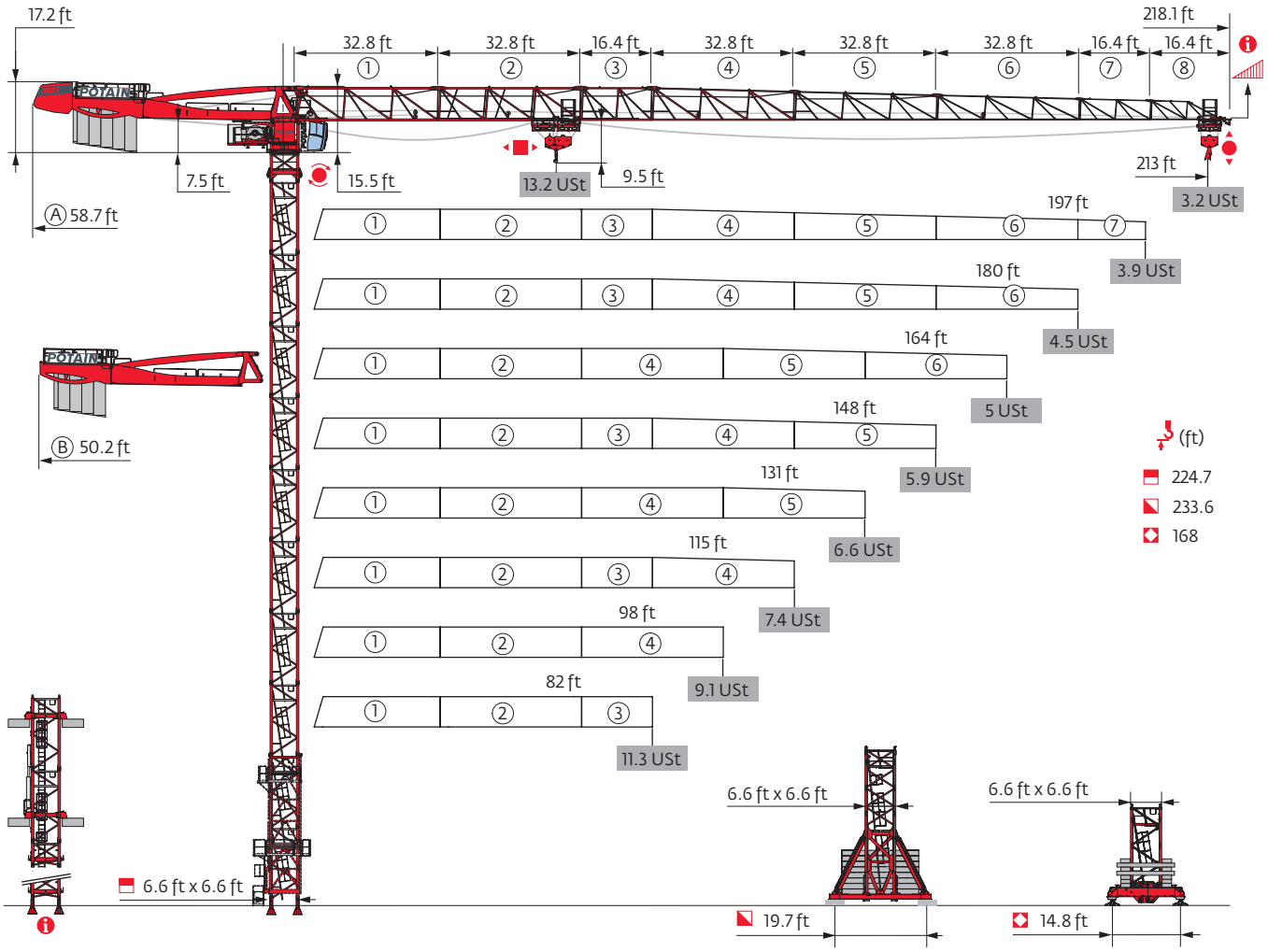
POTAIN®

MDT 259 J12



Potain Plus

Power Control

Top Site

Top Tracing 3

ASCE 7-10

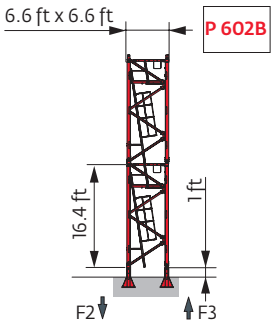
Values have been rounded.

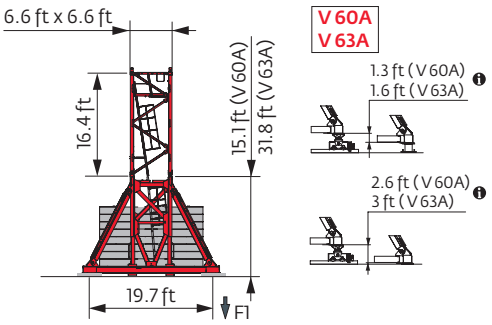
Mast - Reactions

6.6 ft - P 602B									
(ft)	82	98	115	131	148	164	180	197	213
(ft)	224.7	224.7	224.7	224.7	224.7	224.7	213.9	213.9	213.9
/P+ (ft)	224.7	224.7	224.7	224.7	224.7	224.7	213.9	213.9	213.9
6.6 ft	1	1	1	1	1	1	1	1	1
10.9 ft	2	2	2	2	2	2	1	1	1
16.4 ft	12	12	12	12	12	12	12	12	12
F2 (USt) ●	200	196	201	198	198	198	196	196	197
F2 (USt) ■	329	328	334	331	338	339	307	306	313
F3 (USt) ●	147	143	146	142	141	141	138	137	138
F3 (USt) ■	284	282	286	282	287	289	255	254	260

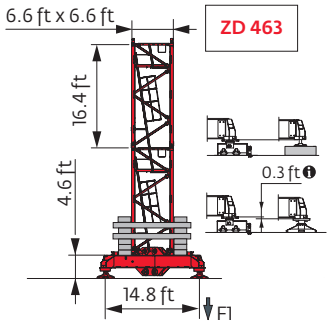
6.6 ft - V 60A -									
(ft)	82	98	115	131	148	164	180	197	213
(ft)	206	211.3	206	211.3	211.3	211.3	211.3	211.3	211.3
/P+ (ft)	206	211.3	206	211.3	211.3	211.3	211.3	211.3	211.3
6.6 ft	1	1	1	1	1	1	1	1	1
10.9 ft	2	1	2	1	1	1	1	1	1
16.4 ft	10	11	10	11	11	11	11	11	11
F1 (USt) ●	113	114	114	115	115	115	119	119	119
F1 (USt) ■	145	152	147	152	156	157	155	154	158

6.6 ft - V 63A -									
(ft)	82	98	115	131	148	164	180	197	213
(ft)	228	233.6	233.6	233.6	233.6	233.6	233.6	228	228
/P+ (ft)	228	233.6	233.6	233.6	233.6	233.6	233.6	228	228
6.6 ft	1	1	1	1	1	1	1	1	1
10.9 ft	1	0	0	0	0	0	0	1	1
16.4 ft	11	12	12	12	12	12	12	11	11
F1 (USt) ●	133	134	136	136	136	136	140	135	135
F1 (USt) ■	181	188	191	189	193	193	191	182	186





6.6 ft - ZD 463 -									
(ft)	82	98	115	131	148	164	180	197	213
(ft)	168	168	168	168	168	168	162.7	162.7	162.7
/P+ (ft)	168	168	168	168	168	168	162.7	162.7	157.2
6.6 ft	1	1	1	1	1	1	1	1	1
10.9 ft	1	1	1	1	1	1	2	2	2
16.4 ft	9	9	9	9	9	9	8	8	8
F1 (USt) ●	113	111	114	112	112	113	116	116	114
F1 (USt) ■	130	129	133	129	134	135	125	124	129



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.

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

Anchorages

Lest de base

(USt) / 6.6 ft - V 60A -

(ft)	82	98	115	131	148	164	180	197	213
211.3		145.5		145.5	145.5	145.5	145.5	145.5	145.5
206	145.5	145.5	145.5	132.3	145.5	145.5	132.3	132.3	132.3
189.6	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8
173.2	79.4	79.4	79.4	79.4	79.4	79.4	92.6	92.6	92.6
156.8	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1
140.4	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
124	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7
107.6	39.7	39.7	39.7	39.7	26.5	26.5	26.5	26.5	26.5
91.2	39.7	39.7	39.7	39.7	26.5	26.5	26.5	26.5	26.5
74.8	39.7	39.7	39.7	39.7	26.5	26.5	26.5	26.5	26.5

(USt) / 6.6 ft - V 63A -

(ft)	82	98	115	131	148	164	180	197	213
233.6		198.4	198.4	198.4	198.4	198.4	198.4		
228	198.4	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2
211.6	158.7	158.7	158.7	145.5	158.7	158.7	145.5	145.5	145.5
195.2	132.3	119.1	119.1	119.1	119.1	119.1	119.1	105.8	119.1
178.8	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6
162.4	79.4	79.4	79.4	66.1	66.1	66.1	79.4	79.4	79.4
146	66.1	66.1	66.1	52.9	52.9	52.9	66.1	66.1	66.1
129.6	52.9	52.9	52.9	39.7	39.7	39.7	52.9	52.9	52.9
113.2	39.7	39.7	39.7	39.7	26.5	26.5	39.7	39.7	26.5
96.8	39.7	39.7	26.5	26.5	26.5	26.5	26.5	26.5	26.5
80.4	39.7	39.7	26.5	26.5	26.5	26.5	26.5	26.5	26.5

(USt) / 6.6 ft - ZD 463 -

(ft)	82	98	115	131	148	164	180	197	213
168	132.3	126.8	132.3	126.8	121.3	126.8			
162.7	126.8	121.3	121.3	121.3	115.7	115.7	132.3	132.3	132.3
146.3	104.7	99.2	104.7	99.2	93.7	93.7	110.2	110.2	110.2
129.9	88.2	82.7	82.7	82.7	77.2	77.2	88.2	88.2	88.2
113.5	77.2	71.7	71.7	71.7	66.1	66.1	66.1	71.7	66.1
97.1	77.2	71.7	71.7	71.7	66.1	66.1	55.1	49.6	55.1
80.7	77.2	71.7	71.7	71.7	66.1	66.1	55.1	44.1	55.1
64.3	77.2	71.7	71.7	71.7	66.1	66.1	55.1	44.1	55.1

Load curves

(ft)			56	66	72	82	89	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	ft
	13.2 USt	6.6 USt																					
213	10 → 57	101 - 109	13.2	11.2	10	8.6	7.8	6.8	6.6	6.3	5.9	5.4	5.1	4.7	4.4	4.1	3.9	3.7	3.5	3.3	3.1	2.95	USt
	10 → 61	109 - 118	13.2	12.3	11	9.4	8.6	7.5	7	6.6	6.4	5.9	5.5	5.1	4.8	4.5	4.3	4	3.8	3.6	3.4	3.2	USt P+
197	10 → 61	109 - 117	13.2	12.1	10.8	9.3	8.5	7.5	6.9	6.6	6.3	5.8	5.5	5.1	4.8	4.5	4.3	4	3.8	3.6	USt		
	10 → 66	118 - 127	13.2	13.2	11.9	10.3	9.4	8.2	7.6	6.8	6.6	6.4	6	5.5	5.3	4.9	4.7	4.3	4.2	3.9	USt P+		
180	10 → 62	112 - 120	13.2	12.4	11.1	9.6	8.8	7.7	7.1	6.6	6.5	6	5.6	5.2	5	4.6	4.4	4.1	USt				
	10 → 68	121 - 130	13.2	13.2	12.3	10.6	9.6	8.5	7.9	7	6.6	6.5	6.2	5.7	5.4	5	4.8	4.5	USt P+				
164	10 → 62	112 - 120	13.2	12.5	11.2	9.6	8.8	7.7	7.2	6.6	6.6	6	5.7	5.2	5	4.6	USt						
	10 → 68	121 - 131	13.2	13.2	12.3	10.6	9.7	8.5	7.9	7.1	6.6	6.6	6.2	5.7	5.4	5	USt P+						
148	10 → 64	114 - 123	13.2	12.8	11.4	9.9	9	7.9	7.3	6.6	6.6	6.1	5.8	5.4	USt								
	10 → 69	124 - 133	13.2	13.2	12.5	10.9	9.9	8.7	8.1	7.3	6.8	6.6	6.4	5.9	USt P+								
131	10 → 66	118 - 128	13.2	13.2	11.9	10.3	9.4	8.3	7.7	6.9	6.6	6.4	USt										
	10 → 71	128 - 131	13.2	13.2	13.1	11.3	10.3	9.1	8.4	7.6	7.1	6.6	USt P+										
115	10 → 64		13.2	12.9	11.5	9.9	9.1	8	7.4	6.6	USt												
	10 → 69		13.2	13.2	12.7	10.9	10	8.8	8.2	7.3	USt P+												
98	10 → 65		13.2	13.1	11.8	10.1	9.3	8.2	USt														
	10 → 71		13.2	13.2	12.9	11.2	10.2	9	USt P+														
82	10 → 65		13.2	13.2	11.8	10.2	USt																
	10 → 71		13.2	13.2	13	11.2	USt P+																

= - 0.63 USt max.

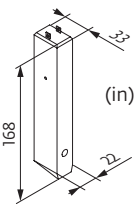
(ft)			56	66	72	82	89	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	ft
	13.2 USt	6.6 USt																					
213	8 → 57	102 - 105	13.2	11.2	10	8.6	7.9	6.9	6.6	5.9	5.5	5	4.7	4.3	4.1	3.7	3.5	3.3	3.1	2.9	2.75	2.6	USt
	8 → 62	110 - 113	13.2	12.4	11.1	9.5	8.7	7.6	7	6.3	6	5.5	5.2	4.7	4.5	4.1	3.9	3.6	3.4	3.2	3.1	2.85	USt P+
197	8 → 61	110 - 112	13.2	12.2	10.9	9.4	8.6	7.6	7	6.4	6	5.5	5.2	4.7	4.5	4.1	3.9	3.7	3.5	3.3	USt		
	8 → 66	119 - 121	13.2	13.2	12	10.3	9.4	8.3	7.7	6.9	6.4	6	5.7	5.2	4.9	4.6	4.3	4	3.8	3.6	USt P+		
180	8 → 62	113 - 115	13.2	12.5	11.2	9.7	8.8	7.8	7.2	6.6	6.2	5.6	5.3	4.9	4.6	4.3	4.1	3.8	USt				
	8 → 68	122 - 124	13.2	13.2	12.3	10.6	9.7	8.6	7.9	7.1	6.6	6.2	5.8	5.4	5.1	4.7	4.5	4.2	USt P+				
164	8 → 63	113 - 115	13.2	12.5	11.2	9.7	8.9	7.8	7.2	6.6	6.2	5.7	5.3	4.9	4.6	4.3	USt						
	8 → 68	122 - 125	13.2	13.2	12.4	10.7	9.7	8.6	8	7.1	6.7	6.2	5.9	5.4	5.1	4.7	USt P+						
148	8 → 64	115 - 118	13.2	12.8	11.5	9.9	9.1	8	7.4	6.7	6.4	5.8	5.5	5	USt								
	8 → 69	125 - 127	13.2	13.2	12.6	10.9	10	8.8	8.2	7.3	6.8	6.3	6	5.5	USt P+								
131	8 → 66	119 - 122	13.2	13.2	12	10.3	9.4	8.3	7.7	6.9	6.6	6.1	USt										
	8 → 72	129 - 131	13.2	13.2	13.1	11.4	10.4	9.2	8.5	7.6	7.1	6.6	USt P+										
115	8 →64		13.2	12.9	11.6	10	9.1	8.1	7.5	6.7	USt												
	8 → 70		13.2	13.2	12.7	11	10.1	8.9	8.2	7.4	USt P+												
98	8 → 66		13.2	13.2	11.8	10.2	9.3	8.2	USt														
	8 → 71		13.2	13.2	13	11.2	10.3	9.1	USt P+														
82	8 → 66		13.2	13.2	11.9	10.3	USt																
	8 → 71		13.2	13.2	13.1	11.3	USt P+																

= - 0.18 USt max.

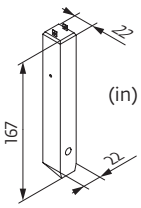
Jib weight & counter-jib ballast

	(lb) (+/- 5%)									
				10,141 lb	3,373 lb	(lb)	6,768 lb	3,373 lb	(lb)
213 ft	27,448	26,764	27,613	5	1	54,079	7	2	54,123
197 ft	26,830	26,169	26,963	5	1	54,079	7	2	54,123
180 ft	26,147	25,485	26,279	5	0	50,706	7	1	50,750
164 ft	24,052	23,391	24,185	4	1	43,938	6	1	43,982
148 ft	24,339	23,678	24,471	4	1	43,938	6	1	43,982
131 ft	22,245	21,583	22,377	4	0	40,565	6	0	40,609
115 ft	21,914	21,253	22,046	3	2	37,170	5	1	37,214
98 ft	20,084	19,423	20,216	3	1	33,797	5	0	33,841
82 ft	19,004	18,342	19,136	3	0	30,424	4	1	30,446

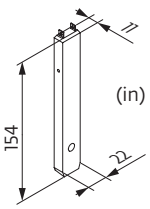
CBS - 10,141 lb



CBU - 6,768 lb



CBY - 3,373 lb

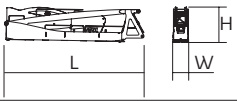
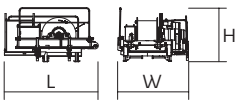
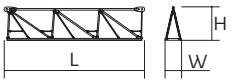
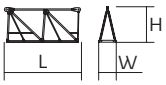
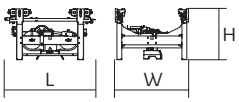
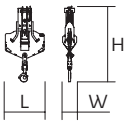
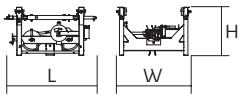
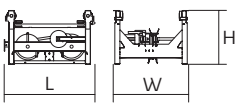
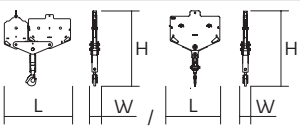


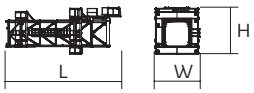
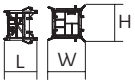
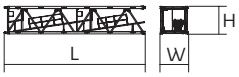
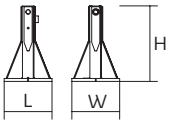
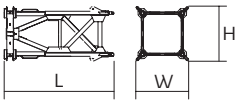
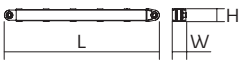
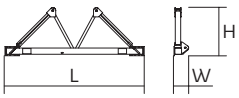
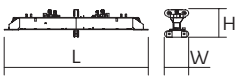
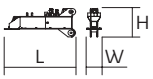
Dimensions and weight

Slewing crane part : 213 ft - - 50 LVF

x 6

x 4

Slewing crane part			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Counter-jib		Ⓐ Ⓑ	36.1 36.1	3.8 3.8	8.1 8.1	19,213 18,629
Towerhead + cab		⍁ 6.6 ft	16.1	7.5	8.3	18,618
Hoisting winch (+ rope)		50 LVF 90 HPL™	10.6 10.6	8.1 10.8	6.2 5.8	6,945 9,235
Jib section		① 6 DVF	35.5	5.6	8.9	7,760
Jib section		② ④ ⑤ ⑥	33.8 33.5 33.6 33.4	3.9 3.9 3.9 3.9	7.9 7.8 6.9 6	5,335 3,439 2,723 1,753
Jib section		③ ⑦	17.3 16.7	3.9 3.9	7.8 5	2,116 683
Jib section		⑧	16.7	3.9	4.6	485
Trolley		13.2 USt	6.1	5	3.4	882
Pulley block		13.2 USt	3.9	1.4	7.6	1,003
Trolley		13.2 USt	5.2	5	3.2	463
Trolley		13.2 USt 6.6 USt	5.6 6.1	5 5	3.4 3.2	540 520
Pulley block		13.2 USt 6.6 USt	5.4 3.6	0.7 0.9	5.8 5.3	992 584

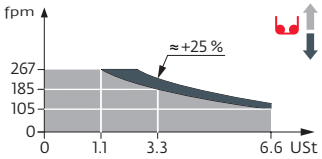
Crane tower			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Telescopic cage T 61		⍁6.6 ft	35.5	13.6	14.7	21,385
K60/K60-2		⍁6.6 ft	7.3	8.2	8.1	4,255
K 649B KM 649E		⍁6.6 ft	33.6 33.8	6.8 6.7	6.7 6.7	11,663 10,692
K 649A KMT 649A KR 649A KRMT 649A		⍁6.6 ft	17.2 17.2 17.2 17.2	6.8 6.8 6.9 6.9	6.7 6.7 6.8 6.8	6,184 5,666 7,165 6,724
K 649C KMT 649C KRMT 649C		⍁6.6 ft	11.7 11.7 11.7	6.8 6.8 6.9	6.7 6.7 6.8	4,376 4,542 5,401
Fixing angles		P 602B	2.1	2.1	4.2	761
Basic mast unit		V 60A V 63A	16.4 32.9	7.9 7.9	7.9 7.9	10,494 16,887
Struts		V 60A V 63A	14.8 14.8	1 1.1	1 1.1	1,036 1,235
Half-bearer		V 60A V 63A	22 22	2.3 2.3	7.6 7.6	4,057 4,101
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 30 Optima	fpm	105	135	185	267	54	71	97	135	50	37	1,106 ft
		USt	6.6	5	3.3	1.1	13.2	9.9	6.6	2.5			
	90 HPL™ 30	fpm	176	228	326	469	723	90	120	172	244	361	90	66	2,434 ft
		USt	6.6	5	3.3	1.7	0.2	13.2	9.9	6.6	3.3	0.9			
	6 DVF 4 Optima	fpm	0 → 164 (13.2 USt) 0 → 328 (6.6 USt) 0 → 394 (3.3 USt)								5.5	4	
	RVF 162 Optima+	rpm	0 → 0.9								2 x 7.5	2 x 5.5	

IEC 60204-32	kVA	
480 V (+6% -10%) 60 Hz	50 LVF: 58 → 38 kVA 90 HPL™: 90 → 54 kVA	

50 LVF 30 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

Ref. 02D_ASCEUSt_MDT259J12_2015_47-7