

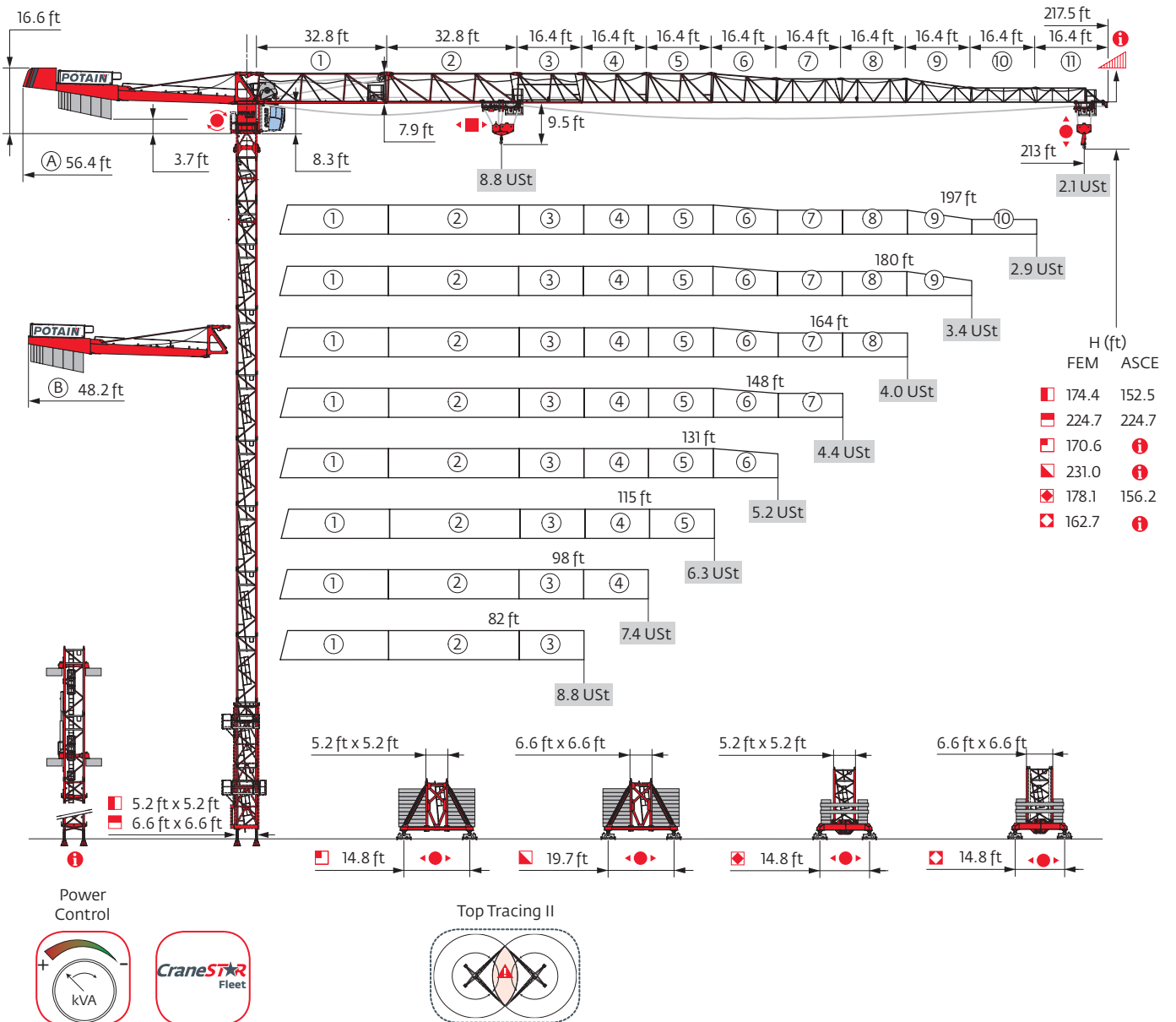


# MDT 218 A

## Data Sheet

FEM 1.001-A3  
ASCE 7-10

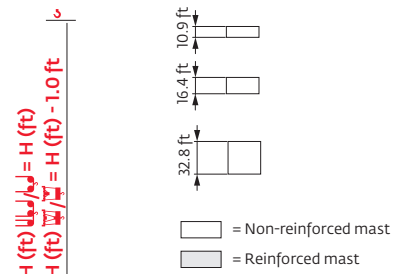
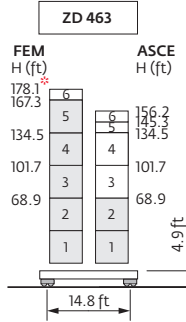
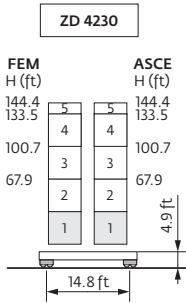
### MDT 218 A J8



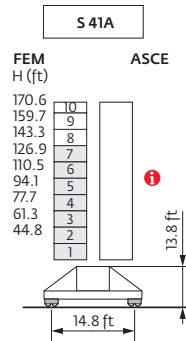
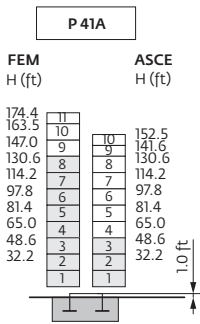
Values have been rounded

# Mast

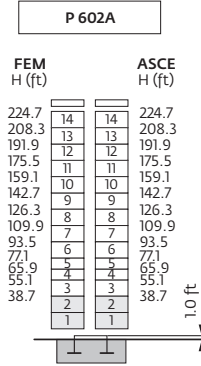
5.2 ft City  
 82 ft → 213 ft



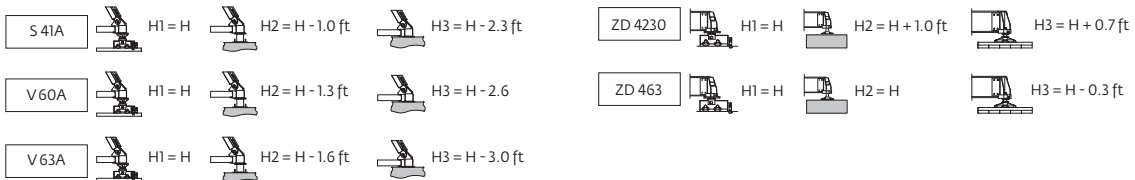
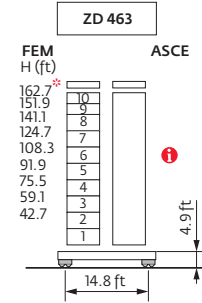
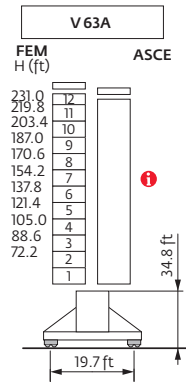
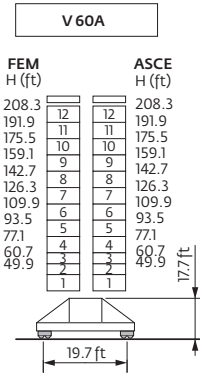
5.2 ft  
 82 ft → 213 ft



6.6 ft  
 82 ft → 213 ft



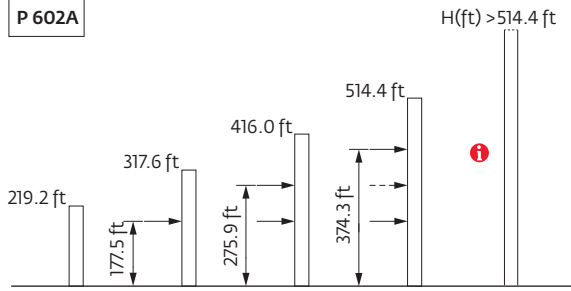
6.6 ft  
 82 ft → 213 ft



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.

# Anchorage (Consult us for ASCE 7-10 values)

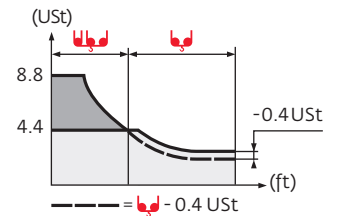
P 602A



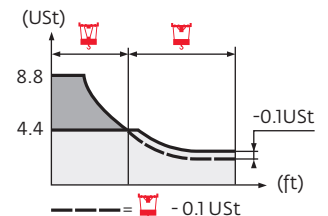
## Load charts



213 ft	10	▶	61	66	72	82	89	98	105	109	117	121	131	138	148	154	164	171	180	187	197	203	213	ft
▲▼▲▼			8.8	8.0	7.3	6.2	5.6	5.0	4.6	4.4	4.4	4.3	3.9	3.6	3.4	3.2	3.0	2.9	2.6	2.5	2.4	2.3	2.1	USt
197 ft	10	▶	71	72	82	89	98	105	115	121	126	136	138	148	154	164	171	180	187	197	ft			
▲▼▲▼			8.8	8.6	7.4	6.7	6.0	5.5	5.0	4.6	4.4	4.4	4.4	4.1	3.9	3.5	3.4	3.2	3.0	2.9	USt			
180 ft	10	▶	75	82	89	98	105	115	121	131	134	145	148	154	164	171	180	ft						
▲▼▲▼			8.8	7.9	7.3	6.4	6.0	5.3	5.0	4.5	4.4	4.4	4.3	4.1	3.9	3.6	3.4	USt						
164 ft	10	▶	78	82	89	98	105	115	121	131	138	140	152	154	164	ft								
▲▼▲▼			8.8	8.4	7.6	6.7	6.3	5.6	5.3	4.7	4.5	4.4	4.4	4.3	4.0	USt								
148 ft	10	▶	81	82	89	98	105	115	121	131	138	148	ft											
▲▼▲▼			8.8	8.6	7.9	7.1	6.5	5.8	5.5	5.0	4.6	4.3	USt											
													4.4	USt										
131 ft	10	▶	83	89	98	105	115	121	131	ft														
▲▼▲▼			8.8	8.3	7.3	6.7	6.1	5.7	5.2	USt														
115 ft	10	▶	84	89	98	105	115	ft																
▲▼▲▼			8.8	8.4	7.4	6.8	6.2	USt																
98 ft	10	▶	84	89	98	ft																		
▲▼▲▼			8.8	8.3	7.3	USt																		
82 ft	10	▶	82	ft																				
▲▼▲▼			8.8	USt																				



213 ft	8	▶	61	66	72	82	89	98	105	110	112	115	121	131	138	148	154	164	171	180	187	197	203	213	ft
▲▼▲▼			8.8	8.2	7.3	6.3	5.7	5.1	4.6	4.4	4.4	4.3	4.0	3.6	3.4	3.1	3.0	2.8	2.6	2.4	2.3	2.1	2.0	1.9	USt
197 ft	8	▶	71	72	82	89	98	105	115	121	128	131	138	148	154	164	171	180	187	197	ft				
▲▼▲▼			8.8	8.6	7.5	6.8	6.1	5.6	5.1	4.7	4.4	4.4	4.4	4.2	3.7	3.6	3.3	3.2	3.0	2.8	2.6	USt			
180 ft	8	▶	75	82	89	98	105	115	121	131	136	139	148	154	164	171	180	ft							
▲▼▲▼			8.8	7.9	7.3	6.5	6.0	5.4	5.1	4.6	4.4	4.4	4.1	3.9	3.6	3.4	3.2	USt							
164 ft	8	▶	79	82	89	98	105	115	121	131	138	142	145	148	154	164	ft								
▲▼▲▼			8.8	8.4	7.7	6.8	6.3	5.7	5.3	4.9	4.6	4.4	4.4	4.3	4.1	3.8	USt								
148 ft	8	▶	81	82	89	98	105	115	121	131	138	148	ft												
▲▼▲▼			8.8	8.7	7.9	7.1	6.5	5.8	5.5	5.1	4.7	4.4	USt												
													4.4	USt											
131 ft	8	▶	84	89	98	105	115	121	131	ft															
▲▼▲▼			8.8	8.3	7.3	6.8	6.2	5.7	5.2	USt															
115 ft	8	▶	85	89	98	105	115	ft																	
▲▼▲▼			8.8	8.5	7.5	6.9	6.3	USt																	
98 ft	8	▶	85	89	98	ft																			
▲▼▲▼			8.8	8.4	7.4	USt																			
82 ft	8	▶	82	ft																					
▲▼▲▼			8.8	USt																					



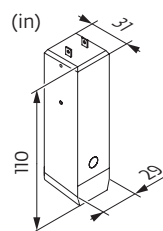
## Base ballast

5.2 ft City	ZD 4230	H (ft)	144.4	133.5	100.7	67.9								
		FEM (USt)	93.7	93.7	93.7	93.7								
		ASCE (USt)					i							
	ZD 463	H (ft)	178.1	167.3	156.2	134.5	101.7	68.9						
		FEM (USt)	110.2*	104.7	-	93.7	93.7	93.7						
		ASCE (USt)	-	-	93.7					i				
5.2 ft	S 41A	H (ft)	170.6	159.7	143.3	126.9	110.5	94.1	77.7	61.3	44.8			
		FEM (USt)											i	
		ASCE (USt)											i	
6.6 ft	V 60A	H (ft)	208.3	191.9	175.5	159.1	142.7	126.3	109.9	93.5	77.1	60.7	49.9	
		FEM (USt)	145.5	119.0	92.6	66.1	39.7	39.7	39.7	39.7	39.7	39.7	39.7	
		ASCE (USt)	145.5											i
	V 63A	H (ft)	231.0	219.8	203.4	187.0	170.6	154.2	137.8	121.4	105.0	88.6	72.2	
		FEM (USt)	198.4	172.0	145.5	105.8	79.4	66.1	39.7	39.7	39.7	39.7	39.7	
		ASCE (USt)											i	
	ZD 463	H (ft)	162.7	151.9	141.1	124.7	108.3	91.9	75.5	59.1	42.7			
		FEM (USt)	121.3*	93.7	77.2	77.2	77.2	77.2	77.2	77.2	77.2			
		ASCE (USt)											i	

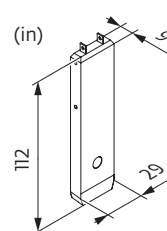
## Counter-jib ballast

	(lb) - 33 LVF (+/- 5%)					
				7937 lb	2425 lb	(lb)
213 ft	23,887	23,435	24,074	4	4	41,447
197 ft	23,446	22,994	23,634	4	4	41,447
180 ft	22,741	22,355	22,950	4	4	41,447
164 ft	22,079	21,693	22,289	4	4	41,447
148 ft	21,319	20,922	21,517	4	3	39,022
131 ft	20,459	20,051	20,657	4	2	36,597
115 ft	19,390	19,004	19,599	4	1	34,172
98 ft	18,287	17,902	18,486	4	0	31,747
82 ft	17,174	16,788	17,372	3	2	28,660



CAU - 7937 lb






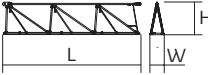



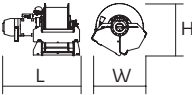
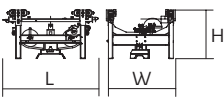

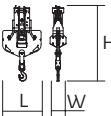

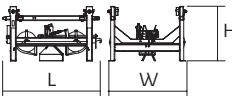

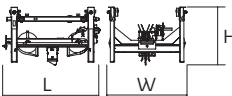


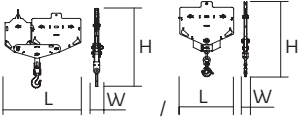


CAV - 2425 lb



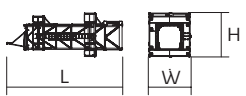
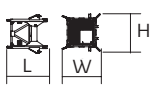
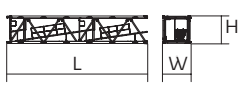
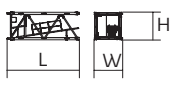
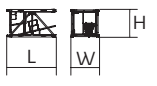
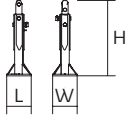
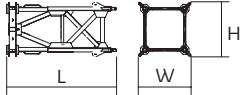
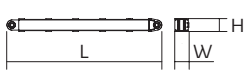
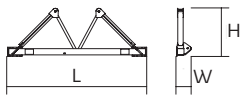
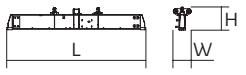
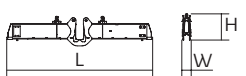

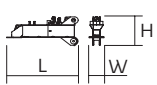
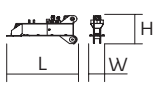
# Component weights

Crane upper :  213 ft -  33 LVF



			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Counter-jib		Ⓐ Ⓑ	36.7	5.0	8.3	13,095
			36.7	5.0	8.3	12,588
Pivot + cab		UltraView □ 5.2 ft □ 6.6 ft	15.4	7.5	8.2	12,511
			15.6	7.5	8.2	14,584
Jib section		① 33 LVF 7 DVF	35.8	9.6	8.6	9766
Jib section		②	33.7	3.4	7.9	4156
Jib section		③	17.2	3.4	7.7	1653
		④	17.0	3.4	7.6	1334
		⑤	17.0	3.4	7.6	1334
		⑦	17.0	3.4	6.2	860
		⑧	16.9	3.4	6.2	783
Jib section		⑥	17.0	3.4	7.6	1058
		⑨	17.0	3.4	6.2	661
Jib section		⑩	16.7	3.4	3.8	441
Hoisting winch (+ rope)		33 LVF	4.6	2.7	2.5	1995
		50 LVF	4.9	3.1	3.0	2646
		50 LVF GH	5.2	4.4	4.1	4453
Trolley		 8.8 USt	5.9	4.4	3.1	364
Hook block		 8.8 USt	3.3	1.4	6.6	441
Trolley		 8.8 USt	5.4	4.3	3.0	364
Trolley		 8.8 USt	5.2	4.3	3.0	353
		 4.4 USt	5.2	4.2	3.0	507
Hook block		 8.8 USt	5.4	0.8	5.6	683
		 4.4 USt	3.6	0.5	4.9	694

# Component weights

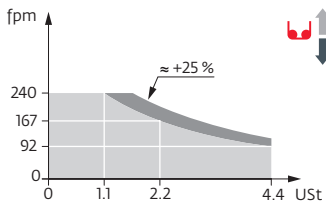
			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Climbing cage		□ 5.2 ft □ 6.6 ft	36.7 37.7	12.9 13.8	11.7 14.3	12,930 18,155
K40/K40 K60/K60		□ 5.2 ft □ 6.6 ft	7.3 6.6	6.9 8.1	6.8 8.2	3208 4365
K 437B KM 437E KM 439E K 639B		□ 5.2 ft □ 5.2 ft □ 5.2 ft □ 6.6 ft	33.5 33.5 33.5 33.6	5.5 5.5 6.9 6.8	5.3 5.3 6.8 6.7	4079 4916 7165 6184
K 437A K 439A KR 649A K 639A		□ 5.2 ft □ 5.2 ft □ 6.6 ft □ 6.6 ft	17.1 17.1 17.2 17.2	5.5 5.5 6.9 6.8	5.3 5.3 6.8 6.7	4079 4916 7165 6184
K 437C K 639C		□ 5.2 ft □ 6.6 ft	11.3 11.7	5.5 6.8	5.3 6.7	2998 4376
Fixing angles		P 41A P 602A	1.2 2.1	1.2 2.1	3.7 4.2	298 650
Chassis mast		S 41A V 60A V 63A	11.9 16.4 32.9	6.4 7.9 7.9	6.8 7.9 7.9	6537 9678 16,502
Struts		S 41A V 60A V 63A	10.4 14.8 14.8	0.9 1.0 1.1	0.8 1.0 1.1	496 926 1135
Half-bearer		S 41A V 60A V 63A	16.7 22.0 22.0	2.0 2.3 2.3	5.8 7.6 7.6	2524 3527 4079
Cross girder		ZD 4230	21.8	2.7	3.4	4034
Cross girder		ZD 4230	21.8	1.5	4.4	4707
Cross girder		ZD 463	25.1	3.8	4.5	7904
1/2 Cross girder		ZD 463	11.2	2.3	4.4	3649
1/2 Cross girder		ZD 463	11.2	2.4	4.4	3682

# Mechanisms

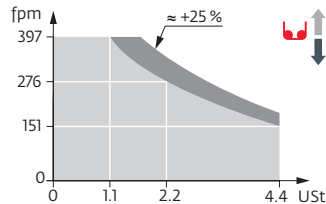
480 V - 60 Hz											hp	kW	
	33 LVF 20 Optima	fpm	92	118	167	240	46	59	84	120	33	22	951 ft
		USt	4.4	3.3	2.2	1.1	8.8	6.6	4.4	2.2			
	50 LVF 20 Optima	fpm	151	194	276	397	75	97	138	198	50	37	1191 ft
		USt	4.4	3.3	2.2	1.1	8.8	6.6	4.4	2.2			
	50 LVF 20 GH Optima	fpm	141	180	259	371	71	90	130	185	50	37	2080 ft
		USt	4.4	3.3	2.2	1.1	8.8	6.6	4.4	2.2			
	7 DVF 4	fpm	0 → 259						6.5	4.8			
	RVF 162 Optima+	rpm	0 → 0.8						2 x 7.5	2 x 5.5			
	S 41A RT 443 A1 - 2V R ≥ 10 m	fpm	59 - 118						4 x 6	4 x 4.4			
	V 60A RT 544 A1 - 2V R ≥ 13 m	fpm	52 - 105						4 x 8.4	4 x 6.2			
	V 63A RT 664 A2B - 2V	fpm	62 - 125						6 x 8.4	6 x 6.2			
	ZD 4230 RT 324	fpm	49 - 98						2 x 8.4	2 x 6.2			
	ZD 463 RT 443 A1 - 2V	fpm	59 - 118						4 x 6	4 x 4.4			

IEC 60204-32	kVA
480 V (+6% -10%) 60 Hz	33 LVF : 44 → 31 kVA
	50 LVF / 50 LVF GH : 58 kVA

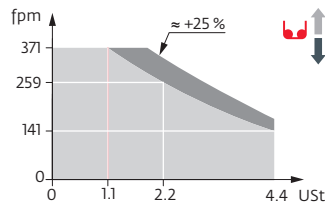
33 LVF 20 Optima



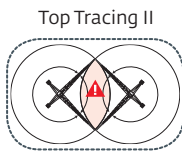
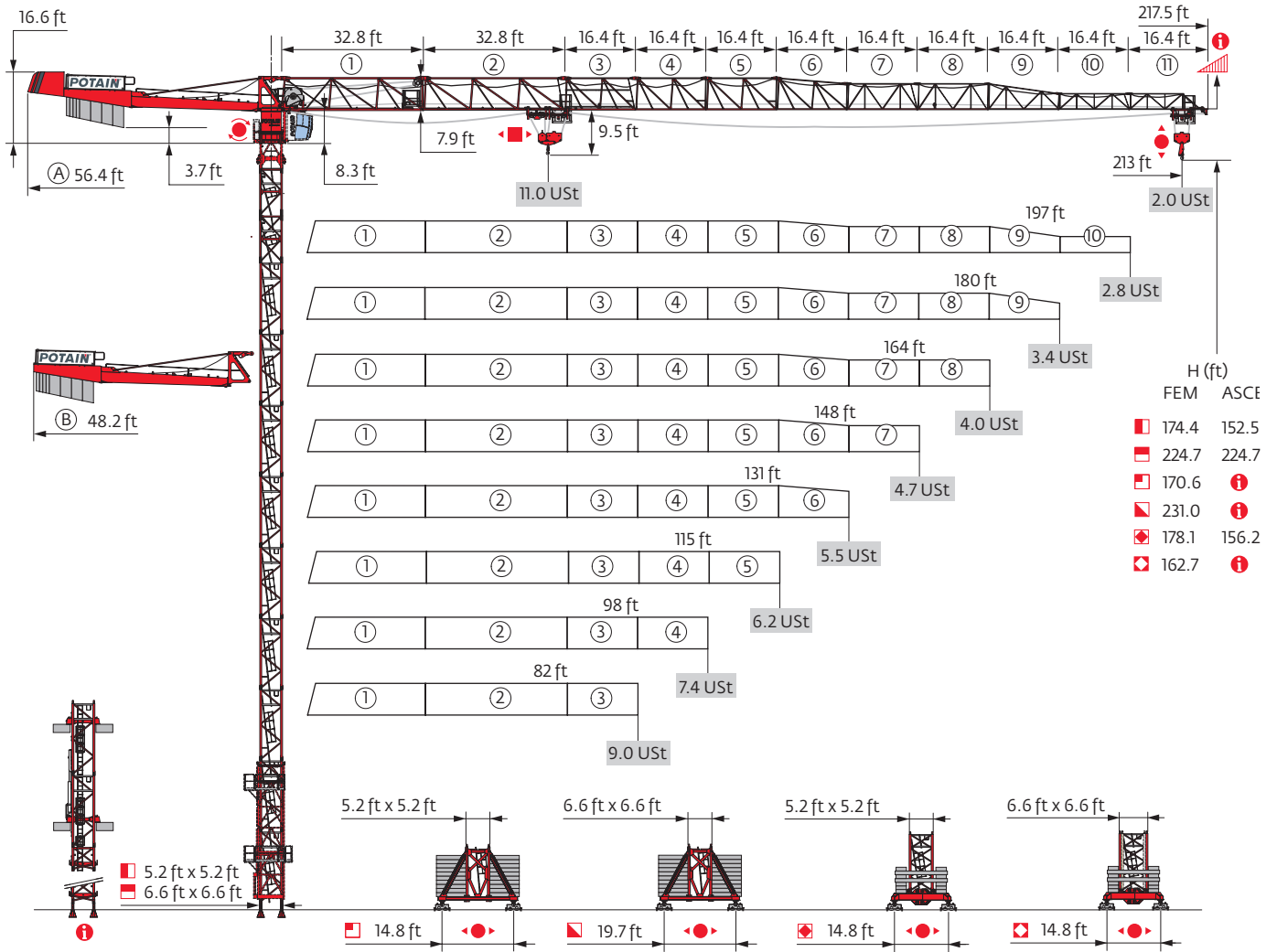
50 LVF 20 Optima



50 LVF 20 GH Optima



# MDT 218 A J10



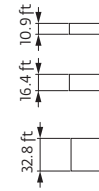
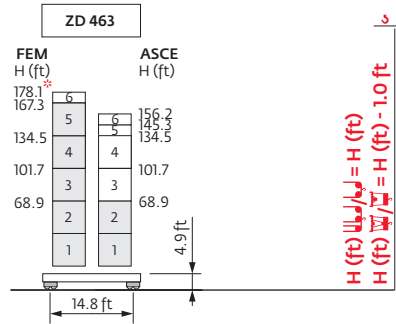
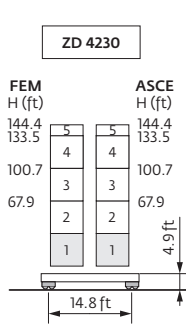
Values have been rounded



# Mast

5.2 ft City

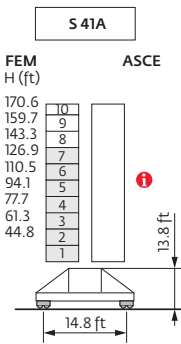
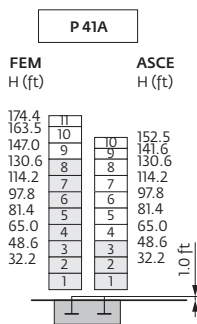
82 ft → 213 ft



White box = Non-reinforced mast  
Grey box = Reinforced mast

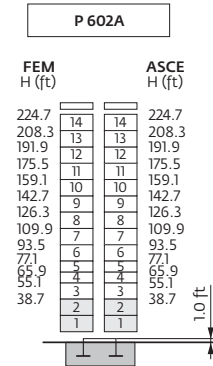
5.2 ft

82 ft → 213 ft



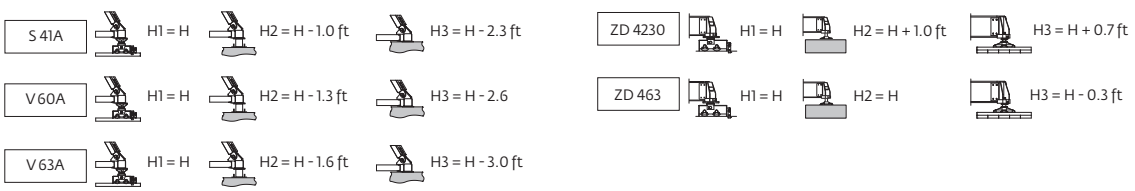
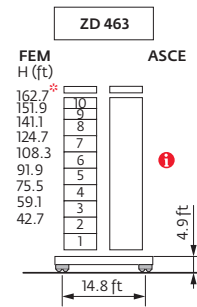
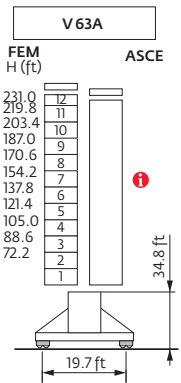
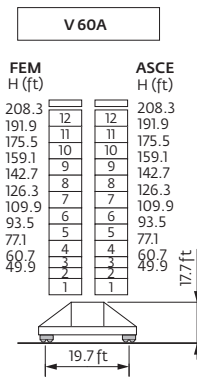
6.6 ft

82 ft → 213 ft



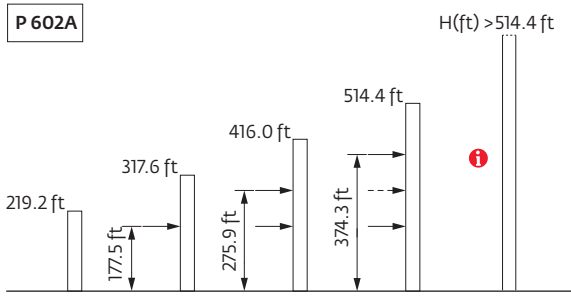
6.6 ft

82 ft → 213 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.

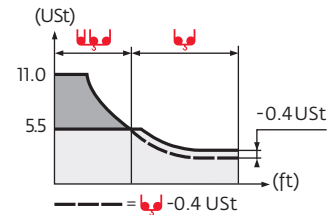
# Anchorage (Consult us for ASCE 7-10 values)



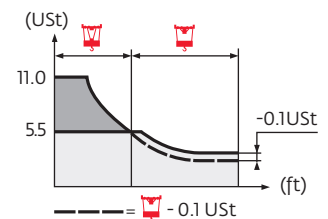
## Load chart



213 ft	10	▶	49	56	66	72	82	88	94	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	ft
▲▲▲▲			11.0	9.5	7.8	6.9	6.0	5.5	5.5	5.3	4.9	4.4	4.1	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.3	2.1	2.0	USt
197 ft	10	▶	57	66	72	82	89	98	102	110	115	121	131	138	148	154	164	171	180	187	197	ft			
▲▲▲▲			11.0	9.4	8.4	7.2	6.5	5.7	5.5	5.5	5.3	5.0	4.5	4.2	3.9	3.7	3.4	3.3	3.1	2.9	2.8	USt			
180 ft	10	▶	62	66	72	82	89	98	105	112	119	121	131	138	148	154	164	171	180	ft					
▲▲▲▲			11.0	10.3	9.3	7.9	7.3	6.4	6.0	5.5	5.5	5.4	5.0	4.6	4.3	4.1	3.9	3.6	3.4	USt					
164 ft	10	▶	64	66	72	82	89	98	105	115	117	125	131	138	148	154	164	ft							
▲▲▲▲			11.0	10.8	9.7	8.4	7.6	6.7	6.3	5.6	5.5	5.5	5.2	5.0	4.5	4.3	4.0	USt							
148 ft	10	▶	66	72	82	89	98	105	115	120	128	131	138	148	ft										
▲▲▲▲			11.0	9.9	8.6	7.8	6.9	6.5	5.8	5.5	5.5	5.4	5.1	4.7	USt										
131 ft	10	▶	68	72	82	89	98	105	115	121	123	131	ft												
▲▲▲▲			11.0	10.3	8.8	8.2	7.2	6.6	6.0	5.6	5.5	5.5	USt												
115 ft	10	▶	69	72	82	89	98	105	115	ft															
▲▲▲▲			11.0	10.5	9.0	8.3	7.4	6.8	6.1	USt															
98 ft	10	▶	69	72	82	89	98	ft																	
▲▲▲▲			11.0	10.4	9.0	8.3	7.3	USt																	
82 ft	10	▶	68	72	82	ft																			
▲▲▲▲			11.0	10.4	8.9	USt																			



213 ft	8	▶	50	56	66	72	82	89	90	92	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	ft
▲▲▲▲			11.0	9.7	8.0	7.2	6.2	5.6	5.5	5.5	5.1	4.6	4.2	3.9	3.5	3.3	3.0	2.9	2.6	2.5	2.3	2.2	2.0	1.9	1.8	USt
197 ft	8	▶	58	66	72	82	89	98	104	106	115	121	131	138	148	154	164	171	180	187	197	ft				
▲▲▲▲			11.0	9.5	8.5	7.4	6.7	6.0	5.5	5.5	5.1	4.7	4.3	4.1	3.7	3.5	3.3	3.1	2.9	2.7	2.5	USt				
180 ft	8	▶	62	66	72	82	89	98	105	113	115	121	131	138	148	154	164	171	180	ft						
▲▲▲▲			11.0	10.4	9.3	8.0	7.3	6.5	6.0	5.5	5.5	5.2	4.7	4.4	4.1	3.9	3.6	3.4	3.2	USt						
164 ft	8	▶	65	66	72	82	89	98	105	115	118	120	121	131	138	148	154	164	ft							
▲▲▲▲			11.0	10.8	9.7	8.4	7.7	6.8	6.3	5.7	5.5	5.5	5.4	5.0	4.7	4.3	4.1	3.8	USt							
148 ft	8	▶	66	72	82	89	98	105	115	121	124	131	138	148	ft											
▲▲▲▲			11.0	10.0	8.7	7.9	7.1	6.5	5.8	5.5	5.5	5.2	4.9	4.5	USt											
131 ft	8	▶	69	72	82	89	98	105	115	121	125	128	131	ft												
▲▲▲▲			11.0	10.4	9.0	8.3	7.3	6.8	6.1	5.7	5.5	5.5	5.3	USt												
115 ft	8	▶	70	72	82	89	98	105	115	ft																
▲▲▲▲			11.0	10.6	9.1	8.4	7.5	6.9	6.2	USt																
98 ft	8	▶	69	72	82	89	98	ft																		
▲▲▲▲			11.0	10.5	9.1	8.4	7.4	USt																		
82 ft	8	▶	69	72	82	ft																				
▲▲▲▲			11.0	10.5	9.0	USt																				



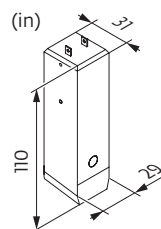
## Base ballast

5.2 ft City	ZD 4230	H (ft)	144.4	133.5	100.7	67.9							
	FEM	(USt)	93.7	93.7	93.7	93.7							
	ASCE	(USt)											
5.2 ft	S 41A	H (ft)	170.6	159.7	143.3	126.9	110.5	94.1	77.7	61.3	44.8		
	FEM	(USt)											
	ASCE	(USt)											
6.6 ft	V 60A	H (ft)	208.3	191.9	175.5	159.1	142.7	126.3	109.9	93.5	77.1	60.7	49.9
	FEM	(USt)	145.5	119.0	92.6	66.1	39.7	39.7	39.7	39.7	39.7	39.7	39.7
	ASCE	(USt)	145.5										
	V 63A	H (ft)	231.0	219.8	203.4	187.0	170.6	154.2	137.8	121.4	105.0	88.6	72.2
	FEM	(USt)	198.4	172.0	145.5	105.8	79.4	66.1	39.7	39.7	39.7	39.7	39.7
	ASCE	(USt)											
	ZD 463	H (ft)	162.7	151.9	141.1	124.7	108.3	91.9	75.5	59.1	42.7		
	FEM	(USt)	121.3 <sup>3</sup>	93.7	77.2	77.2	77.2	77.2	77.2	77.2	77.2		
	ASCE	(USt)											

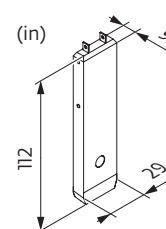
## Counter-jib ballast

Height (ft)	CAV (lb) - 50 LVF (+/- 5%)			CAU (lb)		
	CAV	CAU	CAU	7937 lb	2425 lb	(lb)
213 ft	24,405	23,942	24,593	4	4	41,447
197 ft	23,964	23,501	24,152	4	4	41,447
180 ft	23,259	22,862	23,457	4	4	41,447
164 ft	22,597	22,201	22,796	4	4	41,447
148 ft	21,826	21,429	22,024	4	3	39,022
131 ft	20,966	20,569	21,164	4	2	36,597
115 ft	19,908	19,511	20,106	4	1	34,172
98 ft	18,805	18,409	18,993	4	0	31,747
82 ft	17,692	17,306	17,891	3	2	28,660





CAU - 7937 lb



CAV - 2425 lb

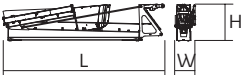


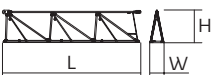



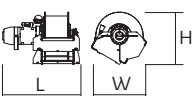
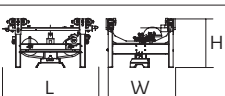

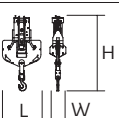

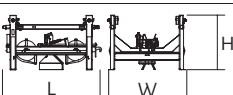

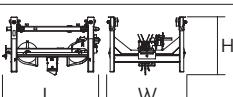


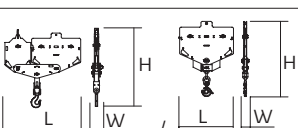




# Component weights






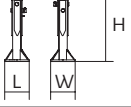
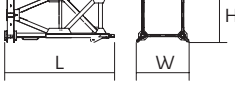
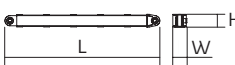
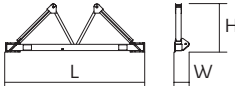
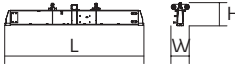
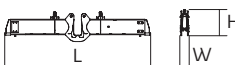
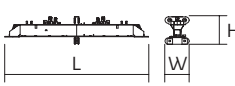
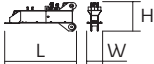

Crane upper :  213 ft -  -  -  50 LVF

 x 3














 x 3

			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Counter-jib		Ⓐ Ⓑ	36.7	5.0	8.3	13,095
			36.7	5.0	8.3	12,588
Pivot + cab		UltraView □ 5.2 ft □ 6.6 ft	15.4	7.5	8.2	12,511
			15.6	7.5	8.2	14,584
Jib section		① 50 LVF 7 DVF	35.8	9.6	8.6	10,439
Jib section		②	33.7	3.4	7.9	4156
Jib section		③	17.2	3.4	7.7	1653
		④	17.0	3.4	7.6	1334
		⑤	17.0	3.4	7.6	1334
		⑦	17.0	3.4	6.2	860
		⑧	16.9	3.4	6.2	783
Jib section		⑥	17.0	3.4	7.6	1058
		⑨	17.0	3.4	6.2	661
Jib section		⑩	16.7	3.4	3.8	441
Hoisting winch (+ rope)		50 LVF 50 LVF GH	4.9	3.1	2.8	2668
			5.2	4.2	3.9	3439
Trolley		 11.0 USt	5.9	4.4	3.1	364
Hook block		 11.0 USt	3.3	1.4	6.6	441
Trolley		 11.0 USt	5.4	4.3	3.0	364
Trolley		 11.0 USt	5.2	4.3	3.0	353
		 5.5 USt	5.2	4.2	3.0	507
Hook block		 11.0 USt	5.4	0.8	5.6	683
		 5.5 USt	3.6	0.5	4.9	694

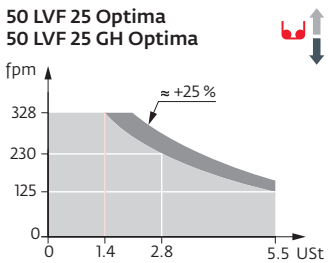
# Component weights

			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Climbing cage		□ 5.2 ft □ 6.6 ft	36.7 37.7	12.9 13.8	11.7 14.3	12,930 18,155
K40/K40 K60/K60		□ 5.2 ft □ 6.6 ft	7.3 6.6	6.9 8.1	6.8 8.2	3208 4365
K 437B KM 437E KM 439E K 639B		□ 5.2 ft □ 5.2 ft □ 5.2 ft □ 6.6 ft	33.5 33.5 33.5 33.6	5.5 5.5 6.9 6.8	5.3 5.3 6.8 6.7	4079 4916 7165 6184
K 437A K 439A KR 649A K 639A		□ 5.2 ft □ 5.2 ft □ 6.6 ft □ 6.6 ft	17.1 17.1 17.2 17.2	5.5 5.5 6.9 6.8	5.3 5.3 6.8 6.7	4079 4916 7165 6184
K 437C K 639C		□ 5.2 ft □ 6.6 ft	11.3 11.7	5.5 6.8	5.3 6.7	2998 4376
Fixing angles		P 41A P 602A	1.2 2.1	1.2 2.1	3.7 4.2	298 650
Chassis mast		S 41A V 60A V 63A	11.9 16.4 32.9	6.4 7.9 7.9	6.8 7.9 7.9	6537 9678 16,502
Struts		S 41A V 60A V 63A	10.4 14.8 14.8	0.9 1.0 1.1	0.8 1.0 1.1	496 926 1135
Half-bearer		S 41A V 60A V 63A	16.7 22 22	2 2.3 2.3	5.8 7.6 7.6	2524 3527 4079
Cross girder		ZD 4230	21.8	2.7	3.4	4034
Cross girder		ZD 4230	21.8	1.5	4.4	4707
Cross girder		ZD 463	25.1	3.8	4.5	7904
1/2 Cross girder		ZD 463	11.2	2.3	4.4	3649
1/2 Cross girder		ZD 463	11.2	2.4	4.4	3682

# Mechanisms

480 V - 60 Hz											hp	kW	
	50 LVF 25 Optima	fpm	125	161	230	328	62	80	115	164	50	37	912 ft
		USt	5.5	4.1	2.8	1.4	11.0	8.3	5.5	2.8			
	50 LVF 25 GH Optima	fpm	125	161	230	328	62	80	115	164	50	37	1690 ft
		USt	5.5	4.1	2.8	1.4	11.0	8.3	5.5	2.8			
	7 DVF 4	fpm	0 → 259								6.5	4.8	
	RVF 162 Optima+	rpm	0 → 0.8								2 x 7.5	2 x 5.5	
	S 41A RT 443 A1 - 2V R ≥ 10 m	fpm	59 - 118								4 x 6	4 x 4.4	
	V 60A RT 544 A1 - 2V R ≥ 13 m	fpm	52 - 105								4 x 8.4	4 x 6.2	
	V 63A RT 664 A2B - 2V	fpm	62 - 125								6 x 8.4	6 x 6.2	
													
	ZD 4230 RT 324	fpm	49 - 98								2 x 8.4	2 x 6.2	
	ZD 463 RT 443 A1 - 2V	fpm	59 - 118								4 x 6	4 x 4.4	










 IEC 60204-32	 kVA
480 V (+6% -10%) 60 Hz	50 LVF : 58 kVA 50 LVF GH : 58 kVA












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CRANE

423-697-9301

# 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
	Consult us
	Static use only

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.

## Manitowoc Cranes Regional Headquarters



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