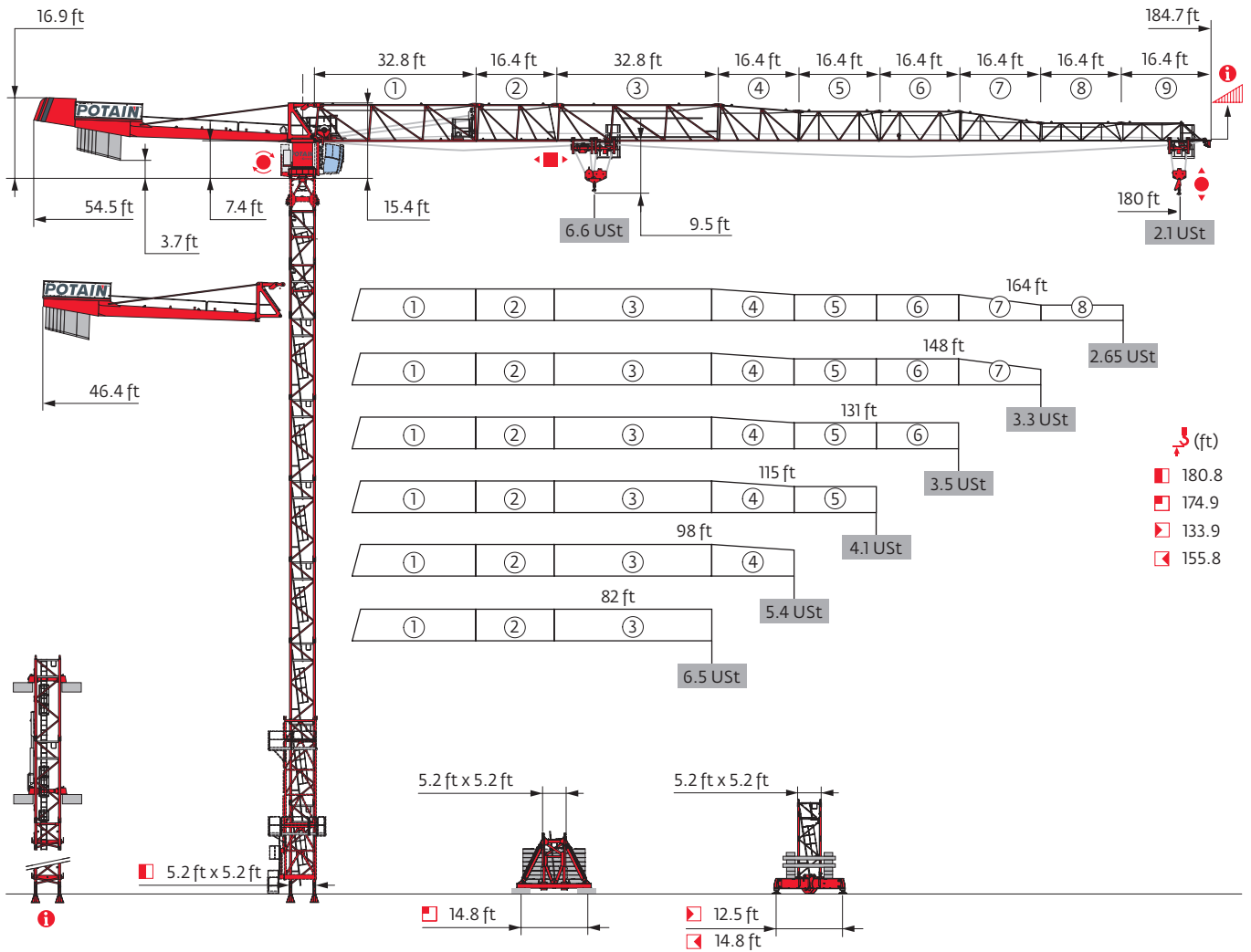


## MDT 139



Potain Plus Power Control Top Site Top Tracing 3

The icons represent the following features: Potain Plus (P+), Power Control (kVA), CraneSTAR Diag, Top Site, and Top Tracing 3.

Mast - Reactions

**5.2 ft City - P 41A**

Height (ft)	82	98	115	131	148	164	180
Height (ft)	179.5	179.5	179.5	179.5	168.6	168.6	168.6
Height/P <sub>+</sub> (ft)	179.5	179.5	179.5	179.5	168.6	168.6	168.6
Access	10.9 ft	0	0	0	2	2	2
	16.4 ft	11	11	11	9	9	9
F2 (USt)	● 125	125	124	126	123	122	123
	■ 189	189	195	196	176	175	181
F3 (USt)	● 97	96	95	96	93	91	92
	■ 165	164	170	169	149	147	153

**5.2 ft City - ZC 4230**

Height (ft)	82	98	115	131	148	164	180
Height (ft)	128.6	133.9	133.9	133.9	128.6	123	123
Height/P <sub>+</sub> (ft)	128.6	133.9	133.9	133.9	128.6	123	123
Access	10.9 ft	1	0	0	1	2	2
	16.4 ft	7	8	8	8	7	6
F1 (USt)	● 68	69	69	70	70	68	68
	■ 65	67	71	71	67	64	67

**5.2 ft City - ZD 4230**

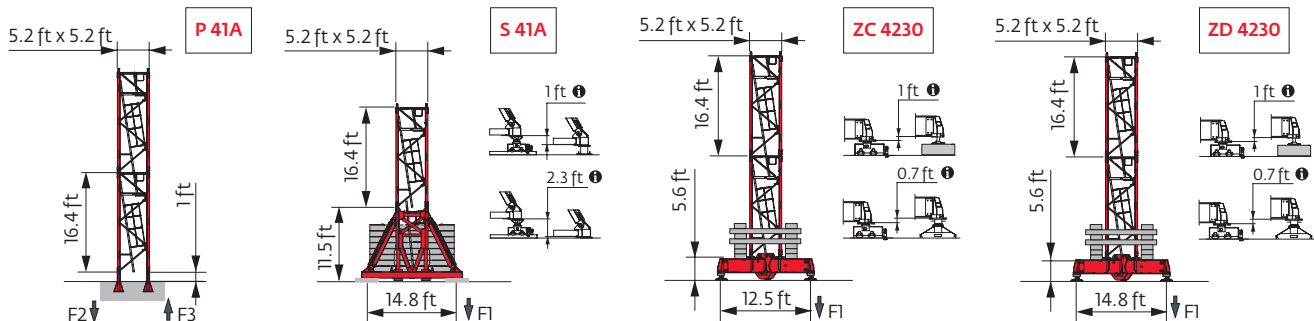
Height (ft)	82	98	115	131	148	164	180
Height (ft)	155.8	155.8	155.8	155.8	150.3	150.3	150.3
Height/P <sub>+</sub> (ft)	155.8	155.8	155.8	155.8	150.3	150.3	150.3
Access	10.9 ft	2	2	2	2	0	0
	16.4 ft	8	8	8	8	9	9
F1 (USt)	● 69	69	69	69	70	69	69
	■ 81	80	84	85	75	74	78

**5.2 ft - P 41A**

Height (ft)	82	98	115	131	148	164	180
Height (ft)	180.8	180.8	175.2	175.2	169.6	164.4	169.6
Height/P <sub>+</sub> (ft)	180.8	180.8	175.2	175.2	169.6	164.4	169.6
Access	6.6 ft	1	1	1	1	1	1
	10.9 ft	1	1	2	2	0	1
	16.4 ft	10	10	9	9	10	9
F2 (USt)	● 131	131	126	128	128	123	127
	■ 209	208	205	206	188	178	194
F3 (USt)	● 99	98	94	94	94	89	93
	■ 180	179	176	175	158	147	162

**5.2 ft - S 41A**

Height (ft)	82	98	115	131	148	164	180
Height (ft)	174.9	174.9	169.3	174.9	174.9	169.3	174.9
Height/P <sub>+</sub> (ft)	174.9	174.9	169.3	174.9	174.9	169.3	174.9
Access	6.6 ft	1	1	1	1	1	1
	10.9 ft	1	1	2	1	1	2
	16.4 ft	9	9	8	9	9	8
F1 (USt)	● 84	84	81	85	87	82	87
	■ 111	111	109	115	113	106	117



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

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

Anchorage



Base ballast

**(Ust) / 5.2 ft City - ZC 4230**

(ft)	82	98	115	131	148	164	180
133.9		88.2	88.2	88.2			
128.6	88.2	88.2	82.7	82.7	88.2		
123	82.7	82.7	77.2	77.2	82.7	88.2	88.2
106.6	71.7	71.7	66.1	66.1	71.7	71.7	71.7
90.2	71.7	71.7	66.1	66.1	66.1	66.1	66.1
73.8	71.7	71.7	66.1	66.1	66.1	66.1	66.1
57.4	71.7	71.7	66.1	66.1	66.1	66.1	66.1
41	71.7	71.7	66.1	66.1	66.1	66.1	66.1

**(Ust) / 5.2 ft City - ZD 4230**

(ft)	82	98	115	131	148	164	180
155.8	88.2	88.2	88.2	88.2			
150.3	82.7	82.7	77.2	77.2	88.2	88.2	88.2
133.9	66.1	66.1	66.1	66.1	71.7	71.7	71.7
117.5	55.1	55.1	49.6	55.1	60.6	60.6	60.6
101.1	55.1	49.6	49.6	44.1	44.1	44.1	44.1
84.7	55.1	49.6	49.6	44.1	44.1	44.1	44.1
68.2	55.1	49.6	49.6	44.1	44.1	44.1	44.1
51.8	55.1	49.6	49.6	44.1	44.1	44.1	44.1
35.4	55.1	49.6	49.6	44.1	44.1	44.1	44.1

**(Ust) / 5.2 ft - S 41A**

(ft)	82	98	115	131	148	164	180
174.9	125.7	125.7		125.7	125.7		125.7
169.3	119.1	112.4	119.1	119.1	112.4	112.4	119.1
152.9	86	86	92.6	92.6	92.6	92.6	92.6
136.5	72.8	72.8	66.1	72.8	79.4	79.4	79.4
120.1	59.5	59.5	52.9	59.5	59.5	66.1	59.5
103.7	46.3	46.3	46.3	46.3	46.3	52.9	46.3
87.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3
70.9	46.3	46.3	46.3	46.3	46.3	46.3	46.3
54.5	46.3	46.3	46.3	46.3	46.3	46.3	46.3
38.1	46.3	46.3	46.3	46.3	46.3	46.3	46.3

Load curves



▲▲▲▲ (ft)		56	66	72	82	89	98	105	115	121	131	138	148	154	164	171	180	ft	
▲▲▲▲	↔ 6.6 USt	↔ 3.3 USt	↔									↔							
180	9 → 67	116 - 126	6.6	6.6	6	5.2	4.8	4.2	3.8	3.4	3.3	3.1	2.95	2.7	2.5	2.3	2.15	1.95	USt
	9 → 68	118 - 130	6.6	6.6	6.2	5.3	4.8	4.2	3.9	3.4	3.3	3.3	3.1	2.8	2.65	2.45	2.3	2.1	USt P+
164	9 → 73	123 - 135	6.6	6.6	6.6	5.7	5.1	4.5	4.1	3.6	3.4	3.3	3.2	2.95	2.8	2.55	USt		
	9 → 74	127 - 138	6.6	6.6	6.6	5.8	5.3	4.6	4.2	3.8	3.5	3.3	3.3	3.1	2.9	2.65	USt P+		
148	9 → 71	126 - 140	6.6	6.6	6.4	5.6	5.1	4.5	4.2	3.7	3.5	3.3	3.3	3.1	USt				
	9 → 77	135 - 148	6.6	6.6	6.6	6.1	5.6	5	4.6	4.1	3.8	3.4	3.3	3.3	USt P+				
131	9 → 68	122 - 131	6.6	6.6	6.2	5.4	4.9	4.3	4	3.6	3.3	3.3 USt							
	9 → 74		6.6	6.6	6.6	5.9	5.4	4.8	4.4	3.9	3.7	3.3 USt P+							
115	9 → 68		6.6	6.6	6.2	5.4	4.9	4.3	4	3.6 USt									
	9 → 74		6.6	6.6	6.6	5.9	5.4	4.8	4.4	3.9	3.7 USt P+								
98	9 → 73		6.6	6.6	6.6	5.8	5.3	4.7	USt										
	9 → 80		6.6	6.6	6.6	6.4	5.9	5.2	USt P+										
82	9 → 72		6.6	6.6	6.6	5.7	USt												
	9 → 79		6.6	6.6	6.6	6.3	USt P+												

$W = W - 0.42 \text{ USt max.}$



▲▲▲▲ (ft)		56	66	72	82	89	98	105	115	121	131	138	148	154	164	171	180	ft	
▲▲▲▲	↔ 6.6 USt	↔ 3.3 USt	↔									↔							
180	7 → 69	121 - 121	6.6	6.6	6.2	5.4	5	4.4	4	3.6	3.3	3	2.8	2.55	2.4	2.15	2.05	1.85	USt
	7 → 70	124 - 125	6.6	6.6	6.4	5.5	5	4.4	4.1	3.7	3.4	3.1	2.95	2.7	2.5	2.3	2.2	1.95	USt P+
164	7 → 75	128 - 131	6.6	6.6	6.6	5.9	5.3	4.7	4.3	3.8	3.6	3.3	3.1	2.8	2.65	2.45	USt		
	7 → 76	133 - 133	6.6	6.6	6.6	6	5.5	4.8	4.4	4	3.7	3.4	3.2	2.95	2.75	2.55	USt P+		
148	7 → 73	132 - 135	6.6	6.6	6.6	5.8	5.3	4.7	4.4	3.9	3.7	3.3	3.2	2.95 USt					
	7 → 79	141 - 142	6.6	6.6	6.6	6.4	5.8	5.2	4.8	4.3	4	3.6	3.4	3.2	USt P+				
131	7 → 70	128 - 131	6.6	6.6	6.4	5.6	5.1	4.5	4.2	3.8	3.5	3.3	3.3 USt						
	7 → 76		6.6	6.6	6.6	6.1	5.6	5	4.6	4.1	3.9	3.5	USt P+						
115	7 → 70		6.6	6.6	6.4	5.6	5.1	4.5	4.2	3.8 USt									
	7 → 76		6.6	6.6	6.6	6.1	5.6	5	4.6	4.1	USt P+								
98	7 → 75		6.6	6.6	6.6	6	5.5	4.9	USt										
	7 → 82		6.6	6.6	6.6	6.6	6.1	5.4	USt P+										
82	7 → 74		6.6	6.6	6.6	5.9	USt												
	7 → 81		6.6	6.6	6.6	6.5	USt P+												

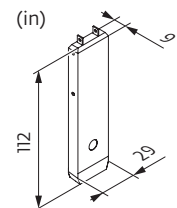
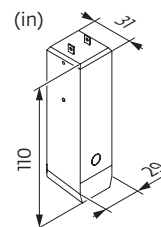
$W = W - 0.08 \text{ USt max.}$

Jib weight & counter-jib ballast

▲▲▲▲	▲▲▲▲ (lb) - 25 LVF (+/- 5%)			■		▲ (lb)
	↔ ↔	↔	↔ ↔	7,937 lb	2,425 lb	
180 ft	16,925	16,616	17,262	2	5	27,999
164 ft	16,495	16,186	16,832	2	5	27,999
148 ft	15,988	15,679	16,325	2	4	25,574
131 ft	15,338	15,029	15,675	2	3	23,149
115 ft	14,588	14,279	14,925	2	2	20,723
98 ft	13,986	13,678	14,323	2	2	20,723
82 ft	13,186	12,877	13,523	2	1	18,298

CAU - 7,937 lb

CAV - 2,425 lb

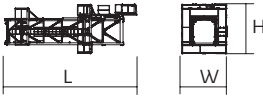

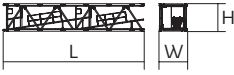




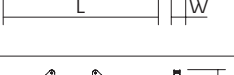

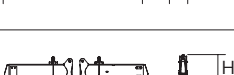



Dimensions and weight

Slewing crane part:  180 ft -  -  -  25 LVF



Slewing crane part		L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Counter-jib		39	3.9	8.2	10,406
Towerhead + cab	 Ultra View	14.2	7.4	8	11,890
Jib section	 ① 25 LVF 6 DVF	35.9	9.6	8.5	7,110
Jib section	 ② ⑤ ⑥ ⑧	17.2 17 17 16.9	3.4 3.4 3.4 3.4	7.7 6.3 6.2 3.9	1,620 886 756 503
Jib section	 ③	33.4	3.4	7.7	2,482
Jib section	 ④ ⑦	17 16.9	3.4 3.4	7.6 6.2	990 646
Jib section	 ⑨	17	3.4	3.8	417
Hoisting winch (+ rope)	 25 LVF 33 LVF	4.3 4.5	2.3 3	2.3 2.9	1,687 2,127
Trolley	  6.6 USt	5.2	4.4	2.9	617
Pulley block	  6.6 USt	3	0.9	4.3	628
Trolley	  6.6 USt	4.6	4.1	3.1	617
Trolley	  6.6 USt  3.3 USt	4.7 5	4.1 4.3	3.1 3.1	617 518
Pulley block	  6.6 USt  3.3 USt	4.1 2.6	0.9 0.7	5 4.2	551 287

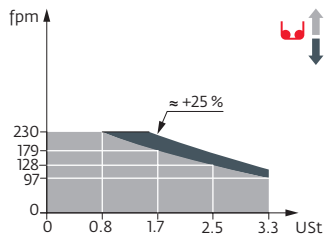
Crane tower		L (ft)	W (ft)	H (ft)	lb (+/- 5%)	
Telescopic cage T41		5.2 ft	35.6	12.3	13.5	15,653
K40/K40		5.2 ft	7.3	6.9	6.8	3,208
K 447E KM 447E KM 449E		5.2 ft	33.5 33.5 33.5	5.3 5.3 5.3	5.3 5.3 5.3	7,474 7,088 8,448
K 447A KMT 447A K 449A KMT 449A		5.2 ft	17.1 17.1 17.1 17.1	5.5 5.5 5.5 5.5	5.3 5.3 5.3 5.3	4,079 3,847 4,916 4,696
K 447C		5.2 ft	11.3	5.5	5.3	2,998
Fixing angles		P 41A	1.2	1.2	3.7	293
Basic mast unit		S 41A	11.9	6.4	6.8	6,537
Struts		S 41A	10.4	0.9	0.8	489
Half-bearer		S 41A	16.7	2	5.8	2,524
Cross girder		ZC 4230 ZD 4230	18.5 21.8	2.7 2.7	3.4 3.4	3,505 4,035
Cross girder		ZC 4230 ZD 4230	18.5 21.8	1.5 1.5	4.4 4.4	4,178 4,707

Mechanisms

480 V - 60 Hz											hp	kW	
	<b>25 LVF 15 Optima</b>	fpm	97	128	179	230	49	66	92	115	25	18	912 ft
		USt	3.3	2.5	1.7	0.8	6.6	5	3.3	1.8			
	<b>33 LVF 15 Optima</b>	fpm	118	154	221	315	59	79	116	157	33	22	1,001 ft
		USt	3.3	2.5	1.7	0.6	6.6	5	3.3	1.4			
	<b>6 DVF 4 Optima</b>	fpm	0 → 262 (6.6 USt) 0 → 328 (2.2 USt)								5.5	4	
	<b>RVF 152 Optima+</b>	rpm	0 → 0.8								2 x 5.5	2 x 4	

480 V (+6% -10%) 60 Hz	25 LVF: 34 → 24 kVA	
	33 LVF: 41 → 28 kVA	

25 LVF 15 Optima



33 LVF 15 Optima

