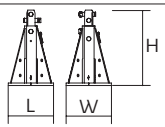
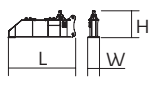

$\text{USt} = \text{USt} - 2.24 \text{ USt max.}$

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	22,240
		39.4	7.4	7.4	31,048
		34	6.7	8.1	22,070
	 180 HPL™ 320 LVF GH	39.7	21.9	13.7	26,109
	 180 HPL™ 320 LVF GH	52.8	21.9	13.7	34,959
	 180 HPL™	39.7	21.9	13.7	42,807
	 180 HPL™	52.8	21.9	13.7	51,657
Hoisting winch (+ rope)	 180 HPL™ 320 LVF GH	15.8 18.4	6.3 7.2	6.5 7.8	16,698 31,150
					
Cab Towerhead	 Ultra View	11	7.5	8.2	6,614
	 8 ft	8.5	8.2	9.7	34,392
		22.5	8.2	9.7	41,006
Jib section	 ①	25.6	5.1	8.2	27,893
	 ② ③	34.5 34.1	7.3 4.8	8.2 8.1	27,133 18,683
	 ④	20.9	4.5	7.9	8,754
	 ⑤ ⑦	34.4 33.9	4.5	7.8 7.5	10,983 7,043
	 ⑪	33.2	4.5	6.4	3,103

			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Jib section		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
Trolley		 35.3 USt	13.8	5.9	4.9	3,219
Pulley block		 35.3 USt	7.5	1.1	9.7	2,888
Trolley		 17.6 USt	6.9	5.9	4.9	1,720
Pulley block		 17.6 USt	5	1.1	10	1,786
Trolley inspection platform			3.1	3.4	7	125
Crane tower						
T 851		 8 ft	36.7	15.9	19	34,723
K 850/K 850		 8 ft	7.3	10.7	8.2	8,069
KM 850.10B KM 850.14B KMT 850.10A KMT 850.14A KMT 850.10C		 8 ft	33.9 33.9 17.5 17.5 12	8.3 8.3 8.3 8.3 8.3	8.2 8.2 8.2 8.2 8.2	22,201 24,670 12,015 13,206 9,326
Fixing angles		P 854A	3	3	4.9	2,072
1/2 Cross girder		ZY 854	18.6	3.2	7.4	13,095
Cross girder		ZY 854	39	4.7	7.4	29,432

Mechanisms

480 V - 60 Hz													hp	kW	
	180 HPL™ 80	fpm	138	171	225	344	490	69	85	115	180	244	180	132	1,660 ft
		USt	17.6	13.2	8.8	4.4	2	35.3	26.5	17.6	8.8	5.2			
	320 LVF 80 GH Optima	fpm	277	351	474	663	705	138	176	243	353	320	240	3,488 ft	
		USt	17.6	13.2	8.8	4.4	3.6	35.3	26.5	17.6	9.4				
	15 DVF 16 Optima	fpm	0 → 108 (35.3 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		

480 V (+6% -10%) 60 Hz	180 HPL™: 194 → 122 kVA	
	320 LVF GH: 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.

