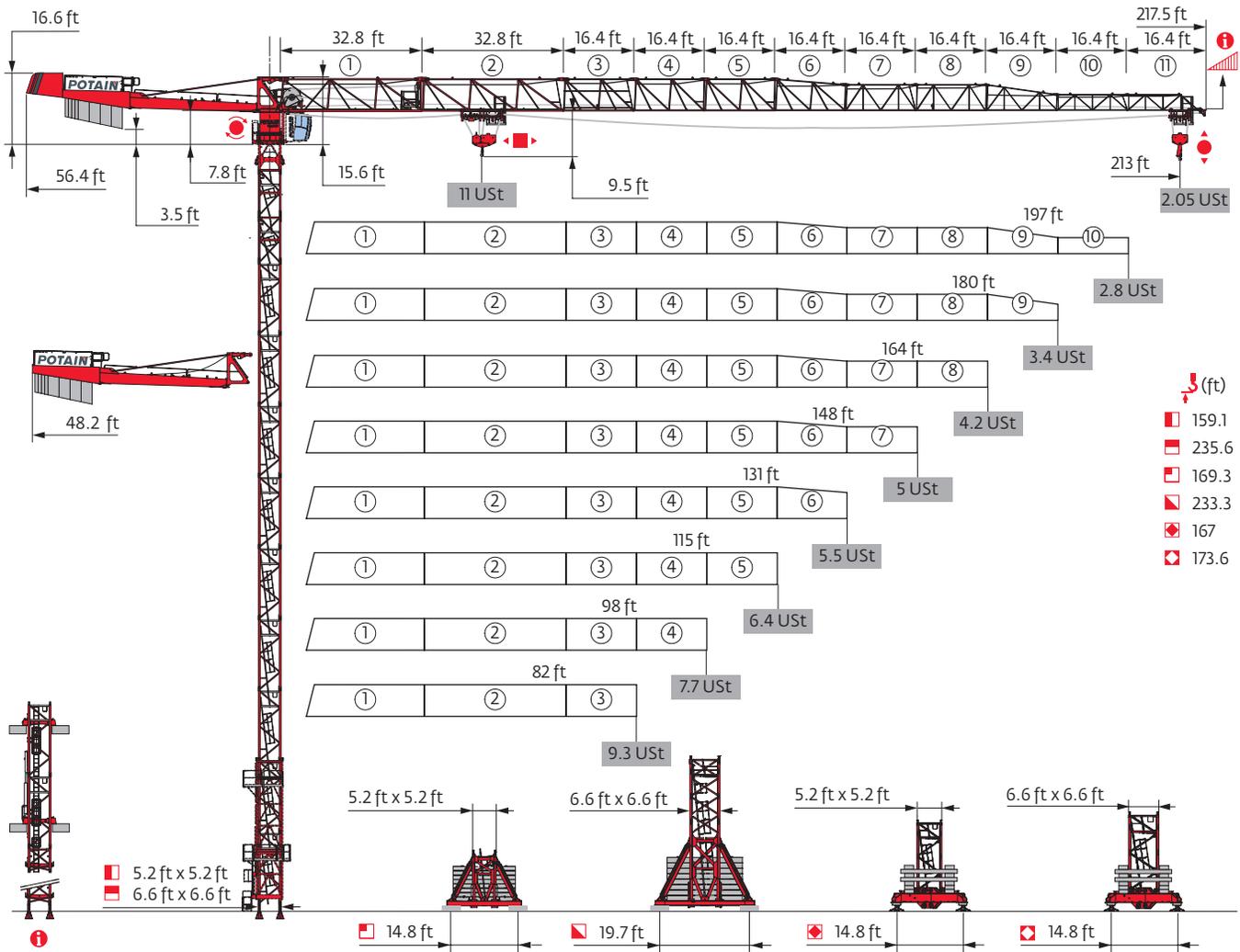


MDT 219 J10



- (ft)
- 159.1
 - 235.6
 - 169.3
 - 233.3
 - ◆ 167
 - ◆ 173.6

Potain Plus Power Control

Top Site Top Tracing 3

Mast - Reactions

5.2 ft City - ZD 4230 - 

MAJAL (ft)	82	98	115	131	148	164	180	197	213
 (ft)	150.6	150.6	155.8	150.6	150.6	150.6	145	145	145
 / P_{+} (ft)	150.6	150.6	155.8	150.6	150.6	150.6	145	145	145
	10.9 ft	0	0	2	0	0	0	1	1
	16.4 ft	9	9	8	9	9	9	8	8
F1 (Ust)	● 78	79	81	79	81	82	82	83	84
	■ 71	71	77	72	75	76	75	78	81

5.2 ft City - ZD 463 - 

MAJAL (ft)	82	98	115	131	148	164	180	197	213
 (ft)	167	167	167	161.4	161.4	155.8	150.6	155.8	155.8
 / P_{+} (ft)	167	167	167	161.4	161.4	155.8	150.6	155.8	155.8
	10.9 ft	0	0	1	1	2	0	2	2
	16.4 ft	10	10	10	9	9	9	8	8
F1 (Ust)	● 85	86	86	85	87	85	85	89	90
	■ 84	84	85	82	85	82	80	88	93

5.2 ft - P 41A

MAJAL (ft)	82	98	115	131	148	164	180	197	213
 (ft)	159.1	159.1	159.1	153.5	153.5	148	148	148	148
 / P_{+} (ft)	159.1	159.1	159.1	153.5	153.5	148	148	148	148
	6.6 ft	1	1	1	1	1	1	1	1
	10.9 ft	2	2	2	0	0	1	1	1
	16.4 ft	8	8	8	9	9	8	8	8
F2 (Ust)	● 138	139	140	138	140	138	142	144	146
	■ 159	158	161	150	152	146	153	161	168
F3 (Ust)	● 104	103	103	101	102	100	104	105	107
	■ 130	128	130	118	120	113	120	127	135

5.2 ft - S 41A - 

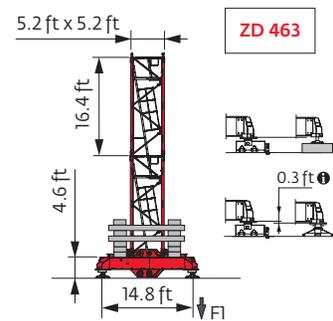
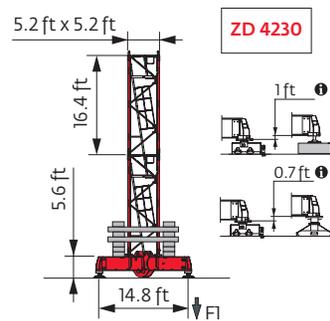
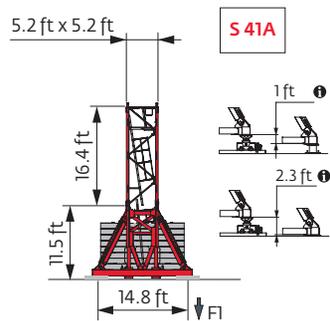
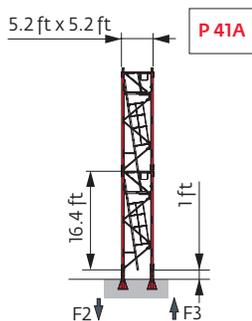
MAJAL (ft)	82	98	115	131	148	164	180	197	213
 (ft)	169.3	164	164	164	158.5	158.5	152.9	152.9	152.9
 / P_{+} (ft)	169.3	164	164	164	158.5	158.5	152.9	152.9	152.9
	6.6 ft	1	1	1	1	1	1	1	1
	10.9 ft	2	0	0	0	1	2	2	2
	16.4 ft	8	9	9	9	8	8	7	7
F1 (Ust)	● 90	87	88	89	89	90	90	90	91
	■ 100	90	92	93	89	90	90	94	99

5.2 ft - ZD 4230 - 

MAJAL (ft)	82	98	115	131	148	164	180	197	213
 (ft)	146	146	146	146	146	146	140.8	140.8	140.8
 / P_{+} (ft)	146	146	146	146	146	146	140.8	140.8	140.8
	6.6 ft	1	1	1	1	1	1	1	1
	10.9 ft	2	2	2	2	2	0	0	0
	16.4 ft	7	7	7	7	7	8	8	8
F1 (Ust)	● 79	80	81	81	82	83	83	83	84
	■ 75	75	76	77	78	79	77	80	84

5.2 ft - ZD 463 - 

MAJAL (ft)	82	98	115	131	148	164	180	197	213
 (ft)	162.4	162.4	157.2	157.2	157.2	151.6	146	146	146
 / P_{+} (ft)	162.4	162.4	157.2	157.2	157.2	151.6	146	146	146
	6.6 ft	1	1	1	1	1	1	1	1
	10.9 ft	2	2	0	0	0	1	2	2
	16.4 ft	8	8	9	9	9	8	7	7
F1 (Ust)	● 87	88	84	86	87	85	86	86	87
	■ 92	91	84	86	87	84	83	87	92



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

6.6 ft - P 602B

Height (ft)	82	98	115	131	148	164	180	197	213	
Height (ft)	235.6	235.6	235.6	230	230	230	230	224.7	219.2	
Height/P _r (ft)	235.6	235.6	235.6	230	230	230	230	224.7	219.2	
	6.6 ft	1	1	1	1	1	1	1	1	
	10.9 ft	0	0	0	1	1	1	2	0	
	16.4 ft	14	14	14	13	13	13	13	13	
F2 (Ust)	●	175	176	176	175	177	179	184	182	178
	■	336	335	338	327	330	332	338	331	320
F3 (Ust)	●	130	130	129	128	129	130	135	133	129
	■	296	295	297	285	287	288	293	287	277

6.6 ft - V 60A - 

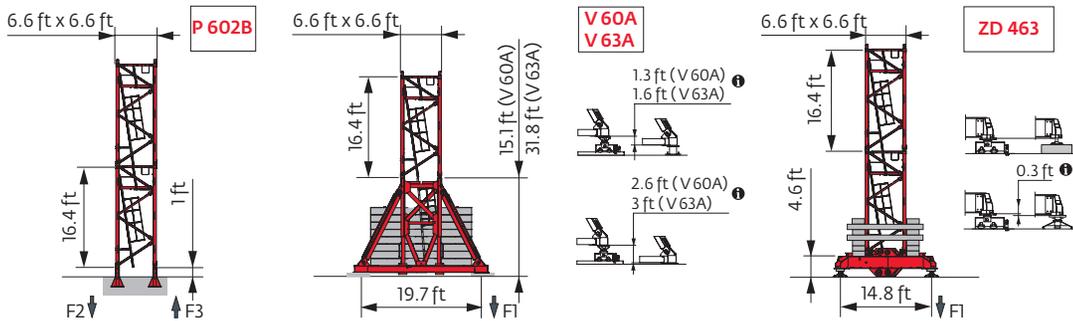
Height (ft)	82	98	115	131	148	164	180	197	213
Height (ft)	211.3	211.3	211.3	211.3	211.3	211.3	206	206	200.5
Height/P _r (ft)	211.3	211.3	211.3	211.3	211.3	211.3	206	206	200.5
	6.6 ft	1	1	1	1	1	1	1	1
	10.9 ft	1	1	1	1	1	2	2	0
	16.4 ft	11	11	11	11	11	10	10	11
F1 (Ust)	●	102	102	103	104	105	106	106	105
	■	144	144	145	146	147	148	145	149

6.6 ft - V 63A - 

Height (ft)	82	98	115	131	148	164	180	197	213
Height (ft)	233.3	233.3	233.3	233.3	233.3	233.3	233.3	228	228
Height/P _r (ft)	233.3	233.3	233.3	233.3	233.3	233.3	233.3	228	228
	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	12	12	12	12	12	12	11	11
F1 (Ust)	●	122	122	123	124	125	126	127	127
	■	179	178	180	181	182	183	186	187

6.6 ft - ZD 463 - 

Height (ft)	82	98	115	131	148	164	180	197	213
Height (ft)	173.6	173.6	173.6	173.6	173.6	173.6	168	162.4	162.4
Height/P _r (ft)	173.6	173.6	173.6	173.6	173.6	173.6	168	162.4	162.4
	6.6 ft	1	1	1	1	1	1	1	1
	10.9 ft	0	0	0	0	0	0	1	2
	16.4 ft	10	10	10	10	10	10	9	8
F1 (Ust)	●	103	102	102	103	104	105	104	105
	■	132	130	132	133	135	136	132	135



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) / 5.2 ft City - ZD 4230 -

RAIL (ft)	82	98	115	131	148	164	180	197	213
155.8	93.7								
150.6	93.7	93.7	88.2	88.2	93.7	93.7			
145	88.2	88.2	82.7	88.2	88.2	88.2	93.7	93.7	93.7
128.6	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	71.7
112.2	71.7	71.7	71.7	71.7	71.7	66.1	66.1	66.1	66.1
95.8	71.7	71.7	71.7	71.7	71.7	66.1	66.1	60.6	60.6
79.4	71.7	71.7	71.7	71.7	71.7	66.1	66.1	60.6	60.6
63	71.7	71.7	71.7	71.7	71.7	66.1	66.1	60.6	60.6

USt) / 5.2 ft - S 41A -

RAIL (ft)	82	98	115	131	148	164	180	197	213
169.3	112.4								
164	105.8	105.8	105.8	105.8					
158.5	105.8	105.8	99.2	105.8	105.8	105.8			
152.9	99.2	99.2	99.2	99.2	99.2	99.2	105.8	105.8	105.8
136.5	86	86	86	86	86	86	86	86	86
120.1	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8
103.7	66.1	66.1	66.1	66.1	66.1	66.1	59.5	59.5	66.1
87.3	66.1	66.1	66.1	66.1	66.1	59.5	59.5	59.5	59.5
70.9	66.1	66.1	66.1	66.1	66.1	59.5	59.5	59.5	59.5

USt) / 5.2 ft - ZD 463 -

RAIL (ft)	82	98	115	131	148	164	180	197	213
162.4	104.7								
157.2	99.2	99.2	93.7	99.2	99.2				
151.6	93.7	93.7	93.7	93.7	93.7	93.7			
146	88.2	88.2	88.2	88.2	88.2	88.2	93.7	93.7	93.7
129.6	77.2	77.2	77.2	77.2	71.7	77.2	77.2	77.2	77.2
113.2	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1
97.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1
80.7	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1
64.3	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1

USt) / 6.6 ft - V 63A -

RAIL (ft)	82	98	115	131	148	164	180	197	213
233.3	198.4								
228	185.2	185.2	185.2	185.2	185.2	185.2	185.2	198.4	198.4
211.6	158.7	158.7	158.7	158.7	158.7	158.7	158.7	158.7	172
195.2	119.1	119.1	119.1	119.1	119.1	119.1	132.3	132.3	132.3
178.8	92.6	92.6	92.6	92.6	92.6	92.6	92.6	105.8	105.8
162.4	66.1	66.1	66.1	66.1	66.1	66.1	66.1	79.4	79.4
146	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
129.6	52.9	52.9	39.7	39.7	39.7	39.7	52.9	39.7	39.7
113.2	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7
96.8	26.5	39.7	26.5	26.5	26.5	26.5	26.5	26.5	39.7
80.4	26.5	39.7	26.5	26.5	26.5	26.5	26.5	26.5	39.7
64	26.5	39.7	26.5	26.5	26.5	26.5	26.5	26.5	26.5

USt) / 5.2 ft City - ZD 463 -

RAIL (ft)	82	98	115	131	148	164	180	197	213
167	99.2	99.2	99.2						
161.4	93.7	93.7	93.7	93.7	99.2				
155.8	93.7	93.7	88.2	93.7	93.7	93.7		99.2	99.2
150.6	88.2	88.2	82.7	88.2	88.2	88.2	93.7	93.7	93.7
134.2	77.2	77.2	77.2	77.2	71.7	71.7	77.2	77.2	71.7
117.8	71.7	71.7	66.1	66.1	66.1	66.1	60.6	60.6	60.6
101.4	71.7	71.7	66.1	66.1	66.1	60.6	60.6	60.6	55.1
85	71.7	71.7	66.1	66.1	66.1	60.6	60.6	60.6	55.1
68.6	71.7	71.7	66.1	66.1	66.1	60.6	60.6	60.6	55.1
52.2	71.7	71.7	66.1	66.1	66.1	60.6	60.6	60.6	55.1

USt) / 5.2 ft - ZD 4230 -

RAIL (ft)	82	98	115	131	148	164	180	197	213
146	93.7	93.7	93.7	93.7	93.7	93.7			
140.8	88.2	88.2	88.2	88.2	88.2	88.2	93.7	93.7	93.7
124.3	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
107.9	71.7	71.7	71.7	71.7	66.1	66.1	66.1	66.1	66.1
91.5	71.7	71.7	71.7	71.7	66.1	66.1	60.6	60.6	66.1
75.1	71.7	71.7	71.7	71.7	66.1	66.1	60.6	60.6	60.6
58.7	71.7	71.7	71.7	71.7	66.1	66.1	60.6	60.6	60.6

USt) / 6.6 ft - V 60A -

RAIL (ft)	82	98	115	131	148	164	180	197	213
211.3	145.5								
206	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	
200.5	132.3	132.3	132.3	132.3	132.3	132.3	132.3	132.3	145.5
184.1	105.8	92.6	105.8	105.8	105.8	92.6	105.8	105.8	119.1
167.7	79.4	66.1	66.1	66.1	66.1	66.1	79.4	79.4	92.6
151.3	66.1	66.1	52.9	52.9	52.9	52.9	66.1	66.1	66.1
134.8	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
118.4	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7
102	39.7	39.7	39.7	39.7	39.7	26.5	26.5	26.5	39.7
85.6	39.7	39.7	39.7	39.7	39.7	26.5	26.5	26.5	39.7
69.2	39.7	39.7	39.7	39.7	39.7	26.5	26.5	26.5	39.7
52.8	39.7	39.7	39.7	39.7	39.7	26.5	26.5	26.5	39.7

USt) / 6.6 ft - ZD 463 -

RAIL (ft)	82	98	115	131	148	164	180	197	213
173.6	137.8								
168	121.3	121.3	121.3	121.3	121.3	121.3	126.8		
162.4	110.2	110.2	110.2	110.2	110.2	110.2	115.7	126.8	132.3
146	93.7	93.7	88.2	93.7	93.7	93.7	99.2	99.2	99.2
129.6	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
113.2	66.1	66.1	66.1	66.1	66.1	60.6	60.6	60.6	60.6
97.1	66.1	66.1	66.1	66.1	66.1	60.6	55.1	55.1	55.1
80.7	66.1	66.1	66.1	66.1	66.1	60.6	55.1	55.1	55.1
64.3	66.1	66.1	66.1	66.1	66.1	60.6	55.1	55.1	55.1

Load curves



		▲▲▲▲▲ (ft)																					
▲▲▲▲▲	▲▲▲▲▲ USt	▲▲▲▲▲ 5.5 USt	56	66	72	82	89	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	ft
	10 → 53	98 - 107	10.5	8.8	7.9	6.8	6.2	5.5	5.5	5.1	4.7	4.4	4.1	3.8	3.6	3.3	3.1	2.85	2.65	2.4	2.15	2.05	USt
213	10 → 58	106 - 115	11	9.7	8.7	7.5	6.9	6	5.6	5.5	5.1	4.6	4.3	4	3.7	3.5	3.3	3	2.8	2.5	2.3	2.05	USt P+
197	10 → 57	106 - 115	11	9.5	8.6	7.4	6.8	6	5.5	5.5	5.1	4.6	4.3	3.9	3.7	3.4	3.3	3.1	2.95	2.75			USt
	10 → 62	108 - 115	11	10.3	9.2	8	7.2	6.3	5.7	5.5	5.1	4.7	4.4	4	3.8	3.5	3.3	3.1	2.95	2.8			USt P+
180	10 → 62	115 - 122	11	10.4	9.4	8.2	7.5	6.6	6.2	5.5	5.1	4.7	4.3	4.1	3.8	3.7	3.4						USt
	10 → 65	117 - 122	11	11	9.9	8.6	7.9	6.9	6.3	5.6	5.5	5.1	4.8	4.4	4.2	3.9	3.7	3.4					USt P+
164	10 → 66	123 - 131	11	11	10	8.7	8	7.1	6.6	6	5.6	5.5	5.1	4.7	4.4	4.1							USt
	10 → 68	123 - 131	11	11	10.4	9	8.3	7.4	6.8	6.1	5.6	5.5	5.2	4.8	4.5	4.2							USt P+
148	10 → 67	124 - 133	11	11	10.1	8.8	8.1	7.2	6.7	6	5.7	5.5	5.3	4.9									USt
	10 → 69	128 - 135	11	11	10.5	9.1	8.3	7.4	6.9	6.2	5.8	5.5	5.4	5									USt P+
131	10 → 68	126 - 131	11	11	10.3	9	8.3	7.3	6.8	6.2	5.8	5.5											USt
	10 → 69	129 - 131	11	11	10.6	9.2	8.4	7.5	7	6.3	5.9	5.5											USt P+
115	10 → 69		11	11	10.5	9.1	8.4	7.5	6.9	6.3													USt
	10 → 70		11	11	10.7	9.3	8.5	7.6	7	6.4													USt P+
98	10 → 70		11	11	10.7	9.3	8.6	7.6															USt
	10 → 71		11	11	10.8	9.4	8.6	7.7															USt P+
82	10 → 69		11	11	10.6	9.2																	USt
	10 → 70		11	11	10.6	9.2																	USt P+

$W_{10} = W_{10} - 0.53 \text{ USt max.}$



		▲▲▲▲▲ (ft)																					
▲▲▲▲▲	▲▲▲▲▲ USt	▲▲▲▲▲ 5.5 USt	56	66	72	82	89	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	ft
	8 → 53	100 - 103	10.6	8.9	8	7	6.4	5.6	5.4	4.8	4.5	4.1	3.9	3.6	3.4	3.1	2.95	2.65	2.45	2.2	1.95	1.8	USt
213	8 → 58	107 - 110	11	9.8	8.8	7.6	7	6.1	5.7	5.2	4.8	4.4	4.1	3.8	3.5	3.3	3.1	2.8	2.6	2.3	2.1	1.85	USt P+
197	8 → 58	108 - 110	11	9.7	8.7	7.6	6.9	6.1	5.7	5.3	4.9	4.5	4.2	3.9	3.7	3.4	3.2	2.9	2.7	2.55			USt
	8 → 62	114 - 116	11	10.4	9.3	8.1	7.4	6.6	6.1	5.5	5.2	4.8	4.4	4.1	3.8	3.5	3.3	3.1	2.85	2.6			USt P+
180	8 → 63	118 - 120	11	10.5	9.5	8.3	7.6	6.7	6.3	5.7	5.4	5	4.7	4.3	4	3.7	3.5	3.3					USt
	8 → 66	121 - 123	11	11	10	8.7	8	7.1	6.6	5.9	5.5	5.1	4.8	4.4	4.1	3.8	3.6	3.4					USt P+
164	8 → 67	124 - 126	11	11	10.1	8.8	8.1	7.2	6.7	6.1	5.7	5.3	4.9	4.5	4.2	3.9							USt
	8 → 69	125 - 128	11	11	10.5	9.1	8.4	7.4	6.9	6.2	5.7	5.3	5	4.6	4.3	4							USt P+
148	8 → 67	126 - 129	11	11	10.2	8.9	8.2	7.3	6.8	6.1	5.8	5.4	5.1	4.7									USt
	8 → 69	129 - 132	11	11	10.5	9.2	8.4	7.5	7	6.3	5.9	5.5	5.2	4.8									USt P+
131	8 → 69	128 - 131	11	11	10.4	9.1	8.4	7.4	6.9	6.3	5.9	5.5											USt
	8 → 70	131 - 131	11	11	10.6	9.3	8.5	7.6	7	6.4	6	5.5											USt P+
115	8 → 70		11	11	10.6	9.2	8.5	7.6	7	6.4													USt
	8 → 71		11	11	10.7	9.3	8.6	7.6	7.1	6.4													USt P+
98	8 → 71		11	11	10.8	9.4	8.7	7.7															USt
	8 → 71		11	11	10.9	9.5	8.7	7.7															USt P+
82	8 → 70		11	11	10.7	9.3																	USt
	8 → 70		11	11	10.7	9.3																	USt P+

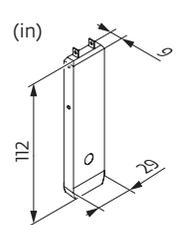
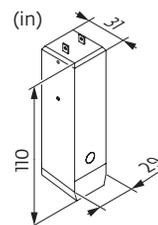
$W_{10} = W_{10} - 0.18 \text{ USt max.}$

Jib weight & counter-jib ballast

▲▲▲▲▲	▲▲▲▲▲ (lb) - 50 LVF (+/- 5%)			▲▲▲▲▲		▲▲▲▲▲ (lb)
	▲▲▲▲▲	▲▲▲▲▲	▲▲▲▲▲	7,937 lb	2,425 lb	
213 ft	24,403	23,940	24,590	4	4	41,447
197 ft	23,962	23,499	24,149	4	4	41,447
180 ft	23,257	22,860	23,455	4	4	41,447
164 ft	22,595	22,198	22,794	4	4	41,447
148 ft	21,821	21,425	22,020	4	3	39,022
131 ft	20,962	20,565	21,160	4	2	36,597
115 ft	19,903	19,507	20,102	4	1	34,172
98 ft	18,797	18,400	18,995	4	0	31,747
82 ft	17,690	17,293	17,888	3	2	28,660

CAU - 7,937 lb

CAV - 2,425 lb

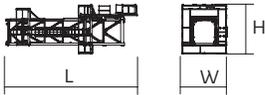
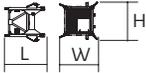
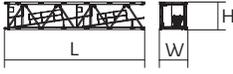
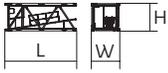
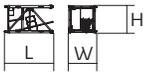
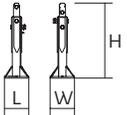
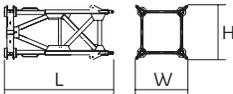
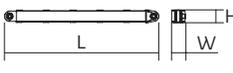
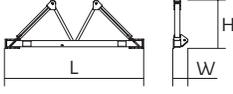
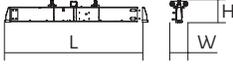
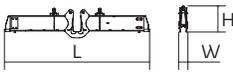
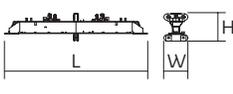
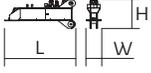


Dimensions and weight

Slewing crane part:  213 ft -  -  50 LVF



Slewing crane part		L (ft)	W (ft)	H (ft)	lb (+/- 5%)	
Counter-jib		36.7	5	8.3	13,096	
Towerhead + cab		Ultra View □ 5.2 ft □ 6.6 ft	15.4 15.6	7.5 7.5	8.2 8.2	14,749 16,513
Jib section		① 50 LVF 6 DVF	35.8	9.6	8.6	9,943
Jib section		②	33.7	3.4	7.9	4,156
Jib section		③ ④ ⑤ ⑦ ⑧ ⑩	17.2 17 17 17 17 16.9	3.4 3.4 3.4 3.4 3.4 3.4	7.7 7.6 7.6 6.3 6.2 3.9	1,654 1,327 1,327 860 774 529
Jib section		⑥ ⑨	17 16.9	3.4 3.4	7.6 6.2	1,058 661
Jib section		⑪	16.7	3.4	3.8	441
Hoisting winch (+ rope)		50 LVF 50 LVF GH	5 5.3	3 4.2	2.8 3.9	2,646 4,101
Trolley		 11 USt	5.9	4.4	3.2	362
Pulley block		 11 USt	3.3	1.4	6.6	441
Trolley		 11 USt	5.4	4.3	3	362
Trolley		 11 USt  5.5 USt	5.2 5.2	4.3 4.2	3 3	353 507
Pulley block		 11 USt  5.5 USt	5.4 3.6	0.8 0.5	5.6 4.9	675 695

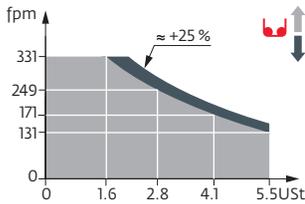
Crane tower			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Telescopic cage T41 Telescopic cage T61		□ 5.2 ft □ 6.6 ft	35.6 35.5	12.3 13.6	13.5 14.7	15,653 21,385
K40/K40 K60/K60		□ 5.2 ft □ 6.6 ft	7.3 7.3	6.9 8.1	6.8 8.2	3,208 4,365
K 447E KM 447E KM 449E K 649B KM 649E		□ 5.2 ft □ 5.2 ft □ 5.2 ft □ 6.6 ft □ 6.6 ft	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		□ 5.2 ft □ 5.2 ft □ 5.2 ft □ 5.2 ft □ 6.6 ft □ 6.6 ft □ 6.6 ft □ 6.6 ft	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 6.9 6.8	5.3 5.3 5.3 5.3 6.8 6.8 6.8 6.7	4,079 3,847 4,916 4,696 7,165 6,724 6,184 5,666
K 447C K 649C KRMT 649C		□ 5.2 ft □ 6.6 ft □ 6.6 ft	11.3 11.7 11.7	5.5 6.8 6.9	5.3 6.7 6.8	2,998 4,376 5,401
Fixing angles		P 41A P 602B	1.2 2.1	1.2 2.1	3.7 4.2	293 650
Basic mast unit		S 41A V 60A V 63A	11.9 16.4 32.9	6.4 7.9 7.9	6.8 7.9 7.9	6,537 9,674 16,502
Struts		S 41A V 60A V 63A	10.4 14.8 14.8	0.9 1 1.1	0.8 1 1.1	489 919 1,135
Half-bearer		S 41A V 60A V 63A	16.7 22 22	2 2.3 2.3	5.8 7.6 7.6	2,524 3,519 4,079
Cross girder		ZD 4230	21.8	2.7	3.4	4,035
Cross girder		ZD 4230	21.8	1.5	4.4	4,707
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

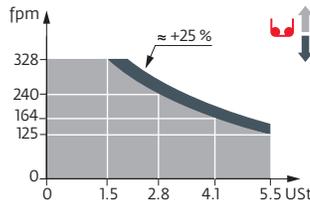
480 V - 60 Hz											hp	kW	
	50 LVF 25 Optima	fpm	131	171	249	331	66	85	125	164	50	37	912 ft
	USt	5.5	4.1	2.8	1.6	11	8.3	5.5	3.3				
	50 LVF 25 GH Optima	fpm	125	164	240	328	62	82	121	164	50	37	1,690 ft
	USt	5.5	4.1	2.8	1.5	11	8.3	5.5	3.2				
	6 DVF 4 Optima	fpm	0 → 262 (11 USt)				0 → 328 (2.2 USt)				5.5	4	
	RVF 162 Optima+	rpm					0 → 0.8				2 x 7.5	2 x 5.5	

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

50 LVF 25 Optima



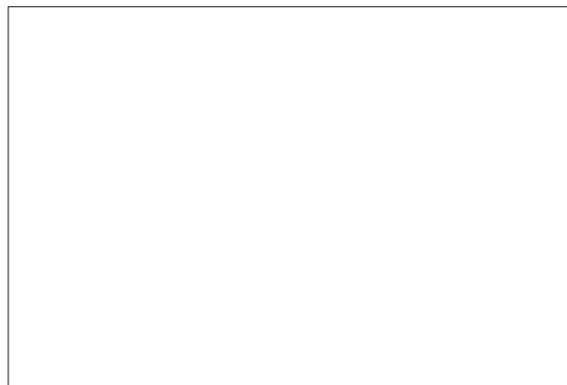
50 LVF 25 GH Optima



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

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POTAIN[®]
by **Wanitowoc**

MDT CCS City Range

THE NEXT GENERATION IS HERE





**THE NEXT
GENERATION
IS HERE**

Now with new Crane Control System

With the new Manitowoc Crane Control System (CCS), Potain MDT CCS City Range cranes help you get more work done faster and with greater precision. Get outstanding lift performance, time-saving setup, ultimate operator control and outstanding ROI* with the next generation of cranes.

Now available in Potain MDT CCS City Range:

> **MDT 109** | **MDT 139** | **MDT 189** | **MDT 219 J8** | **MDT 219 J10**

- Highest safety standards in the industry
- Increased performance
- Optimized ergonomic control
- Integrated maintenance
- Fast, easy set up on the job site

**Return on investment.*



Highest safety standards in the tower crane industry

With proven components and innovative design, the CCS system allows MDT City cranes to set the new benchmark in the tower crane industry.

Using fully tested and certified, reliable components; CCS constantly controls and monitors all crane movements and structural stresses in real time using a superior redundant sensor design.

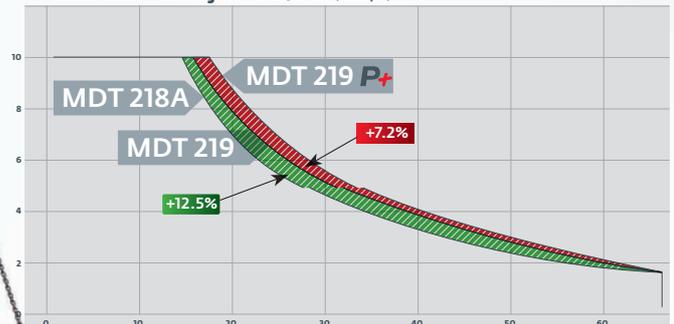


Increased performance

The CCS allows a more precise information exchange and analysis on the crane which maximizes lifting capacities and provides more flexibility on the job site.

- CCS provides increased load chart with the maximum speed potential
- Utilizing the Potain Plus function generates an extra load chart increase. This function can be switched on directly from the joystick

MDT 219 – 65 m jib – SM/DM (example)





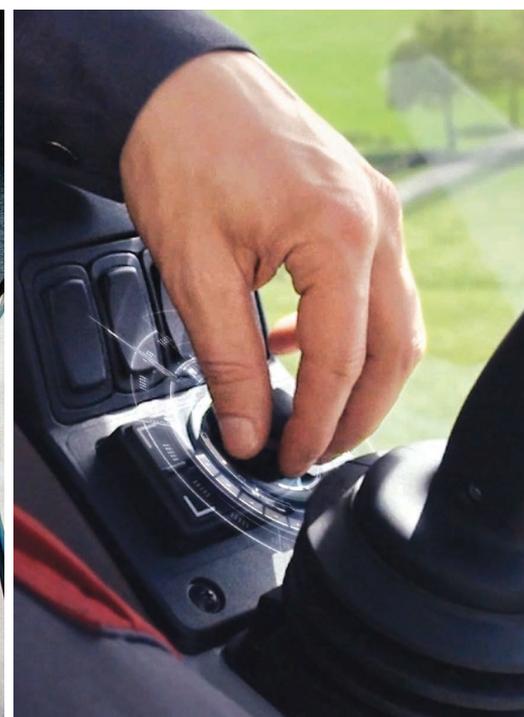
Ultra visibility and comfort

The Ultra View cab takes comfort, ergonomics and functionality to new heights. The new design makes it easy for the crane operator to maximize all of the features of the new Manitowoc Crane Control System.

Optimized ergonomic control

Premium Ultra View cab is equipped with a complete new driver control unit for enhanced ergonomics and comfort.

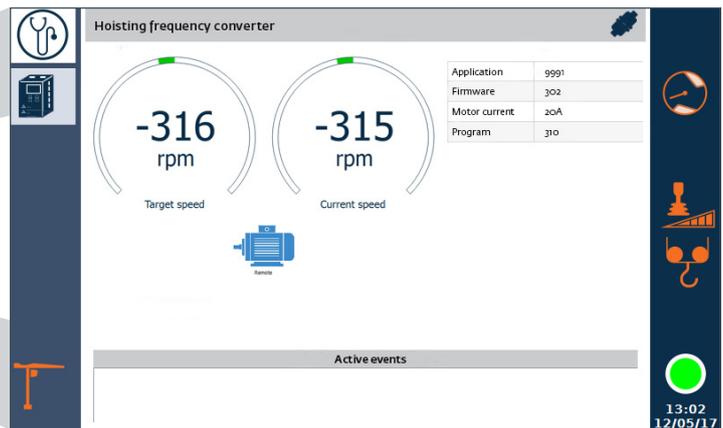
- Ergonomic design for reduced operator fatigue and increased productivity on the work site
- All commands can be done from the joysticks for ultimate operator ergonomics
- Jog Dial provides easy on-screen navigation
- Speed limiter function provides great control and accuracy by adjusting the speed for all crane motions, by 25 percent increments
- Operator customization mode allows to define the speed and dynamism of the crane motions
- Auto-switch between the cab control unit and the remote control does not require plug-unplug operation



Integrated maintenance

MDT CCS City range cranes provide CCS for an integrated on-site maintenance tool to diagnose and centralize maintenance.

A remote version is available with activation of CraneSTAR Diag for easy maintenance and operational cost savings.



^ Maintenance screen provides systems status at a glance

< Operator can monitor maintenance screen from the crane cab

> Real-time maintenance information is also available from any computer screen





Fast and easy set up

All crane configuration limit settings are completed using the CCS display from within the cab.

With CCS, it takes only 15 minutes to configure the crane, calibrate sensors for crane movement, set the trolley limit switch, and set jib length. The crane will then automatically know its stopping points.

Cranes without CCS can take more than three hours to properly configure and put in service.



Simple, fast and efficient erection

The first step towards better productivity

The MDT CCS City Range offers simplified installation to reduce the time needed to put the crane in service. Crane sections are compact and can be folded for easy transport to the jobsite. Easy pinning and multiple slinging points provide greater control while assembling and lifting the jib. Reduced installation time maximizes your crane investment.

> Assembling the counter-jib on the ground

The compact counter-jib installs easily from the ground and features a reduced footprint, ballast supports and stabilizer plates that are designed to be folded away for transport.



^ One single section folded for transportation with lifting points.

^ Integrated ready-to-fit pin and moment safety device.

^ The counter-jib unfolds rapidly. No locking required.

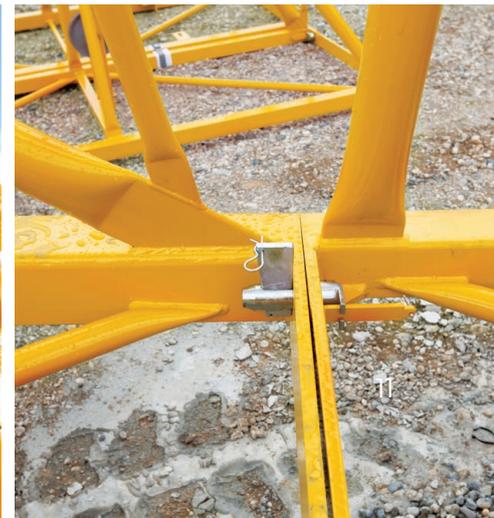
> Assembling the jib on the ground

Jib assembly is simplified with the help of numerous installation features.

✓ Fishplate for centering pin and port to enable quick and easy pinning.

✓ Maintenance safety rope on each 5 meter jib-section.

✓ Assembly is simplified by centering of jib sections and wedge-locking of the pins.



> Installation of the cab-mast

The cab-mast is a single, compact section. A dual-function guardrail protects the cab during transportation. Slings from three points offers excellent balance. While packed for transportation, access to the cab and electrical cabinet is prevented.

✓ Cab and cab mast are delivered in one package.



- < Only the hoist and trolley mechanisms, with their respective safety devices, need to be plugged in.
- < The electrical cables are all centralized in the tube of the cab-mast.



- < The protective guardrail is now placed on the access platform.
- < The cab-mast section is lowered onto the mast and secured.

< After removal of the guardrail, the cab is rotated manually and locked in the working position.

> Erection of the counter-jib

Erection of the counter-jib is achieved in a few basic steps.

- > Simplified assembly using only two pins, which are tapered for easier fitting.



- ^ Notches guide and center while connecting counter jib to mast.
- < Balanced slinging points enhance lifting.

> Fitting and pinning the jib

The jib is fully assembled and cabled on the ground. The fully assembled jib is then placed by a mobile crane in one lift. Fitting and pinning the jib is achieved in a few easy steps.

- ∨ Numerous slinging points for any jib length assist horizontal lifting.
- ∨ Notches are used to guide and center the jib.
- ∨ Centering pins allow seamless, automatic adjustment and centering of the lower member before locking it into place.



Mechanisms

Potain technology is devoted to operator productivity and comfort with standard-fitted variable frequency mechanisms that provide outstanding performance.

> DVF mechanism (Distribution)

With the Crane Control System, MDT CCS City range cranes have a DVF Optima trolleying mechanism that enables the trolleying speed to be adapted to the load.

The trolleying speed can reach 100m/min, which contributes to increased efficiency on the jobsite.

> LVF mechanism (Lifting)

With three mechanisms (25, 33 and 50 LVF Optima), the MDT CCS City Cranes are capable of high working speeds by optimizing speed in accordance with the load hoisted, allowing for gains in productivity.

- For working speeds, the Optima system adapts the speed in accordance with the load hoisted. This enables full power of the engine to always be used for optimum productivity.
- The LVF Optima provides 25 percent extra lowering speed.

> RVF mechanism (Rotation)

The RVF mechanism offers complete, progressive control that adapts slewing and counter slewing speed to the crane operator's particular control behavior.

- Action is mastered by stopping the control, and the jib decelerating time is controlled by the frequency converter
- Reverse control is possible in the decelerating phase or counter-slewing

The crane operator is able to control decelerating and stopping. And the mast torque is always automatically controlled.



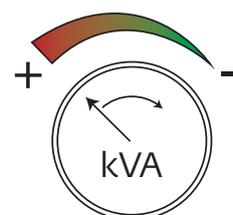
Technical solutions

The latest generation of technical solutions.

> Power control

Power Limiter Functionality

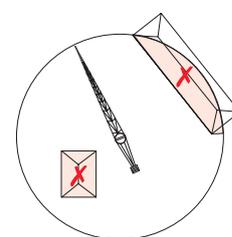
Thanks to CCS, it is possible to supply power to the winch and reduce the power required by the crane. This provides flexibility on the jobsite and saves energy.



> Top Site

Zone Control System

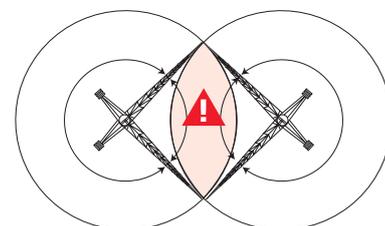
Integrated directly inside the CCS, Top Site creates a forbidden area for added safety on the jobsite.



> Top Tracing 3

Zone and / or interference control system.

This is the latest generation of devices for controlling working zones and interference between cranes. This system can monitor up to 16 cranes for interference. It has a full screen display for better viewing of the crane and its environment (including forbidden zones and interfering cranes).



> Crane Configuration Optimizer

Potain provides a calculation of each mast composition and base ballast definition for each jib length or combination. This allows adaptation to the job site and maximizes transportation and logistics.

NEW

> Manitowoc CraneSTAR Diag

Real-time remote crane diagnostics.

CraneSTAR[®]
Diag

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