

Liftcrane Jib Capacities

Jib No. 148 on
 Boom No. B60:680
 with Mast No. M10:684 or Mast No. M11:684
 440,900 lb VPC (Variable Position Counterweight)
 360 Degree Rating

MLC650 VPC-MAX SERIES 1



LIFTING CAPACITIES: Chart supplements Boom Capacity chart No. 9386-A. Lifting capacities for various boom lengths, jib lengths, and jib operating radii are for freely suspended loads and may be based on percent of static tipping or strength of structural components. Capacities must be reduced by applicable deducts.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point sheaves is considered part of load. Boom and jib are not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved.

BOOM BACKWARD STABILITY: Capacities indicated by (b) require 8,200 lb minimum weight suspended beneath jib point and (c) require 15,500 lb minimum weight. **Caution: Do not operate in areas indicated by (b) or (c) without required minimum weight.** Boom and jib may not lower and boom hoist wire rope may go slack causing wire rope damage or failure.

OPERATING CONDITIONS: Machine to operate on a firm, level, and uniformly supporting surface. Refer to Boom Rigging No. 81022686, Jib Rigging No. 81023385, Mast Rigging No. 81025005 or No. 84050187, Wire Rope Specifications chart No. 9532-A, Counterweight Arrangements chart No. 9349-A, and Wind Conditions chart No. 9531-A. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to the Operator Manual for operating guidelines.

MACHINE TRAVEL: Machine to travel on a firm, level, and uniformly supporting surface. Boom must be within boom angle range shown in capacity chart. Refer to Maximum Allowable Travel Specification chart No. 9677-A.



OPERATING RADIUS: Operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block.



BOOM ANGLE: Boom angle in degrees (°) is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.



JIB POINT ELEVATION: Jib point elevation is vertical distance from ground level to centerline of jib point shaft.

MACHINE EQUIPMENT: Machine equipped with VPC-MAX, 36 ft 6 in. crawlers, 60 in. or 80 in. treads, 36 ft 1 in. live mast, 118.1 ft mast, 16 part boom hoist reeving, boom support straps, and 440,900 lb VPC.

Luffing Jib Backstay Deduct	
Boom Length (ft)	Deduct (lb)
144.4	6,000
164.0	7,500
183.7	8,500
203.4	10,000
223.1	10,000
242.8	10,000
262.5	11,000
282.2	12,500
301.8	13,500
321.5	14,800
341.2	16,000
Deduct the appropriate value from capacities when luffing jib backstays are stored on boom.	

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Refer to Table 1 (with luffing jib backstays stored) and Table 2 (without luffing jib backstays stored) for raising ability with the maximum weight of all load blocks, hooks, weight ball, slings, and hoist lines beneath boom and jib point sheaves. For block weights shown with #, load blocks, hooks, weight ball, and slings must remain on ground until combined weights are within rated capacity of chart. Raising is not permitted in shaded areas of table.

Select counterweight position from Tables 1 or 2 that will allow raising and lowering of boom and jib length. Counterweight position selection may be changed with jib on ground or while jib is within operating range of capacity chart.

Combined weight beneath boom and jib point sheaves must not exceed block weight shown. Total weight beneath jib point must not exceed 6,200 lb.

Table 1a: With Luffing Jib Backstays

Over End or Side of Crawlers												
Boom Length (ft)	Counterweight Position											
	38.7 ft						60.0 ft					
	Jib Length (ft)											
	39.4	59.1	78.7	98.4	118.1	137.8	39.4	59.1	78.7	98.4	118.1	137.8
	Block Weight (lb)											
144.4	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500
164.0	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500
183.7	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500
203.4	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500
223.1	46,500	46,500	22,600	22,600	22,600	22,600	46,500	46,500	46,500	46,500	46,500	46,500
242.8	22,600	22,600	22,600	16,200	16,200	16,200	46,500	46,500	46,500	46,500	46,500	46,500
262.5	#	#	#	#	#	#	46,500	46,500	46,500	46,500	46,500	22,600
282.2	Raising Not Permitted						22,600	22,600	22,600	22,600	22,600	22,600
301.8							22,600	16,200	16,200	16,200	#	#
321.5							#	#	#	#	#	
341.2												

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Table 1b: With Luffing Jib Backstays

Over End of Blocked Crawlers												
Boom Length (ft)	Counterweight Position											
	38.7 ft						60.0 ft					
	Jib Length (ft)											
	39.4	59.1	78.7	98.4	118.1	137.8	39.4	59.1	78.7	98.4	118.1	137.8
	Block Weight (lb)											
144.4	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500
164.0	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500
183.7	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500
203.4	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500
223.1	46,500	46,500	22,600	22,600	22,600	22,600	46,500	46,500	46,500	46,500	46,500	46,500
242.8	22,600	22,600	22,600	16,200	16,200	16,200	46,500	46,500	46,500	46,500	46,500	46,500
262.5	#	#	#	#	#	#	46,500	46,500	46,500	46,500	46,500	22,600
282.2	#	#	#	#	#	#	22,600	22,600	22,600	22,600	22,600	22,600
301.8	Raising Not Permitted						22,600	16,200	16,200	16,200	#	#
321.5							#	#	#	#	#	#
341.2							#	#	#	#		
Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius is within 360 degree chart. <i>Crane tipping or structural damage can occur.</i>												

REFERENCE ONLY

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Table 2a: Without Luffing Jib Backstays

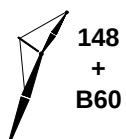
Over End or Side of Crawlers												
Boom Length (ft)	Counterweight Position											
	38.7 ft						60.0 ft					
	Jib Length (ft)											
	39.4	59.1	78.7	98.4	118.1	137.8	39.4	59.1	78.7	98.4	118.1	137.8
	Block Weight (lb)											
144.4	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500
164.0	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500
183.7	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500
203.4	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500
223.1	46,500	46,500	46,500	22,600	22,600	22,600	46,500	46,500	46,500	46,500	46,500	46,500
242.8	22,600	22,600	22,600	22,600	22,600	16,200	46,500	46,500	46,500	46,500	46,500	46,500
262.5	16,200	16,200	#	#	#	#	46,500	46,500	46,500	46,500	46,500	46,500
282.2	#	#	#	#			22,600	22,600	22,600	22,600	22,600	22,600
301.8							22,600	22,600	22,600	22,600	16,200	16,200
321.5	Raising Not Permitted						#	#	#	#	#	#
341.2							#	#	#			

Table 2b: Without Luffing Jib Backstays

Over End of Blocked Crawlers												
Boom Length (ft)	Counterweight Position											
	38.7 ft						60.0 ft					
	Jib Length (ft)											
	39.4	59.1	78.7	98.4	118.1	137.8	39.4	59.1	78.7	98.4	118.1	137.8
	Block Weight (lb)											
144.4	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500
164.0	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500
183.7	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500
203.4	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500
223.1	46,500	46,500	46,500	22,600	22,600	22,600	46,500	46,500	46,500	46,500	46,500	46,500
242.8	22,600	22,600	22,600	22,600	22,600	16,200	46,500	46,500	46,500	46,500	46,500	46,500
262.5	16,200	16,200	#	#	#	#	46,500	46,500	46,500	46,500	46,500	46,500
282.2	#	#	#	#	#	#	22,600	22,600	22,600	22,600	22,600	22,600
301.8	#	#	#				22,600	22,600	22,600	22,600	16,200	16,200
321.5	Raising Not Permitted						#	#	#	#	#	#
341.2							#	#	#	#	#	#

Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius is within 360 degree chart. Crane tipping or structural damage can occur.

Explanation of Symbols



Jib No. 148
+
Boom No. B60:680



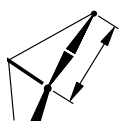
VPC (Variable Position Counterweight)



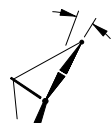
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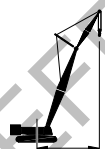
Boom Length



Jib Length



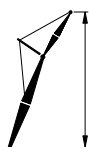
Jib Offset Angle



Operating Radius
(see page 1)



Boom Angle
(see page 1)



Jib Point Elevation
(see page 1)



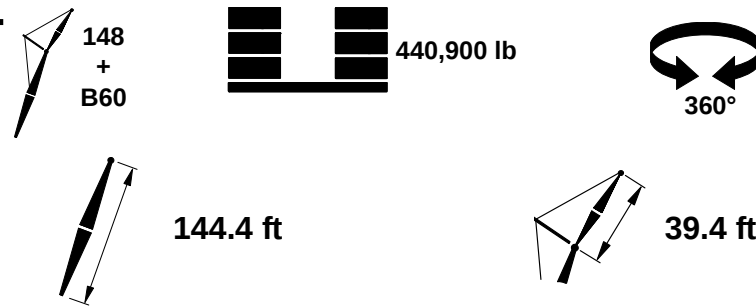
Counterweight Position
from Axis of Rotation

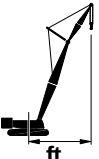
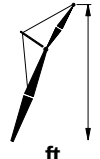
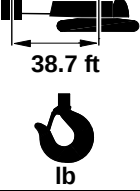
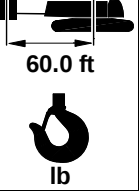
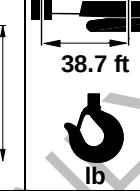
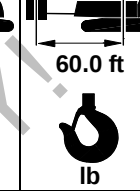
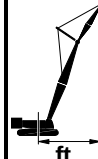


Lifting Capacities
(see page 1)

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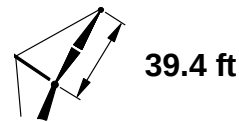
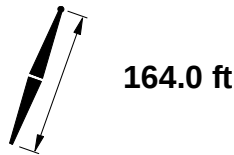
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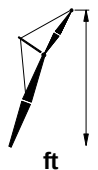
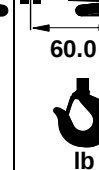
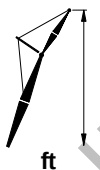
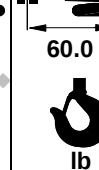
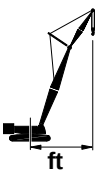


	10°					20°				
	 ft	 °	 ft	 38.7 ft lb	 60.0 ft lb	 °	 ft	 38.7 ft lb	 60.0 ft lb	 ft
38	82.8	191.7	143,300c	143,300c						38
40	82.1	191.3	143,300c	143,300c						40
45	80.5	190.3	143,300b	143,300b	82.4	188.8	143,300c	143,300c		45
50	78.9	189.1	143,300b	143,300b	80.8	187.6	140,100b	140,100b		50
55	77.3	187.7	143,300	143,300	79.2	186.2	133,300b	133,300b		55
60	75.7	186.2	143,300	143,300	77.5	184.7	127,200	127,200		60
65	74.1	184.6	143,300	143,300	75.9	183.1	121,600	121,600		65
70	72.4	182.8	143,300	143,300	74.2	181.3	116,600	116,600		70
75	70.8	180.8	142,500	142,500	72.5	179.3	112,000	112,000		75
80	69.1	178.7	135,500	135,500	70.8	177.1	107,800	107,800		80
85	67.4	176.4	129,200	129,200	69.1	174.8	103,900	103,900		85
90	65.6	173.9	123,400	123,400	67.3	172.3	100,300	100,300		90
95	63.9	171.2	118,300	118,300	65.5	169.5	97,000	97,000		95
100	62.1	168.3	113,500	113,500	63.7	166.6	93,900	93,900		100
105	60.2	165.2	109,100	109,100	61.9	163.5	91,100	91,100		105
110	58.4	161.8	105,000	105,000	60.0	160.1	88,400	88,400		110
115	56.5	158.2	101,300	101,300	58.1	156.4	86,000	86,000		115
120	54.5	154.4	97,900	97,900	56.1	152.6	83,700	83,700		120
125	52.5	150.3	94,600	94,600	54.0	148.4	81,600	81,600		125
130	50.4	145.8	91,700	91,700	51.9	143.9	79,600	79,600		130
135	48.2	141.0	88,900	88,900	49.7	139.0	77,800	77,800		135
140	46.0	135.9	86,400	86,400	47.5	133.7	76,100	76,100		140
145	43.7	130.3	84,000	84,000	45.1	128.0	74,500	74,500		145
150	41.2	124.2	81,800	81,800	42.6	121.8	73,000	73,000		150
155	38.6	117.5	79,800	79,800	40.0	115.0	71,700	71,700		155
160	35.9	110.2	77,800	77,800	37.1	107.5	70,500	70,500		160
165	32.9	101.9	76,000	76,000	34.0	99.0	69,400	69,400		165
170	29.6	92.6	74,500	74,500	30.6	89.3	68,500	68,500		170
175	25.9	81.7	73,000	73,000	26.7	77.9	67,800	67,800		175
180	21.5	68.4	68,700	71,900						180

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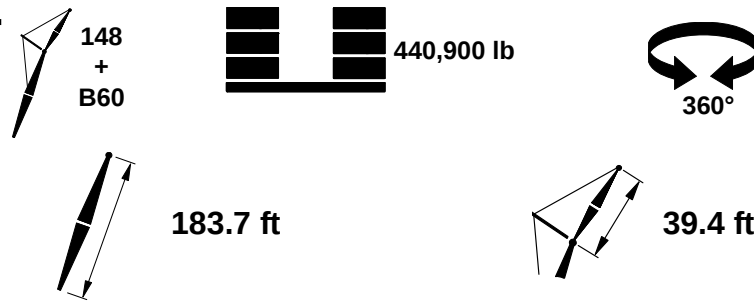
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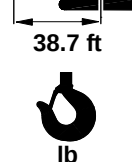
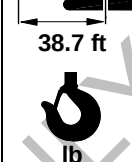
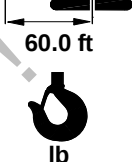


	10°					20°				
										
	ft	°	ft	lb	lb	°	ft	lb	lb	ft
40		82.9	211.3	143,300b	143,300b					40
45		81.5	210.3	143,300	143,300					45
50		80.0	209.3	143,300	143,300	81.7	207.8	143,300b	143,300b	50
55		78.6	208.1	143,300	143,300	80.2	206.6	137,700	137,700	55
60		77.1	206.8	143,300	143,300	78.8	205.2	131,800	131,800	60
65		75.7	205.3	143,300	143,300	77.3	203.7	126,400	126,400	65
70		74.2	203.7	143,300	143,300	75.8	202.1	121,400	121,400	70
75		72.7	201.9	143,300	143,300	74.3	200.3	116,800	116,800	75
80		71.2	200.0	143,300	143,300	72.8	198.4	112,700	112,700	80
85		69.7	198.0	137,900	137,900	71.3	196.4	108,800	108,800	85
90		68.2	195.8	132,000	132,000	69.7	194.1	105,200	105,200	90
95		66.6	193.4	126,600	126,600	68.1	191.7	101,900	101,900	95
100		65.0	190.8	121,600	121,600	66.6	189.2	98,800	98,800	100
105		63.4	188.1	117,000	117,000	64.9	186.4	96,000	96,000	105
110		61.8	185.2	112,800	112,800	63.3	183.5	93,300	93,300	110
115		60.2	182.1	108,900	108,900	61.6	180.4	90,800	90,800	115
120		58.5	178.8	105,300	105,300	59.9	177.0	88,400	88,400	120
125		56.8	175.3	101,900	101,900	58.2	173.5	86,200	86,200	125
130		55.0	171.5	98,800	98,800	56.4	169.7	84,100	84,100	130
135		53.2	167.5	95,800	95,800	54.6	165.6	82,200	82,200	135
140		51.4	163.3	93,100	93,100	52.7	161.3	80,300	80,300	140
145		49.5	158.7	90,500	90,500	50.8	156.7	78,700	78,700	145
150		47.5	153.8	88,100	88,100	48.8	151.7	77,000	77,000	150
155		45.5	148.6	85,800	85,800	46.8	146.4	75,600	75,600	155
160		43.4	143.0	83,700	83,700	44.6	140.7	74,200	74,200	160
165		41.1	136.9	79,900	81,700	42.4	134.5	72,900	72,900	165
170		38.8	130.3	74,800	79,900	40.0	127.8	71,700	71,700	170
175		36.4	123.1	69,900	78,100	37.5	120.4	70,600	70,600	175
180		33.7	115.2	65,200	76,600	34.8	112.3	66,200	69,700	180
190		27.7	96.4	56,500	73,700	28.6	92.8	57,100	68,100	190
200		19.9	70.4	48,400	71,600					200

MLC650 VPC-MAX S-1

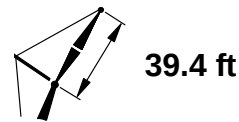
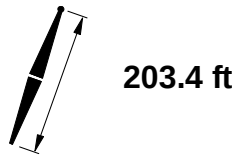
ASME B30.5

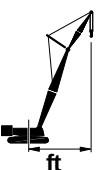
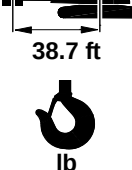
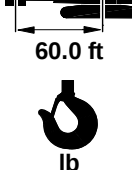
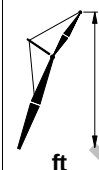
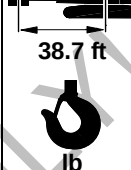
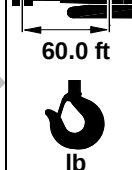


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
45	82.2	230.4	143,300	143,300	82.4	227.8	143,300	143,300	45
50	80.9	229.4	143,300	143,300	81.1	226.8	141,500	141,500	50
55	79.6	228.3	143,300	143,300	79.8	225.5	135,800	135,800	55
60	78.3	227.1	143,300	143,300	78.5	224.2	130,500	130,500	60
65	77.0	225.8	143,300	143,300	77.1	222.7	125,700	125,700	65
70	75.6	224.3	143,300	143,300	75.8	221.1	121,200	121,200	70
75	74.3	222.7	143,300	143,300	74.4	219.4	117,100	117,100	75
80	72.9	221.0	143,300	143,300	73.0	217.6	113,200	113,200	80
85	71.6	219.2	143,300	143,300	71.6	215.6	109,700	109,700	85
90	70.2	217.2	139,900	139,900					90
95	68.8	215.1	134,400	134,400	70.2	213.4	106,400	106,400	95
100	67.4	212.8	129,300	129,300	68.8	211.1	103,300	103,300	100
105	66.0	210.4	124,600	124,600	67.4	208.7	100,400	100,400	105
110	64.5	207.8	120,100	120,100	65.9	206.1	97,700	97,700	110
115	63.1	205.1	116,100	116,100	64.5	203.3	95,100	95,100	115
120	61.6	202.2	112,300	112,300	63.0	200.4	92,700	92,700	120
125	60.1	199.1	108,800	108,800	61.4	197.3	90,500	90,500	125
130	58.6	195.8	105,500	105,500	59.9	194.0	88,400	88,400	130
135	57.0	192.3	102,300	102,300	58.3	190.5	86,300	86,300	135
140	55.4	188.7	99,500	99,500	56.7	186.7	84,400	84,400	140
145	53.8	184.8	96,700	96,700	55.1	182.8	82,700	82,700	145
150	52.1	180.6	92,600	94,200	53.4	178.6	81,000	81,000	150
155	50.4	176.2	86,400	91,800	51.7	174.2	79,400	79,400	155
160	48.7	171.6	80,600	89,500	49.9	169.5	77,900	77,900	160
165	46.9	166.6	75,100	87,400	48.1	164.4	76,500	76,500	165
170	45.0	161.3	70,000	85,400	46.2	159.1	71,600	75,200	170
175	43.1	155.7	65,100	83,500	44.2	153.4	66,600	74,000	175
180	41.1	149.6	60,500	81,700	42.2	147.2	61,900	72,800	180
190	36.8	136.1	52,000	78,400	37.8	133.4	53,100	70,700	190
200	31.9	119.9	44,200	75,600	32.8	116.8	45,000	69,000	200
210	26.2	99.9	37,000	73,100	26.8	96.0	37,500	67,900	210
220	18.6	72.2	30,300	71,300					220

MLC650 VPC-MAX S-1

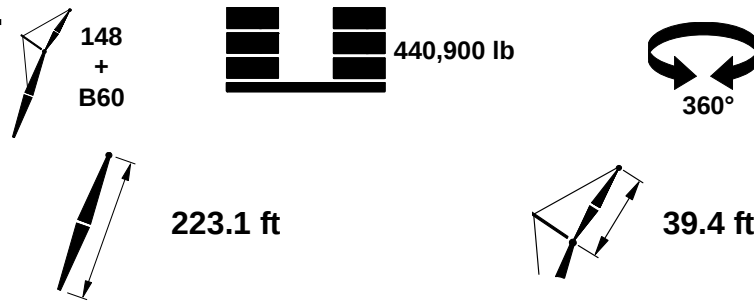
ASME B30.5

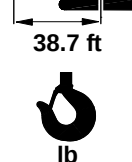
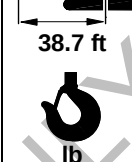
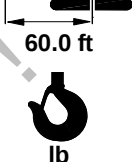


	10°				20°					
										
	ft	°	ft	lb	lb	°	ft	lb	lb	ft
45		82.9	250.3	143,300	143,300					45
50		81.7	249.4	143,300	143,300					50
55		80.5	248.4	143,300	143,300					55
60		79.3	247.3	143,300	143,300					60
65		78.1	246.1	143,300	143,300					65
70		76.8	244.8	143,300	143,300					70
75		75.6	243.4	143,300	143,300					75
80		74.4	241.8	143,300	143,300					80
85		73.1	240.1	143,300	143,300					85
90		71.9	238.3	143,300	143,300					90
95		70.6	236.4	141,700	141,700					95
100		69.4	234.3	136,500	136,500					100
105		68.1	232.1	131,600	131,600					105
110		66.8	229.8	127,100	127,100					110
115		65.5	227.4	122,900	122,900					115
120		64.1	224.8	119,000	119,000					120
125		62.8	222.0	115,300	115,300					125
130		61.4	219.1	111,900	111,900					130
135		60.0	216.0	108,700	108,700					135
140		58.6	212.8	102,600	105,700					140
145		57.2	209.3	95,400	102,800					145
150		55.8	205.7	88,800	100,100					150
155		54.3	201.9	82,600	97,600					155
160		52.8	197.9	76,800	95,200					160
165		51.2	193.7	71,300	92,900					165
170		49.6	189.2	66,100	90,800					170
175		48.0	184.4	61,300	88,700					175
180		46.4	179.4	56,700	86,800					180
190		42.9	168.4	48,200	83,300					190
200		39.1	155.9	40,500	80,100					200
210		35.0	141.5	33,500	77,300					210
220		30.3	124.4	27,000	74,800					220
230		24.8	103.1	21,000	72,700					230
240		17.4	73.7	15,200	71,100					240

MLC650 VPC-MAX S-1

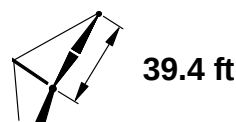
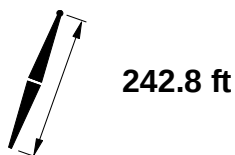
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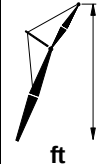
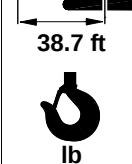
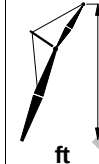
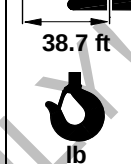
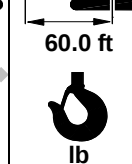
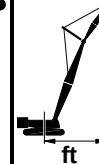


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
50	82.3		269.4	143,300	143,300				50
55	81.2		268.5	143,300	143,300				55
60	80.1		267.5	143,300	143,300				60
65	79.0		266.4	143,300	143,300				65
70	77.8		265.1	143,300	143,300				70
75	76.7		263.8	143,300	143,300				75
80	75.6		262.4	143,300	143,300				80
85	74.4		260.8	143,300	143,300				85
90	73.3		259.2	143,300	143,300				90
95	72.1		257.4	143,300	143,300				95
100	71.0		255.6	142,600	142,600				100
105	69.8		253.6	138,200	138,200				105
110	68.6		251.4	133,600	133,600				110
115	67.4		249.2	129,300	129,300				115
120	66.2		246.8	125,300	125,300				120
125	65.0		244.3	121,500	121,500				125
130	63.8		241.7	117,600	118,000				130
135	62.5		238.9	109,300	114,600				135
140	61.3		236.0	101,600	111,500				140
145	60.0		233.0	94,500	108,600				145
150	58.7		229.7	87,800	105,800				150
155	57.4		226.4	81,600	103,100				155
160	56.1		222.8	75,700	100,700				160
165	54.7		219.1	70,200	98,300				165
170	53.3		215.1	65,100	96,100				170
175	51.9		211.0	60,200	93,900				175
180	50.5		206.7	55,600	91,900				180
190	47.5		197.3	47,100	88,100				190
200	44.3		186.8	39,500	84,700				200
210	41.0		175.1	32,500	81,700				210
220	37.3		161.8	26,100	78,900				220
230	33.4		146.6	20,200	76,400				230
240	28.9		128.5	14,800	74,200				240
250	23.5		106.1	9,600	72,300				250

MLC650 VPC-MAX S-1

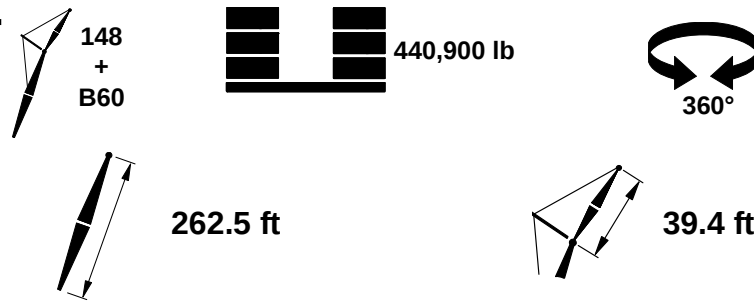
ASME B30.5

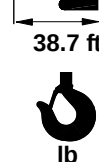
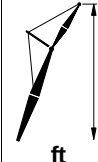
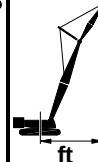


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
50	82.8	289.4	143,300	143,300					50
55	81.8	288.5	143,300	143,300					55
60	80.8	287.6	143,300	143,300	82.0	286.0	143,300	143,300	60
65	79.8	286.5	143,300	143,300	80.9	284.9	140,300	140,300	65
70	78.7	285.4	143,300	143,300	79.9	283.8	135,900	135,900	70
75	77.7	284.2	143,300	143,300	78.8	282.5	131,700	131,700	75
80	76.6	282.8	143,300	143,300	77.8	281.2	127,800	127,800	80
85	75.6	281.4	143,300	143,300	76.7	279.8	124,200	124,200	85
90	74.5	279.9	143,300	143,300	75.7	278.2	120,800	120,800	90
95	73.4	278.3	143,300	143,300	74.6	276.6	117,600	117,600	95
100	72.4	276.5	143,300	143,300	73.5	274.8	114,500	114,500	100
105	71.3	274.7	142,900	142,900	72.4	273.0	111,600	111,600	105
110	70.2	272.8	139,900	139,900	71.3	271.0	108,900	108,900	110
115	69.1	270.7	135,500	135,500	70.2	269.0	106,300	106,300	115
120	68.0	268.5	131,400	131,400	69.1	266.8	103,900	103,900	120
125	66.9	266.2	122,700	122,700	68.0	264.5	101,600	101,600	125
130	65.8	263.8	113,600	123,900	66.9	262.1	99,400	99,400	130
135	64.6	261.3	105,300	120,500	65.7	259.5	97,300	97,300	135
140	63.5	258.7	97,600	117,300	64.6	256.9	95,300	95,300	140
145	62.3	255.9	90,400	114,200	63.4	254.1	93,400	93,400	145
150	61.2	253.0	83,700	111,300	62.2	251.1	86,800	91,600	150
155	60.0	249.9	77,500	108,600	61.0	248.0	80,400	89,900	155
160	58.8	246.7	71,600	106,000	59.8	244.8	74,400	88,200	160
165	57.5	243.4	66,100	103,500	58.6	241.4	68,700	86,700	165
170	56.3	239.8	60,900	101,200	57.3	237.9	63,400	85,200	170
175	55.0	236.2	56,000	99,000	56.1	234.2	58,400	83,800	175
180	53.8	232.3	51,400	96,800	54.8	230.3	53,700	82,400	180
190	51.1	224.1	42,900	92,900	52.1	221.9	44,900	79,800	190
200	48.4	215.0	35,300	89,300	49.3	212.8	37,000	77,500	200
210	45.5	205.0	28,300	86,000	46.4	202.6	29,900	75,400	210
220	42.5	193.9	22,000	83,000	43.4	191.4	23,300	73,500	220
230	39.3	181.5	16,100	80,300	40.1	178.8	17,300	71,800	230
240	35.8	167.5	10,700	77,900	36.6	164.6	11,700	70,300	240
250	32.0	151.4		75,700	32.6	148.2	6,500	69,000	250
260	27.6	132.4		72,400	28.2	128.7		68,100	260
270	22.4	108.8		66,400					270

MLC650 VPC-MAX S-1

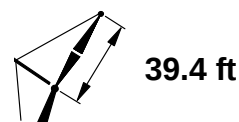
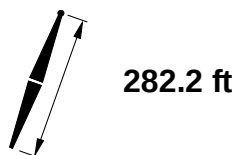
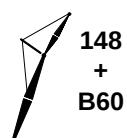
ASME B30.5

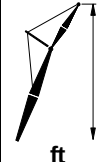
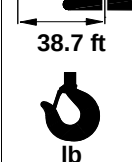
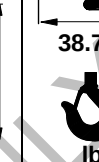
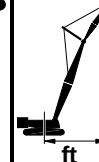


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
55		82.4	308.5	143,300	143,300				55
60		81.4	307.6	143,300	143,300				60
65		80.4	306.6	143,300	143,300				65
70		79.5	305.6	143,300	143,300				70
75		78.5	304.4	143,300	143,300				75
80		77.5	303.2	143,300	143,300				80
85		76.5	301.9	143,300	143,300				85
90		75.5	300.5	143,300	143,300				90
95		74.6	298.9	143,300	143,300				95
100		73.6	297.3	143,300	143,300				100
105		72.6	295.6	143,300	143,300				105
110		71.6	293.8	142,900	142,900				110
115		70.5	291.9	140,800	141,100				115
120		69.5	289.9	130,100	137,200				120
125		68.5	287.8	120,200	133,300				125
130		67.5	285.6	111,200	129,500				130
135		66.4	283.3	102,800	126,000				135
140		65.4	280.8	95,100	122,700				140
145		64.3	278.3	87,900	119,600				145
150		63.2	275.6	81,200	116,600				150
155		62.1	272.8	74,900	113,800				155
160		61.0	269.9	69,100	111,100				160
165		59.9	266.9	63,500	108,600				165
170		58.8	263.7	58,400	106,200				170
175		57.7	260.3	53,500	103,900				175
180		56.5	256.9	48,900	101,700				180
190		54.2	249.5	40,400	97,500				190
200		51.7	241.4	32,700	93,800				200
210		49.2	232.6	25,800	90,400				210
220		46.6	222.9	19,400	87,200				220
230		43.8	212.3	13,600	84,400				230
240		40.9	200.6	8,300	81,700				240
250		37.8	187.5		76,600				250
260		34.4	172.8		70,300				260
270		30.7	156.0		64,400				270
280		26.5	136.1		58,900				280
290		21.4	111.4		53,700				290

MLC650 VPC-MAX S-1

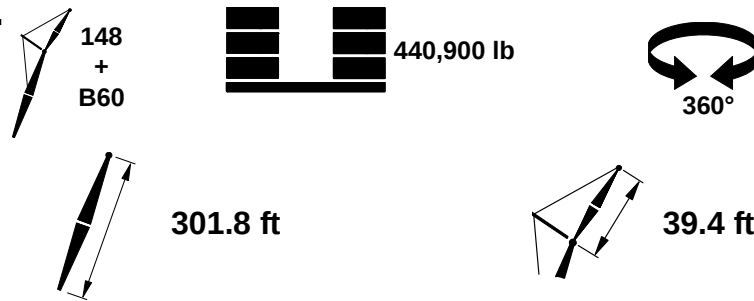
ASME B30.5

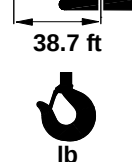
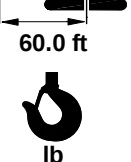
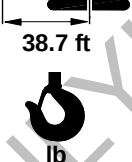


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
55		82.8	328.4	143,300	143,300				55
60		81.9	327.6	143,300	143,300				60
65		81.0	326.7	143,300	143,300				65
70		80.1	325.7	143,300	143,300				70
75		79.2	324.6	143,300	143,300				75
80		78.3	323.5	143,300	143,300				80
85		77.4	322.2	143,300	143,300				85
90		76.5	320.9	143,300	143,300				90
95		75.5	319.5	143,300	143,300				95
100		74.6	318.0	143,300	143,300				100
105		73.7	316.4	143,300	143,300				105
110		72.7	314.7	143,300	143,300				110
115		71.8	313.0	142,900	142,900				115
120		70.8	311.1	141,200	141,200				120
125		69.9	309.1	131,600	138,800				125
130		68.9	307.1	121,900	135,000				130
135		68.0	304.9	112,900	131,400				135
140		67.0	302.7	104,600	128,000				140
145		66.0	300.3	96,800	124,800				145
150		65.0	297.8	89,600	121,800				150
155		64.0	295.3	82,900	118,900				155
160		63.0	292.6	76,600	116,200				160
165		62.0	289.8	70,700	113,600				165
170		60.9	286.9	65,100	111,100				170
175		59.9	283.8	59,900	108,700				175
180		58.8	280.6	55,000	106,400				180
190		56.7	273.9	45,800	102,200				190
200		54.5	266.6	37,600	98,300				200
210		52.2	258.7	30,200	94,600				210
220		49.9	250.1	23,500	91,400				220
230		47.4	240.7	17,300	87,200				230
240		44.9	230.5	11,600	79,800				240
250		42.2	219.3		72,900				250
260		39.4	207.0		66,600				260
270		36.4	193.3		60,800				270
280		33.1	177.9		55,300				280
290		29.5	160.3		50,200				290
300		25.4	139.6		45,400				300
310		20.5	113.8		40,900				310

MLC650 VPC-MAX S-1

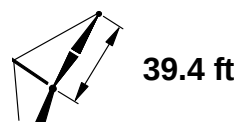
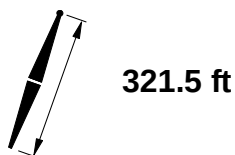
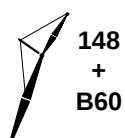
ASME B30.5

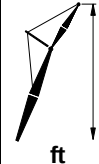
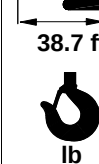
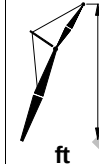
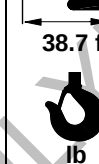
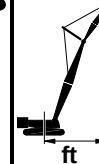


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
60	82.4	347.5	143,300	143,300	82.5	345.0	142,100	142,100	60
65	81.5	346.7	143,300	143,300	81.7	344.1	141,800	141,800	65
70	80.7	345.8	143,300	143,300	80.8	343.1	139,600	139,600	70
75	79.8	344.8	143,300	143,300	80.0	342.0	136,000	136,000	75
80	79.0	343.7	143,300	143,300	79.1	340.8	132,700	132,700	80
85	78.1	342.5	143,300	143,300	78.2	339.6	129,400	129,400	85
90	77.3	341.3	143,300	143,300	77.4	338.2	126,400	126,400	90
95	76.4	339.9	143,300	143,300	76.5	336.8	123,400	123,400	95
100	75.5	338.5	143,300	143,300	75.6	335.3	120,600	120,600	100
105	74.6	337.0	143,300	143,300	74.7	333.7	118,000	118,000	105
110	73.8	335.5	143,300	143,300	73.8	332.1	115,500	115,500	110
115	72.9	333.8	143,300	143,300	72.9	330.3	113,100	113,100	115
120	72.0	332.1	139,600	142,800	72.0	328.5	110,800	110,800	120
125	71.1	330.2	129,000	141,200	71.1	326.6	108,600	108,600	125
130	70.2	328.3	119,300	139,600	70.2	324.5	106,500	106,500	130
135	69.3	326.3	110,300	136,600	69.3	322.4	104,500	104,500	135
140	68.4	324.2	101,900	133,200	68.4	320.2	98,100	102,600	140
145	67.5	322.0	94,200	129,900	67.5	317.9	90,700	100,700	145
150	66.6	319.7	86,900	126,800	66.5	315.5	83,800	99,000	150
155	65.6	317.3	80,200	123,800	65.6	313.0	77,300	97,300	155
160	64.7	314.8	73,900	121,000	64.6	310.4	71,200	95,700	160
165	63.7	312.2	68,000	118,300	63.7	307.7	65,500	94,100	165
170	62.8	309.5	62,400	115,800	62.7	304.8	60,100	92,600	170
175	61.8	306.7	57,100	113,300	61.7	301.9	55,100	91,100	175
180	60.9	303.8	52,200	111,000	59.7	295.7	45,700	88,400	180
190	58.9	297.6	43,100	106,600	57.7	288.9	37,300	85,900	190
200	56.9	290.9	34,900	102,600	55.6	281.6	29,600	83,500	200
210	54.8	283.7	27,400	98,900	53.5	273.8	22,700	81,400	210
220	52.7	275.9	20,700	92,900	51.3	265.3	16,300	79,300	220
230	50.5	267.5	14,500	84,800	49.0	256.1	10,400	77,500	230
240	48.2	258.4	8,800	77,400	46.6	246.2		71,700	240
250	45.9	248.5		70,600	44.1	235.3		65,300	250
260	43.4	237.8		64,300	41.5	223.5		59,400	260
270	40.8	226.1		58,500	38.7	210.4		53,800	270
280	38.1	213.2		53,100	35.8	195.9		48,600	280
290	35.2	198.9		48,000	32.6	179.5		43,800	290
300	32.0	182.8		43,300	29.0	160.8		39,200	300
310	28.5	164.5		38,800					310
320	24.5	142.9		34,600					320
330	19.7	116.0		30,600					330

MLC650 VPC-MAX S-1

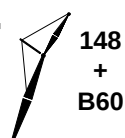
ASME B30.5



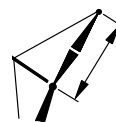
	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
60		82.8	367.5	143,300	143,300				60
65		82.0	366.7	143,300	143,300				65
70		81.2	365.8	143,300	143,300				70
75		80.4	364.8	143,300	143,300				75
80		79.6	363.8	143,300	143,300				80
85		78.8	362.7	143,300	143,300				85
90		78.0	361.5	143,300	143,300				90
95		77.1	360.3	143,300	143,300				95
100		76.3	359.0	143,300	143,300				100
105		75.5	357.6	143,300	143,300				105
110		74.7	356.1	143,300	143,300				110
115		73.8	354.5	143,300	143,300				115
120		73.0	352.9	135,000	143,300				120
125		72.2	351.2	124,400	142,600				125
130		71.3	349.4	114,600	141,000				130
135		70.5	347.5	105,500	139,500				135
140		69.6	345.5	97,200	138,100				140
145		68.8	343.5	89,400	134,900				145
150		67.9	341.3	82,200	131,700				150
155		67.0	339.1	75,400	128,700				155
160		66.2	336.8	69,100	125,800				160
165		65.3	334.3	63,100	123,100				165
170		64.4	331.8	57,500	120,400				170
175		63.5	329.2	52,300	117,900				175
180		62.6	326.5	47,300	115,500				180
190		60.8	320.7	38,200	111,100				190
200		58.9	314.6	29,900	106,900				200
210		57.0	307.9	22,500	97,800				210
220		55.1	300.8	15,700	89,000				220
230		53.1	293.1	9,500	80,900				230
240		51.0	284.9		73,500				240
250		48.9	276.0		66,700				250
260		46.7	266.4		60,400				260
270		44.4	256.0		54,600				270
280		42.0	244.8		49,200				280
290		39.5	232.5		44,100				290
300		36.9	219.1		39,400				300
310		34.0	204.2		35,000				310
320		30.9	187.5		30,800				320
330		27.5	168.4		26,900				330
340		23.6	146.0		23,100				340
350		18.9	118.1		19,500				350

MLC650 VPC-MAX S-1

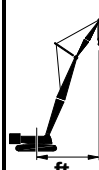
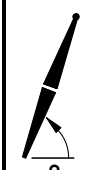
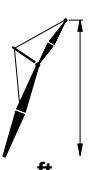
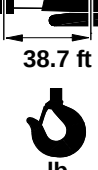
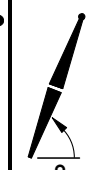
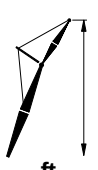
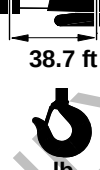
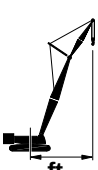
ASME B30.5



341.2 ft

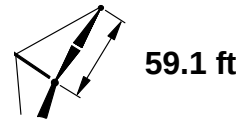
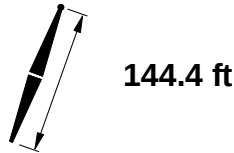


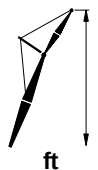
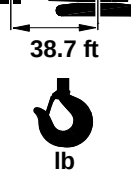
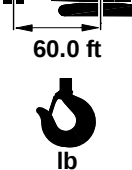
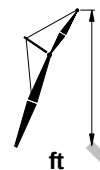
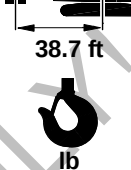
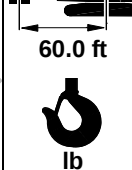
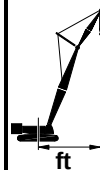
39.4 ft

	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
65	82.4	386.6	143,300	143,300	82.6	384.1	140,500	140,500	65
70	81.7	385.8	143,300	143,300	81.8	383.2	140,300	140,300	70
75	80.9	384.9	143,300	143,300	81.0	382.2	139,600	139,600	75
80	80.1	383.9	143,300	143,300	80.2	381.2	137,300	137,300	80
85	79.4	382.9	143,300	143,300	79.5	380.0	134,200	134,200	85
90	78.6	381.8	143,300	143,300	78.7	378.9	131,300	131,300	90
95	77.8	380.6	143,300	143,300	77.9	377.6	128,500	128,500	95
100	77.1	379.3	143,300	143,300	77.1	376.3	125,800	125,800	100
105	76.3	378.0	143,300	143,300	76.4	374.9	123,200	123,200	105
110	75.5	376.6	143,300	143,300					110
115	74.7	375.1	143,000	143,000	75.6	373.4	120,800	120,800	115
120	73.9	373.6	142,800	142,800	74.8	371.8	118,400	118,400	120
125	73.1	372.0	137,400	142,600	74.0	370.2	116,100	116,100	125
130	72.3	370.3	127,000	142,200	73.2	368.5	114,000	114,000	130
135	71.5	368.5	117,300	140,700	72.4	366.7	111,900	111,900	135
140	70.7	366.6	108,400	139,400	71.6	364.9	109,900	109,900	140
145	69.9	364.7	100,100	138,000	70.8	362.9	104,500	108,000	145
150	69.1	362.7	92,300	136,400	70.0	360.9	96,500	106,100	150
155	68.3	360.6	85,100	133,400	69.1	358.8	89,100	104,400	155
160	67.5	358.4	78,400	130,500	68.3	356.6	82,200	102,700	160
165	66.7	356.1	72,000	127,700	67.5	354.3	75,700	101,100	165
170	65.8	353.8	66,100	125,000	66.6	351.9	69,600	99,400	170
175	65.0	351.3	60,400	122,400	65.8	349.5	63,800	98,000	175
180	64.2	348.8	55,100	120,000	65.0	346.9	58,400	96,400	180
190	62.4	343.4	45,400	115,400	63.2	341.5	48,400	93,700	190
200	60.7	337.7	36,600	105,100	61.5	335.8	39,400	91,100	200
210	58.9	331.5	28,700	95,400	59.7	329.6	31,300	88,700	210
220	57.1	324.9	21,500	86,500	57.9	322.9	23,900	86,400	220
230	55.3	317.9	14,900	78,400	56.1	315.8	17,100	80,100	230
240	53.4	310.3	8,900	71,100	54.2	308.2	10,900	72,600	240
250	51.5	302.2		64,300	52.2	300.0		65,600	250
260	49.5	293.5		58,000	50.2	291.2		59,300	260
270	47.4	284.2		52,200	48.1	281.8		53,300	270
280	45.3	274.1		46,800	46.0	271.7		47,900	280
290	43.1	263.3		41,800	43.7	260.8		42,700	290
300	40.8	251.6		37,100	41.4	248.9		37,900	300
310	38.3	238.8		32,700	38.9	236.0		33,400	310
320	35.7	224.8		28,600	36.3	221.8		29,200	320
330	33.0	209.3		24,700	33.5	206.1		25,200	330
340	30.0	192.0		21,000	30.4	188.5		21,400	340
350	26.6	172.2		17,500	27.0	168.3		17,800	350
360	22.8	148.9		13,900					360
370	18.2	120.0		9,700					370

MLC650 VPC-MAX S-1

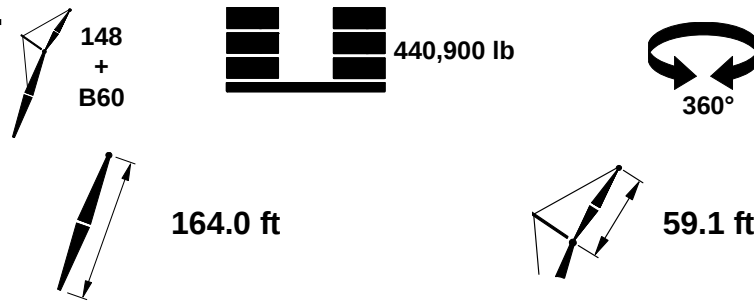
ASME B30.5

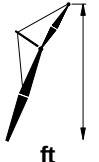
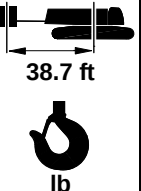
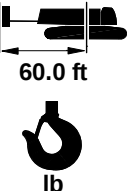
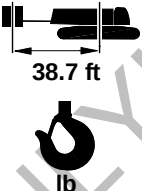
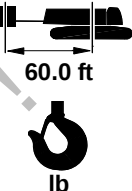


	10°					20°				
										
	ft	°	ft	38.7 ft lb	60.0 ft lb	ft	°	ft	38.7 ft lb	60.0 ft lb
45		82.9	210.0	113,700 ^c	113,700 ^c					
50		81.5	208.9	110,600 ^b	110,600 ^b					
55		80.1	207.7	107,600 ^b	107,600 ^b	82.5	205.5	91,200 ^c	91,200 ^c	55
60		78.6	206.4	104,700	104,700	81.1	204.2	87,100 ^b	87,100 ^b	60
65		77.1	204.9	102,000	102,000	79.6	202.7	83,300 ^b	83,300 ^b	65
70		75.7	203.3	99,500	99,500	78.1	201.1	79,800	79,800	70
75		74.2	201.5	97,200	97,200	76.6	199.3	76,700	76,700	75
80		72.7	199.6	94,800	94,800	75.1	197.4	73,800	73,800	80
85		71.1	197.6	92,700	92,700	73.5	195.3	71,100	71,100	85
90		69.6	195.3	89,000	89,000	72.0	193.1	68,700	68,700	90
95		68.0	193.0	85,300	85,300	70.4	190.6	66,300	66,300	95
100		66.5	190.4	82,000	82,000	68.8	188.1	64,200	64,200	100
105		64.9	187.7	78,800	78,800	67.2	185.3	62,200	62,200	105
110		63.2	184.8	75,900	75,900	65.5	182.3	60,300	60,300	110
115		61.6	181.7	73,300	73,300	63.8	179.2	58,600	58,600	115
120		59.9	178.4	70,800	70,800	62.1	175.8	57,000	57,000	120
125		58.2	174.8	68,500	68,500	60.4	172.2	55,500	55,500	125
130		56.4	171.1	66,300	66,300	58.6	168.4	54,100	54,100	130
135		54.6	167.0	64,300	64,300	56.8	164.3	52,700	52,700	135
140		52.8	162.8	62,400	62,400	54.9	160.0	51,500	51,500	140
145		50.8	158.2	60,600	60,600	52.9	155.3	50,300	50,300	145
150		48.9	153.3	59,000	59,000	50.9	150.3	49,200	49,200	150
155		46.8	148.0	57,400	57,400	48.8	145.0	48,100	48,100	155
160		44.7	142.4	56,000	56,000	46.7	139.2	47,200	47,200	160
165		42.5	136.3	54,600	54,600	44.4	132.9	46,300	46,300	165
170		40.2	129.7	53,300	53,300	42.0	126.1	45,500	45,500	170
175		37.7	122.4	52,100	52,100	39.4	118.6	44,700	44,700	175
180		35.0	114.5	51,000	51,000	36.7	110.4	44,000	44,000	180
190		29.0	95.5	49,000	49,000	30.3	90.4	42,900	42,900	190
200		21.1	69.1	47,500	47,500					200

MLC650 VPC-MAX S-1

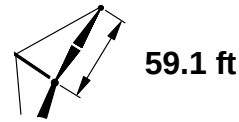
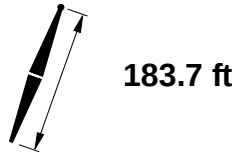
ASME B30.5

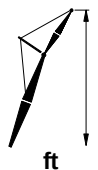
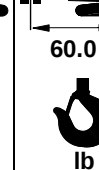
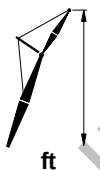
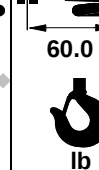
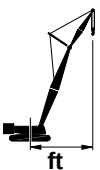


	10°					20°				
										
	ft	°	ft	38.7 ft lb	60.0 ft lb	ft	°	ft	38.7 ft lb	60.0 ft lb
50	82.3	229.0	111,900b	111,900b						
55	81.0	227.9	109,100	109,100						
60	79.6	226.7	106,500	106,500	81.9	224.5	89,200	89,200		
65	78.3	225.3	103,900	103,900	80.6	223.1	85,600	85,600		
70	77.0	223.9	101,500	101,500	79.2	221.6	82,300	82,300		
75	75.6	222.3	99,300	99,300	77.8	220.0	79,300	79,300		
80	74.3	220.6	97,100	97,100	76.5	218.3	76,400	76,400		
85	72.9	218.7	95,100	95,100	75.1	216.4	73,800	73,800		
90	71.5	216.7	93,100	93,100	73.7	214.4	71,400	71,400		
95	70.1	214.6	90,300	90,300	72.3	212.3	69,100	69,100		
100	68.7	212.3	86,800	86,800	70.9	210.0	67,000	67,000		
105	67.3	209.9	83,600	83,600	69.4	207.5	65,000	65,000		
110	65.8	207.3	80,700	80,700	68.0	204.9	63,100	63,100		
115	64.4	204.6	77,900	77,900	66.5	202.1	61,400	61,400		
120	62.9	201.7	75,300	75,300	65.0	199.2	59,800	59,800		
125	61.4	198.6	72,900	72,900	63.4	196.0	58,200	58,200		
130	59.9	195.3	70,700	70,700	61.9	192.7	56,800	56,800		
135	58.3	191.8	68,600	68,600	60.3	189.2	55,400	55,400		
140	56.7	188.1	66,600	66,600	58.7	185.4	54,100	54,100		
145	55.1	184.2	64,800	64,800	57.0	181.5	52,900	52,900		
150	53.4	180.1	63,000	63,000	55.3	177.2	51,800	51,800		
155	51.7	175.7	61,400	61,400	53.6	172.8	50,600	50,600		
160	49.9	171.0	59,900	59,900	51.8	168.0	49,600	49,600		
165	48.1	166.0	58,400	58,400	50.0	162.9	48,700	48,700		
170	46.3	160.7	57,000	57,000	48.0	157.5	47,800	47,800		
175	44.3	155.1	55,700	55,700	46.1	151.7	46,900	46,900		
180	42.3	149.0	54,500	54,500	44.0	145.5	46,200	46,200		
190	38.0	135.3	52,300	52,300	39.5	131.4	44,700	44,700		
200	33.1	119.1	50,300	50,300	34.5	114.6	43,500	43,500		
210	27.3	98.8	48,600	48,600	28.3	93.3	42,700	42,700		
220	19.6	70.7	42,200	47,300						

MLC650 VPC-MAX S-1

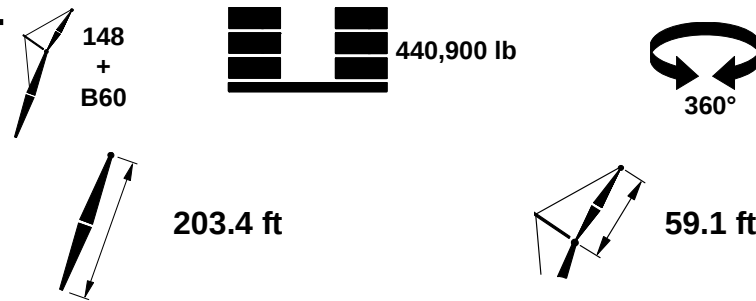
ASME B30.5

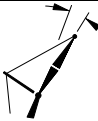
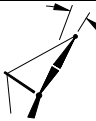
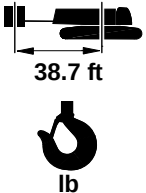
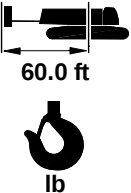
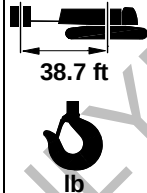
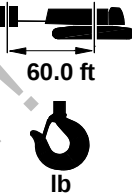


	10°					20°				
										
	ft	°	ft	38.7 ft lb	60.0 ft lb	ft	°	ft	38.7 ft lb	60.0 ft lb
50		82.9	249.0	113,100	113,100					
55		81.7	248.0	110,500	110,500					
60		80.5	246.9	107,900	107,900	82.6	244.6	91,100	91,100	
65		79.3	245.7	105,600	105,600	81.4	243.4	87,700	87,700	
70		78.1	244.3	103,300	103,300	80.1	242.0	84,500	84,500	
75		76.8	242.9	101,200	101,200	78.9	240.6	81,500	81,500	
80		75.6	241.3	99,100	99,100	77.6	239.0	78,800	78,800	
85		74.4	239.7	97,100	97,100	76.4	237.3	76,200	76,200	
90		73.1	237.8	95,200	95,200	75.1	235.5	73,800	73,800	
95		71.8	235.9	93,400	93,400	73.8	233.5	71,500	71,500	
100		70.6	233.9	91,400	91,400	72.5	231.4	69,500	69,500	
105		69.3	231.7	88,200	88,200	71.2	229.2	67,500	67,500	
110		68.0	229.3	85,100	85,100	69.9	226.9	65,600	65,600	
115		66.7	226.9	82,300	82,300	68.6	224.4	63,900	63,900	
120		65.3	224.3	79,700	79,700	67.2	221.7	62,300	62,300	
125		64.0	221.5	77,200	77,200	65.9	218.9	60,700	60,700	
130		62.6	218.6	74,900	74,900	64.5	216.0	59,300	59,300	
135		61.2	215.5	72,700	72,700	63.1	212.9	57,900	57,900	
140		59.8	212.2	70,600	70,600	61.7	209.6	56,600	56,600	
145		58.4	208.8	68,800	68,800	60.2	206.1	55,300	55,300	
150		56.9	205.2	66,900	66,900	58.7	202.4	54,100	54,100	
155		55.5	201.4	65,200	65,200	57.2	198.5	53,100	53,100	
160		53.9	197.3	63,600	63,600	55.7	194.4	52,000	52,000	
165		52.4	193.1	62,100	62,100	54.1	190.1	51,000	51,000	
170		50.8	188.6	60,600	60,600	52.5	185.5	50,100	50,100	
175		49.2	183.8	59,200	59,200	50.9	180.7	49,100	49,100	
180		47.5	178.8	57,900	57,900	49.2	175.6	48,300	48,300	
190		44.0	167.7	55,500	55,500	45.6	164.3	46,800	46,800	
200		40.2	155.2	51,700	53,300	41.7	151.4	45,400	45,400	
210		36.0	140.7	44,600	51,400	37.4	136.5	44,200	44,200	
220		31.3	123.4	38,100	49,700	32.5	118.6	39,100	43,200	
230		25.8	102.0	31,900	48,200					

MLC650 VPC-MAX S-1

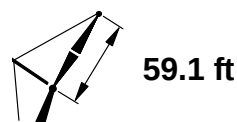
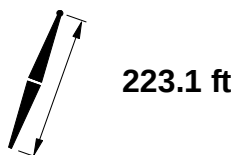
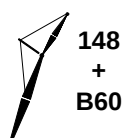
ASME B30.5

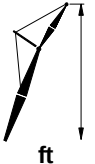
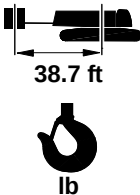
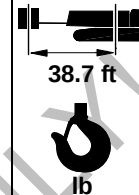
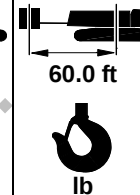


	 10°				 20°						
	 ft	 °	 ft	 38.7 ft lb	 60.0 ft lb	 °	 ft	 38.7 ft lb		 60.0 ft lb	 ft
55	82.3	268.0	111,400	111,400							55
60	81.2	267.0	109,100	109,100							60
65	80.1	265.9	106,900	106,900	82.0	263.6	89,400	89,400			65
70	79.0	264.7	104,700	104,700	80.9	262.3	86,400	86,400			70
75	77.8	263.3	102,700	102,700	79.7	261.0	83,500	83,500			75
80	76.7	261.9	100,700	100,700	78.6	259.5	80,800	80,800			80
85	75.6	260.4	98,800	98,800	77.4	258.0	78,300	78,300			85
90	74.4	258.7	97,000	97,000	76.3	256.3	76,000	76,000			90
95	73.3	256.9	95,300	95,300	75.1	254.5	73,800	73,800			95
100	72.1	255.1	93,600	93,600	73.9	252.6	71,700	71,700			100
105	70.9	253.1	92,000	92,000	72.8	250.6	69,800	69,800			105
110	69.7	250.9	89,300	89,300	71.6	248.5	68,000	68,000			110
115	68.5	248.7	86,400	86,400	70.4	246.2	66,200	66,200			115
120	67.3	246.3	83,700	83,700	69.1	243.8	64,600	64,600			120
125	66.1	243.8	81,200	81,200	67.9	241.3	63,000	63,000			125
130	64.9	241.2	78,800	78,800	66.7	238.6	61,600	61,600			130
135	63.6	238.4	76,600	76,600	65.4	235.8	60,200	60,200			135
140	62.4	235.5	74,500	74,500	64.1	232.8	58,900	58,900			140
145	61.1	232.4	72,500	72,500	62.8	229.7	57,600	57,600			145
150	59.8	229.2	70,700	70,700	61.5	226.5	56,400	56,400			150
155	58.5	225.8	68,800	68,800	60.2	223.0	55,300	55,300			155
160	57.1	222.2	67,200	67,200	58.8	219.4	54,200	54,200			160
165	55.8	218.5	65,600	65,600	57.4	215.6	53,200	53,200			165
170	54.4	214.5	64,100	64,100	56.0	211.6	52,200	52,200			170
175	53.0	210.4	62,700	62,700	54.6	207.4	51,300	51,300			175
180	51.5	206.1	61,300	61,300	53.1	203.0	50,400	50,400			180
190	48.5	196.6	55,600	58,700	50.1	193.4	48,800	48,800			190
200	45.4	186.1	47,800	56,400	46.8	182.7	47,200	47,200			200
210	42.0	174.4	40,800	54,400	43.4	170.7	42,600	45,900			210
220	38.4	161.1	34,300	52,400	39.7	157.0	35,800	44,800			220
230	34.4	145.7	28,300	50,800	35.6	141.2	29,500	43,800			230
240	29.8	127.5	22,800	49,300	30.8	122.3	23,600	43,000			240
250	24.4	104.8	17,500	48,000							250

MLC650 VPC-MAX S-1

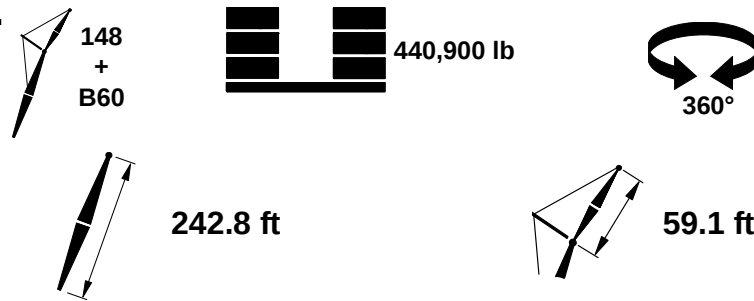
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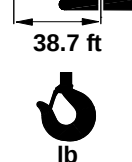
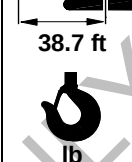
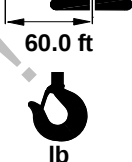


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
55		82.9	288.0	112,100	112,100				55
60		81.8	287.1	109,900	109,900				60
65		80.8	286.1	107,800	107,800				65
70		79.8	284.9	105,800	105,800				70
75		78.7	283.7	103,800	103,800				75
80		77.7	282.4	102,000	102,000				80
85		76.6	280.9	100,200	100,200				85
90		75.6	279.4	98,500	98,500				90
95		74.5	277.8	96,800	96,800				95
100		73.4	276.0	95,200	95,200				100
105		72.3	274.2	93,700	93,700				105
110		71.2	272.2	92,200	92,200				110
115		70.1	270.2	90,200	90,200				115
120		69.0	268.0	87,500	87,500				120
125		67.9	265.7	84,900	84,900				125
130		66.8	263.3	82,600	82,600				130
135		65.7	260.8	80,200	80,200				135
140		64.5	258.1	78,100	78,100				140
145		63.3	255.3	76,000	76,000				145
150		62.2	252.4	74,200	74,200				150
155		61.0	249.4	72,300	72,300				155
160		59.8	246.1	70,600	70,600				160
165		58.5	242.8	69,000	69,000				165
170		57.3	239.3	67,400	67,400				170
175		56.0	235.6	65,900	65,900				175
180		54.8	231.7	62,800	64,500				180
190		52.1	223.4	54,200	61,800				190
200		49.4	214.3	46,500	59,400				200
210		46.5	204.3	39,500	57,200				210
220		43.5	193.1	33,000	55,200				220
230		40.2	180.7	27,100	53,400				230
240		36.7	166.6	21,600	51,700				240
250		32.9	150.4	16,500	50,200				250
260		28.5	131.3	11,700	48,900				260
270		23.2	107.5	7,100	47,800				270

MLC650 VPC-MAX S-1

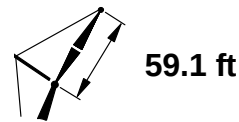
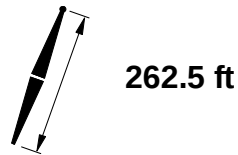
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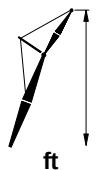
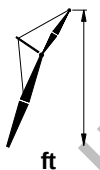
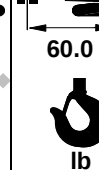
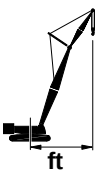


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
60		82.4	307.1	110,500	110,500				60
65		81.4	306.1	108,600	108,600				65
70		80.4	305.1	106,700	106,700				70
75		79.5	303.9	104,900	104,900				75
80		78.5	302.7	103,100	103,100				80
85		77.5	301.4	101,400	101,400				85
90		76.5	300.0	99,800	99,800				90
95		75.5	298.4	98,200	98,200				95
100		74.5	296.8	96,600	96,600				100
105		73.5	295.1	95,200	95,200				105
110		72.5	293.3	93,700	93,700				110
115		71.5	291.4	92,300	92,300				115
120		70.5	289.4	91,000	91,000				120
125		69.5	287.3	88,500	88,500				125
130		68.4	285.1	86,100	86,100				130
135		67.4	282.7	83,700	83,700				135
140		66.3	280.3	81,600	81,600				140
145		65.3	277.7	79,500	79,500				145
150		64.2	275.1	77,600	77,600				150
155		63.1	272.3	75,700	75,700				155
160		62.0	269.3	73,900	73,900				160
165		60.9	266.3	72,200	72,200				165
170		59.8	263.1	68,300	70,600				170
175		58.6	259.8	63,400	69,100				175
180		57.5	256.3	58,700	67,600				180
190		55.1	248.9	50,100	64,800				190
200		52.6	240.8	42,300	62,400				200
210		50.1	231.9	35,300	60,000				210
220		47.5	222.2	28,800	57,900				220
230		44.7	211.6	22,900	56,000				230
240		41.8	199.8	17,500	54,300				240
250		38.6	186.7	12,500	52,600				250
260		35.3	171.9	7,800	51,100				260
270		31.5	154.9		49,800				270
280		27.3	134.9		48,600				280
290		22.2	109.9		47,600				290

MLC650 VPC-MAX S-1

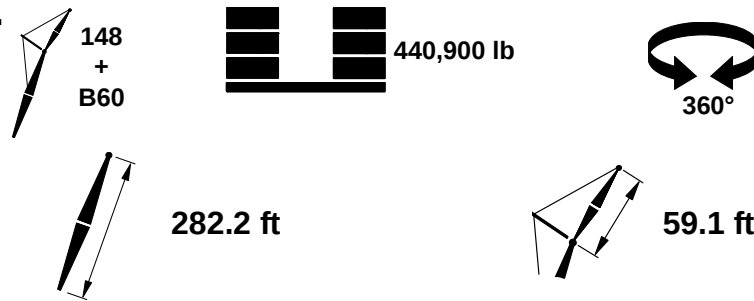
ASME B30.5

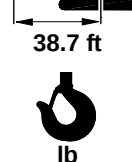
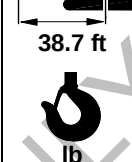
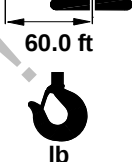


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
60		82.9	327.1	111,100	111,100				60
65		81.9	326.2	109,200	109,200				65
70		81.0	325.2	107,400	107,400				70
75		80.1	324.1	105,700	105,700				75
80		79.2	323.0	104,000	104,000				80
85		78.3	321.7	102,400	102,400				85
90		77.4	320.4	100,800	100,800				90
95		76.4	319.0	99,300	99,300				95
100		75.5	317.5	97,800	97,800				100
105		74.6	315.9	96,400	96,400				105
110		73.6	314.2	95,000	95,000				110
115		72.7	312.4	93,700	93,700				115
120		71.7	310.6	92,500	92,500				120
125		70.8	308.6	91,200	91,200				125
130		69.8	306.5	89,500	89,500				130
135		68.9	304.4	87,100	87,100				135
140		67.9	302.1	84,900	84,900				140
145		66.9	299.8	82,800	82,800				145
150		65.9	297.3	80,800	80,800				150
155		64.9	294.7	78,900	78,900				155
160		63.9	292.0	76,600	77,100				160
165		62.9	289.2	71,000	75,300				165
170		61.8	286.3	65,700	73,700				170
175		60.8	283.2	60,700	72,100				175
180		59.7	280.0	56,000	70,600				180
190		57.6	273.3	47,400	67,800				190
200		55.4	266.0	39,600	65,200				200
210		53.1	258.0	32,600	62,800				210
220		50.7	249.4	26,200	60,700				220
230		48.3	240.0	20,300	58,600				230
240		45.8	229.8	14,900	56,800				240
250		43.1	218.6	9,800	55,000				250
260		40.2	206.2		53,500				260
270		37.2	192.4		52,000				270
280		33.9	177.0		50,700				280
290		30.3	159.2		49,500				290
300		26.2	138.3		48,400				300
310		21.2	112.2		47,500				310

MLC650 VPC-MAX S-1

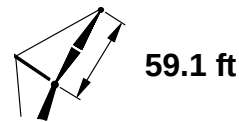
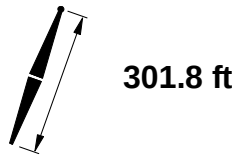
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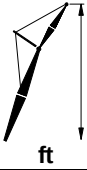
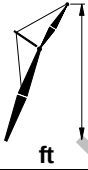


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
65	82.4	346.2	106,600	106,600					65
70	81.6	345.2	105,000	105,000					70
75	80.7	344.2	103,500	103,500	82.2	341.7	90,500	90,500	75
80	79.8	343.1	101,900	101,900	81.3	340.6	88,800	88,800	80
85	79.0	342.0	100,500	100,500	80.4	339.5	86,500	86,500	85
90	78.1	340.7	99,000	99,000	79.6	338.2	84,300	84,300	90
95	77.3	339.4	97,700	97,700	78.7	336.9	82,300	82,300	95
100	76.4	338.0	96,300	96,300	77.8	335.5	80,300	80,300	100
105	75.5	336.5	95,000	95,000	76.9	334.0	78,500	78,500	105
110	74.6	334.9	93,800	93,800	76.1	332.4	76,600	76,600	110
115	73.7	333.3	92,500	92,500	75.2	330.7	74,900	74,900	115
120	72.9	331.5	91,400	91,400	74.3	328.9	73,300	73,300	120
125	72.0	329.7	90,200	90,200	73.4	327.1	71,800	71,800	125
130	71.1	327.8	89,100	89,100	72.5	325.1	70,300	70,300	130
135	70.2	325.8	88,000	88,000	71.5	323.1	68,900	68,900	135
140	69.2	323.7	86,900	86,900	70.6	321.0	67,600	67,600	140
145	68.3	321.5	86,000	86,000	69.7	318.8	66,200	66,200	145
150	67.4	319.2	85,000	85,000	68.8	316.5	65,000	65,000	150
155	66.5	316.8	83,400	83,400	67.8	314.0	63,800	63,800	155
160	65.5	314.3	81,500	81,500	66.9	311.5	62,700	62,700	160
165	64.6	311.7	78,300	79,700	65.9	308.9	61,600	61,600	165
170	63.6	308.9	72,600	78,000	65.0	306.2	60,500	60,500	170
175	62.7	306.1	67,300	76,300	64.0	303.3	59,500	59,500	175
180	61.7	303.2	62,300	74,700	63.0	300.4	58,600	58,600	180
190	59.7	297.0	53,000	71,700	61.0	294.1	56,700	56,800	190
200	57.7	290.3	44,700	69,000	59.0	287.3	48,000	55,100	200
210	55.6	283.1	37,100	66,500	56.9	280.0	40,200	53,500	210
220	53.5	275.2	30,300	64,200	54.7	272.1	33,100	52,000	220
230	51.3	266.8	24,000	62,000	52.5	263.6	26,500	50,600	230
240	49.0	257.7	18,200	60,000	50.2	254.3	20,500	49,400	240
250	46.7	247.8	12,900	58,100	47.8	244.3	14,900	48,300	250
260	44.2	237.0	7,900	56,400	45.3	233.3	9,800	47,200	260
270	41.6	225.3		54,900	42.7	221.4		46,200	270
280	38.9	212.3		53,400	39.9	208.2		45,300	280
290	35.9	197.9		52,000	36.8	193.5		44,500	290
300	32.7	181.8		50,000	33.6	176.9		43,800	300
310	29.2	163.3		45,500	29.9	157.8		43,300	310
320	25.2	141.5		41,200					320
330	20.3	114.3		37,100					330

MLC650 VPC-MAX S-1

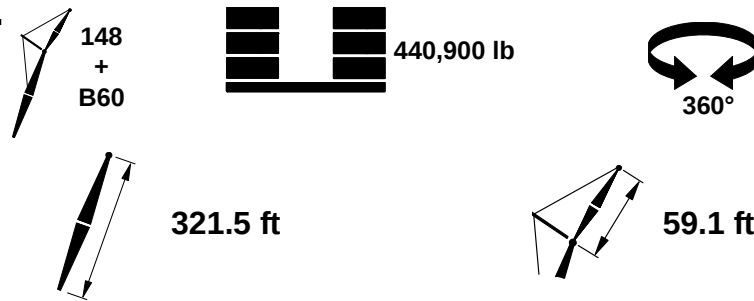
ASME B30.5

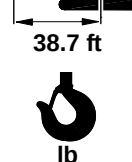
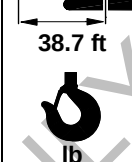
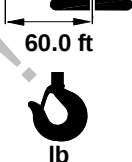


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
65		82.8	366.1	106,900	106,900				65
70		82.0	365.3	105,300	105,300				70
75		81.2	364.3	103,900	103,900				75
80		80.4	363.3	102,500	102,500				80
85		79.6	362.2	101,100	101,100				85
90		78.8	361.0	99,700	99,700				90
95		78.0	359.8	98,400	98,400				95
100		77.1	358.4	97,100	97,100				100
105		76.3	357.0	95,900	95,900				105
110		75.5	355.5	94,600	94,600				110
115		74.7	354.0	93,500	93,500				115
120		73.8	352.3	92,400	92,400				120
125		73.0	350.6	91,300	91,300				125
130		72.1	348.8	90,200	90,200				130
135		71.3	346.9	89,100	89,100				135
140		70.4	345.0	88,100	88,100				140
145		69.6	342.9	87,100	87,100				145
150		68.7	340.7	86,100	86,100				150
155		67.9	338.5	85,200	85,200				155
160		67.0	336.2	84,300	84,300				160
165		66.1	333.8	83,400	83,400				165
170		65.2	331.2	82,500	82,500				170
175		64.3	328.6	81,600	81,600				175
180		63.4	325.9	80,700	80,700				180
190		61.6	320.1	79,800	79,800				190
200		59.7	313.9	78,900	78,900				200
210		57.8	307.3	78,000	78,000				210
220		55.8	300.1	77,100	77,100				220
230		53.8	292.4	76,200	76,200				230
240		51.8	284.2	75,300	75,300				240
250		49.7	275.3	74,400	74,400				250
260		47.5	265.7	73,500	73,500				260
270		45.2	255.3	72,600	72,600				270
280		42.8	244.0	71,700	71,700				280
290		40.3	231.7	70,800	70,800				290
300		37.6	218.2	69,900	69,900				300
310		34.7	203.2	69,000	69,000				310
320		31.6	186.4	68,100	68,100				320
330		28.2	167.2	67,200	67,200				330
340		24.3	144.6	66,300	66,300				340
350		19.5	116.3	65,400	65,400				350

MLC650 VPC-MAX S-1

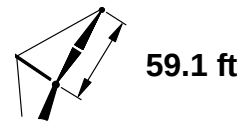
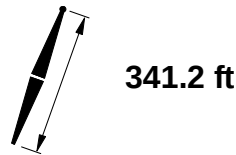
ASME B30.5

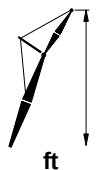
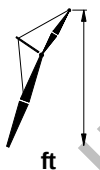
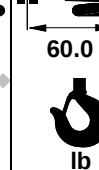
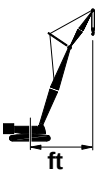


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
70		82.4	385.2	105,500	105,500				70
75		81.7	384.3	104,100	104,100				75
80		80.9	383.4	102,800	102,800				80
85		80.1	382.3	101,400	101,400	82.2	380.8	89,900	85
90		79.4	381.2	100,200	100,200	81.5	379.8	88,900	85
95		78.6	380.0	98,900	98,900	80.7	378.6	87,100	90
100		77.8	378.8	97,700	97,700	79.9	377.5	85,100	95
105		77.0	377.5	96,500	96,500	79.1	376.2	83,300	100
110		76.3	376.1	95,400	95,400	78.3	374.9	81,500	105
115		75.5	374.6	94,300	94,300	77.6	373.5	79,700	110
120		74.7	373.0	93,200	93,200	76.8	372.0	78,100	115
125		73.9	371.4	92,100	92,100	76.0	370.4	76,600	120
130		73.1	369.7	91,100	91,100	75.2	368.8	75,100	125
135		72.3	367.9	90,100	90,100	74.4	367.1	73,600	130
140		71.5	366.1	89,100	89,100	73.6	365.3	72,200	135
145		70.7	364.1	88,200	88,200	72.8	363.4	70,900	140
150		69.9	362.1	87,200	87,200	71.9	361.5	69,600	145
155		69.1	360.0	86,300	86,300	71.1	359.4	68,400	150
160		68.3	357.8	85,400	85,400	70.3	357.3	67,200	155
165		67.4	355.6	84,600	84,600	69.5	355.1	66,100	160
170		66.6	353.2	83,700	83,700	68.6	352.8	65,000	165
175		65.8	350.7	82,800	82,800	67.8	350.4	63,900	170
180		64.9	348.2	81,900	81,900	67.0	348.0	62,900	175
190		63.2	342.8	80,500	80,500	66.1	345.4	61,900	180
200		61.5	337.1	79,400	79,400	65.1	343.0	60,100	190
210		59.7	330.9	78,400	78,400	64.4	340.0	58,300	200
220		57.9	324.3	77,400	77,400	62.6	334.2	56,700	210
230		56.0	317.2	76,500	76,500	60.8	327.9	55,200	220
240		54.2	309.6	75,600	75,600	59.0	321.2	53,800	230
250		52.2	301.5	74,700	74,700	57.2	314.1	52,500	240
260		50.2	292.8	73,800	73,800	55.3	306.4	51,200	250
270		48.2	283.4	72,900	72,900	53.3	298.2	50,100	260
280		46.0	273.3	72,000	72,000	51.3	289.4	49,000	270
290		43.8	262.5	71,100	71,100	49.2	279.9	48,000	280
300		41.5	250.7	70,200	70,200	47.0	269.7	47,000	290
310		39.0	237.9	69,300	69,300	44.8	258.7	45,100	300
320		36.4	223.8	68,400	68,400	42.4	246.7	44,200	310
330		33.6	208.3	67,500	67,500	39.9	233.7	43,300	320
340		30.6	190.9	66,600	66,600	37.3	219.4	42,400	330
350		27.3	171.0	65,700	65,700	34.4	203.5	41,500	340
360		23.4	147.5	64,800	64,800	31.3	185.5	40,600	350
370		18.7	118.1	63,900	63,900	27.8	164.9	39,700	360
				63,000	63,000			38,800	370

MLC650 VPC-MAX S-1

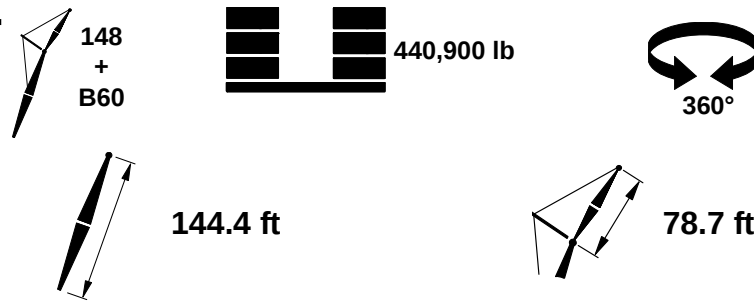
ASME B30.5



	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
70		82.8	405.2	105,500	105,500				70
75		82.1	404.3	104,200	104,200				75
80		81.4	403.4	102,900	102,900				80
85		80.6	402.4	101,700	101,700				85
90		79.9	401.4	100,500	100,500				90
95		79.2	400.2	99,300	99,300				95
100		78.4	399.1	98,200	98,200				100
105		77.7	397.8	97,000	97,000				105
110		77.0	396.5	95,900	95,900				110
115		76.2	395.1	94,900	94,900				115
120		75.5	393.6	93,900	93,900				120
125		74.7	392.1	92,800	92,800				125
130		74.0	390.5	91,800	91,800				130
135		73.2	388.8	90,800	90,800				135
140		72.5	387.0	89,900	89,900				140
145		71.7	385.2	89,000	89,000				145
150		70.9	383.3	88,100	88,100				150
155		70.2	381.3	87,200	87,200				155
160		69.4	379.3	86,200	86,400				160
165		68.6	377.1	79,700	85,500				165
170		67.8	374.9	73,700	84,700				170
175		67.0	372.6	67,900	83,900				175
180		66.2	370.2	62,500	83,100				180
190		64.6	365.2	52,600	80,100				190
200		63.0	359.8	43,700	77,200				200
210		61.4	354.0	35,600	74,500				210
220		59.7	347.9	28,300	72,000				220
230		58.0	341.3	21,600	69,700				230
240		56.2	334.2	15,500	67,500				240
250		54.4	326.8	9,800	65,400				250
260		52.6	318.8		62,600				260
270		50.7	310.2		56,800				270
280		48.8	301.1		51,400				280
290		46.8	291.3		46,300				290
300		44.7	280.8		41,600				300
310		42.5	269.4		37,100				310
320		40.3	257.2		32,900				320
330		37.9	243.9		29,000				330
340		35.4	229.3		25,300				340
350		32.6	213.2		21,800				350
360		29.7	195.1		18,400				360
370		26.4	174.5		15,200				370
380		22.6	150.2		11,500				380

MLC650 VPC-MAX S-1

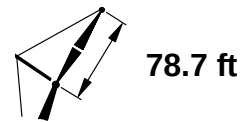
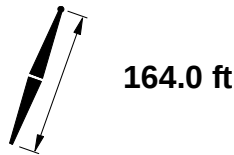
ASME B30.5

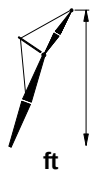
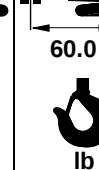
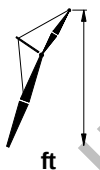
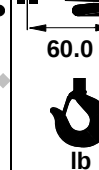
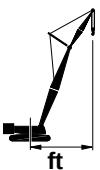


	10°					20°				
	ft	°	ft	lb	lb	ft	lb	lb	ft	
55	81.8	227.9	82,200b	82,200b						55
60	80.5	226.7	80,200b	80,200b						60
65	79.2	225.3	78,100	78,100	82.2	222.8	67,900b	67,900b		65
70	77.8	223.9	76,300	76,300	80.9	221.4	64,900b	64,900b		70
75	76.5	222.3	74,400	74,400	79.5	219.8	62,200	62,200		75
80	75.1	220.6	72,700	72,700	78.2	218.0	59,700	59,700		80
85	73.8	218.7	71,100	71,100	76.8	216.1	57,400	57,400		85
90	72.4	216.7	69,500	69,500	75.4	214.1	55,200	55,200		90
95	71.0	214.6	68,000	68,000	74.0	212.0	53,300	53,300		95
100	69.6	212.3	66,600	66,600	72.5	209.7	51,400	51,400		100
105	68.2	209.9	64,500	64,500	71.1	207.2	49,700	49,700		105
110	66.7	207.3	62,000	62,000	69.6	204.6	48,100	48,100		110
115	65.3	204.6	59,600	59,600	68.1	201.8	46,600	46,600		115
120	63.8	201.7	57,500	57,500	66.6	198.8	45,200	45,200		120
125	62.3	198.6	55,400	55,400	65.1	195.7	43,900	43,900		125
130	60.7	195.3	53,600	53,600	63.5	192.4	42,600	42,600		130
135	59.2	191.8	51,800	51,800	62.0	188.8	41,400	41,400		135
140	57.6	188.1	50,100	50,100	60.3	185.1	40,400	40,400		140
145	55.9	184.2	48,600	48,600	58.7	181.1	39,300	39,300		145
150	54.3	180.1	47,200	47,200	57.0	176.9	38,400	38,400		150
155	52.6	175.7	45,800	45,800	55.2	172.4	37,400	37,400		155
160	50.8	171.0	44,500	44,500	53.4	167.6	36,600	36,600		160
165	49.0	166.0	43,300	43,300	51.6	162.6	35,800	35,800		165
170	47.1	160.7	42,100	42,100	49.7	157.1	35,000	35,000		170
175	45.2	155.0	41,000	41,000	47.7	151.3	34,200	34,200		175
180	43.2	149.0	40,000	40,000	45.6	145.1	33,500	33,500		180
190	38.8	135.3	38,100	38,100	41.1	131.0	32,300	32,300		190
200	33.9	119.1	36,400	36,400	36.0	114.0	31,300	31,300		200
210	28.1	98.8	35,000	35,000	29.9	92.6	30,400	30,400		210
220	20.5	70.6	33,800	33,800						220

MLC650 VPC-MAX S-1

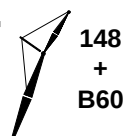
ASME B30.5



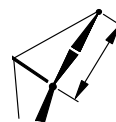
	10°					20°				
										
	ft	°	ft	38.7 ft lb	60.0 ft lb	ft	°	ft	38.7 ft lb	60.0 ft lb
55		82.5	248.0	83,100b	83,100b					
60		81.3	246.9	81,100	81,100					
65		80.1	245.6	79,300	79,300	82.9	243.0	69,300b	69,300b	
70		78.9	244.3	77,500	77,500	81.7	241.7	66,500	66,500	
75		77.6	242.9	75,800	75,800	80.4	240.2	63,900	63,900	
80		76.4	241.3	74,200	74,200	79.2	238.6	61,400	61,400	
85		75.2	239.6	72,600	72,600	77.9	236.9	59,200	59,200	
90		73.9	237.8	71,100	71,100	76.6	235.1	57,100	57,100	
95		72.6	235.9	69,600	69,600	75.4	233.2	55,200	55,200	
100		71.4	233.8	68,200	68,200	74.1	231.1	53,400	53,400	
105		70.1	231.6	66,900	66,900	72.8	228.9	51,700	51,700	
110		68.8	229.3	65,500	65,500	71.5	226.5	50,100	50,100	
115		67.5	226.8	63,100	63,100	70.1	224.0	48,600	48,600	
120		66.1	224.2	61,000	61,000	68.8	221.4	47,200	47,200	
125		64.8	221.5	58,900	58,900	67.4	218.6	45,900	45,900	
130		63.4	218.5	56,900	56,900	66.0	215.6	44,700	44,700	
135		62.0	215.5	55,100	55,100	64.6	212.5	43,500	43,500	
140		60.6	212.2	53,400	53,400	63.2	209.2	42,300	42,300	
145		59.2	208.8	51,800	51,800	61.7	205.7	41,300	41,300	
150		57.7	205.1	50,300	50,300	60.3	202.0	40,300	40,300	
155		56.3	201.3	48,900	48,900	58.7	198.1	39,400	39,400	
160		54.7	197.3	47,500	47,500	57.2	194.0	38,400	38,400	
165		53.2	193.0	46,200	46,200	55.6	189.7	37,600	37,600	
170		51.6	188.5	45,000	45,000	54.0	185.1	36,800	36,800	
175		50.0	183.8	44,000	44,000	52.4	180.2	36,100	36,100	
180		48.3	178.7	42,800	42,800	50.6	175.1	35,300	35,300	
190		44.8	167.7	40,800	40,800	47.0	163.8	34,000	34,000	
200		41.0	155.1	39,000	39,000	43.1	150.9	32,800	32,800	
210		36.8	140.6	37,400	37,400	38.8	135.8	31,800	31,800	
220		32.1	123.3	36,000	36,000	33.9	117.8	31,000	31,000	
230		26.5	101.9	34,700	34,700	28.0	95.0	30,300	30,300	
240		19.1	71.8	33,700	33,700					

MLC650 VPC-MAX S-1

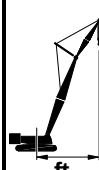
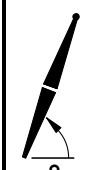
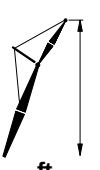
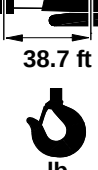
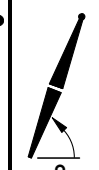
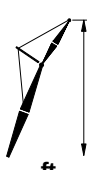
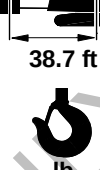
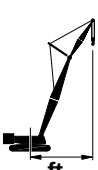
ASME B30.5



183.7 ft

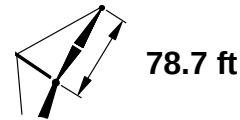
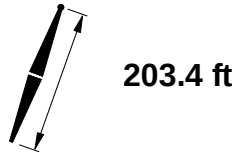


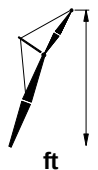
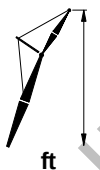
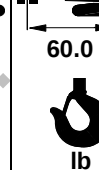
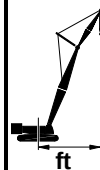
78.7 ft

	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
60		82.0	267.0	82,000	82,000				60
65		80.8	265.8	80,300	80,300				65
70		79.7	264.6	78,600	78,600	82.3	261.9	67,900	70
75		78.6	263.3	77,000	77,000	81.2	260.6	65,400	75
80		77.5	261.9	75,400	75,400	80.0	259.1	63,000	80
85		76.3	260.3	73,900	73,900	78.9	257.6	60,900	85
90		75.2	258.7	72,500	72,500	77.7	255.9	58,800	90
95		74.0	256.9	71,100	71,100	76.5	254.1	57,000	95
100		72.8	255.0	69,700	69,700	75.4	252.2	55,200	100
105		71.7	253.0	68,500	68,500	74.2	250.2	53,500	105
110		70.5	250.9	67,200	67,200	73.0	248.0	51,900	110
115		69.3	248.6	66,100	66,100	71.8	245.8	50,500	115
120		68.1	246.3	64,200	64,200	70.5	243.4	49,100	120
125		66.9	243.8	62,100	62,100	69.3	240.8	47,800	125
130		65.6	241.1	60,100	60,100	68.1	238.2	46,500	130
135		64.4	238.4	58,300	58,300	66.8	235.3	45,300	135
140		63.1	235.4	56,500	56,500	65.5	232.4	44,200	140
145		61.8	232.4	54,900	54,900	64.2	229.3	43,100	145
150		60.5	229.1	53,300	53,300	62.9	226.0	42,100	150
155		59.2	225.7	51,800	51,800	61.6	222.5	41,200	155
160		57.9	222.2	50,400	50,400	60.2	218.9	40,300	160
165		56.5	218.4	49,100	49,100	58.8	215.1	39,400	165
170		55.1	214.5	47,900	47,900	57.4	211.1	38,600	170
175		53.7	210.3	46,700	46,700	56.0	206.9	37,800	175
180		52.3	206.0	45,600	45,600	54.5	202.5	37,100	180
190		49.3	196.6	43,400	43,400	51.4	192.9	35,700	190
200		46.1	186.1	41,500	41,500	48.2	182.1	34,500	200
210		42.7	174.3	39,800	39,800	44.7	170.1	33,300	210
220		39.1	161.0	38,300	38,300	41.0	156.4	32,300	220
230		35.1	145.6	36,800	36,800	36.9	140.4	31,400	230
240		30.5	127.4	32,700	35,500	32.1	121.4	30,700	240
250		25.1	104.7	27,400	34,400				250

MLC650 VPC-MAX S-1

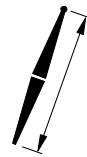
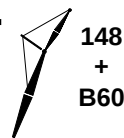
ASME B30.5



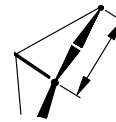
	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
60		82.5	287.0	82,700	82,700				60
65		81.5	286.0	81,000	81,000				65
70		80.5	284.8	79,400	79,400				70
75		79.4	283.6	77,900	77,900				75
80		78.4	282.3	76,400	76,400				80
85		77.3	280.9	75,000	75,000				85
90		76.2	279.3	73,600	73,600				90
95		75.2	277.7	72,300	72,300				95
100		74.1	276.0	71,000	71,000				100
105		73.0	274.1	69,800	69,800				105
110		71.9	272.2	68,700	68,700				110
115		70.8	270.1	67,500	67,500				115
120		69.7	267.9	66,400	66,400				120
125		68.6	265.7	65,200	65,200				125
130		67.5	263.2	63,200	63,200				130
135		66.3	260.7	61,200	61,200				135
140		65.2	258.1	59,500	59,500				140
145		64.0	255.3	57,800	57,800				145
150		62.9	252.3	56,100	56,100				150
155		61.7	249.3	54,700	54,700				155
160		60.5	246.1	53,200	53,200				160
165		59.2	242.7	51,900	51,900				165
170		58.0	239.2	50,500	50,500				170
175		56.7	235.5	49,300	49,300				175
180		55.4	231.6	48,200	48,200				180
190		52.8	223.3	45,900	45,900				190
200		50.1	214.2	44,000	44,000				200
210		47.2	204.2	42,200	42,200				210
220		44.1	193.0	40,200	40,500				220
230		40.9	180.6	34,300	39,000				230
240		37.4	166.5	28,800	37,600				240
250		33.5	150.3	23,700	36,300				250
260		29.1	131.1	18,900	35,200				260
270		23.9	107.3	14,300	34,200				270

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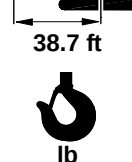
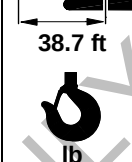
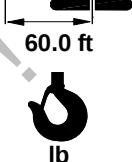
ASME B30.5



223.1 ft

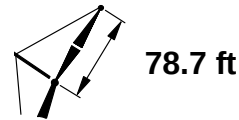
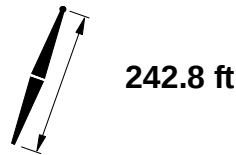


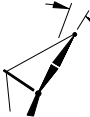
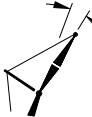
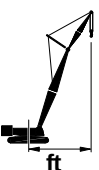
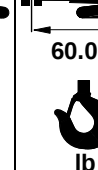
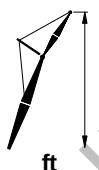
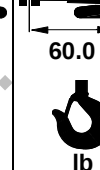
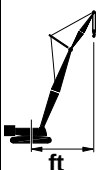
78.7 ft

	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
65	82.1	306.1	81,500	81,500					65
70	81.1	305.0	80,100	80,100					70
75	80.1	303.9	78,600	78,600	82.4	301.0	67,900	67,900	75
80	79.1	302.6	77,200	77,200	81.4	299.8	65,700	65,700	80
85	78.2	301.3	75,800	75,800	80.4	298.4	63,600	63,600	85
90	77.2	299.9	74,600	74,600	79.4	297.0	61,700	61,700	90
95	76.2	298.3	73,300	73,300	78.4	295.4	59,900	59,900	95
100	75.2	296.7	72,100	72,100	77.4	293.8	58,200	58,200	100
105	74.2	295.0	70,900	70,900	76.4	292.1	56,600	56,600	105
110	73.2	293.2	69,800	69,800	75.4	290.3	55,100	55,100	110
115	72.2	291.3	68,700	68,700	74.3	288.3	53,700	53,700	115
120	71.1	289.3	67,600	67,600	73.3	286.3	52,300	52,300	120
125	70.1	287.2	66,600	66,600	72.2	284.2	51,000	51,000	125
130	69.1	285.0	65,500	65,500	71.2	281.9	49,700	49,700	130
135	68.0	282.7	64,000	64,000	70.1	279.6	48,600	48,600	135
140	67.0	280.2	62,200	62,200	69.1	277.1	47,500	47,500	140
145	65.9	277.7	60,500	60,500	68.0	274.5	46,400	46,400	145
150	64.8	275.0	58,900	58,900	66.9	271.8	45,400	45,400	150
155	63.7	272.2	57,300	57,300	65.8	269.0	44,500	44,500	155
160	62.6	269.2	55,800	55,800	64.7	266.0	43,500	43,500	160
165	61.5	266.2	54,500	54,500	63.6	262.9	42,600	42,600	165
170	60.4	263.0	53,100	53,100	62.4	259.7	41,800	41,800	170
175	59.2	259.7	51,900	51,900	61.3	256.3	40,900	40,900	175
180	58.1	256.2	50,600	50,600	60.1	252.8	40,200	40,200	180
190	55.7	248.7	48,400	48,400	57.7	245.2	38,700	38,700	190
200	53.3	240.6	46,300	46,300	55.2	237.0	37,400	37,400	200
210	50.7	231.8	44,500	44,500	52.6	228.0	36,200	36,200	210
220	48.1	222.1	38,600	42,700	49.9	218.1	35,100	35,100	220
230	45.3	211.5	32,700	41,200	47.1	207.3	34,100	34,100	230
240	42.4	199.7	27,300	39,700	44.1	195.2	29,500	33,100	240
250	39.3	186.6	22,200	38,300	40.9	181.8	24,100	32,300	250
260	35.9	171.8	17,500	37,100	37.4	166.5	19,100	31,500	260
270	32.1	154.8	13,100	36,000	33.5	148.9	14,400	30,800	270
280	27.9	134.7	8,900	34,900	29.1	127.8	9,800	30,300	280
290	22.8	109.7		34,100					290

MLC650 VPC-MAX S-1

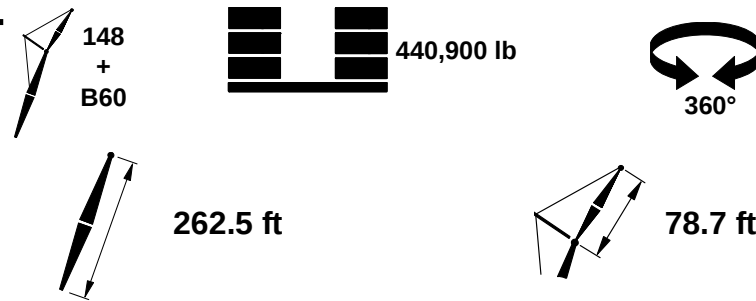
ASME B30.5



	 10°					 20°					
	 ft	 °	 ft	 38.7 ft lb	 60.0 ft lb	 °	 ft	 38.7 ft lb	 60.0 ft lb	 ft	
65		82.6	326.1	82,000	82,000						65
70		81.6	325.1	80,600	80,600						70
75		80.7	324.0	79,200	79,200	82.9	321.1	68,900	68,900		75
80		79.8	322.9	77,900	77,900	81.9	319.9	66,800	66,800		80
85		78.9	321.6	76,600	76,600	81.0	318.7	64,900	64,900		85
90		78.0	320.3	75,400	75,400	80.1	317.4	63,000	63,000		90
95		77.1	318.9	74,200	74,200	79.1	315.9	61,200	61,200		95
100		76.1	317.4	73,000	73,000	78.2	314.4	59,500	59,500		100
105		75.2	315.8	71,900	71,900	77.3	312.8	58,000	58,000		105
110		74.2	314.1	70,800	70,800	76.3	311.1	56,500	56,500		110
115		73.3	312.3	69,700	69,700	75.3	309.3	55,100	55,100		115
120		72.4	310.5	68,700	68,700	74.4	307.4	53,700	53,700		120
125		71.4	308.5	67,700	67,700	73.4	305.4	52,400	52,400		125
130		70.4	306.4	66,800	66,800	72.4	303.4	51,200	51,200		130
135		69.5	304.3	65,800	65,800	71.5	301.2	50,000	50,000		135
140		68.5	302.0	64,900	64,900	70.5	298.9	49,000	49,000		140
145		67.5	299.6	63,500	63,500	69.5	296.5	47,900	47,900		145
150		66.5	297.2	61,500	61,500	68.5	294.0	46,900	46,900		150
155		65.5	294.6	59,900	59,900	67.5	291.4	45,900	45,900		155
160		64.5	291.9	58,400	58,400	66.4	288.7	45,000	45,000		160
165		63.5	289.1	57,000	57,000	65.4	285.8	44,100	44,100		165
170		62.4	286.2	55,600	55,600	64.4	282.9	43,200	43,200		170
175		61.4	283.1	54,300	54,300	63.3	279.8	42,500	42,500		175
180		60.3	279.9	53,100	53,100	62.2	276.5	41,600	41,600		180
190		58.2	273.2	50,700	50,700	60.1	269.7	40,200	40,200		190
200		56.0	265.8	47,900	48,600	57.8	262.3	38,800	38,800		200
210		53.7	257.9	40,900	46,700	55.5	254.2	37,600	37,600		210
220		51.3	249.3	34,400	44,900	53.1	245.4	36,400	36,400		220
230		48.9	239.9	28,500	43,300	50.6	235.9	31,400	35,400		230
240		46.3	229.6	23,100	41,800	48.0	225.5	25,700	34,400		240
250		43.7	218.4	18,000	40,300	45.3	214.0	20,400	33,500		250
260		40.8	206.0	13,400	39,000	42.4	201.4	15,400	32,700		260
270		37.8	192.3	9,000	37,700	39.3	187.2	10,700	31,900		270
280		34.5	176.8		36,600	35.9	171.3		31,200		280
290		30.9	159.0		35,600	32.1	152.8		30,700		290
300		26.7	138.1		34,700	27.8	130.8		30,200		300
310		21.8	111.9		34,000						310

MLC650 VPC-MAX S-1

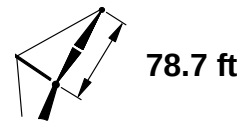
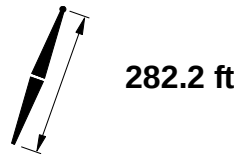
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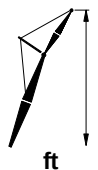
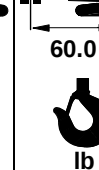
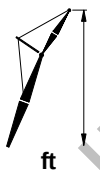
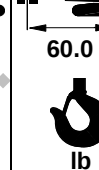
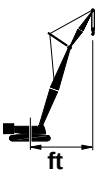


	10°				20°				
	ft	°	ft	lb	ft	°	ft	lb	
65	83.0	346.1	82,300	82,300					65
70	82.1	345.1	80,900	80,900					70
75	81.3	344.1	79,700	79,700					75
80	80.4	343.0	78,400	78,400	82.4	340.1	67,900	67,900	80
85	79.6	341.9	77,200	77,200	81.5	338.9	65,900	65,900	85
90	78.7	340.6	76,100	76,100	80.7	337.6	64,100	64,100	90
95	77.8	339.3	74,900	74,900	79.8	336.3	62,400	62,400	95
100	77.0	337.9	73,800	73,800	78.9	334.9	60,800	60,800	100
105	76.1	336.4	72,700	72,700	78.0	333.4	59,200	59,200	105
110	75.2	334.8	71,700	71,700	77.1	331.8	57,800	57,800	110
115	74.3	333.2	70,700	70,700	76.2	330.1	56,400	56,400	115
120	73.4	331.4	69,700	69,700	75.3	328.3	55,000	55,000	120
125	72.5	329.6	68,700	68,700	74.4	326.5	53,800	53,800	125
130	71.6	327.7	67,800	67,800	73.5	324.6	52,600	52,600	130
135	70.7	325.6	66,800	66,800	72.6	322.5	51,400	51,400	135
140	69.8	323.5	66,000	66,000	71.7	320.4	50,400	50,400	140
145	68.9	321.3	65,100	65,100	70.8	318.2	49,200	49,200	145
150	68.0	319.0	63,900	63,900	69.8	315.8	48,200	48,200	150
155	67.0	316.6	62,400	62,400	68.9	313.4	47,400	47,400	155
160	66.1	314.1	60,800	60,800	67.9	310.9	46,400	46,400	160
165	65.2	311.5	59,400	59,400	67.0	308.3	45,500	45,500	165
170	64.2	308.8	58,000	58,000	66.0	305.5	44,600	44,600	170
175	63.2	306.0	56,700	56,700	65.0	302.7	43,800	43,800	175
180	62.3	303.1	55,400	55,400	64.1	299.7	43,000	43,000	180
190	60.3	296.9	53,000	53,000	62.1	293.4	41,500	41,500	190
200	58.3	290.2	45,200	50,900	60.0	286.6	40,200	40,200	200
210	56.2	282.9	38,100	48,900	57.9	279.3	38,900	38,900	210
220	54.1	275.1	31,600	47,000	55.8	271.4	35,100	37,700	220
230	51.9	266.7	25,700	45,300	53.5	262.8	28,900	36,600	230
240	49.6	257.5	20,300	43,700	51.2	253.5	23,200	35,600	240
250	47.2	247.6	15,300	42,200	48.8	243.5	17,900	34,700	250
260	44.7	236.9	10,600	40,900	46.3	232.5	13,000	33,800	260
270	42.2	225.1		39,600	43.6	220.5	8,400	33,000	270
280	39.4	212.1		38,400	40.8	207.2		32,300	280
290	36.5	197.8		37,300	37.8	192.5		31,600	290
300	33.3	181.6		36,300	34.5	175.8		31,000	300
310	29.7	163.1		35,400	30.8	156.5		30,600	310
320	25.7	141.3		34,600					320
330	20.8	114.0		33,900					330

MLC650 VPC-MAX S-1

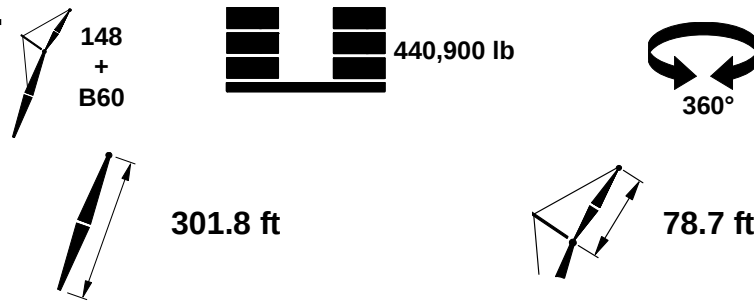
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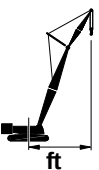
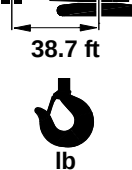
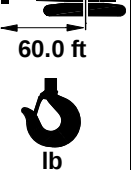
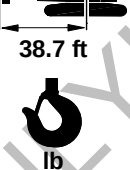


	10°					20°				
										
	ft	°	ft	38.7 ft lb	60.0 ft lb	ft	°	ft	38.7 ft lb	60.0 ft lb
70	82.6	365.1	81,200	81,200	81,200	82.8	360.2	68,800	68,800	68,800
75	81.8	364.2	80,000	80,000	80,000	82.0	359.0	66,900	66,900	66,900
80	81.0	363.2	78,800	78,800	78,800	81.2	357.9	65,200	65,200	65,200
85	80.1	362.1	77,700	77,700	77,700	80.4	356.6	63,500	63,500	63,500
90	79.3	360.9	76,600	76,600	76,600	79.5	355.3	61,900	61,900	61,900
95	78.5	359.6	75,500	75,500	75,500	78.7	353.9	60,400	60,400	60,400
100	77.7	358.3	74,400	74,400	74,400	77.9	352.4	59,000	59,000	59,000
105	76.9	356.9	73,400	73,400	73,400	77.0	350.8	57,600	57,600	57,600
110	76.0	355.4	72,400	72,400	72,400	76.2	349.1	56,300	56,300	56,300
115	75.2	353.9	71,400	71,400	71,400	75.3	347.4	55,100	55,100	55,100
120	74.4	352.2	70,500	70,500	70,500	74.5	345.6	53,900	53,900	53,900
125	73.5	350.5	69,600	69,600	69,600	73.6	343.7	52,700	52,700	52,700
130	72.7	348.7	68,700	68,700	68,700	72.8	341.7	51,600	51,600	51,600
135	71.8	346.8	67,800	67,800	67,800	71.9	339.6	50,600	50,600	50,600
140	71.0	344.8	66,900	66,900	66,900	71.0	337.4	49,600	49,600	49,600
145	70.1	342.8	66,100	66,100	66,100	70.2	335.2	48,600	48,600	48,600
150	69.3	340.6	65,300	65,300	65,300	69.3	332.8	47,700	47,700	47,700
155	68.4	338.4	64,500	64,500	64,500	68.4	330.3	46,800	46,800	46,800
160	67.5	336.1	63,200	63,200	63,200	67.5	327.8	46,000	46,000	46,000
165	66.6	333.6	61,800	61,800	61,800	66.6	325.2	45,200	45,200	45,200
170	65.7	331.1	60,300	60,300	60,300	65.7	322.4	44,300	44,300	44,300
175	64.8	328.5	59,000	59,000	59,000	64.8	316.6	42,800	42,800	42,800
180	63.9	325.8	57,700	57,700	57,700	63.9	310.3	41,500	41,500	41,500
190	62.1	320.0	55,300	55,300	55,300	62.1	303.6	40,200	40,200	40,200
200	60.2	313.8	50,300	53,100	53,100	60.2	296.3	39,000	39,000	39,000
210	58.3	307.2	42,700	51,000	51,000	58.3	288.5	33,000	37,900	37,900
220	56.4	300.0	35,800	49,100	49,100	56.4	280.1	26,900	36,800	36,800
230	54.4	292.3	29,400	47,300	47,300	54.4	271.1	21,300	35,900	35,900
240	52.3	284.0	23,600	45,700	45,700	52.3	261.3	16,100	35,000	35,000
250	50.2	275.1	18,300	44,200	44,200	50.2	250.8	11,200	34,100	34,100
260	48.0	265.5	13,300	42,700	42,700	48.0	239.3	6,600	33,300	33,300
270	45.7	255.1	8,700	41,400	41,400	45.7	226.7		32,600	32,600
280	43.3	243.8		40,200	40,200	43.3	212.8		32,000	32,000
290	40.8	231.5		39,000	39,000	40.8	197.5		31,400	31,400
300	38.1	218.0		38,000	38,000	38.1	180.1		30,900	30,900
310	35.2	203.0		36,900	36,900	35.2	160.1		30,400	30,400
320	32.1	186.2		36,000	36,000	32.1				
330	28.7	167.0		35,200	35,200	28.7				
340	24.8	144.3		34,400	34,400	24.8				
350	20.0	115.9		33,600	33,600	20.0				

MLC650 VPC-MAX S-1

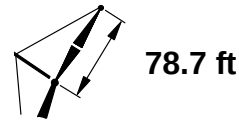
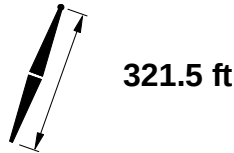
ASME B30.5

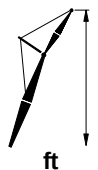
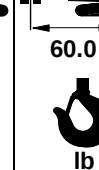
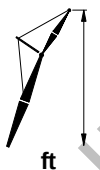
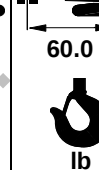
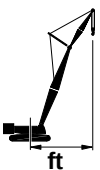


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
70		83.0	385.1	81,300	81,300				70
75		82.2	384.2	80,200	80,200				75
80		81.4	383.2	79,100	79,100				80
85		80.7	382.2	78,000	78,000	82.4	379.1	67,800	85
90		79.9	381.1	77,000	77,000	81.7	378.0	66,200	90
95		79.1	379.9	76,000	76,000	80.9	376.8	64,500	95
100		78.3	378.7	74,900	74,900	80.1	375.6	63,000	100
105		77.6	377.3	74,000	74,000	79.3	374.2	61,500	105
110		76.8	375.9	73,000	73,000	78.5	372.8	60,100	110
115		76.0	374.5	72,100	72,100	77.7	371.3	58,800	115
120		75.2	372.9	71,200	71,200	76.9	369.8	57,500	120
125		74.4	371.3	70,300	70,300	76.1	368.1	56,200	125
130		73.6	369.6	69,400	69,400	75.3	366.4	55,100	130
135		72.8	367.8	68,600	68,600	74.5	364.6	53,900	135
140		72.0	365.9	67,700	67,700	73.7	362.8	52,900	140
145		71.2	364.0	67,000	67,000	72.9	360.8	51,800	145
150		70.4	362.0	66,200	66,200	72.1	358.8	50,800	150
155		69.6	359.9	65,400	65,400	71.3	356.6	49,900	155
160		68.8	357.7	64,700	64,700	70.4	354.4	49,000	160
165		67.9	355.4	63,900	63,900	69.6	352.1	48,000	165
170		67.1	353.1	62,500	62,500	68.8	349.8	47,200	170
175		66.3	350.6	61,200	61,200	67.9	347.3	46,400	175
180		65.4	348.1	59,900	59,900	67.1	344.7	45,600	180
190		63.7	342.7	55,800	57,400	65.3	339.3	44,100	190
200		62.0	336.9	47,400	55,200	63.6	333.5	42,700	200
210		60.2	330.8	39,800	53,100	61.8	327.2	41,400	210
220		58.4	324.1	32,800	51,100	60.0	320.5	37,000	220
230		56.5	317.0	26,500	49,300	58.1	313.3	30,400	230
240		54.7	309.5	20,700	47,600	56.2	305.7	24,300	240
250		52.7	301.3	15,300	46,000	54.2	297.4	18,600	250
260		50.7	292.6	10,400	44,500	52.2	288.6	13,400	260
270		48.7	283.2		43,200	50.1	279.1	8,500	270
280		46.5	273.2		42,000	47.9	268.8		280
290		44.3	262.3		40,700	45.7	257.8		290
300		42.0	250.5		39,600	43.3	245.8		300
310		39.5	237.7		38,500	40.8	232.7		310
320		36.9	223.6		37,500	38.1	218.3		320
330		34.1	208.1		36,600	35.3	202.3		330
340		31.1	190.6		35,100	32.1	184.2		340
350		27.7	170.7		31,500	28.6	163.5		350
360		23.9	147.1		28,100				360
370		19.2	117.7		24,800				370

MLC650 VPC-MAX S-1

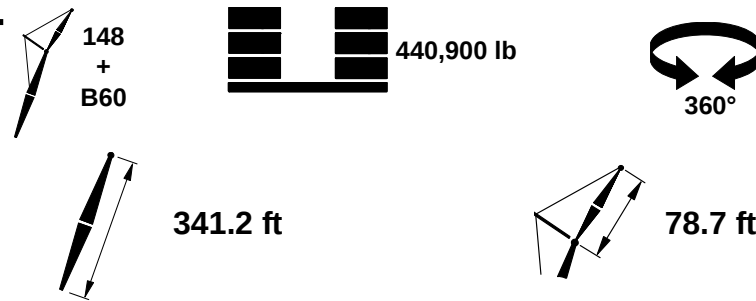
ASME B30.5

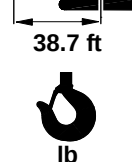
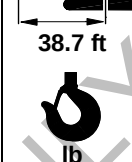
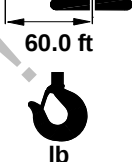


	10°					20°				
										
	ft	°	ft	38.7 ft	60.0 ft	ft	°	ft	38.7 ft	60.0 ft
75	82.6	404.2	80,300	80,300	80,300	82.8	399.2	68,500	68,500	68,500
80	81.9	403.3	79,300	79,300	79,300	82.1	398.1	67,000	67,000	67,000
85	81.1	402.3	78,200	78,200	78,200	81.3	397.0	65,500	65,500	65,500
90	80.4	401.2	77,200	77,200	77,200	80.6	395.8	64,000	64,000	64,000
95	79.7	400.1	76,300	76,300	76,300	79.9	394.5	62,500	62,500	62,500
100	78.9	398.9	75,300	75,300	75,300	79.1	393.2	61,100	61,100	61,100
105	78.2	397.7	74,400	74,400	74,400	78.4	391.8	59,800	59,800	59,800
110	77.4	396.3	73,500	73,500	73,500	77.6	390.3	58,600	58,600	58,600
115	76.7	394.9	72,600	72,600	72,600	76.9	388.8	57,400	57,400	57,400
120	76.0	393.5	71,700	71,700	71,700	76.1	387.2	56,200	56,200	56,200
125	75.2	391.9	70,900	70,900	70,900	75.3	385.5	55,100	55,100	55,100
130	74.5	390.3	70,000	70,000	70,000	74.6	383.7	54,000	54,000	54,000
135	73.7	388.7	69,300	69,300	69,300	73.8	381.8	53,000	53,000	53,000
140	72.9	386.9	68,400	68,400	68,400	73.0	379.9	52,000	52,000	52,000
145	72.2	385.1	67,700	67,700	67,700	72.3	377.9	51,100	51,100	51,100
150	71.4	383.2	66,900	66,900	66,900	71.5	375.8	50,200	50,200	50,200
155	70.6	381.2	66,200	66,200	66,200	70.7	373.7	49,300	49,300	49,300
160	69.9	379.1	65,400	65,400	65,400	69.9	371.4	48,400	48,400	48,400
165	69.1	377.0	64,800	64,800	64,800	69.1	369.1	47,600	47,600	47,600
170	68.3	374.8	64,000	64,000	64,000	68.3	366.7	46,800	46,800	46,800
175	67.5	372.5	63,300	63,300	63,300	66.7	361.6	45,400	45,400	45,400
180	66.7	370.1	60,500	62,000	62,000	65.0	356.2	43,900	43,900	43,900
190	65.1	365.0	51,100	59,500	59,500	63.4	350.3	39,800	42,700	42,700
200	63.5	359.6	42,600	57,200	57,200	61.7	344.1	32,600	41,400	41,400
210	61.8	353.9	35,000	55,100	55,100	59.9	337.5	25,900	40,200	40,200
220	60.2	347.7	28,000	53,100	53,100	58.2	330.4	19,800	39,200	39,200
230	58.4	341.1	21,700	51,200	51,200	56.4	322.8	14,100	38,100	38,100
240	56.7	334.1	15,900	49,500	49,500	54.5	314.7	8,900	37,200	37,200
250	54.9	326.6	10,500	47,900	47,900	52.6	306.0		36,300	36,300
260	53.1	318.6		46,400	46,400	50.6	296.7		35,500	35,500
270	51.2	310.0		45,000	45,000	48.6	286.8		34,700	34,700
280	49.2	300.9		43,600	43,600	46.5	276.1		34,000	34,000
290	47.2	291.1		42,400	42,400	44.3	264.6		33,300	33,300
300	45.2	280.6		41,300	41,300	42.0	252.1		32,700	32,700
310	43.0	269.2		40,200	40,200	39.5	238.4		32,000	32,000
320	40.7	257.0		39,100	39,100	36.9	223.5		31,500	31,500
330	38.3	243.7		35,100	35,100	34.1	206.9		28,800	28,800
340	35.8	229.1		31,400	31,400	31.1	188.2		25,200	25,200
350	33.1	212.9		27,800	27,800	27.6	166.7		21,800	21,800
360	30.1	194.9		24,500	24,500					
370	26.9	174.2		21,200	21,200					
380	23.1	149.8		18,100	18,100					
390	18.5	119.3		15,100	15,100					

MLC650 VPC-MAX S-1

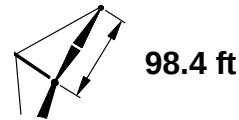
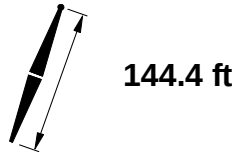
ASME B30.5

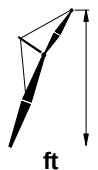
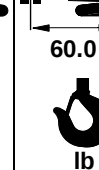
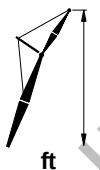
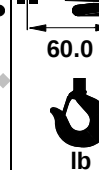
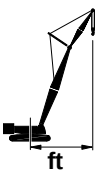


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
75		82.9	424.2	80,200	80,200				75
80		82.2	423.3	79,300	79,300				80
85		81.5	422.3	78,300	78,300				85
90		80.9	421.3	77,400	77,400	82.5	418.2	67,800	90
95		80.2	420.3	76,500	76,500	81.8	417.1	66,400	95
100		79.5	419.1	75,600	75,600	81.1	416.0	64,800	100
105		78.8	417.9	74,700	74,700	80.4	414.8	63,500	105
110		78.1	416.7	73,800	73,800	79.6	413.5	62,100	110
115		77.3	415.4	73,000	73,000	78.9	412.2	60,800	115
120		76.6	414.0	72,100	72,100	78.2	410.8	59,600	120
125		75.9	412.5	71,400	71,400	77.5	409.3	58,400	125
130		75.2	411.0	70,600	70,600	76.8	407.8	57,300	130
135		74.5	409.4	69,800	69,800	76.1	406.2	56,200	135
140		73.8	407.7	69,000	69,000	75.3	404.5	55,100	140
145		73.1	406.0	68,300	68,300	74.6	402.8	54,100	145
150		72.3	404.2	67,500	67,500	73.9	400.9	53,200	150
155		71.6	402.3	66,800	66,800	73.1	399.0	52,200	155
160		70.9	400.4	66,100	66,100	72.4	397.1	51,300	160
165		70.1	398.3	65,500	65,500	71.7	395.0	50,400	165
170		69.4	396.2	64,800	64,800	70.9	392.9	49,600	170
175		68.6	394.1	64,100	64,100	70.2	390.7	48,700	175
180		67.9	391.8	63,500	63,500	69.4	388.5	48,000	180
190		66.4	387.1	58,300	61,600	67.9	383.7	46,500	190
200		64.9	382.0	49,300	59,200	66.3	378.5	45,100	200
210		63.3	376.6	41,200	57,100	64.8	373.1	43,700	210
220		61.7	370.8	33,800	55,000	63.2	367.2	38,500	220
230		60.1	364.6	27,000	53,100	61.6	361.0	31,500	230
240		58.5	358.1	20,800	51,400	59.9	354.4	25,000	240
250		56.8	351.1	15,100	49,700	58.2	347.4	19,000	250
260		55.1	343.7	9,800	48,200	56.5	339.9	13,400	260
270		53.4	335.8		46,700	54.7	331.9	8,300	270
280		51.6	327.4		45,400	52.9	323.4		280
290		49.8	318.5		44,100	51.1	314.3		290
300		47.9	308.9		42,900	49.2	304.6		300
310		45.9	298.7		40,800	47.2	294.2		310
320		43.9	287.7		36,700	45.1	283.1		320
330		41.8	276.0		32,700	43.0	271.1		330
340		39.6	263.2		29,000	40.7	258.1		340
350		37.3	249.4		25,500	38.4	244.0		350
360		34.8	234.3		22,200	35.8	228.5		360
370		32.1	217.6		19,000	33.1	211.4		370
380		29.2	198.9		15,900	30.1	192.0		380
390		26.0	177.6		12,800				390
400		22.3	152.4		9,100				400

MLC650 VPC-MAX S-1

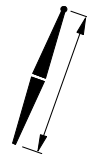
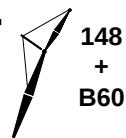
ASME B30.5



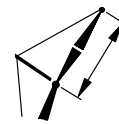
	10°					20°				
										
	ft	°	ft	38.7 ft	60.0 ft	ft	°	ft	38.7 ft	60.0 ft
55		82.9	248.2	66,200b	66,200b					
60		81.6	247.1	64,600b	64,600b					
65		80.4	245.9	63,100b	63,100b					
70		79.2	244.5	61,400	61,400	82.8	242.0	54,100b	54,100b	
75		78.0	243.1	59,900	59,900	81.5	240.5	52,700b	52,700b	
80		76.8	241.5	58,500	58,500	80.3	238.9	51,300	51,300	
85		75.5	239.9	56,900	56,900	79.0	237.2	50,100	50,100	
90		74.3	238.0	55,300	55,300	77.8	235.4	48,300	48,300	
95		73.0	236.1	53,800	53,800	76.5	233.4	46,400	46,400	
100		71.7	234.1	52,400	52,400	75.2	231.4	44,700	44,700	
105		70.4	231.9	51,000	51,000	73.9	229.1	43,000	43,000	
110		69.1	229.6	49,700	49,700	72.6	226.8	41,500	41,500	
115		67.8	227.1	48,400	48,400	71.3	224.3	40,100	40,100	
120		66.5	224.5	47,200	47,200	69.9	221.7	38,800	38,800	
125		65.2	221.7	46,100	46,100	68.6	218.9	37,500	37,500	
130		63.8	218.8	45,000	45,000	67.2	215.9	36,300	36,300	
135		62.4	215.7	43,900	43,900	65.8	212.8	35,200	35,200	
140		61.0	212.5	42,900	42,900	64.3	209.5	34,200	34,200	
145		59.6	209.0	41,900	41,900	62.9	206.0	33,200	33,200	
150		58.1	205.4	40,500	40,500	61.4	202.3	32,300	32,300	
155		56.6	201.6	39,200	39,200	59.9	198.4	31,400	31,400	
160		55.1	197.6	38,000	38,000	58.4	194.3	30,600	30,600	
165		53.6	193.3	36,900	36,900	56.8	190.0	29,800	29,800	
170		52.0	188.8	35,800	35,800	55.2	185.4	29,100	29,100	
175		50.4	184.1	34,800	34,800	53.5	180.6	28,400	28,400	
180		48.7	179.1	33,800	33,800	51.8	175.5	27,700	27,700	
190		45.2	168.0	32,000	32,000	48.2	164.2	26,400	26,400	
200		41.4	155.5	30,400	30,400	44.3	151.3	25,300	25,300	
210		37.3	141.0	28,900	28,900	40.1	136.3	24,300	24,300	
220		32.6	123.8	27,600	27,600	35.2	118.4	23,500	23,500	
230		27.0	102.5	26,500	26,500	29.3	95.7	22,800	22,800	
240		19.6	72.7	25,500	25,500					

MLC650 VPC-MAX S-1

ASME B30.5



164.0 ft

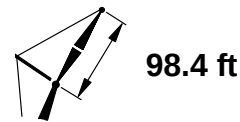
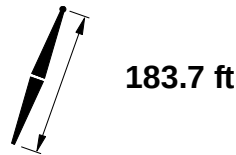


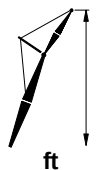
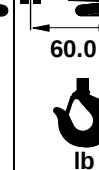
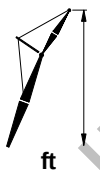
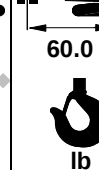
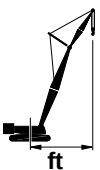
98.4 ft

	10°				20°				
	ft	°	ft	lb	lb	ft	lb	lb	ft
60	82.3	267.2	65,200	65,200					60
65	81.2	266.1	63,800	63,800					65
70	80.0	264.8	62,400	62,400					70
75	78.9	263.5	60,900	60,900	82.2	260.8	53,300	53,300	75
80	77.8	262.1	59,600	59,600	81.1	259.3	52,100	52,100	80
85	76.6	260.5	58,200	58,200	79.9	257.8	50,900	50,900	85
90	75.5	258.9	56,700	56,700	78.8	256.1	49,700	49,700	90
95	74.3	257.1	55,300	55,300	77.6	254.3	47,900	47,900	95
100	73.2	255.2	53,900	53,900	76.4	252.4	46,200	46,200	100
105	72.0	253.2	52,500	52,500	75.2	250.4	44,600	44,600	105
110	70.8	251.1	51,300	51,300	74.0	248.3	43,100	43,100	110
115	69.6	248.9	50,100	50,100	72.8	246.0	41,700	41,700	115
120	68.4	246.5	48,900	48,900	71.6	243.6	40,400	40,400	120
125	67.2	244.0	47,800	47,800	70.4	241.1	39,200	39,200	125
130	66.0	241.4	46,700	46,700	69.1	238.4	38,000	38,000	130
135	64.7	238.6	45,700	45,700	67.8	235.6	36,900	36,900	135
140	63.5	235.7	44,700	44,700	66.6	232.6	35,800	35,800	140
145	62.2	232.6	43,700	43,700	65.3	229.5	34,800	34,800	145
150	60.9	229.4	42,700	42,700	63.9	226.2	33,900	33,900	150
155	59.6	226.0	41,800	41,800	62.6	222.8	33,000	33,000	155
160	58.2	222.4	40,600	40,600	61.3	219.2	32,200	32,200	160
165	56.9	218.7	39,400	39,400	59.9	215.4	31,400	31,400	165
170	55.5	214.8	38,300	38,300	58.5	211.4	30,600	30,600	170
175	54.1	210.6	37,200	37,200	57.0	207.2	29,900	29,900	175
180	52.6	206.3	36,200	36,200	55.5	202.7	29,200	29,200	180
190	49.6	196.9	34,300	34,300	52.5	193.2	27,900	27,900	190
200	46.5	186.4	32,600	32,600	49.3	182.5	26,800	26,800	200
210	43.1	174.6	31,100	31,100	45.8	170.4	25,700	25,700	210
220	39.5	161.3	29,700	29,700	42.1	156.7	24,800	24,800	220
230	35.5	146.0	28,400	28,400	38.0	140.8	24,000	24,000	230
240	31.0	127.8	27,300	27,300	33.2	121.9	23,200	23,200	240
250	25.6	105.3	26,200	26,200	27.5	97.8	22,700	22,700	250
260	18.4	73.8	25,400	25,400					260

MLC650 VPC-MAX S-1

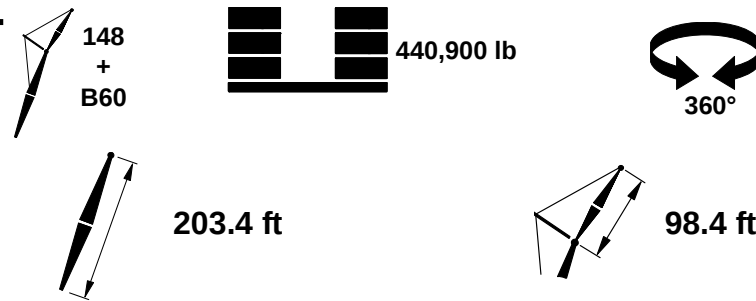
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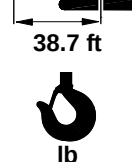
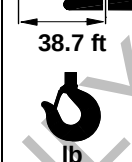
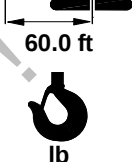


	10°					20°				
										
	ft	°	ft	38.7 ft lb	60.0 ft lb	ft	°	ft	38.7 ft lb	60.0 ft lb
60		82.8	287.2	65,800	65,800					60
65		81.8	286.2	64,400	64,400					65
70		80.8	285.1	63,200	63,200					70
75		79.7	283.8	61,900	61,900					75
80		78.7	282.5	60,600	60,600					80
85		77.6	281.1	59,300	59,300					85
90		76.5	279.6	57,900	57,900					90
95		75.5	277.9	56,600	56,600					95
100		74.4	276.2	55,200	55,200					100
105		73.3	274.3	54,000	54,000					105
110		72.2	272.4	52,800	52,800					110
115		71.1	270.3	51,600	51,600					115
120		70.0	268.2	50,400	50,400					120
125		68.9	265.9	49,400	49,400					125
130		67.8	263.5	48,300	48,300					130
135		66.7	260.9	47,300	47,300					135
140		65.5	258.3	46,300	46,300					140
145		64.3	255.5	45,400	45,400					145
150		63.2	252.6	44,500	44,500					150
155		62.0	249.5	43,500	43,500					155
160		60.8	246.3	42,700	42,700					160
165		59.6	243.0	41,800	41,800					165
170		58.3	239.4	40,700	40,700					170
175		57.1	235.8	39,500	39,500					175
180		55.8	231.9	38,500	38,500					180
190		53.1	223.6	36,600	36,600					190
200		50.4	214.5	34,800	34,800					200
210		47.5	204.5	33,200	33,200					210
220		44.5	193.4	31,700	31,700					220
230		41.3	180.9	30,300	30,300					230
240		37.8	166.9	29,100	29,100					240
250		33.9	150.7	27,900	27,900					250
260		29.5	131.6	27,000	27,000					260
270		24.3	107.9	23,300	26,100					270
280		17.2	74.6	18,800	25,300					280

MLC650 VPC-MAX S-1

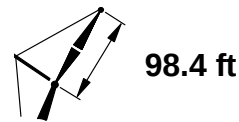
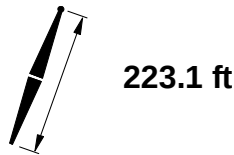
ASME B30.5

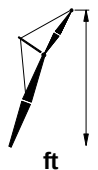
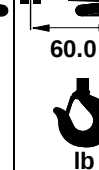
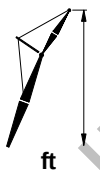
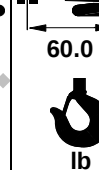
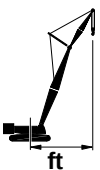


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
65		82.3	306.3	64,900	64,900				65
70		81.4	305.2	63,700	63,700				70
75		80.4	304.1	62,500	62,500				75
80		79.4	302.8	61,300	61,300	82.3	299.9	53,200	80
85		78.4	301.5	60,100	60,100	81.3	298.5	52,200	85
90		77.5	300.1	58,900	58,900	80.3	297.1	51,100	90
95		76.5	298.6	57,700	57,700	79.3	295.6	50,100	95
100		75.5	297.0	56,400	56,400	78.3	294.0	49,000	100
105		74.5	295.3	55,200	55,200	77.3	292.2	47,400	105
110		73.5	293.4	54,000	54,000	76.3	290.4	46,000	110
115		72.4	291.5	52,900	52,900	75.2	288.5	44,600	115
120		71.4	289.5	51,800	51,800	74.2	286.5	43,300	120
125		70.4	287.4	50,700	50,700	73.2	284.3	42,100	125
130		69.4	285.2	49,700	49,700	72.1	282.1	40,900	130
135		68.3	282.9	48,700	48,700	71.0	279.7	39,800	135
140		67.3	280.4	47,700	47,700	70.0	277.3	38,800	140
145		66.2	277.9	46,800	46,800	68.9	274.7	37,800	145
150		65.1	275.2	45,900	45,900	67.8	272.0	36,900	150
155		64.0	272.4	45,100	45,100	66.7	269.1	36,000	155
160		62.9	269.5	44,200	44,200	65.6	266.2	35,100	160
165		61.8	266.4	43,400	43,400	64.5	263.1	34,300	165
170		60.7	263.2	42,600	42,600	63.3	259.8	33,500	170
175		59.6	259.9	41,800	41,800	62.2	256.5	32,700	175
180		58.4	256.4	40,700	40,700	61.0	252.9	32,000	180
190		56.0	249.0	38,700	38,700	58.6	245.4	30,700	190
200		53.6	240.9	36,900	36,900	56.1	237.2	29,500	200
210		51.1	232.1	35,200	35,200	53.6	228.2	28,400	210
220		48.4	222.4	33,600	33,600	50.9	218.3	27,300	220
230		45.7	211.8	32,200	32,200	48.0	207.5	26,400	230
240		42.7	200.0	30,900	30,900	45.0	195.4	25,500	240
250		39.6	186.9	28,600	29,700	41.8	182.0	24,700	250
260		36.2	172.1	23,900	28,600	38.3	166.8	24,000	260
270		32.5	155.2	19,500	27,600	34.5	149.2	21,200	270
280		28.2	135.2	15,400	26,700	30.0	128.2	16,600	280
290		23.2	110.3	11,300	25,900				290

MLC650 VPC-MAX S-1

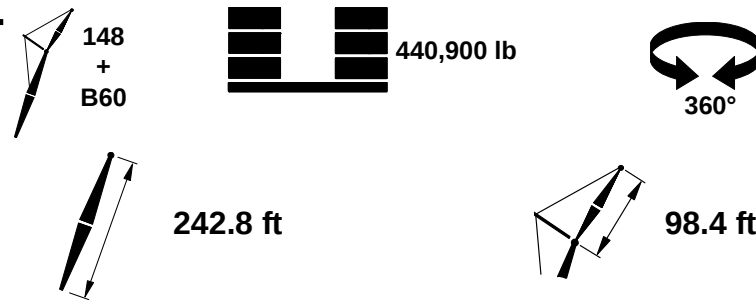
ASME B30.5



	10°					20°				
										
	ft	°	ft	38.7 ft lb	60.0 ft lb	°	ft	lb	lb	ft
65		82.8	326.3	65,300	65,300					65
70		81.9	325.3	64,100	64,100					70
75		81.0	324.2	62,900	62,900					75
80		80.1	323.1	61,800	61,800	82.8	320.0	53,600	53,600	80
85		79.2	321.8	60,700	60,700	81.8	318.8	52,600	52,600	85
90		78.2	320.5	59,600	59,600	80.9	317.5	51,600	51,600	90
95		77.3	319.1	58,500	58,500	80.0	316.0	50,700	50,700	95
100		76.4	317.6	57,500	57,500	79.0	314.5	49,800	49,800	100
105		75.5	316.0	56,300	56,300	78.1	312.9	48,600	48,600	105
110		74.5	314.3	55,200	55,200	77.1	311.2	47,200	47,200	110
115		73.6	312.5	54,100	54,100	76.2	309.4	45,900	45,900	115
120		72.6	310.7	53,000	53,000	75.2	307.5	44,500	44,500	120
125		71.7	308.7	51,900	51,900	74.3	305.5	43,300	43,300	125
130		70.7	306.7	51,000	51,000	73.3	303.5	42,200	42,200	130
135		69.7	304.5	50,000	50,000	72.3	301.3	41,100	41,100	135
140		68.8	302.2	49,000	49,000	71.3	299.0	40,100	40,100	140
145		67.8	299.9	48,100	48,100	70.3	296.6	39,100	39,100	145
150		66.8	297.4	47,200	47,200	69.3	294.1	38,100	38,100	150
155		65.8	294.8	46,400	46,400	68.3	291.5	37,300	37,300	155
160		64.8	292.1	45,600	45,600	67.3	288.8	36,400	36,400	160
165		63.7	289.3	44,800	44,800	66.3	285.9	35,600	35,600	165
170		62.7	286.4	44,000	44,000	65.2	283.0	34,800	34,800	170
175		61.7	283.3	43,200	43,200	64.1	279.9	34,000	34,000	175
180		60.6	280.2	42,400	42,400	63.1	276.7	33,300	33,300	180
190		58.5	273.4	40,800	40,800	60.9	269.8	32,000	32,000	190
200		56.3	266.1	38,900	38,900	58.7	262.4	30,700	30,700	200
210		54.0	258.2	37,100	37,100	56.4	254.3	29,600	29,600	210
220		51.6	249.5	35,500	35,500	54.0	245.6	28,500	28,500	220
230		49.2	240.2	34,100	34,100	51.5	236.0	27,600	27,600	230
240		46.6	229.9	31,800	32,700	48.9	225.6	26,600	26,600	240
250		44.0	218.7	26,800	31,400	46.2	214.2	25,800	25,800	250
260		41.1	206.4	22,100	30,300	43.3	201.5	24,600	25,000	260
270		38.1	192.6	17,800	29,200	40.1	187.4	19,900	24,400	270
280		34.8	177.2	13,700	28,200	36.8	171.5	15,600	23,700	280
290		31.2	159.5	9,900	27,300	33.0	153.0	11,400	23,200	290
300		27.1	138.6		26,500	28.6	131.0	7,300	22,700	300
310		22.1	112.6		25,700					310

MLC650 VPC-MAX S-1

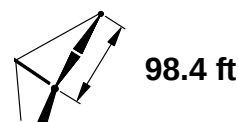
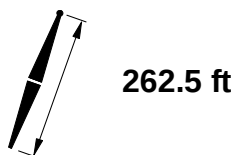
ASME B30.5

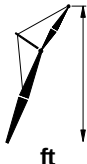
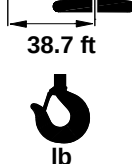
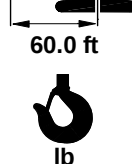
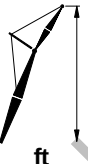
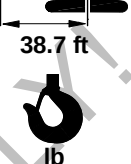
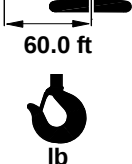


	10°				20°				
	ft	°	ft	lb	lb	ft	lb	lb	ft
70	82.4	345.3	64,400	64,400					70
75	81.5	344.3	63,300	63,300					75
80	80.7	343.2	62,200	62,200					80
85	79.8	342.1	61,300	61,300	82.3	339.0	53,000	53,000	85
90	78.9	340.8	60,300	60,300	81.5	337.7	52,100	52,100	90
95	78.1	339.5	59,200	59,200	80.6	336.4	51,200	51,200	95
100	77.2	338.1	58,200	58,200	79.7	335.0	50,300	50,300	100
105	76.3	336.6	57,200	57,200	78.8	333.5	49,500	49,500	105
110	75.4	335.0	56,100	56,100	77.9	331.9	48,300	48,300	110
115	74.6	333.4	55,100	55,100	77.0	330.2	47,000	47,000	115
120	73.7	331.6	54,100	54,100	76.1	328.4	45,700	45,700	120
125	72.8	329.8	53,000	53,000	75.2	326.6	44,500	44,500	125
130	71.9	327.9	52,100	52,100	74.3	324.6	43,400	43,400	130
135	71.0	325.9	51,100	51,100	73.4	322.6	42,400	42,400	135
140	70.1	323.7	50,200	50,200	72.5	320.5	41,300	41,300	140
145	69.2	321.5	49,300	49,300	71.6	318.2	40,300	40,300	145
150	68.2	319.3	48,500	48,500	70.6	315.9	39,400	39,400	150
155	67.3	316.9	47,600	47,600	69.7	313.5	38,500	38,500	155
160	66.4	314.4	46,800	46,800	68.7	311.0	37,700	37,700	160
165	65.4	311.8	46,000	46,000	67.8	308.3	36,800	36,800	165
170	64.5	309.1	45,300	45,300	66.8	305.6	36,000	36,000	170
175	63.5	306.2	44,500	44,500	65.8	302.8	35,300	35,300	175
180	62.5	303.3	43,800	43,800	64.9	299.8	34,600	34,600	180
190	60.5	297.1	42,400	42,400	62.9	293.5	33,200	33,200	190
200	58.5	290.4	40,900	40,900	60.8	286.7	31,900	31,900	200
210	56.5	283.2	39,100	39,100	58.7	279.4	30,800	30,800	210
220	54.3	275.4	37,400	37,400	56.6	271.5	29,700	29,700	220
230	52.1	266.9	32,900	35,900	54.3	262.9	28,700	28,700	230
240	49.9	257.8	27,500	34,500	52.0	253.6	27,800	27,800	240
250	47.5	247.9	22,500	33,200	49.6	243.6	25,700	26,900	250
260	45.0	237.2	17,900	32,000	47.1	232.6	20,800	26,100	260
270	42.4	225.4	13,500	30,800	44.5	220.6	16,200	25,400	270
280	39.7	212.5	9,500	29,800	41.6	207.3	11,800	24,700	280
290	36.8	198.1		28,800	38.6	192.6	7,700	24,100	290
300	33.6	182.0		27,900	35.3	175.9		23,500	300
310	30.0	163.5		27,100	31.7	156.7		23,100	310
320	26.0	141.8		26,300	27.4	133.7		22,600	320
330	21.2	114.6		25,600					330

MLC650 VPC-MAX S-1

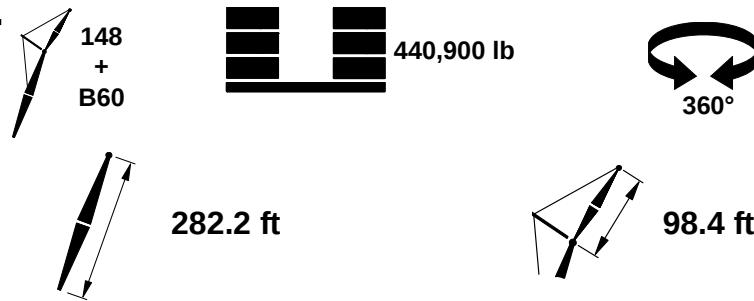
ASME B30.5

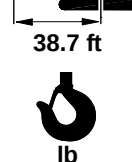
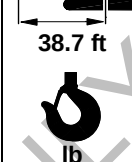
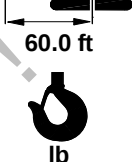


	10°				20°						
											
	ft	°	ft	38.7 ft lb	60.0 ft lb	ft	°	ft	38.7 ft lb	60.0 ft lb	ft
70		82.8	365.3	64,600	64,600						70
75		82.0	364.4	63,700	63,700						75
80		81.2	363.4	62,700	62,700						80
85		80.4	362.3	61,600	61,600						85
90		79.6	361.1	60,700	60,700						90
95		78.7	359.8	59,800	59,800						95
100		77.9	358.5	58,800	58,800						100
105		77.1	357.1	57,900	57,900						105
110		76.3	355.6	57,000	57,000						110
115		75.4	354.1	56,000	56,000						115
120		74.6	352.4	55,000	55,000						120
125		73.8	350.7	54,000	54,000						125
130		72.9	348.9	53,100	53,100						130
135		72.1	347.0	52,200	52,200						135
140		71.2	345.0	51,300	51,300						140
145		70.4	343.0	50,400	50,400						145
150		69.5	340.8	49,600	49,600						150
155		68.6	338.6	48,700	48,700						155
160		67.8	336.3	48,000	48,000						160
165		66.9	333.8	47,200	47,200						165
170		66.0	331.3	46,400	46,400						170
175		65.1	328.7	45,700	45,700						175
180		64.2	326.0	45,000	45,000						180
190		62.4	320.2	43,600	43,600						190
200		60.5	314.0	42,300	42,300						200
210		58.6	307.4	40,900	40,900						210
220		56.6	300.2	39,200	39,200						220
230		54.6	292.5	37,600	37,600						230
240		52.6	284.3	36,200	36,200						240
250		50.4	275.4	34,800	34,800						250
260		48.2	265.8	33,600	33,600						260
270		46.0	255.4	32,400	32,400						270
280		43.6	244.1	31,300	31,300						280
290		41.0	231.8	30,300	30,300						290
300		38.4	218.3	29,400	29,400						300
310		35.5	203.4	28,400	28,400						310
320		32.4	186.6	27,600	27,600						320
330		29.0	167.4	26,900	26,900						330
340		25.1	144.8	26,200	26,200						340
350		20.3	116.5	25,600	25,600						350

MLC650 VPC-MAX S-1

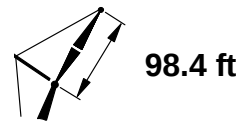
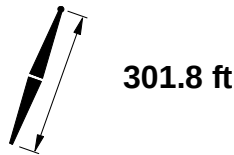
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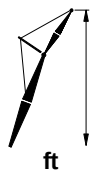
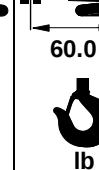
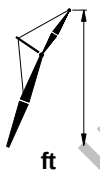
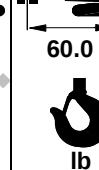
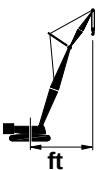


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
75		82.4	384.4	63,800	63,800				75
80		81.7	383.4	62,900	62,900				80
85		80.9	382.4	62,000	62,000				85
90		80.1	381.3	61,100	61,100	82.4	378.1	52,800	90
95		79.3	380.1	60,200	60,200	81.6	376.9	51,900	95
100		78.6	378.8	59,300	59,300	80.8	375.6	51,200	100
105		77.8	377.5	58,400	58,400	80.0	374.3	50,400	105
110		77.0	376.1	57,600	57,600	79.2	372.8	49,700	110
115		76.2	374.6	56,700	56,700	78.4	371.4	48,900	115
120		75.4	373.1	55,900	55,900	77.6	369.8	47,900	120
125		74.6	371.5	54,900	54,900	76.8	368.2	46,700	125
130		73.8	369.8	54,000	54,000	76.0	366.4	45,600	130
135		73.0	368.0	53,100	53,100	75.2	364.7	44,600	135
140		72.2	366.1	52,200	52,200	74.4	362.8	43,500	140
145		71.4	364.2	51,400	51,400	73.6	360.8	42,600	145
150		70.6	362.2	50,600	50,600	72.8	358.8	41,600	150
155		69.8	360.1	49,800	49,800	72.0	356.7	40,700	155
160		69.0	357.9	49,000	49,000	71.1	354.5	39,900	160
165		68.2	355.6	48,300	48,300	70.3	352.2	39,100	165
170		67.3	353.3	47,500	47,500	69.5	349.8	38,300	170
175		66.5	350.8	46,800	46,800	68.6	347.3	37,500	175
180		65.6	348.3	46,100	46,100	67.8	344.7	36,800	180
190		63.9	342.9	44,800	44,800	66.0	339.3	35,500	190
200		62.2	337.1	43,500	43,500	64.3	333.5	34,200	200
210		60.4	331.0	42,200	42,200	62.5	327.2	33,000	210
220		58.6	324.4	40,000	41,000	60.7	320.5	31,900	220
230		56.8	317.3	33,700	39,400	58.8	313.4	30,800	230
240		54.9	309.7	27,900	37,900	56.9	305.7	29,900	240
250		53.0	301.6	22,600	36,500	54.9	297.4	26,600	250
260		51.0	292.9	17,700	35,200	52.9	288.6	21,300	260
270		48.9	283.5	13,100	34,000	50.8	279.1	16,400	270
280		46.8	273.4	8,800	32,900	48.6	268.9	11,900	280
290		44.5	262.6		31,800	46.4	257.8	7,600	290
300		42.2	250.8		30,800	44.0	245.8		300
310		39.8	238.0		29,800	41.5	232.7		310
320		37.2	224.0		29,000	38.8	218.3		320
330		34.4	208.4		28,200	36.0	202.3		330
340		31.4	191.0		27,400	32.8	184.3		340
350		28.0	171.1		26,700	29.3	163.5		350
360		24.2	147.6		26,100				360
370		19.5	118.3		25,500				370

MLC650 VPC-MAX S-1

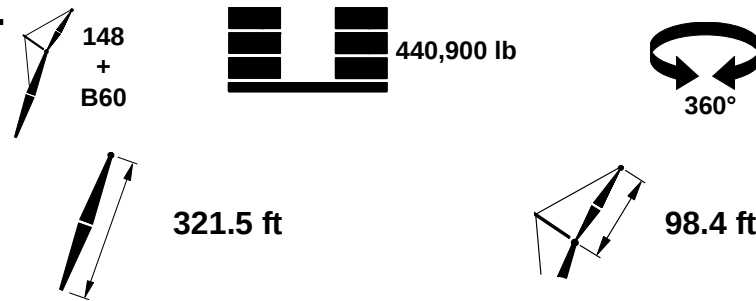
ASME B30.5

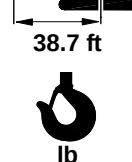
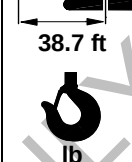
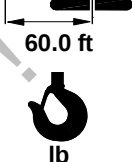


	10°					20°				
										
	ft	°	ft	38.7 ft lb	60.0 ft lb	°	ft	lb	lb	ft
75		82.8	404.4	64,000	64,000					75
80		82.1	403.5	63,100	63,100					80
85		81.3	402.5	62,200	62,200					85
90		80.6	401.4	61,400	61,400					90
95		79.9	400.3	60,500	60,500					95
100		79.1	399.1	59,700	59,700	82.8	398.1	53,000	53,000	100
105		78.4	397.9	59,000	59,000	82.0	397.0	52,300	52,300	105
110		77.7	396.5	58,100	58,100	81.3	395.8	51,500	51,500	110
115		76.9	395.1	57,300	57,300	80.5	394.5	50,800	50,800	115
120		76.2	393.7	56,500	56,500	79.8	393.2	50,100	50,100	120
125		75.4	392.1	55,700	55,700	79.0	391.8	49,300	49,300	125
130		74.7	390.5	54,800	54,800	78.3	390.3	48,600	48,600	130
135		73.9	388.9	53,900	53,900	77.5	388.8	47,700	47,700	135
140		73.2	387.1	53,100	53,100	76.8	387.2	46,600	46,600	140
145		72.4	385.3	52,300	52,300	76.0	385.5	45,600	45,600	145
150		71.6	383.4	51,400	51,400	75.2	383.7	44,600	44,600	150
155		70.9	381.4	50,700	50,700	74.5	381.9	43,600	43,600	155
160		70.1	379.3	50,000	50,000	73.7	379.9	42,700	42,700	160
165		69.3	377.2	49,200	49,200	72.9	377.9	41,800	41,800	165
170		68.5	375.0	48,500	48,500	72.1	375.8	40,900	40,900	170
175		67.7	372.7	47,800	47,800	71.4	373.7	40,100	40,100	175
180		66.9	370.3	47,100	47,100	70.6	371.4	39,400	39,400	180
190		65.3	365.2	45,800	45,800	69.8	369.1	38,600	38,600	190
200		63.7	359.8	44,500	44,500	69.0	366.7	37,900	37,900	200
210		62.1	354.1	43,300	43,300	67.4	361.6	36,500	36,500	210
220		60.4	347.9	37,000	42,200	65.7	356.2	35,200	35,200	220
230		58.7	341.3	30,700	41,000	64.0	350.3	34,100	34,100	230
240		56.9	334.3	24,900	39,500	62.3	344.1	32,900	32,900	240
250		55.1	326.8	19,600	38,100	60.6	337.5	31,900	31,900	250
260		53.3	318.8	14,600	36,800	58.8	330.4	29,500	30,900	260
270		51.4	310.3	10,000	35,500	57.0	322.8	23,800	30,000	270
280		49.5	301.1		34,300	55.2	314.7	18,600	29,100	280
290		47.5	291.4		33,300	53.3	306.0	13,700	28,300	290
300		45.4	280.8		32,200	51.3	296.7	9,200	27,500	300
310		43.2	269.5		31,200	49.3	286.8		26,800	310
320		41.0	257.3		30,300	47.1	276.1		26,200	320
330		38.6	244.0		29,500	44.9	264.6		25,600	330
340		36.1	229.4		28,700	42.6	252.1		25,000	340
350		33.3	213.3		27,900	40.2	238.4		24,400	350
360		30.4	195.3		27,200	37.6	223.5		23,900	360
370		27.1	174.7		26,500	34.8	206.9		23,500	370
380		23.4	150.4		25,100	31.7	188.2		23,100	380
390		18.8	119.9		22,100	28.3	166.7		22,700	390

MLC650 VPC-MAX S-1

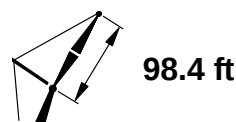
ASME B30.5

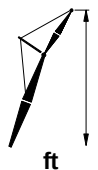
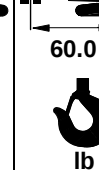
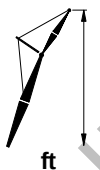
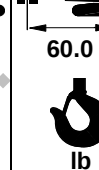
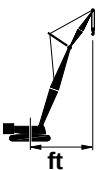


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
80	82.4	423.5	63,100	63,100					80
85	81.8	422.5	62,400	62,400					85
90	81.1	421.5	61,500	61,500					90
95	80.4	420.5	60,700	60,700	82.4	417.1	52,400	52,400	95
100	79.7	419.3	60,000	60,000	81.7	416.0	51,700	51,700	100
105	79.0	418.1	59,200	59,200	81.0	414.8	51,100	51,100	105
110	78.3	416.9	58,500	58,500	80.3	413.5	50,400	50,400	110
115	77.6	415.5	57,700	57,700	79.6	412.2	49,700	49,700	115
120	76.8	414.2	57,000	57,000	78.9	410.8	49,000	49,000	120
125	76.1	412.7	56,200	56,200	78.1	409.3	48,400	48,400	125
130	75.4	411.2	55,500	55,500	77.4	407.8	47,600	47,600	130
135	74.7	409.6	54,700	54,700	76.7	406.2	46,500	46,500	135
140	74.0	407.9	53,900	53,900	76.0	404.5	45,600	45,600	140
145	73.3	406.2	53,000	53,000	75.2	402.7	44,600	44,600	145
150	72.5	404.4	52,300	52,300	74.5	400.9	43,700	43,700	150
155	71.8	402.5	51,500	51,500	73.8	399.0	42,800	42,800	155
160	71.1	400.6	50,800	50,800	73.0	397.1	41,900	41,900	160
165	70.3	398.5	50,100	50,100	72.3	395.0	41,100	41,100	165
170	69.6	396.4	49,400	49,400	71.6	392.9	40,400	40,400	170
175	68.9	394.3	48,700	48,700	70.8	390.7	39,600	39,600	175
180	68.1	392.0	48,000	48,000	70.0	388.4	38,900	38,900	180
190	66.6	387.3	46,700	46,700	68.5	383.6	37,500	37,500	190
200	65.1	382.2	45,500	45,500	67.0	378.5	36,200	36,200	200
210	63.5	376.8	39,200	44,300	65.4	373.0	35,000	35,000	210
220	61.9	371.0	32,300	43,200	63.8	367.2	33,900	33,900	220
230	60.3	364.9	25,900	42,100	62.2	361.0	31,300	32,900	230
240	58.7	358.3	20,100	41,000	60.5	354.4	25,100	31,900	240
250	57.0	351.3	14,700	39,700	58.9	347.3	19,400	31,000	250
260	55.3	343.9	9,800	38,300	57.1	339.8	14,100	30,100	260
270	53.6	336.1		37,100	55.4	331.9	9,200	29,200	270
280	51.8	327.7		35,900	53.6	323.3		28,500	280
290	50.0	318.7		34,700	51.7	314.3		27,700	290
300	48.1	309.2		33,600	49.8	304.6		27,100	300
310	46.2	299.0		32,700	47.8	294.2		26,400	310
320	44.1	288.0		31,700	45.8	283.1		25,800	320
330	42.0	276.2		30,800	43.6	271.1		25,300	330
340	39.8	263.5		29,900	41.4	258.1		24,700	340
350	37.5	249.7		29,200	39.0	244.0		24,200	350
360	35.0	234.6		27,700	36.5	228.5		23,800	360
370	32.4	218.0		24,600	33.7	211.3		23,400	370
380	29.5	199.3		21,500	30.7	192.0		22,500	380
390	26.3	178.1		18,600	27.4	169.7		19,300	390
400	22.6	152.9		15,800					400
410	18.1	121.4		13,000					410

MLC650 VPC-MAX S-1

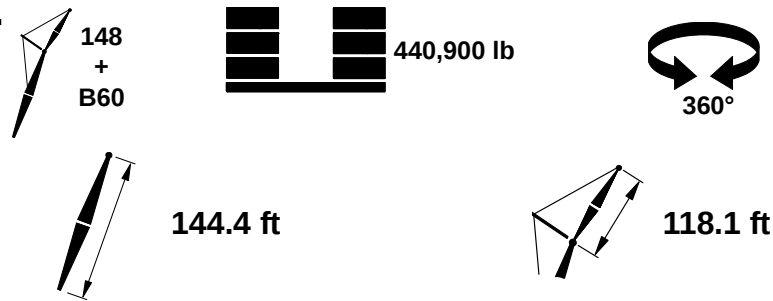
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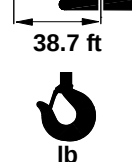
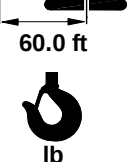
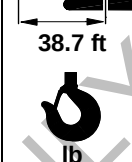
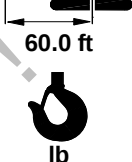


	10°					20°				
										
	ft	°	ft	38.7 ft lb	60.0 ft lb	°	ft	lb	lb	ft
80		82.8	443.4	63,200	63,200					80
85		82.1	442.5	62,300	62,300					85
90		81.5	441.6	61,600	61,600					90
95		80.8	440.6	60,900	60,900					95
100		80.1	439.5	60,100	60,100	82.8	437.2	52,600	52,600	100
105		79.5	438.3	59,400	59,400	82.1	436.1	52,000	52,000	105
110		78.8	437.1	58,800	58,800	81.4	435.0	51,300	51,300	110
115		78.1	435.9	58,100	58,100	80.7	433.8	50,600	50,600	115
120		77.4	434.6	57,300	57,300	80.1	432.5	50,000	50,000	120
125		76.8	433.2	56,600	56,600	79.4	431.1	49,400	49,400	125
130		76.1	431.7	55,900	55,900	78.7	429.7	48,800	48,800	130
135		75.4	430.2	55,200	55,200	78.0	428.3	48,200	48,200	135
140		74.7	428.6	54,500	54,500	77.3	426.8	47,400	47,400	140
145		74.0	427.0	53,800	53,800	76.6	425.2	46,500	46,500	145
150		73.4	425.3	53,000	53,000	75.9	423.5	45,500	45,500	150
155		72.7	423.5	52,200	52,200	75.2	421.8	44,600	44,600	155
160		72.0	421.6	51,600	51,600	74.5	420.0	43,700	43,700	160
165		71.3	419.7	50,800	50,800	73.8	418.1	42,900	42,900	165
170		70.6	417.7	50,200	50,200	73.1	416.2	42,100	42,100	170
175		69.9	415.7	49,500	49,500	72.4	414.2	41,300	41,300	175
180		69.2	413.5	48,800	48,800	71.7	412.1	40,600	40,600	180
190		67.7	409.1	47,600	47,600	71.0	409.9	39,900	39,900	190
200		66.3	404.3	46,400	46,400	69.6	405.4	38,500	38,500	200
210		64.8	399.2	45,300	45,300	68.1	400.6	37,200	37,200	210
220		63.3	393.7	37,900	44,100	66.6	395.4	36,000	36,000	220
230		61.8	387.9	31,200	43,100	65.1	389.9	34,900	34,900	230
240		60.3	381.8	25,000	42,000	63.6	384.1	33,800	33,800	240
250		58.7	375.3	19,300	41,000	62.1	377.9	30,300	32,900	250
260		57.2	368.4	14,000	39,900	60.5	371.3	24,300	31,900	260
270		55.5	361.0	9,100	38,600	58.9	364.3	18,700	31,000	270
280		53.9	353.2		37,300	57.3	356.9	13,500	30,200	280
290		52.2	345.0		36,200	55.6	349.0	8,600	29,400	290
300		50.5	336.2		35,100	53.9	340.6		28,600	300
310		48.7	326.9		34,000	52.1	331.7		27,900	310
320		46.8	316.9		33,100	50.3	322.3		27,300	320
330		44.9	306.3		32,100	48.4	312.2		26,700	330
340		43.0	294.9		31,300	46.5	301.4		26,100	340
350		40.9	282.7		28,600	44.5	289.8		25,500	350
360		38.8	269.6		25,300	42.4	277.4		25,000	360
370		36.5	255.3		22,200	40.2	264.0		24,500	370
380		34.1	239.7		19,200	37.9	249.3		23,600	380
390		31.5	222.5		16,300	35.4	233.3		20,400	390
400		28.7	203.3		13,500	32.7	215.6		17,400	400
410		25.5	181.3		10,200	29.8	195.6		14,400	410
420		21.9	155.4		6,900	26.5	172.6		11,100	420

MLC650 VPC-MAX S-1

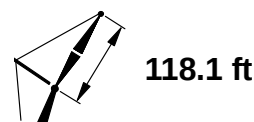
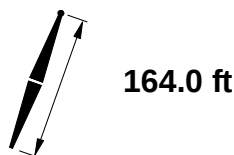
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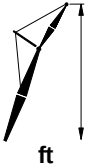
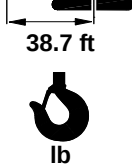
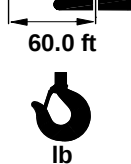
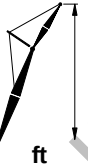
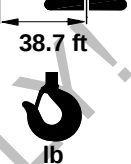
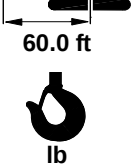


	10°					20°				
										
	ft	°	ft	lb	lb	ft	lb	lb	ft	
65	82.3	265.9	50,100b	50,100b						65
70	81.2	264.6	48,700b	48,700b						70
75	80.1	263.3	47,300	47,300						75
80	78.9	261.9	45,900	45,900	82.9	258.8	40,000b	40,000b		80
85	77.8	260.3	44,600	44,600	81.7	257.3	38,900b	38,900b		85
90	76.6	258.7	43,300	43,300	80.6	255.6	37,800	37,800		90
95	75.5	256.9	42,000	42,000	79.4	253.8	36,800	36,800		95
100	74.3	255.0	40,900	40,900	78.2	251.9	35,900	35,900		100
105	73.1	253.0	39,700	39,700	77.0	249.9	34,900	34,900		105
110	72.0	250.9	38,600	38,600	75.8	247.7	34,000	34,000		110
115	70.8	248.7	37,500	37,500	74.6	245.4	33,100	33,100		115
120	69.6	246.3	36,500	36,500	73.4	243.0	32,300	32,300		120
125	68.3	243.8	35,500	35,500	72.2	240.5	31,400	31,400		125
130	67.1	241.1	34,500	34,500	70.9	237.8	30,600	30,600		130
135	65.9	238.4	33,600	33,600	69.6	235.0	29,600	29,600		135
140	64.6	235.4	32,700	32,700	68.4	232.0	28,700	28,700		140
145	63.3	232.4	31,800	31,800	67.1	228.9	27,800	27,800		145
150	62.0	229.1	31,000	31,000	65.7	225.6	27,000	27,000		150
155	60.7	225.7	30,200	30,200	64.4	222.2	26,200	26,200		155
160	59.4	222.2	29,400	29,400	63.0	218.6	25,500	25,500		160
165	58.0	218.4	28,600	28,600	61.7	214.8	24,800	24,800		165
170	56.6	214.5	27,900	27,900	60.2	210.7	24,200	24,200		170
175	55.2	210.3	27,300	27,300	58.8	206.5	23,600	23,600		175
180	53.7	206.0	26,600	26,600	57.3	202.1	22,900	22,900		180
190	50.7	196.6	25,400	25,400	54.3	192.5	21,800	21,800		190
200	47.6	186.1	24,300	24,300	51.0	181.7	20,800	20,800		200
210	44.2	174.3	23,200	23,200	47.6	169.6	19,900	19,900		210
220	40.6	161.0	22,300	22,300	43.8	155.9	19,100	19,100		220
230	36.6	145.6	21,400	21,400	39.6	139.9	18,400	18,400		230
240	32.0	127.4	20,700	20,700	34.9	120.7	17,700	17,700		240
250	26.6	104.7	20,100	20,100	29.0	96.3	17,200	17,200		250
260	19.3	72.9	19,500	19,500						260

MLC650 VPC-MAX S-1

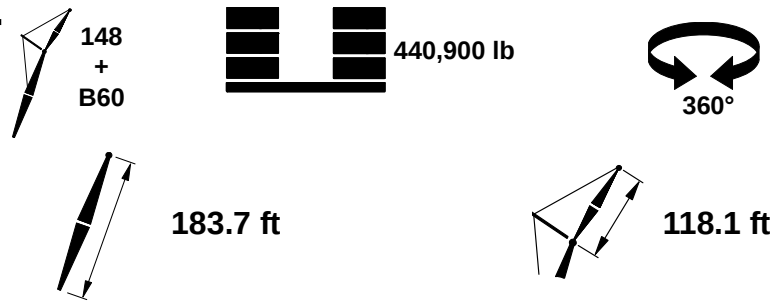
ASME B30.5



	10°					20°				
										
	ft	°	ft	lb	lb	ft	lb	lb	ft	
65		82.9	285.9	50,600	50,600					65
70		81.8	284.8	49,300	49,300					70
75		80.8	283.6	48,000	48,000					75
80		79.7	282.3	46,700	46,700					80
85		78.7	280.8	45,500	45,500					85
90		77.6	279.3	44,300	44,300	82.4	277.6	39,400	39,400	90
95		76.5	277.7	43,100	43,100	81.3	276.1	38,400	38,400	95
100		75.5	275.9	42,000	42,000	80.2	274.4	37,500	37,500	100
105		74.4	274.1	40,900	40,900	79.1	272.7	36,500	36,500	105
110		73.3	272.1	39,800	39,800	78.0	270.8	35,700	35,700	110
115		72.2	270.1	38,800	38,800	76.9	268.8	34,800	34,800	115
120		71.1	267.9	37,700	37,700	75.8	266.7	33,900	33,900	120
125		70.0	265.6	36,800	36,800	74.7	264.5	33,100	33,100	125
130		68.9	263.2	35,900	35,900	73.5	262.2	32,400	32,400	130
135		67.7	260.7	35,000	35,000	72.4	259.8	31,600	31,600	135
140		66.6	258.0	34,100	34,100	71.2	257.2	30,800	30,800	140
145		65.4	255.2	33,200	33,200	70.1	254.5	29,900	29,900	145
150		64.2	252.3	32,400	32,400	68.9	251.7	29,000	29,000	150
155		63.0	249.2	31,700	31,700	67.7	248.7	28,200	28,200	155
160		61.8	246.0	30,800	30,800	66.5	245.6	27,500	27,500	160
165		60.6	242.7	30,200	30,200	65.3	242.3	26,700	26,700	165
170		59.4	239.1	29,400	29,400	64.0	238.9	26,000	26,000	170
175		58.1	235.4	28,700	28,700	62.8	235.3	25,400	25,400	175
180		56.8	231.6	28,100	28,100	61.5	231.6	24,800	24,800	180
190		54.2	223.3	26,800	26,800	60.2	227.6	24,200	24,200	190
200		51.4	214.2	25,700	25,700	57.5	219.2	23,000	23,000	200
210		48.6	204.1	24,600	24,600	54.7	209.9	22,000	22,000	210
220		45.5	193.0	23,600	23,600	51.7	199.6	21,000	21,000	220
230		42.3	180.5	22,700	22,700	48.6	188.2	20,200	20,200	230
240		38.8	166.4	21,900	21,900	45.3	175.4	19,400	19,400	240
250		34.9	150.2	21,100	21,100	41.7	160.8	18,700	18,700	250
260		30.5	131.1	20,500	20,500	37.6	143.9	18,100	18,100	260
270		25.2	107.2	20,000	20,000	33.0	123.7	17,500	17,500	270
280		18.1	73.5	19,300	19,300	27.3	97.8	17,100	17,100	280

MLC650 VPC-MAX S-1

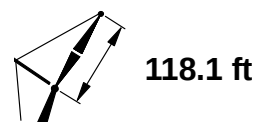
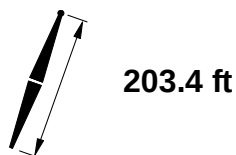
ASME B30.5

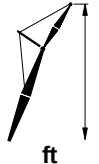
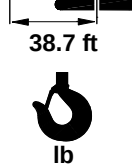
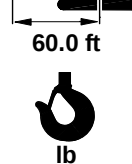
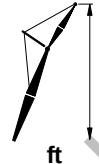
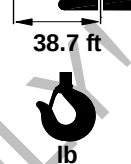
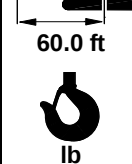


	10°				20°				
	ft	°	ft	lb	lb	ft	lb	lb	ft
70	82.4	304.9	49,900	49,900					70
75	81.4	303.8	48,700	48,700					75
80	80.4	302.5	47,500	47,500					80
85	79.4	301.2	46,300	46,300	82.9	297.9	39,900	39,900	85
90	78.5	299.8	45,200	45,200	81.9	296.4	38,900	38,900	90
95	77.5	298.3	44,100	44,100	80.9	294.9	38,000	38,000	95
100	76.5	296.7	43,000	43,000	79.9	293.3	37,100	37,100	100
105	75.5	295.0	41,900	41,900	78.8	291.5	36,300	36,300	105
110	74.5	293.2	40,900	40,900	77.8	289.7	35,500	35,500	110
115	73.4	291.3	39,900	39,900	76.8	287.8	34,600	34,600	115
120	72.4	289.2	39,000	39,000	75.8	285.7	33,800	33,800	120
125	71.4	287.1	37,900	37,900	74.7	283.6	33,200	33,200	125
130	70.3	284.9	37,100	37,100	73.7	281.4	32,400	32,400	130
135	69.3	282.6	36,200	36,200	72.6	279.0	31,700	31,700	135
140	68.2	280.1	35,300	35,300	71.5	276.5	31,000	31,000	140
145	67.2	277.6	34,600	34,600	70.5	273.9	30,200	30,200	145
150	66.1	274.9	33,700	33,700	69.4	271.2	29,300	29,300	150
155	65.0	272.1	33,000	33,000	68.3	268.4	28,600	28,600	155
160	63.9	269.2	32,200	32,200	67.1	265.4	27,900	27,900	160
165	62.8	266.1	31,500	31,500	66.0	262.3	27,100	27,100	165
170	61.7	262.9	30,700	30,700	64.9	259.0	26,500	26,500	170
175	60.5	259.6	30,100	30,100	63.7	255.7	25,900	25,900	175
180	59.4	256.1	29,400	29,400	62.5	252.1	25,300	25,300	180
190	57.0	248.7	28,100	28,100	60.1	244.6	24,100	24,100	190
200	54.6	240.6	27,000	27,000	57.6	236.3	23,000	23,000	200
210	52.0	231.7	25,900	25,900	55.1	227.3	22,100	22,100	210
220	49.4	222.0	24,900	24,900	52.4	217.4	21,200	21,200	220
230	46.6	211.4	23,900	23,900	49.5	206.5	20,400	20,400	230
240	43.7	199.6	23,100	23,100	46.5	194.4	19,700	19,700	240
250	40.5	186.4	22,300	22,300	43.3	180.8	19,000	19,000	250
260	37.1	171.6	21,600	21,600	39.8	165.5	18,400	18,400	260
270	33.4	154.6	20,900	20,900	35.8	147.8	17,900	17,900	270
280	29.1	134.5	20,300	20,300	31.3	126.5	17,400	17,400	280
290	24.0	109.5	19,800	19,800					290

MLC650 VPC-MAX S-1

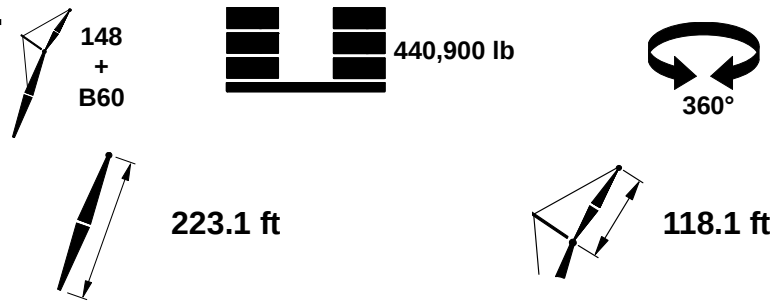
ASME B30.5

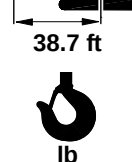
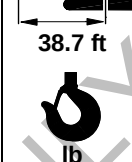


	10°					20°				
										
	ft	°	ft	lb	lb	ft	lb	lb	ft	
70		82.8	325.0	50,400	50,400					70
75		81.9	323.9	49,200	49,200					75
80		81.0	322.8	48,100	48,100					80
85		80.1	321.5	47,000	47,000					85
90		79.2	320.2	45,900	45,900					90
95		78.3	318.8	44,900	44,900	82.4	316.7	39,300	39,300	95
100		77.3	317.3	43,800	43,800	80.5	313.7	37,600	37,600	100
105		76.4	315.7	42,800	42,800	79.6	312.1	36,800	36,800	105
110		75.4	314.0	41,800	41,800	78.6	310.4	36,000	36,000	110
115		74.5	312.2	40,900	40,900	77.7	308.6	35,300	35,300	115
120		73.6	310.4	39,900	39,900	76.7	306.7	34,500	34,500	120
125		72.6	308.4	39,000	39,000	75.7	304.8	33,800	33,800	125
130		71.6	306.3	38,100	38,100	74.8	302.7	33,100	33,100	130
135		70.7	304.2	37,300	37,300	73.8	300.5	32,500	32,500	135
140		69.7	301.9	36,500	36,500	72.8	298.2	31,800	31,800	140
145		68.7	299.5	35,700	35,700	71.8	295.8	31,100	31,100	145
150		67.7	297.1	34,900	34,900	70.8	293.3	30,400	30,400	150
155		66.7	294.5	34,100	34,100	69.8	290.7	29,600	29,600	155
160		65.7	291.8	33,400	33,400	68.7	287.9	28,900	28,900	160
165		64.7	289.0	32,600	32,600	67.7	285.1	28,200	28,200	165
170		63.6	286.1	32,000	32,000	66.6	282.1	27,500	27,500	170
175		62.6	283.0	31,300	31,300	65.6	279.0	26,900	26,900	175
180		61.5	279.8	30,700	30,700	64.5	275.8	26,300	26,300	180
190		59.4	273.1	29,300	29,300	62.3	268.9	25,100	25,100	190
200		57.2	265.7	28,200	28,200	60.1	261.5	24,100	24,100	200
210		54.9	257.8	27,100	27,100	57.8	253.4	23,100	23,100	210
220		52.5	249.1	26,100	26,100	55.4	244.6	22,200	22,200	220
230		50.1	239.7	25,100	25,100	52.9	235.0	21,400	21,400	230
240		47.5	229.5	24,300	24,300	50.3	224.5	20,600	20,600	240
250		44.9	218.3	23,400	23,400	47.5	213.0	19,900	19,900	250
260		42.0	205.9	22,600	22,600	44.6	200.3	19,300	19,300	260
270		39.0	192.1	21,900	21,900	41.5	186.1	18,700	18,700	270
280		35.7	176.6	20,500	21,300	38.1	170.0	18,100	18,100	280
290		32.1	158.8	16,600	20,700	34.2	151.4	17,700	17,700	290
300		27.9	137.8	12,900	20,200	29.8	129.1	14,200	17,300	300
310		22.9	111.6	9,300	19,700					310

MLC650 VPC-MAX S-1

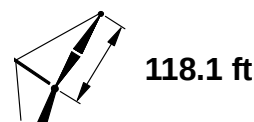
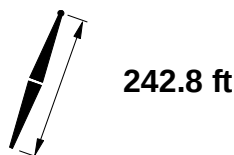
ASME B30.5

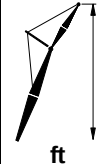
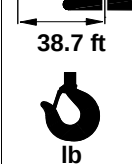
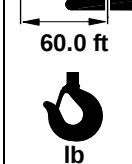
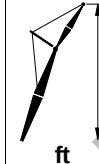
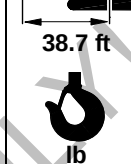
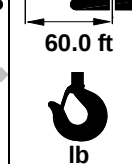
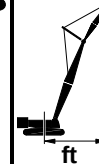


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
75	82.4	344.0	49,600	49,600					75
80	81.6	342.9	48,500	48,500					80
85	80.7	341.7	47,600	47,600					85
90	79.8	340.5	46,500	46,500	82.9	336.9	39,600	39,600	90
95	79.0	339.2	45,500	45,500	82.0	335.6	38,900	38,900	95
100	78.1	337.8	44,500	44,500	81.1	334.1	38,000	38,000	100
105	77.2	336.3	43,600	43,600	80.2	332.6	37,300	37,300	105
110	76.3	334.7	42,700	42,700	79.3	331.0	36,500	36,500	110
115	75.4	333.0	41,800	41,800	78.4	329.4	35,800	35,800	115
120	74.5	331.3	40,800	40,800	77.5	327.6	35,100	35,100	120
125	73.7	329.5	40,000	40,000	76.6	325.7	34,400	34,400	125
130	72.8	327.5	39,100	39,100	75.7	323.8	33,800	33,800	130
135	71.8	325.5	38,200	38,200	74.8	321.7	33,100	33,100	135
140	70.9	323.4	37,500	37,500	73.9	319.6	32,500	32,500	140
145	70.0	321.2	36,600	36,600	72.9	317.4	31,900	31,900	145
150	69.1	318.9	35,900	35,900	72.0	315.0	31,200	31,200	150
155	68.2	316.5	35,200	35,200	71.1	312.6	30,600	30,600	155
160	67.2	314.0	34,500	34,500	70.1	310.1	29,900	29,900	160
165	66.3	311.4	33,800	33,800	69.1	307.4	29,200	29,200	165
170	65.3	308.7	33,100	33,100	68.2	304.7	28,500	28,500	170
175	64.4	305.9	32,400	32,400	67.2	301.8	27,900	27,900	175
180	63.4	302.9	31,800	31,800	66.2	298.9	27,200	27,200	180
190	61.4	296.7	30,500	30,500	64.2	292.6	26,100	26,100	190
200	59.4	290.0	29,300	29,300	62.2	285.8	25,000	25,000	200
210	57.3	282.8	28,300	28,300	60.0	278.4	24,100	24,100	210
220	55.2	275.0	27,300	27,300	57.9	270.5	23,100	23,100	220
230	53.0	266.5	26,300	26,300	55.6	261.9	22,300	22,300	230
240	50.7	257.4	25,400	25,400	53.3	252.5	21,500	21,500	240
250	48.3	247.5	24,500	24,500	50.9	242.4	20,800	20,800	250
260	45.9	236.7	23,700	23,700	48.4	231.4	20,100	20,100	260
270	43.3	224.9	22,700	22,900	45.7	219.3	19,500	19,500	270
280	40.5	211.9	18,600	22,300	42.9	206.0	18,900	18,900	280
290	37.6	197.5	14,800	21,600	39.8	191.1	17,000	18,400	290
300	34.4	181.4	11,200	21,000	36.5	174.3	13,100	17,900	300
310	30.8	162.8	7,700	20,500	32.8	154.9	9,300	17,500	310
320	26.8	140.9		20,100	28.5	131.6		17,200	320
330	21.9	113.6		19,600					330

MLC650 VPC-MAX S-1

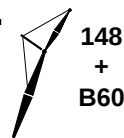
ASME B30.5



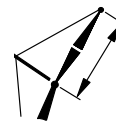
	10°					20°				
										
	ft	°	ft	lb	lb	ft	°	ft	lb	ft
75		82.8	364.0	49,900	49,900					75
80		82.0	363.0	49,000	49,000					80
85		81.2	361.9	48,000	48,000					85
90		80.4	360.7	47,100	47,100					90
95		79.6	359.5	46,100	46,100					95
100		78.8	358.2	45,200	45,200	82.4	355.8	39,200	39,200	100
105		77.9	356.8	44,200	44,200	80.8	353.0	37,700	37,700	105
110		77.1	355.3	43,400	43,400	79.9	351.5	37,000	37,000	110
115		76.3	353.7	42,500	42,500	79.1	349.9	36,300	36,300	115
120		75.4	352.1	41,700	41,700	78.2	348.3	35,600	35,600	120
125		74.6	350.3	40,800	40,800	77.4	346.5	34,900	34,900	125
130		73.7	348.5	40,000	40,000	76.5	344.7	34,300	34,300	130
135		72.9	346.7	39,200	39,200	75.7	342.8	33,700	33,700	135
140		72.0	344.7	38,400	38,400	74.8	340.8	33,100	33,100	140
145		71.2	342.6	37,600	37,600	73.9	338.7	32,500	32,500	145
150		70.3	340.5	36,900	36,900	73.1	336.5	31,900	31,900	150
155		69.4	338.2	36,200	36,200	72.2	334.3	31,400	31,400	155
160		68.6	335.9	35,500	35,500	71.3	331.9	30,800	30,800	160
165		67.7	333.5	34,800	34,800	70.4	329.5	30,100	30,100	165
170		66.8	330.9	34,100	34,100	69.5	326.9	29,400	29,400	170
175		65.9	328.3	33,500	33,500	68.6	324.2	28,800	28,800	175
180		65.0	325.6	32,900	32,900	67.7	321.5	28,200	28,200	180
190		63.2	319.8	31,600	31,600	65.8	315.6	27,100	27,100	190
200		61.3	313.6	30,400	30,400	63.9	309.4	25,900	25,900	200
210		59.4	307.0	29,300	29,300	62.0	302.6	25,000	25,000	210
220		57.4	299.8	28,300	28,300	60.0	295.3	24,100	24,100	220
230		55.4	292.1	27,300	27,300	58.0	287.5	23,200	23,200	230
240		53.4	283.8	26,500	26,500	55.9	279.1	22,400	22,400	240
250		51.2	274.9	25,600	25,600	53.7	270.0	21,700	21,700	250
260		49.0	265.3	22,800	24,700	51.5	260.2	21,000	21,000	260
270		46.7	254.9	18,500	23,900	49.1	249.6	20,300	20,300	270
280		44.3	243.6	14,400	23,300	46.7	238.0	17,400	19,700	280
290		41.8	231.3	10,600	22,600	44.1	225.4	13,300	19,200	290
300		39.1	217.7	7,000	22,000	41.3	211.4	9,400	18,700	300
310		36.3	202.7		21,400	38.4	195.9		18,200	310
320		33.2	185.9		20,800	35.1	178.4		17,700	320
330		29.7	166.6		20,400	31.5	158.2		17,400	330
340		25.8	143.9		19,900	27.3	133.9		17,100	340
350		21.0	115.4		19,600					350

MLC650 VPC-MAX S-1

ASME B30.5



262.5 ft

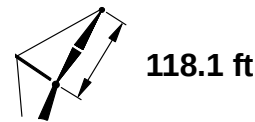
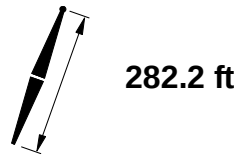


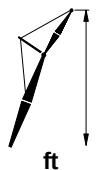
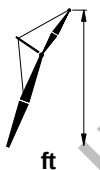
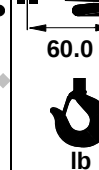
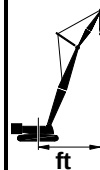
118.1 ft

	10°				20°				
	ft	°	ft	lb	ft	°	ft	lb	ft
80	82.4	383.1	49,300	49,300					80
85	81.7	382.0	48,400	48,400					85
90	80.9	380.9	47,500	47,500					90
95	80.1	379.7	46,600	46,600	82.8	375.9	39,500	39,500	95
100	79.4	378.5	45,700	45,700	82.1	374.7	38,700	38,700	100
105	78.6	377.2	44,900	44,900	81.3	373.3	38,100	38,100	105
110	77.8	375.8	44,000	44,000	80.5	371.9	37,300	37,300	110
115	77.0	374.3	43,100	43,100	79.7	370.4	36,700	36,700	115
120	76.2	372.7	42,400	42,400	78.9	368.9	36,100	36,100	120
125	75.4	371.1	41,600	41,600	78.1	367.2	35,400	35,400	125
130	74.6	369.4	40,800	40,800	77.3	365.5	34,900	34,900	130
135	73.8	367.6	40,000	40,000	76.5	363.7	34,300	34,300	135
140	73.0	365.8	39,200	39,200	75.7	361.8	33,700	33,700	140
145	72.2	363.8	38,500	38,500	74.8	359.9	33,000	33,000	145
150	71.4	361.8	37,700	37,700	74.0	357.8	32,500	32,500	150
155	70.6	359.7	37,000	37,000	73.2	355.7	32,000	32,000	155
160	69.8	357.5	36,400	36,400	72.4	353.5	31,500	31,500	160
165	68.9	355.2	35,700	35,700	71.5	351.2	30,900	30,900	165
170	68.1	352.9	35,100	35,100	70.7	348.8	30,300	30,300	170
175	67.3	350.4	34,400	34,400	69.8	346.3	29,600	29,600	175
180	66.4	347.9	33,800	33,800	69.0	343.7	29,000	29,000	180
190	64.7	342.5	32,700	32,700	67.2	338.3	27,900	27,900	190
200	63.0	336.7	31,500	31,500	65.5	332.4	26,800	26,800	200
210	61.2	330.6	30,400	30,400	63.7	326.2	25,800	25,800	210
220	59.4	323.9	29,400	29,400	61.9	319.5	24,900	24,900	220
230	57.5	316.8	28,400	28,400	60.0	312.3	24,100	24,100	230
240	55.7	309.2	27,400	27,400	58.1	304.5	23,300	23,300	240
250	53.7	301.1	24,500	26,500	56.1	296.3	22,500	22,500	250
260	51.7	292.4	19,900	25,700	54.0	287.4	21,800	21,800	260
270	49.6	283.0	15,500	25,000	51.9	277.9	19,200	21,100	270
280	47.5	272.9	11,500	24,200	49.8	267.6	14,900	20,500	280
290	45.3	262.0	7,700	23,500	47.5	256.4	10,800	19,900	290
300	43.0	250.3		22,800	45.1	244.4	6,900	19,400	300
310	40.5	237.4		22,300	42.6	231.2		18,900	310
320	37.9	223.3		21,700	39.9	216.7		18,400	320
330	35.1	207.7		21,100	37.0	200.6		18,000	330
340	32.1	190.3		20,700	33.9	182.3		17,600	340
350	28.7	170.3		20,200	30.3	161.3		17,300	350
360	24.8	146.7		19,900					360
370	20.1	117.1		19,500					370

MLC650 VPC-MAX S-1

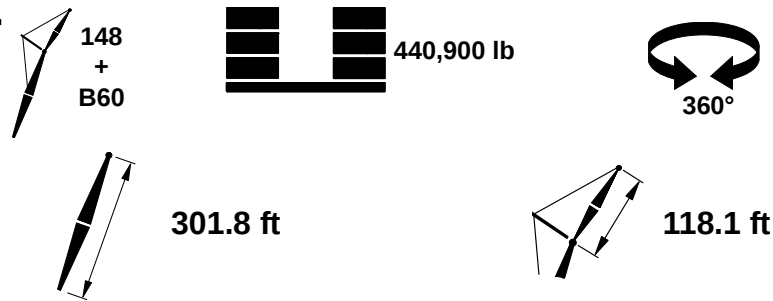
ASME B30.5



	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
80		82.8	403.1	49,500	49,500				80
85		82.1	402.1	48,700	48,700				85
90		81.4	401.0	47,800	47,800				90
95		80.6	399.9	47,000	47,000				95
100		79.9	398.7	46,200	46,200				100
105		79.1	397.5	45,300	45,300	82.5	394.9	39,000	105
110		78.4	396.1	44,500	44,500	81.7	393.6	38,400	110
115		77.7	394.8	43,800	43,800	81.0	392.2	37,800	115
120		76.9	393.3	42,900	42,900	80.2	390.8	37,100	120
125		76.2	391.8	42,200	42,200	79.5	389.4	36,500	125
130		75.4	390.1	41,400	41,400	78.7	387.8	35,900	130
135		74.7	388.5	40,700	40,700	77.9	386.2	35,200	135
140		73.9	386.7	40,000	40,000	77.2	384.5	34,700	140
145		73.1	384.9	39,300	39,300	76.4	382.7	34,100	145
150		72.4	383.0	38,500	38,500	75.6	380.8	33,600	150
155		71.6	381.0	37,900	37,900	74.9	378.9	33,000	155
160		70.8	378.9	37,200	37,200	74.1	376.9	32,500	160
165		70.0	376.8	36,600	36,600	73.3	374.8	32,000	165
170		69.3	374.6	35,900	35,900	72.5	372.7	31,500	170
175		68.5	372.3	35,300	35,300	71.7	370.4	31,000	175
180		67.7	369.9	34,700	34,700	70.9	368.1	30,500	180
190		66.1	364.8	33,600	33,600	70.1	365.7	29,900	190
200		64.4	359.4	32,500	32,500	68.5	360.6	28,700	200
210		62.8	353.6	31,300	31,300	66.8	355.1	27,600	210
220		61.1	347.5	30,300	30,300	65.2	349.2	26,700	220
230		59.4	340.9	29,400	29,400	63.5	343.0	25,800	230
240		57.6	333.9	28,400	28,400	61.7	336.3	24,900	240
250		55.9	326.4	27,500	27,500	60.0	329.2	24,100	250
260		54.0	318.3	26,700	26,700	58.1	321.6	23,300	260
270		52.1	309.8	18,100	25,900	56.3	313.4	22,600	270
280		50.2	300.6	13,700	25,200	54.4	304.7	21,900	280
290		48.2	290.8	9,700	24,500	52.4	295.4	17,600	290
300		46.1	280.3		23,800	50.3	285.4	13,200	300
310		43.9	269.0		23,200	48.2	274.7	9,200	310
320		41.7	256.7		22,500	46.0	263.1		320
330		39.3	243.3		22,000	43.7	250.5		330
340		36.7	228.7		21,500	41.2	236.8	18,700	340
350		34.0	212.6		21,000	38.6	221.7	18,300	350
360		31.1	194.5		20,500	35.8	205.0	17,900	360
370		27.8	173.8		20,200	32.7	186.1	17,600	370
380		24.0	149.3		19,800	29.2	164.3	17,300	380
390		19.3	118.6		19,400				390

MLC650 VPC-MAX S-1

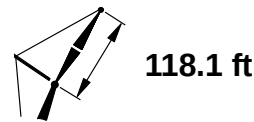
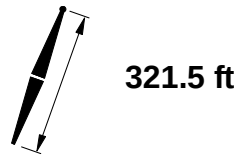
ASME B30.5

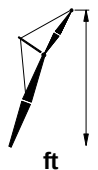
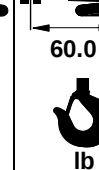
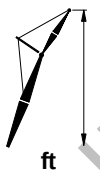
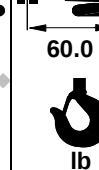
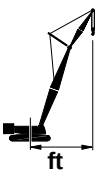


	10°				20°				
	ft	°	ft	lb	lb	ft	lb	lb	ft
85	82.5	422.1	48,900	48,900					85
90	81.8	421.1	48,100	48,100					90
95	81.1	420.1	47,300	47,300					95
100	80.4	418.9	46,600	46,600					100
105	79.7	417.7	45,700	45,700					105
110	79.0	416.5	45,000	45,000					110
115	78.3	415.2	44,300	44,300					115
120	77.6	413.8	43,500	43,500					120
125	76.8	412.3	42,800	42,800					125
130	76.1	410.8	42,100	42,100					130
135	75.4	409.2	41,400	41,400					135
140	74.7	407.5	40,600	40,600					140
145	74.0	405.8	40,000	40,000					145
150	73.2	404.0	39,300	39,300					150
155	72.5	402.1	38,600	38,600					155
160	71.8	400.1	38,000	38,000					160
165	71.0	398.1	37,300	37,300					165
170	70.3	396.0	36,800	36,800					170
175	69.6	393.8	36,100	36,100					175
180	68.8	391.6	35,500	35,500					180
190	67.3	386.8	34,400	34,400					190
200	65.8	381.8	33,300	33,300					200
210	64.2	376.3	32,200	32,200					210
220	62.6	370.6	31,200	31,200					220
230	61.0	364.4	30,300	30,300					230
240	59.4	357.8	29,300	29,300					240
250	57.7	350.9	24,700	28,500					250
260	56.0	343.5	19,700	27,600					260
270	54.3	335.6	15,000	26,800					270
280	52.5	327.2	10,700	26,100					280
290	50.7	318.2	6,700	25,300					290
300	48.8	308.6		24,600					300
310	46.8	298.4		24,000					310
320	44.8	287.4		23,400					320
330	42.7	275.6		22,800					330
340	40.5	262.9		22,300					340
350	38.2	249.1		21,800					350
360	35.7	233.9		21,200					360
370	33.0	217.2		20,800					370
380	30.1	198.5		20,400					380
390	26.9	177.1		20,000					390
400	23.2	151.8		19,700					400
410	18.6	120.0		19,400					410

MLC650 VPC-MAX S-1

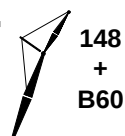
ASME B30.5



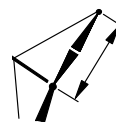
	10°					20°				
										
	ft	°	ft	lb	lb	°	ft	lb	lb	ft
85		82.8	442.1	49,000	49,000					85
90		82.1	441.2	48,300	48,300					90
95		81.5	440.2	47,500	47,500					95
100		80.8	439.1	46,800	46,800					100
105		80.1	437.9	46,100	46,100					105
110		79.5	436.7	45,400	45,400	82.5	433.9	38,800	38,800	110
115		78.8	435.5	44,700	44,700	81.1	431.4	37,700	37,700	115
120		78.1	434.2	44,000	44,000	80.4	430.1	37,100	37,100	120
125		77.5	432.8	43,300	43,300	79.8	428.7	36,600	36,600	125
130		76.8	431.3	42,600	42,600	79.1	427.2	36,000	36,000	130
135		76.1	429.8	41,900	41,900	78.4	425.7	35,500	35,500	135
140		75.4	428.2	41,300	41,300	77.7	424.1	34,900	34,900	140
145		74.7	426.6	40,600	40,600	77.0	422.4	34,500	34,500	145
150		74.0	424.9	39,900	39,900	76.3	420.7	33,900	33,900	150
155		73.3	423.1	39,300	39,300	75.6	418.9	33,500	33,500	155
160		72.6	421.2	38,700	38,700	74.9	417.0	33,000	33,000	160
165		71.9	419.3	38,100	38,100	74.2	415.1	32,500	32,500	165
170		71.2	417.3	37,500	37,500	73.5	413.1	32,100	32,100	170
175		70.5	415.2	36,800	36,800	72.8	411.0	31,600	31,600	175
180		69.8	413.1	36,300	36,300	72.1	408.8	31,200	31,200	180
190		68.4	408.6	35,200	35,200	70.6	404.3	30,300	30,300	190
200		66.9	403.8	34,100	34,100	69.2	399.4	29,300	29,300	200
210		65.5	398.7	33,100	33,100	67.7	394.3	28,300	28,300	210
220		64.0	393.3	32,000	32,000	66.2	388.8	27,300	27,300	220
230		62.5	387.5	31,200	31,200	64.6	382.9	26,400	26,400	230
240		61.0	381.3	25,400	30,200	63.1	376.7	25,600	25,600	240
250		59.4	374.8	20,000	29,300	61.5	370.1	24,800	24,800	250
260		57.8	367.9	15,000	28,500	59.9	363.1	20,200	24,100	260
270		56.2	360.5	10,300	27,700	58.3	355.6	15,200	23,400	270
280		54.5	352.7		26,900	56.6	347.7	10,600	22,800	280
290		52.9	344.5		26,200	54.9	339.3		22,100	290
300		51.1	335.7		25,500	53.1	330.4		21,500	300
310		49.3	326.3		24,900	51.3	320.9		21,000	310
320		47.5	316.4		24,200	49.4	310.7		20,500	320
330		45.6	305.7		23,600	47.5	299.9		20,000	330
340		43.6	294.3		23,100	45.5	288.2		19,500	340
350		41.5	282.1		22,500	43.3	275.7		19,100	350
360		39.4	268.9		22,000	41.1	262.2		18,700	360
370		37.1	254.6		21,500	38.8	247.5		18,300	370
380		34.7	239.0		21,100	36.3	231.3		18,000	380
390		32.1	221.7		20,600	33.6	213.4		17,600	390
400		29.2	202.4		19,400	30.6	193.2		17,400	400
410		26.1	180.3		16,700	27.3	169.9		17,100	410
420		22.4	154.2		14,100					420
430		17.9	121.2		11,200					430

MLC650 VPC-MAX S-1

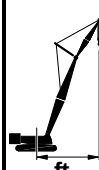
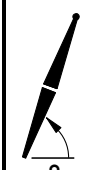
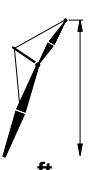
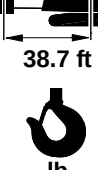
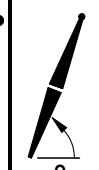
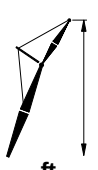
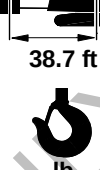
ASME B30.5



341.2 ft

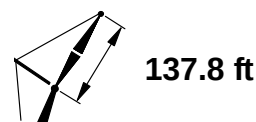
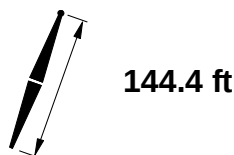


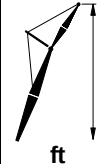
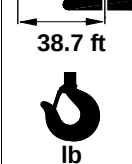
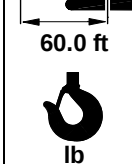
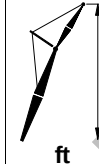
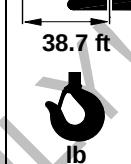
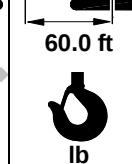
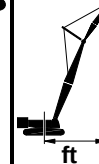
118.1 ft

	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
90		82.5	461.2	48,400	48,400				90
95		81.9	460.2	47,700	47,700				95
100		81.2	459.2	47,100	47,100				100
105		80.6	458.1	46,400	46,400				105
110		79.9	457.0	45,700	45,700	82.8	454.0	39,000	110
115		79.3	455.8	45,000	45,000	82.2	452.9	38,500	115
120		78.7	454.5	44,300	44,300	81.5	451.7	37,900	120
125		78.0	453.2	43,700	43,700	80.9	450.4	37,400	125
130		77.4	451.8	43,000	43,000	80.2	449.0	36,900	130
135		76.7	450.3	42,300	42,300	79.6	447.6	36,300	135
140		76.1	448.8	41,700	41,700	78.9	446.2	35,800	140
145		75.4	447.3	41,100	41,100	78.3	444.7	35,300	145
150		74.7	445.6	40,500	40,500	77.6	443.1	34,800	150
155		74.1	443.9	39,900	39,900	76.9	441.4	34,300	155
160		73.4	442.2	39,300	39,300	76.3	439.7	33,900	160
165		72.8	440.3	38,700	38,700	75.6	437.9	33,400	165
170		72.1	438.4	38,100	38,100	74.9	436.1	33,000	170
175		71.4	436.5	37,500	37,500	74.2	434.2	32,500	175
180		70.7	434.5	37,000	37,000	73.6	432.2	32,100	180
190		69.4	430.2	35,900	35,900	72.9	430.1	31,700	190
200		68.0	425.6	34,800	34,800	71.5	425.8	30,800	200
210		66.6	420.8	33,800	33,800	70.1	421.2	30,000	210
220		65.2	415.7	32,900	32,900	68.7	416.3	29,000	220
230		63.8	410.2	31,900	31,900	67.3	411.1	28,000	230
240		62.4	404.4	30,300	31,000	65.9	405.6	27,200	240
250		60.9	398.3	24,600	30,200	64.4	399.8	26,400	250
260		59.4	391.8	19,200	29,300	62.9	393.5	25,500	260
270		57.9	384.9	14,300	28,500	61.4	387.0	24,800	270
280		56.3	377.6	9,700	27,800	59.9	380.0	19,500	280
290		54.8	369.9		27,100	58.3	372.6	14,600	290
300		53.2	361.8		26,300	56.7	364.8	10,000	300
310		51.5	353.1		25,700	55.1	356.5		310
320		49.8	343.9		25,100	53.4	347.8		320
330		48.1	334.2		24,400	51.7	338.5		330
340		46.3	323.9		23,800	49.9	328.6		340
350		44.4	312.8		23,300	48.1	318.0		350
360		42.5	301.0		22,800	46.2	306.8		360
370		40.5	288.4		22,300	44.2	294.7		370
380		38.4	274.7		21,800	42.2	281.8		380
390		36.1	260.0		19,800	40.0	267.8		390
400		33.8	243.8		17,000	37.7	252.6		400
410		31.2	226.0		14,400	35.3	235.9		410
420		28.4	206.1		11,600	32.6	217.4		420
430		25.3	183.4		8,400	29.7	196.6		430

MLC650 VPC-MAX S-1

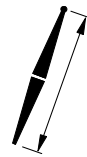
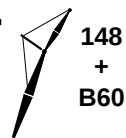
ASME B30.5



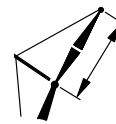
	10°					20°				
										
	ft	°	ft	38.7 ft lb	60.0 ft lb		ft	lb	lb	ft
65		82.6	286.4	41,900b	41,900b					65
70		81.5	285.3	40,500b	40,500b					70
75		80.5	284.1	39,100	39,100					75
80		79.4	282.7	37,900	37,900					80
85		78.4	281.3	36,700	36,700					85
90		77.3	279.8	35,600	35,600	82.7	278.5	31,600b	31,600b	90
95		76.3	278.2	34,500	34,500	80.6	275.3	29,600	29,600	95
100		75.2	276.4	33,400	33,400	79.5	273.6	28,700	28,700	100
105		74.1	274.6	32,300	32,300	78.4	271.7	27,900	27,900	105
110		73.0	272.7	31,200	31,200	77.3	269.7	27,000	27,000	110
115		71.9	270.6	30,200	30,200	76.2	267.7	26,200	26,200	115
120		70.8	268.4	29,300	29,300	75.1	265.5	25,400	25,400	120
125		69.7	266.1	28,300	28,300	74.0	263.2	24,600	24,600	125
130		68.6	263.7	27,400	27,400	72.8	260.7	23,900	23,900	130
135		67.4	261.2	26,500	26,500	71.7	258.2	23,200	23,200	135
140		66.3	258.6	25,700	25,700	70.5	255.5	22,500	22,500	140
145		65.1	255.8	24,900	24,900	69.3	252.7	21,900	21,900	145
150		64.0	252.9	24,100	24,100	68.2	249.7	21,200	21,200	150
155		62.8	249.8	23,400	23,400	67.0	246.6	20,700	20,700	155
160		61.6	246.6	22,600	22,600	65.7	243.4	20,100	20,100	160
165		60.4	243.2	22,000	22,000	64.5	240.0	19,500	19,500	165
170		59.1	239.7	21,300	21,300	63.2	236.4	19,000	19,000	170
175		57.9	236.0	20,700	20,700	62.0	232.7	18,500	18,500	175
180		56.6	232.2	20,100	20,100	60.7	228.8	17,900	17,900	180
190		53.9	223.9	18,900	18,900	58.0	220.4	17,000	17,000	190
200		51.2	214.8	17,900	17,900	55.2	211.1	16,200	16,200	200
210		48.3	204.8	16,900	16,900	52.3	200.9	15,400	15,400	210
220		45.3	193.7	15,900	15,900	49.2	189.5	14,700	14,700	220
230		42.1	181.3	15,100	15,100	45.9	176.8	14,000	14,000	230
240		38.6	167.3	14,400	14,400	42.3	162.4	13,400	13,400	240
250		34.7	151.2	13,600	13,600	38.3	145.7	12,900	12,900	250
260		30.4	132.2	13,000	13,000	33.7	125.8	12,400	12,400	260
270		25.2	108.6	12,400	12,400	28.2	100.5	12,100	12,100	270
280		18.2	75.6	12,000	12,000					280

MLC650 VPC-MAX S-1

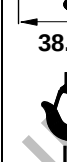
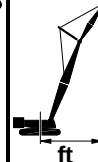
ASME B30.5



164.0 ft

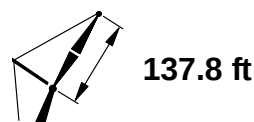
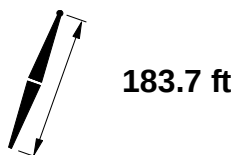


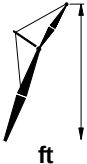
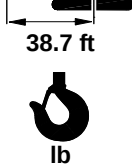
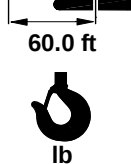
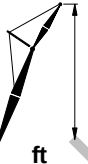
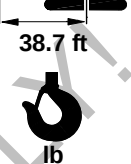
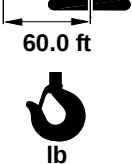
137.8 ft

	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
70		82.1	305.4	41,300	41,300				70
75		81.1	304.3	40,000	40,000				75
80		80.2	303.0	38,700	38,700				80
85		79.2	301.7	37,600	37,600				85
90		78.2	300.3	36,500	36,500				90
95		77.2	298.8	35,400	35,400	82.2	297.3	31,100	95
100		76.2	297.2	34,400	34,400	80.2	294.2	29,300	100
105		75.2	295.5	33,300	33,300	79.2	292.4	28,500	105
110		74.2	293.7	32,300	32,300	78.2	290.6	27,600	110
115		73.2	291.8	31,400	31,400	77.2	288.7	26,900	115
120		72.2	289.8	30,400	30,400	76.2	286.7	26,100	120
125		71.1	287.7	29,500	29,500	75.1	284.5	25,300	125
130		70.1	285.4	28,600	28,600	74.1	282.3	24,600	130
135		69.0	283.1	27,700	27,700	73.0	279.9	24,000	135
140		68.0	280.7	26,900	26,900	71.9	277.5	23,300	140
145		66.9	278.1	26,100	26,100	70.9	274.9	22,700	145
150		65.9	275.5	25,400	25,400	69.8	272.2	22,100	150
155		64.8	272.7	24,600	24,600	68.7	269.3	21,500	155
160		63.7	269.7	23,900	23,900	67.6	266.4	21,000	160
165		62.6	266.7	23,200	23,200	66.4	263.3	20,400	165
170		61.4	263.5	22,600	22,600	65.3	260.1	19,900	170
175		60.3	260.2	22,000	22,000	64.1	256.7	19,300	175
180		59.1	256.7	21,300	21,300	63.0	253.2	18,900	180
190		56.8	249.3	20,200	20,200	60.6	245.6	17,900	190
200		54.3	241.2	19,100	19,100	58.1	237.4	17,100	200
210		51.8	232.4	18,100	18,100	55.5	228.4	16,300	210
220		49.2	222.7	17,200	17,200	52.8	218.6	15,500	220
230		46.4	212.1	16,300	16,300	50.0	207.8	14,800	230
240		43.5	200.3	15,500	15,500	47.0	195.7	14,200	240
250		40.4	187.3	14,700	14,700	43.8	182.3	13,600	250
260		37.0	172.5	14,000	14,000	40.3	167.1	13,200	260
270		33.3	155.6	13,400	13,400	36.5	149.6	12,700	270
280		29.0	135.7	12,800	12,800	32.0	128.6	12,300	280
290		24.0	111.0	12,300	12,300	26.6	102.0	12,000	290
300		17.1	76.2	12,000	12,000				300

MLC650 VPC-MAX S-1

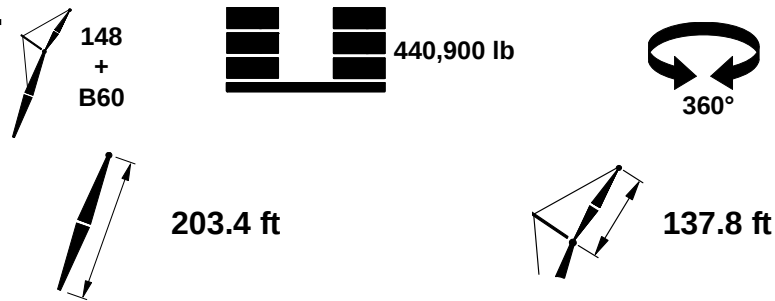
ASME B30.5

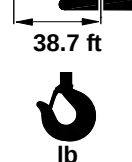
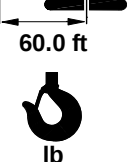
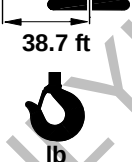


	10°					20°				
										
	ft	°	ft	lb	lb	°	ft	lb	lb	ft
70		82.6	325.5	41,800	41,800					70
75		81.7	324.4	40,600	40,600					75
80		80.8	323.3	39,500	39,500					80
85		79.9	322.0	38,400	38,400					85
90		78.9	320.7	37,300	37,300					90
95		78.0	319.3	36,300	36,300	82.7	317.6	31,500	31,500	95
100		77.1	317.8	35,300	35,300	80.9	314.6	29,800	29,800	100
105		76.1	316.2	34,300	34,300	79.9	313.0	29,000	29,000	105
110		75.2	314.5	33,300	33,300	79.0	311.3	28,200	28,200	110
115		74.3	312.7	32,400	32,400	78.0	309.5	27,500	27,500	115
120		73.3	310.9	31,400	31,400	77.1	307.6	26,700	26,700	120
125		72.4	308.9	30,500	30,500	76.1	305.7	26,000	26,000	125
130		71.4	306.9	29,700	29,700	75.1	303.6	25,300	25,300	130
135		70.4	304.7	28,900	28,900	74.1	301.4	24,700	24,700	135
140		69.4	302.5	28,000	28,000	73.2	299.1	24,100	24,100	140
145		68.5	300.1	27,300	27,300	72.2	296.7	23,400	23,400	145
150		67.5	297.6	26,500	26,500	71.2	294.2	22,800	22,800	150
155		66.5	295.0	25,800	25,800	70.1	291.6	22,300	22,300	155
160		65.5	292.4	25,100	25,100	69.1	288.9	21,700	21,700	160
165		64.4	289.5	24,400	24,400	68.1	286.1	21,100	21,100	165
170		63.4	286.6	23,700	23,700	67.0	283.1	20,600	20,600	170
175		62.4	283.6	23,100	23,100	66.0	280.0	20,200	20,200	175
180		61.3	280.4	22,500	22,500	64.9	276.8	19,700	19,700	180
190		59.2	273.7	21,300	21,300	62.7	269.9	18,700	18,700	190
200		57.0	266.3	20,200	20,200	60.5	262.5	17,900	17,900	200
210		54.7	258.4	19,300	19,300	58.2	254.5	17,100	17,100	210
220		52.3	249.8	18,300	18,300	55.8	245.7	16,300	16,300	220
230		49.9	240.4	17,400	17,400	53.3	236.2	15,700	15,700	230
240		47.4	230.2	16,600	16,600	50.7	225.8	15,000	15,000	240
250		44.7	219.0	15,800	15,800	48.0	214.3	14,400	14,400	250
260		41.9	206.7	15,100	15,100	45.1	201.7	13,800	13,800	260
270		38.8	193.0	14,400	14,400	42.0	187.6	13,400	13,400	270
280		35.6	177.6	13,800	13,800	38.6	171.6	12,900	12,900	280
290		31.9	159.9	13,200	13,200	34.9	153.3	12,500	12,500	290
300		27.8	139.1	12,600	12,600	30.5	131.3	12,200	12,200	300
310		22.9	113.2	12,300	12,300	25.2	103.3	12,000	12,000	310
320		16.1	76.6	12,000	12,000					320

MLC650 VPC-MAX S-1

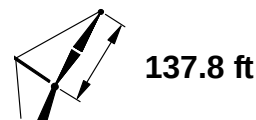
ASME B30.5

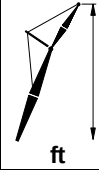
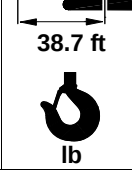
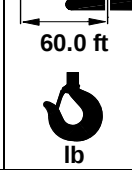
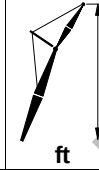
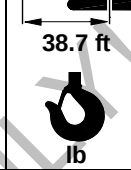
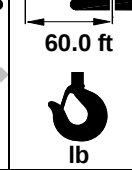
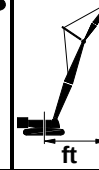


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
75		82.2	344.5	41,100	41,100				75
80		81.3	343.4	40,100	40,100				80
85		80.5	342.3	39,000	39,000				85
90		79.6	341.0	38,000	38,000				90
95		78.7	339.7	37,000	37,000	82.3	336.4	31,000	95
100		77.8	338.3	36,100	36,100	81.4	335.0	30,300	100
105		77.0	336.8	35,100	35,100	80.5	333.5	29,500	105
110		76.1	335.2	34,200	34,200	79.7	331.9	28,700	110
115		75.2	333.6	33,200	33,200	78.8	330.2	28,000	115
120		74.3	331.8	32,400	32,400	77.9	328.5	27,300	120
125		73.4	330.0	31,500	31,500	77.0	326.6	26,600	125
130		72.5	328.1	30,700	30,700	76.0	324.7	26,000	130
135		71.6	326.1	29,800	29,800	75.1	322.6	25,300	135
140		70.7	323.9	29,100	29,100	74.2	320.5	24,700	140
145		69.8	321.7	28,300	28,300	73.3	318.3	24,100	145
150		68.9	319.5	27,600	27,600	72.4	316.0	23,500	150
155		67.9	317.1	26,900	26,900	71.4	313.5	22,900	155
160		67.0	314.6	26,100	26,100	70.5	311.0	22,400	160
165		66.1	312.0	25,500	25,500	69.5	308.4	21,900	165
170		65.1	309.3	24,800	24,800	68.5	305.6	21,400	170
175		64.1	306.4	24,200	24,200	67.6	302.8	20,900	175
180		63.2	303.5	23,600	23,600	66.6	299.8	20,400	180
190		61.2	297.3	22,400	22,400	64.6	293.5	19,500	190
200		59.2	290.6	21,400	21,400	62.5	286.8	18,700	200
210		57.1	283.4	20,300	20,300	60.4	279.4	17,800	210
220		55.0	275.6	19,400	19,400	58.3	271.5	17,100	220
230		52.8	267.2	18,400	18,400	56.0	262.9	16,400	230
240		50.5	258.1	17,600	17,600	53.7	253.7	15,800	240
250		48.2	248.2	16,800	16,800	51.3	243.6	15,100	250
260		45.7	237.4	16,100	16,100	48.8	232.6	14,600	260
270		43.1	225.7	15,400	15,400	46.2	220.6	14,100	270
280		40.4	212.8	14,700	14,700	43.4	207.4	13,600	280
290		37.4	198.4	14,100	14,100	40.3	192.6	13,200	290
300		34.3	182.3	13,600	13,600	37.1	176.0	12,700	300
310		30.7	163.9	13,000	13,000	33.4	156.8	12,400	310
320		26.7	142.2	9,800	12,600	29.1	133.8	11,300	320
330		21.9	115.2	6,700	12,200				330
340		15.2	76.8		11,900				340

MLC650 VPC-MAX S-1

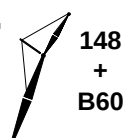
ASME B30.5



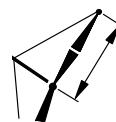
	10°					20°				
										
	ft	°	ft	lb	lb	ft	lb	lb	ft	
75		82.6	364.6	41,500	41,500					75
80		81.8	363.5	40,500	40,500					80
85		81.0	362.4	39,500	39,500					85
90		80.2	361.3	38,600	38,600					90
95		79.4	360.0	37,600	37,600					95
100		78.5	358.7	36,700	36,700	82.7	356.6	31,400	31,400	100
105		77.7	357.3	35,800	35,800	81.1	353.9	29,900	29,900	105
110		76.9	355.8	34,900	34,900	80.2	352.4	29,200	29,200	110
115		76.0	354.2	34,000	34,000	79.4	350.8	28,500	28,500	115
120		75.2	352.6	33,200	33,200	78.6	349.1	27,800	27,800	120
125		74.4	350.9	32,300	32,300	77.7	347.4	27,100	27,100	125
130		73.5	349.1	31,500	31,500	76.9	345.6	26,500	26,500	130
135		72.7	347.2	30,800	30,800	76.0	343.7	25,900	25,900	135
140		71.8	345.2	30,000	30,000	75.1	341.7	25,300	25,300	140
145		71.0	343.2	29,200	29,200	74.3	339.6	24,700	24,700	145
150		70.1	341.0	28,500	28,500	73.4	337.4	24,200	24,200	150
155		69.2	338.8	27,800	27,800	72.5	335.2	23,600	23,600	155
160		68.4	336.5	27,100	27,100	71.6	332.8	23,100	23,100	160
165		67.5	334.0	26,500	26,500	70.7	330.4	22,600	22,600	165
170		66.6	331.5	25,800	25,800	69.9	327.8	22,100	22,100	170
175		65.7	328.9	25,200	25,200	68.9	325.2	21,600	21,600	175
180		64.8	326.2	24,600	24,600	68.0	322.4	21,100	21,100	180
190		63.0	320.4	23,500	23,500	66.2	316.6	20,200	20,200	190
200		61.1	314.2	22,400	22,400	64.3	310.3	19,400	19,400	200
210		59.2	307.6	21,400	21,400	62.4	303.6	18,600	18,600	210
220		57.2	300.4	20,400	20,400	60.4	296.3	17,800	17,800	220
230		55.2	292.8	19,400	19,400	58.4	288.5	17,100	17,100	230
240		53.2	284.5	18,600	18,600	56.3	280.1	16,500	16,500	240
250		51.1	275.6	17,800	17,800	54.1	271.1	15,800	15,800	250
260		48.9	266.0	17,100	17,100	51.9	261.3	15,300	15,300	260
270		46.6	255.6	16,300	16,300	49.5	250.8	14,700	14,700	270
280		44.2	244.4	15,700	15,700	47.1	239.3	14,200	14,200	280
290		41.7	232.1	15,000	15,000	44.5	226.7	13,700	13,700	290
300		39.0	218.6	14,400	14,400	41.8	212.9	13,300	13,300	300
310		36.2	203.7	11,100	13,900	38.9	197.5	13,000	13,000	310
320		33.1	186.9	7,900	13,300	35.6	180.1	10,000	12,600	320
330		29.6	167.8		12,900	32.1	160.1	6,600	12,300	330
340		25.7	145.2		12,500	27.9	136.2		12,100	340
350		21.0	117.1		12,100					350

MLC650 VPC-MAX S-1

ASME B30.5



242.8 ft

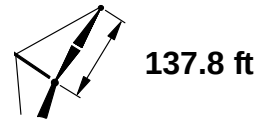
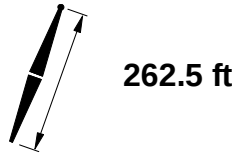


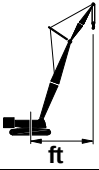
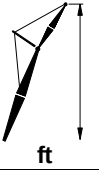
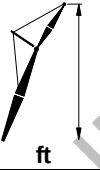
137.8 ft

	10°				20°				
	ft	°	ft	lb	lb	ft	lb	lb	ft
75	83.0	384.6	41,800	41,800					75
80	82.2	383.6	40,900	40,900					80
85	81.5	382.5	40,000	40,000					85
90	80.7	381.4	39,100	39,100					90
95	79.9	380.3	38,200	38,200					95
100	79.1	379.0	37,300	37,300	82.3	375.5	31,000	31,000	100
105	78.4	377.7	36,400	36,400	81.6	374.2	30,200	30,200	105
110	77.6	376.3	35,600	35,600	80.8	372.7	29,600	29,600	110
115	76.8	374.8	34,700	34,700	80.0	371.3	28,900	28,900	115
120	76.0	373.3	33,900	33,900	79.2	369.7	28,300	28,300	120
125	75.2	371.6	33,100	33,100	78.4	368.1	27,600	27,600	125
130	74.4	369.9	32,300	32,300	77.6	366.3	27,000	27,000	130
135	73.6	368.2	31,500	31,500	76.8	364.5	26,400	26,400	135
140	72.8	366.3	30,800	30,800	76.0	362.7	25,900	25,900	140
145	72.0	364.4	30,100	30,100	75.2	360.7	25,300	25,300	145
150	71.2	362.4	29,400	29,400	74.3	358.7	24,700	24,700	150
155	70.4	360.3	28,700	28,700	73.5	356.6	24,200	24,200	155
160	69.6	358.1	28,100	28,100	72.7	354.3	23,700	23,700	160
165	68.7	355.8	27,400	27,400	71.8	352.1	23,200	23,200	165
170	67.9	353.4	26,800	26,800	71.0	349.7	22,700	22,700	170
175	67.1	351.0	26,200	26,200	70.2	347.2	22,200	22,200	175
180	66.2	348.5	25,500	25,500	69.3	344.6	21,800	21,800	180
190	64.5	343.1	24,400	24,400	67.6	339.2	20,900	20,900	190
200	62.8	337.3	23,300	23,300	65.8	333.4	20,000	20,000	200
210	61.0	331.2	22,300	22,300	64.0	327.1	19,300	19,300	210
220	59.2	324.6	21,300	21,300	62.2	320.4	18,500	18,500	220
230	57.4	317.5	20,400	20,400	60.3	313.2	17,800	17,800	230
240	55.5	309.9	19,600	19,600	58.4	305.6	17,100	17,100	240
250	53.5	301.8	18,800	18,800	56.4	297.3	16,600	16,600	250
260	51.5	293.1	18,000	18,000	54.4	288.5	16,000	16,000	260
270	49.5	283.7	17,300	17,300	52.3	279.0	15,400	15,400	270
280	47.4	273.7	16,600	16,600	50.2	268.7	14,800	14,800	280
290	45.1	262.8	13,600	15,900	47.9	257.7	14,400	14,400	290
300	42.8	251.1	10,100	15,300	45.5	245.6	13,300	13,900	300
310	40.4	238.3	6,800	14,700	43.0	232.5	9,700	13,500	310
320	37.8	224.2		14,200	40.4	218.1		13,100	320
330	35.0	208.7		13,700	37.5	202.1		12,800	330
340	32.0	191.3		13,200	34.4	184.1		12,400	340
350	28.6	171.5		12,700	30.8	163.3		12,200	350
360	24.8	148.1		12,400	26.8	138.4		12,000	360
370	20.2	118.9		12,100					370

MLC650 VPC-MAX S-1

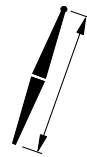
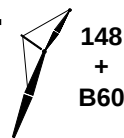
ASME B30.5



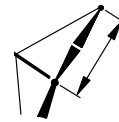
	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
80		82.6	403.6	41,200	41,200				80
85		81.9	402.6	40,400	40,400				85
90		81.2	401.6	39,500	39,500				90
95		80.4	400.4	38,700	38,700				95
100		79.7	399.3	37,800	37,800				100
105		78.9	398.0	37,000	37,000	82.7	395.7	31,300	105
110		78.2	396.7	36,200	36,200	81.2	393.1	29,900	110
115		77.5	395.3	35,300	35,300	80.5	391.6	29,300	115
120		76.7	393.8	34,600	34,600	79.7	390.2	28,700	120
125		76.0	392.3	33,800	33,800	79.0	388.6	28,100	125
130		75.2	390.7	33,000	33,000	78.2	387.0	27,500	130
135		74.5	389.0	32,300	32,300	77.5	385.3	26,900	135
140		73.7	387.3	31,600	31,600	76.7	383.5	26,300	140
145		72.9	385.4	30,900	30,900	75.9	381.7	25,800	145
150		72.2	383.5	30,200	30,200	75.2	379.8	25,300	150
155		71.4	381.5	29,500	29,500	74.4	377.8	24,800	155
160		70.6	379.5	28,900	28,900	73.6	375.7	24,300	160
165		69.9	377.3	28,200	28,200	72.8	373.5	23,800	165
170		69.1	375.1	27,600	27,600	72.0	371.3	23,300	170
175		68.3	372.8	27,000	27,000	71.2	368.9	22,800	175
180		67.5	370.4	26,400	26,400	70.4	366.5	22,400	180
190		65.9	365.4	25,300	25,300	68.8	361.4	21,500	190
200		64.3	360.0	24,200	24,200	67.2	356.0	20,700	200
210		62.6	354.2	23,200	23,200	65.5	350.2	19,900	210
220		60.9	348.1	22,300	22,300	63.8	343.9	19,200	220
230		59.2	341.5	21,300	21,300	62.1	337.3	18,400	230
240		57.5	334.5	20,500	20,500	60.3	330.2	17,800	240
250		55.7	327.0	19,600	19,600	58.5	322.6	17,100	250
260		53.9	319.0	18,800	18,800	56.6	314.5	16,600	260
270		52.0	310.5	18,200	18,200	54.7	305.8	16,000	270
280		50.0	301.3	14,200	17,400	52.7	296.5	15,500	280
290		48.0	291.6	10,500	16,800	50.7	286.6	14,400	290
300		46.0	281.1	7,000	16,100	48.6	275.9	10,700	300
310		43.8	269.7		15,500	46.4	264.3	7,100	310
320		41.5	257.5		15,000	44.1	251.8		320
330		39.2	244.2		14,400	41.6	238.2	13,300	330
340		36.6	229.7		13,900	39.0	223.2	13,000	340
350		33.9	213.6		13,500	36.2	206.6	12,600	350
360		31.0	195.6		13,000	33.2	187.9	12,400	360
370		27.7	175.0		12,600	29.7	166.3	12,200	370
380		24.0	150.8		12,300	25.7	140.5	12,000	380
390		19.4	120.5		12,100				390

MLC650 VPC-MAX S-1

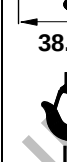
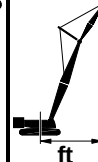
ASME B30.5



282.2 ft

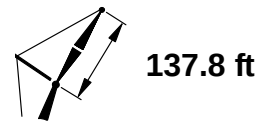
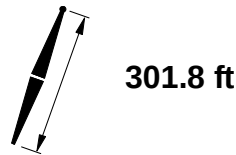


137.8 ft

	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
80	83.0	423.6	41,500	41,500					80
85	82.3	422.7	40,700	40,700					85
90	81.6	421.7	39,900	39,900					90
95	80.9	420.6	39,100	39,100					95
100	80.2	419.5	38,200	38,200					100
105	79.5	418.3	37,500	37,500	82.4	414.6	30,900	30,900	105
110	78.8	417.0	36,700	36,700	81.7	413.3	30,200	30,200	110
115	78.1	415.7	35,900	35,900	81.0	412.0	29,600	29,600	115
120	77.4	414.3	35,200	35,200	80.2	410.6	29,000	29,000	120
125	76.7	412.8	34,400	34,400	79.5	409.1	28,400	28,400	125
130	75.9	411.3	33,700	33,700	78.8	407.6	27,900	27,900	130
135	75.2	409.7	33,000	33,000	78.1	405.9	27,300	27,300	135
140	74.5	408.1	32,300	32,300	77.4	404.3	26,800	26,800	140
145	73.8	406.3	31,600	31,600	76.6	402.5	26,300	26,300	145
150	73.1	404.5	31,000	31,000	75.9	400.7	25,800	25,800	150
155	72.3	402.7	30,300	30,300	75.2	398.8	25,300	25,300	155
160	71.6	400.7	29,700	29,700	74.4	396.8	24,800	24,800	160
165	70.9	398.7	29,000	29,000	73.7	394.8	24,300	24,300	165
170	70.1	396.6	28,400	28,400	72.9	392.7	23,800	23,800	170
175	69.4	394.4	27,800	27,800	72.2	390.5	23,400	23,400	175
180	68.6	392.2	27,300	27,300	71.4	388.2	23,000	23,000	180
190	67.1	387.4	26,100	26,100	69.9	383.4	22,000	22,000	190
200	65.6	382.4	25,100	25,100	68.4	378.3	21,200	21,200	200
210	64.0	376.9	24,100	24,100	66.8	372.8	20,500	20,500	210
220	62.5	371.2	23,100	23,100	65.2	367.0	19,800	19,800	220
230	60.9	365.0	22,200	22,200	63.6	360.8	19,000	19,000	230
240	59.2	358.5	21,300	21,300	61.9	354.1	18,400	18,400	240
250	57.6	351.5	20,500	20,500	60.2	347.1	17,800	17,800	250
260	55.9	344.1	19,700	19,700	58.5	339.6	17,200	17,200	260
270	54.1	336.2	19,000	19,000	56.8	331.6	16,600	16,600	270
280	52.4	327.8	16,500	18,300	55.0	323.1	16,100	16,100	280
290	50.5	318.9	12,500	17,600	53.1	314.0	15,600	15,600	290
300	48.6	309.4	8,800	17,000	51.2	304.3	12,900	15,100	300
310	46.7	299.2		16,300	49.2	293.9	9,100	14,700	310
320	44.7	288.2		15,800	47.1	282.8		14,200	320
330	42.6	276.5		15,200	45.0	270.8		13,800	330
340	40.4	263.8		14,700	42.7	257.8		13,500	340
350	38.0	250.0		14,300	40.4	243.6		13,200	350
360	35.6	234.9		13,800	37.8	228.1		12,800	360
370	32.9	218.3		13,300	35.1	210.9		12,500	370
380	30.0	199.6		12,900	32.1	191.5		12,300	380
390	26.8	178.4		12,600	28.7	169.2		12,100	390
400	23.2	153.3		12,200	24.8	142.4		12,000	400
410	18.7	121.9		12,000					410

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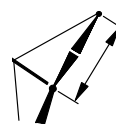
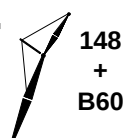
ASME B30.5

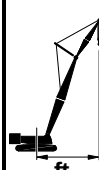
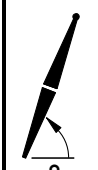
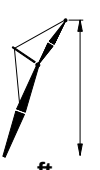
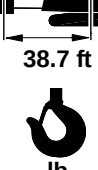
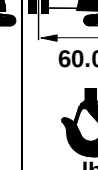
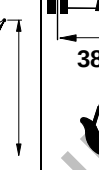


	10°				20°				
	ft	°	ft	lb	lb	ft	lb	lb	ft
85	82.6	442.7	40,900	40,900					85
90	82.0	441.7	40,100	40,100					90
95	81.3	440.7	39,400	39,400					95
100	80.6	439.6	38,600	38,600					100
105	80.0	438.5	37,900	37,900					105
110	79.3	437.3	37,100	37,100	82.7	434.7	31,100	31,100	110
115	78.6	436.0	36,400	36,400	81.4	432.2	29,900	29,900	115
120	77.9	434.7	35,700	35,700	80.7	430.9	29,300	29,300	120
125	77.3	433.3	35,000	35,000	80.0	429.5	28,800	28,800	125
130	76.6	431.9	34,300	34,300	79.3	428.0	28,300	28,300	130
135	75.9	430.3	33,600	33,600	78.6	426.5	27,700	27,700	135
140	75.2	428.8	32,900	32,900	78.0	424.9	27,200	27,200	140
145	74.5	427.1	32,200	32,200	77.3	423.2	26,700	26,700	145
150	73.9	425.4	31,600	31,600	76.6	421.5	26,200	26,200	150
155	73.2	423.6	31,000	31,000	75.9	419.7	25,700	25,700	155
160	72.5	421.8	30,300	30,300	75.2	417.9	25,200	25,200	160
165	71.8	419.9	29,700	29,700	74.5	415.9	24,700	24,700	165
170	71.1	417.9	29,200	29,200	73.8	413.9	24,300	24,300	170
175	70.4	415.8	28,600	28,600	73.0	411.8	23,900	23,900	175
180	69.7	413.7	28,000	28,000	72.3	409.7	23,400	23,400	180
190	68.2	409.2	26,900	26,900	70.9	405.1	22,600	22,600	190
200	66.8	404.4	25,900	25,900	69.4	400.3	21,800	21,800	200
210	65.3	399.3	24,900	24,900	68.0	395.1	21,000	21,000	210
220	63.8	393.9	23,900	23,900	66.5	389.6	20,300	20,300	220
230	62.3	388.1	23,000	23,000	64.9	383.8	19,600	19,600	230
240	60.8	381.9	22,200	22,200	63.4	377.6	19,000	19,000	240
250	59.2	375.4	21,300	21,300	61.8	371.0	18,400	18,400	250
260	57.7	368.5	20,600	20,600	60.2	364.0	17,800	17,800	260
270	56.1	361.2	19,900	19,900	58.6	356.6	17,200	17,200	270
280	54.4	353.4	13,300	19,100	56.9	348.7	16,700	16,700	280
290	52.7	345.2	9,400	18,400	55.2	340.3	14,100	16,200	290
300	51.0	336.4		17,800	53.4	331.4	10,100	15,700	300
310	49.2	327.1		17,200	51.6	321.9		15,200	310
320	47.4	317.1		16,600	49.7	311.8		14,800	320
330	45.5	306.5		16,000	47.8	301.0		14,300	330
340	43.5	295.1		15,500	45.8	289.4		14,000	340
350	41.4	283.0		15,000	43.7	277.0		13,600	350
360	39.3	269.8		14,500	41.5	263.5		13,300	360
370	37.0	255.5		14,000	39.2	248.9		13,000	370
380	34.6	240.0		13,600	36.7	232.9		12,700	380
390	32.0	222.8		13,200	34.0	215.1		12,400	390
400	29.2	203.6		12,800	31.1	195.1		12,200	400
410	26.0	181.6		12,500	27.8	172.0		12,100	410
420	22.4	155.8		12,200					420
430	18.0	123.3		12,000					430

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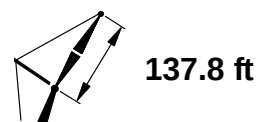
ASME B30.5

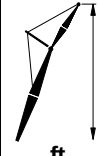
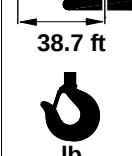
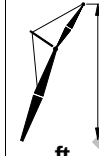
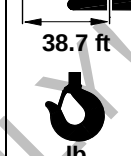
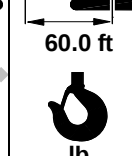


	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
85	82.9	462.6	41,100	41,100					85
90	82.3	461.7	40,400	40,400					90
95	81.7	460.8	39,700	39,700					95
100	81.0	459.7	38,900	38,900					100
105	80.4	458.6	38,200	38,200					105
110	79.8	457.5	37,500	37,500	82.4	453.6	30,800	30,800	110
115	79.1	456.3	36,800	36,800	81.8	452.4	30,200	30,200	115
120	78.5	455.0	36,100	36,100	81.1	451.2	29,600	29,600	120
125	77.8	453.7	35,500	35,500	80.5	449.8	29,100	29,100	125
130	77.2	452.3	34,800	34,800	79.8	448.4	28,600	28,600	130
135	76.5	450.9	34,100	34,100	79.2	447.0	28,000	28,000	135
140	75.9	449.4	33,500	33,500	78.5	445.5	27,600	27,600	140
145	75.2	447.8	32,800	32,800	77.8	443.9	27,100	27,100	145
150	74.6	446.2	32,200	32,200	77.2	442.2	26,600	26,600	150
155	73.9	444.5	31,600	31,600	76.5	440.5	26,100	26,100	155
160	73.3	442.7	31,000	31,000	75.8	438.7	25,700	25,700	160
165	72.6	440.9	30,400	30,400	75.2	436.9	25,200	25,200	165
170	71.9	439.0	29,900	29,900	74.5	435.0	24,800	24,800	170
175	71.3	437.0	29,300	29,300	73.8	433.0	24,300	24,300	175
180	70.6	435.0	28,800	28,800	73.1	431.0	23,900	23,900	180
190	69.2	430.8	27,600	27,600	71.8	426.7	23,100	23,100	190
200	67.9	426.2	26,600	26,600	70.4	422.1	22,300	22,300	200
210	66.5	421.4	25,700	25,700	69.0	417.2	21,600	21,600	210
220	65.1	416.2	24,700	24,700	67.6	412.0	20,800	20,800	220
230	63.6	410.8	23,800	23,800	66.1	406.5	20,200	20,200	230
240	62.2	405.0	22,900	22,900	64.7	400.6	19,600	19,600	240
250	60.7	398.9	22,200	22,200	63.2	394.4	18,900	18,900	250
260	59.3	392.4	17,500	21,400	61.7	387.9	18,400	18,400	260
270	57.7	385.5	12,900	20,600	60.2	380.9	17,800	17,800	270
280	56.2	378.3	8,600	19,900	58.6	373.6	14,100	17,200	280
290	54.6	370.6		19,200	57.0	365.8	9,800	16,700	290
300	53.0	362.4		18,600	55.4	357.5		16,200	300
310	51.4	353.8		17,900	53.7	348.8		15,700	310
320	49.7	344.7		17,300	52.0	339.5		15,300	320
330	47.9	335.0		16,800	50.2	329.6		14,900	330
340	46.2	324.6		16,200	48.4	319.1		14,500	340
350	44.3	313.6		15,700	46.5	307.9		14,100	350
360	42.4	301.9		15,200	44.6	295.9		13,700	360
370	40.4	289.3		14,700	42.5	283.0		13,500	370
380	38.3	275.7		14,300	40.4	269.1		13,200	380
390	36.0	260.9		13,900	38.1	254.0		12,900	390
400	33.7	244.9		13,500	35.6	237.4		12,600	400
410	31.1	227.2		13,100	33.0	219.1		12,400	410
420	28.4	207.4		12,700	30.1	198.4		12,200	420
430	25.3	184.7		12,500	26.9	174.6		12,000	430
440	21.7	158.1		11,900					440
450	17.4	124.5		8,900					450

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	10°				20°				
									
	ft	°	ft	lb	lb	ft	lb	lb	ft
90		82.6	481.7	40,500	40,500				90
95		82.0	480.8	39,900	39,900				95
100		81.4	479.8	39,200	39,200				100
105		80.8	478.8	38,500	38,500				105
110		80.2	477.7	37,900	37,900				110
115		79.6	476.5	37,200	37,200				115
120		79.0	475.3	36,500	36,500				120
125		78.3	474.0	35,900	35,900				125
130		77.7	472.7	35,200	35,200				130
135		77.1	471.3	34,600	34,600				135
140		76.5	469.9	34,000	34,000				140
145		75.9	468.4	33,400	33,400				145
150		75.2	466.8	32,800	32,800				150
155		74.6	465.2	32,200	32,200				155
160		74.0	463.6	31,600	31,600				160
165		73.3	461.8	31,000	31,000				165
170		72.7	460.0	30,500	30,500				170
175		72.1	458.1	29,900	29,900				175
180		71.4	456.2	29,400	29,400				180
190		70.1	452.2	28,300	28,300				190
200		68.8	447.8	27,300	27,300				200
210		67.5	443.2	26,400	26,400				210
220		66.2	438.4	25,500	25,500				220
230		64.8	433.2	24,600	24,600				230
240		63.5	427.7	23,700	23,700				240
250		62.1	421.9	22,900	22,900				250
260		60.7	415.8	21,700	22,200				260
270		59.3	409.4	16,800	21,400				270
280		57.8	402.5	12,200	20,700				280
290		56.3	395.3	8,000	20,000				290
300		54.8	387.7		19,300				300
310		53.3	379.7		18,700				310
320		51.7	371.2		18,100				320
330		50.1	362.2		17,500				330
340		48.5	352.7		17,000				340
350		46.8	342.7		16,500				350
360		45.0	332.0		15,900				360
370		43.2	320.6		15,400				370
380		41.3	308.4		15,000				380
390		39.4	295.4		14,500				390
400		37.3	281.4		14,200				400
410		35.1	266.2		13,700				410
420		32.8	249.6		13,300				420
430		30.3	231.4		11,800				430
440		27.6	211.0		8,800				440
450									450