


Liftcrane Boom

Extended Upper Point Capacities

Boom No. B85:685-680-681-682
 with Mast No. M10:684 or Mast No. M11:684 and
 24.9 ft Extended Upper Boom Point
 881,800 lb VPC (Variable Position Counterweight)
 360 Degree Rating


MLC650 VPC-MAX SERIES 3


 **LIFTING CAPACITIES:** Lifting capacities for various boom lengths and operating radii are for freely suspended loads and may be based on percent of static tipping or strength of structural components. Capacities shown are for boom point or extended upper boom point and their respective operating radii. Capacities must be reduced by applicable deducts.


Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath sheaves is considered part of load. Boom is 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.

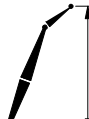
OPERATING CONDITIONS: Machine to operate on a firm, level, and uniformly supporting surface. Refer to Boom Rigging No. 84038306, Mast Rigging No. 81025005 or No. 84050187, Wire Rope Specification chart No. 9567-A, Counterweight Arrangement chart No. 9349-A, and Wind Conditions chart No. 9566-A. Crane 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.

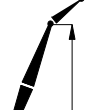
MACHINE TRAVEL: Machine to travel on a firm, level, and uniformly supporting surface. Boom must be within boom angle range shown in capacity chart. Refer to Maximum Allowable Travel Specification chart No. 9565-A.

 **EXTENDED UPPER BOOM POINT OPERATING RADIUS:** Extended upper boom point operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block.

 **BOOM POINT OPERATING RADIUS:** Boom point operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block on boom point.

 **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.

 **EXTENDED UPPER BOOM POINT ELEVATION:** Extended upper boom point elevation is vertical distance from ground level to centerline of extended upper boom point shaft.

 **BOOM POINT ELEVATION:** Boom point elevation is vertical distance from ground level to centerline of boom 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 881,800 lb VPC.

Warning: Luffing jib backstay straps must be removed before use of this chart. *Crane tipping or structural damage may occur.*

Upper Boom Point (upper sheave) Capacity for Liftcrane Service - Whip Line	
Drum 1 or 3	
1 Part	2 Parts
30,000 lb	60,000 lb
In all cases upper boom point (upper sheave) capacities cannot exceed those listed for extended upper boom point.	

Boom Point Capacity for Liftcrane Service - Whip Line	
Drum 1	Drum 3
1 Part	
48,800 lb	30,000 lb
2 Parts	
97,600 lb	60,000 lb
3 Parts	
146,400 lb	90,000 lb
4 Parts	
195,200 lb	120,000 lb

REFERENCE ONLY!

MLC650 VPC-MAX S-3

ASME B30.5



Refer to Tables 1 and 2 for raising ability with the maximum weight of all load blocks, hooks, weight balls, slings, and hoist lines beneath sheaves. For block weights shown with #, load blocks, hooks, weight balls, 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 length. Counterweight position selection may be changed with boom on ground or while boom is within operating range of capacity chart.

Combined weight beneath sheaves must not exceed block weight shown.

Table 1

Over End or Side of Crawlers		
Boom Length (ft)	38.7 ft Counterweight Position	60.0 ft Counterweight Position
	Block Weight (lb)	
351.1	22,400	22,400
360.9	22,400	22,400
370.7	22,400	22,400
380.6	22,400	22,400
390.4	17,300	22,400
400.3	9,300	22,400
410.1	9,300	22,400
419.9	#	22,400
429.8	Raising Not Permitted	22,400
439.6		22,400
449.5		22,400
459.3		22,400
469.2		17,300
479.0		9,300
488.8		9,300
498.7		#
508.5		#
518.4		#
528.2		
538.1		

Table 2

Over End of Blocked Crawlers		
Boom Length (ft)	38.7 ft Counterweight Position	60.0 ft Counterweight Position
	Block Weight (lb)	
351.1	22,400	22,400
360.9	22,400	22,400
370.7	22,400	22,400
380.6	22,400	22,400
390.4	17,300	22,400
400.3	9,300	22,400
410.1	9,300	22,400
419.9	#	22,400
429.8	#	22,400
439.6	#	22,400
449.5	#	22,400
459.3	Raising Not Permitted	22,400
469.2		17,300
479.0		9,300
488.8		9,300
498.7		#
508.5	#	#
518.4	#	#
528.2	#	#
538.1	#	#

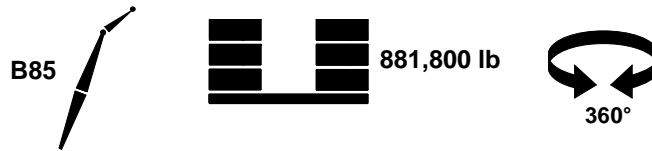
Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius and crane configuration is within 360 degree chart. Crane tipping or structural damage can occur.

Explanation of Symbols

	<p>Boom No. B85:685-680-681-682</p>
	<p>VPC (Variable Position Counterweight)</p>
	<p>360 Degree Rating</p>
	<p>Boom Length</p>
	<p>Extended Upper Boom Point Offset Angle</p>
	<p>Extended Upper Boom Point Operating Radius (see page 1)</p>
	<p>Extended Upper Boom Point Elevation (see page 1)</p>
	<p>Boom Point Operating Radius (see page 1)</p>
	<p>Boom Point Elevation (see page 1)</p>
	<p>Boom Angle (see page 1)</p>
	<p>Counterweight Position from Axis of Rotation</p>
	<p>Lifting Capacities (see page 1)</p>

MLC650 VPC-MAX S-3

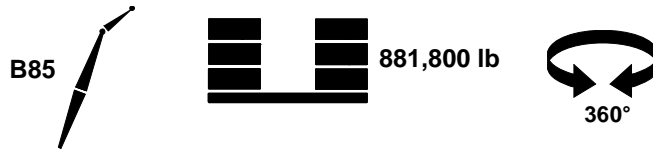
ASME B30.5



351.0 ft		28°				
ft	ft	ft	ft	ft	lb	lb
50	382.3	40.6	357.7	84.9	341,600	341,600
51	382.2	41.6	357.6	84.8	341,600	341,600
52	382.1	42.5	357.5	84.6	341,600	341,600
53	381.9	43.4	357.4	84.5	341,600	341,600
54	381.8	44.4	357.3	84.3	341,600	341,600
55	381.7	45.3	357.2	84.2	341,600	341,600
56	381.5	46.3	357.1	84.0	341,600	341,600
57	381.4	47.2	357.0	83.9	341,600	341,600
58	381.2	48.2	356.9	83.7	341,600	341,600
59	381.1	49.1	356.8	83.5	341,600	341,600
60	381.0	50.0	356.6	83.4	341,600	341,600
65	380.2	54.7	356.0	82.6	341,600	341,600
70	379.3	59.3	355.3	81.8	341,600	341,600
75	378.4	64.0	354.5	81.1	341,600	341,600
80	377.4	68.7	353.7	80.3	341,600	341,600
85	376.4	73.4	352.8	79.5	341,600	341,600
90	375.3	78.0	351.8	78.7	341,600	341,600
95	374.0	82.7	350.8	77.9	341,600	341,600
100	372.8	87.4	349.7	77.1	341,600	341,600
105	371.4	92.1	348.5	76.4	341,600	341,600
110	370.0	96.8	347.3	75.6	341,600	341,600
115	368.5	101.5	346.0	74.8	332,400	341,600
120	366.9	106.1	344.6	74.0	312,700	341,600
125	365.3	110.9	343.1	73.2	294,600	341,600
130	363.6	115.5	341.6	72.3	277,900	341,600
135	361.7	120.2	340.0	71.5	262,500	339,300
140	359.9	124.9	338.3	70.7	248,300	334,500
145	357.9	129.6	336.6	69.9	235,100	329,600
150	355.8	134.3	334.7	69.1	222,700	324,700
155	353.7	139.0	332.8	68.2	211,200	319,700
160	351.5	143.7	330.8	67.4	200,500	314,700
165	349.1	148.4	328.7	66.6	190,400	310,000
170	346.7	153.1	326.6	65.7	180,900	305,400
175	344.2	157.8	324.4	64.9	172,000	297,000
180	341.7	162.5	322.0	64.0	163,600	285,400
185	339.0	167.2	319.6	63.1	155,600	274,400
190	336.2	171.9	317.1	62.3	148,100	264,100
195	333.3	176.7	314.5	61.4	141,000	254,400
200	330.3	181.4	311.8	60.5	134,200	245,200
210	324.0	190.7	306.1	58.7	121,600	228,100
220	317.2	200.2	299.9	56.8	110,200	212,700
230	310.0	209.6	293.3	54.9	99,800	198,700
240	302.2	219.1	286.2	53.0	90,300	185,900
250	293.9	228.6	278.6	51.0	81,500	174,200
260	284.9	238.0	270.5	49.0	73,400	163,400
270	275.3	247.5	261.7	46.8	65,800	153,400
280	264.9	257.0	252.1	44.6	58,800	144,200
290	253.6	266.5	241.8	42.3	52,300	135,600
300	241.4	276.0	230.6	39.9	46,200	127,600
310	228.0	285.6	218.3	37.4	40,400	120,100
320	213.3	295.1	204.8	34.6	35,000	113,100
330	196.9	304.7	189.6	31.7	29,800	106,500
340	178.3	314.4	172.5	28.5	24,900	100,200

MLC650 VPC-MAX S-3

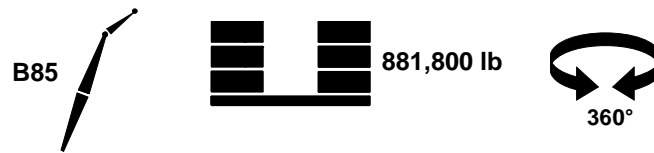
ASME B30.5



351.0 ft		35°				
ft	ft	ft	ft	°	38.7 ft lb	60.0 ft lb
50						
51						
52	381.0	40.3	357.8	85.0	302,600	302,600
53	380.9	41.2	357.7	84.8	302,600	302,600
54	380.8	42.2	357.6	84.7	302,600	302,600
55	380.6	43.1	357.5	84.5	302,600	302,600
56	380.5	44.0	357.4	84.4	302,600	302,600
57	380.4	45.0	357.3	84.2	302,600	302,600
58	380.2	45.9	357.2	84.1	302,600	302,600
59	380.1	46.8	357.0	83.9	302,600	302,600
60	379.9	47.8	356.9	83.8	302,600	302,600
65	379.2	52.5	356.3	83.0	302,600	302,600
70	378.3	57.2	355.6	82.2	302,600	302,600
75	377.4	61.9	354.9	81.4	302,600	302,600
80	376.4	66.5	354.1	80.6	302,600	302,600
85	375.3	71.2	353.2	79.9	302,600	302,600
90	374.2	75.9	352.3	79.1	302,600	302,600
95	373.0	80.7	351.3	78.3	302,600	302,600
100	371.7	85.4	350.2	77.5	302,600	302,600
105	370.4	90.0	349.0	76.7	302,600	302,600
110	369.0	94.8	347.8	75.9	302,600	302,600
115	367.5	99.5	346.5	75.1	302,600	302,600
120	365.9	104.1	345.2	74.3	302,600	302,600
125	364.2	108.9	343.7	73.5	296,700	298,300
130	362.5	113.6	342.2	72.7	279,900	293,600
135	360.7	118.3	340.7	71.9	264,500	289,100
140	358.8	123.0	339.0	71.0	250,100	284,800
145	356.8	127.7	337.3	70.2	236,800	280,600
150	354.7	132.5	335.5	69.4	224,400	276,600
155	352.6	137.2	333.6	68.6	212,800	272,700
160	350.4	141.9	331.6	67.7	202,000	269,000
165	348.0	146.6	329.5	66.9	191,800	265,500
170	345.6	151.4	327.4	66.0	182,300	262,000
175	343.1	156.1	325.2	65.2	173,300	258,700
180	340.5	160.8	322.9	64.3	164,800	255,500
185	337.8	165.5	320.5	63.4	156,800	252,400
190	335.0	170.3	318.0	62.6	149,300	249,400
195	332.1	175.1	315.4	61.7	142,100	246,500
200	329.1	179.8	312.7	60.8	135,300	243,800
210	322.8	189.3	307.0	59.0	122,600	228,900
220	316.0	198.8	300.9	57.1	111,100	213,400
230	308.7	208.3	294.3	55.2	100,600	199,300
240	300.9	217.8	287.2	53.3	91,000	186,500
250	292.5	227.4	279.6	51.3	82,100	174,700
260	283.5	236.9	271.5	49.2	74,000	163,900
270	273.8	246.5	262.6	47.1	66,400	153,800
280	263.4	256.0	253.1	44.9	59,300	144,600
290	252.1	265.7	242.8	42.5	52,700	135,900
300	239.8	275.3	231.5	40.1	46,500	127,900
310	226.3	285.0	219.2	37.5	40,700	120,300
320	211.4	294.6	205.5	34.8	35,200	113,300
330						
340						

MLC650 VPC-MAX S-3

ASME B30.5



		351.0 ft		41°			
	ft	ft	ft	ft	ft	lb	lb
50							
51							
52							
53							
54							
55	379.3	40.9	357.7	84.9	244,000	244,000	
56	379.1	41.8	357.6	84.7	244,000	244,000	
57	379.0	42.8	357.5	84.6	244,000	244,000	
58	378.9	43.7	357.4	84.4	244,000	244,000	
59	378.7	44.6	357.3	84.3	244,000	244,000	
60	378.6	45.6	357.2	84.1	244,000	244,000	
65	377.8	50.3	356.6	83.3	244,000	244,000	
70	376.9	55.0	356.0	82.6	244,000	244,000	
75	376.0	59.7	355.2	81.8	244,000	244,000	
80	375.0	64.4	354.5	81.0	244,000	244,000	
85	374.0	69.2	353.6	80.2	244,000	244,000	
90	372.8	73.9	352.7	79.4	244,000	244,000	
95	371.6	78.6	351.7	78.6	244,000	244,000	
100	370.3	83.3	350.7	77.8	244,000	244,000	
105	369.0	88.1	349.5	77.0	244,000	244,000	
110	367.5	92.8	348.3	76.2	244,000	244,000	
115	366.0	97.5	347.1	75.4	244,000	244,000	
120	364.5	102.3	345.7	74.6	244,000	244,000	
125	362.8	107.0	344.3	73.8	244,000	244,000	
130	361.1	111.7	342.8	73.0	244,000	244,000	
135	359.2	116.5	341.3	72.2	244,000	244,000	
140	357.3	121.2	339.7	71.4	244,000	244,000	
145	355.3	126.0	337.9	70.5	238,500	244,000	
150	353.3	130.7	336.2	69.7	226,000	244,000	
155	351.1	135.5	334.3	68.9	214,300	244,000	
160	348.9	140.2	332.3	68.0	203,400	244,000	
165	346.5	145.0	330.3	67.2	193,200	241,600	
170	344.1	149.8	328.1	66.3	183,600	239,100	
175	341.6	154.5	325.9	65.5	174,500	236,600	
180	339.0	159.3	323.6	64.6	166,000	234,300	
185	336.3	164.0	321.2	63.7	157,900	232,000	
190	333.5	168.8	318.8	62.8	150,300	229,800	
195	330.5	173.6	316.2	61.9	143,100	227,700	
200	327.5	178.3	313.5	61.0	136,200	225,700	
210	321.2	187.9	307.8	59.2	123,500	221,900	
220	314.3	197.5	301.7	57.4	111,900	214,000	
230	307.0	207.1	295.1	55.4	101,300	199,800	
240	299.2	216.7	288.1	53.5	91,600	186,900	
250	290.7	226.4	280.5	51.5	82,700	175,100	
260	281.7	236.0	272.3	49.4	74,400	164,200	
270	271.9	245.7	263.4	47.3	66,800	154,200	
280	261.4	255.3	253.9	45.0	59,700	144,800	
290	250.0	265.1	243.4	42.7	53,000	136,100	
300							
310							
320							
330							
340							

MLC650 VPC-MAX S-3

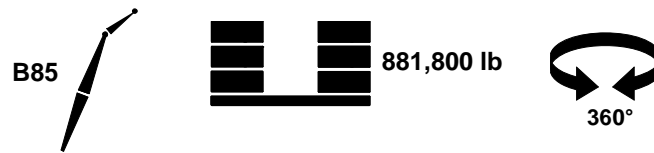
ASME B30.5



		360.9 ft		28°			
						38.7 ft	
						60.0 ft	
ft	ft	ft	ft	°	lb	lb	lb
51	392.1	41.6	367.6	84.9	341,600	341,600	341,600
52	392.0	42.6	367.5	84.8	341,600	341,600	341,600
53	391.8	43.5	367.4	84.6	341,600	341,600	341,600
54	391.7	44.5	367.3	84.5	341,600	341,600	341,600
55	391.6	45.4	367.2	84.3	341,600	341,600	341,600
56	391.5	46.3	367.1	84.2	341,600	341,600	341,600
57	391.3	47.3	367.0	84.0	341,600	341,600	341,600
58	391.2	48.2	366.8	83.9	341,600	341,600	341,600
59	391.0	49.1	366.7	83.7	341,600	341,600	341,600
60	390.9	50.1	366.6	83.6	341,600	341,600	341,600
65	390.1	54.8	366.0	82.8	341,600	341,600	341,600
70	389.3	59.4	365.3	82.1	341,600	341,600	341,600
75	388.4	64.1	364.6	81.3	341,600	341,600	341,600
80	387.5	68.8	363.7	80.5	341,600	341,600	341,600
85	386.4	73.5	362.9	79.8	341,600	341,600	341,600
90	385.3	78.2	361.9	79.0	341,600	341,600	341,600
95	384.2	82.9	360.9	78.3	341,600	341,600	341,600
100	382.9	87.6	359.8	77.5	341,600	341,600	341,600
105	381.6	92.2	358.7	76.7	341,600	341,600	341,600
110	380.2	96.9	357.5	75.9	341,600	341,600	341,600
115	378.8	101.6	356.2	75.2	331,400	341,600	341,600
120	377.3	106.3	354.9	74.4	311,500	341,600	341,600
125	375.7	111.0	353.4	73.6	293,400	341,600	341,600
130	374.0	115.8	351.9	72.8	276,700	341,600	341,600
135	372.2	120.5	350.4	72.0	261,300	341,600	341,600
140	370.4	125.1	348.8	71.2	247,000	341,600	341,600
145	368.5	129.8	347.1	70.4	233,700	341,600	341,600
150	366.5	134.5	345.3	69.6	221,400	336,700	336,700
155	364.4	139.3	343.4	68.8	209,900	330,900	330,900
160	362.2	144.0	341.5	68.0	199,100	325,400	325,400
165	360.0	148.6	339.5	67.2	189,000	320,100	320,100
170	357.7	153.4	337.4	66.4	179,500	308,300	308,300
175	355.2	158.1	335.2	65.6	170,500	295,900	295,900
180	352.7	162.8	332.9	64.7	162,100	284,300	284,300
185	350.1	167.5	330.6	63.9	154,100	273,400	273,400
190	347.4	172.2	328.2	63.0	146,600	263,100	263,100
195	344.7	176.9	325.6	62.2	139,500	253,300	253,300
200	341.8	181.6	323.0	61.3	132,700	244,100	244,100
210	335.7	191.1	317.5	59.6	120,100	227,000	227,000
220	329.2	200.5	311.6	57.8	108,700	211,600	211,600
230	322.2	210.0	305.2	56.0	98,300	197,600	197,600
240	314.7	219.4	298.4	54.1	88,700	184,800	184,800
250	306.7	228.9	291.1	52.2	79,900	173,100	173,100
260	298.2	238.4	283.3	50.3	71,800	162,300	162,300
270	289.0	247.9	274.9	48.2	64,300	152,300	152,300
280	279.1	257.4	265.9	46.1	57,300	143,100	143,100
290	268.5	266.9	256.1	44.0	50,700	134,500	134,500
300	257.0	276.4	245.5	41.7	44,600	126,500	126,500
310	244.6	286.0	234.0	39.3	38,800	119,000	119,000
320	230.9	295.5	221.5	36.8	33,400	112,000	112,000
330	215.9	305.1	207.6	34.1	28,300	105,400	105,400
340	199.2	314.7	192.2	31.2	23,400	99,200	99,200
350	180.3	324.4	174.7	28.0	18,800	93,300	93,300

MLC650 VPC-MAX S-3

ASME B30.5



ft	ft	ft	ft	°	lb	lb
51						
52						
53	390.8	41.3	367.6	85.0	305,500	305,500
54	390.7	42.2	367.5	84.8	305,500	305,500
55	390.6	43.1	367.4	84.7	305,500	305,500
56	390.4	44.1	367.3	84.5	305,500	305,500
57	390.3	45.0	367.2	84.4	305,500	305,500
58	390.2	45.9	367.1	84.2	305,500	305,500
59	390.0	46.9	367.0	84.1	305,500	305,500
60	389.9	47.8	366.9	83.9	305,500	305,500
65	389.1	52.5	366.3	83.2	305,500	305,500
70	388.3	57.3	365.6	82.4	305,500	305,500
75	387.4	62.0	364.9	81.6	305,500	305,500
80	386.4	66.7	364.1	80.9	305,500	305,500
85	385.4	71.4	363.3	80.1	305,500	305,500
90	384.3	76.0	362.4	79.4	305,500	305,500
95	383.1	80.8	361.4	78.6	305,500	305,500
100	381.9	85.5	360.3	77.8	305,500	305,500
105	380.6	90.2	359.2	77.1	305,500	305,500
110	379.2	94.9	358.0	76.3	305,500	305,500
115	377.7	99.6	356.8	75.5	305,500	305,500
120	376.2	104.4	355.4	74.7	305,500	305,500
125	374.6	109.1	354.1	73.9	295,600	300,900
130	372.9	113.8	352.6	73.1	278,800	296,200
135	371.1	118.5	351.0	72.4	263,200	291,700
140	369.3	123.2	349.4	71.6	248,900	287,400
145	367.4	128.0	347.7	70.8	235,500	283,300
150	365.4	132.7	346.0	70.0	223,100	279,300
155	363.3	137.4	344.2	69.1	211,500	275,400
160	361.1	142.1	342.3	68.3	200,600	271,700
165	358.9	146.8	340.3	67.5	190,500	268,100
170	356.5	151.6	338.2	66.7	180,900	264,700
175	354.1	156.4	336.0	65.9	171,900	261,400
180	351.6	161.1	333.8	65.0	163,400	258,100
185	349.0	165.8	331.4	64.2	155,400	255,000
190	346.3	170.5	329.0	63.3	147,800	252,000
195	343.5	175.3	326.5	62.5	140,600	249,200
200	340.6	180.0	323.9	61.6	133,800	244,900
210	334.5	189.5	318.4	59.9	121,100	227,800
220	327.9	199.1	312.5	58.1	109,600	212,300
230	320.9	208.6	306.2	56.3	99,100	198,200
240	313.4	218.1	299.4	54.4	89,500	185,400
250	305.4	227.6	292.1	52.5	80,600	173,600
260	296.8	237.2	284.3	50.5	72,400	162,800
270	287.6	246.8	275.9	48.5	64,800	152,800
280	277.7	256.4	266.8	46.4	57,800	143,500
290	267.0	266.0	257.1	44.2	51,200	134,800
300	255.5	275.6	246.5	41.9	45,000	126,800
310	242.9	285.2	235.0	39.5	39,200	119,300
320	229.2	294.9	222.3	37.0	33,700	112,200
330						
340						
350						

MLC650 VPC-MAX S-3

ASME B30.5



881,800 lb

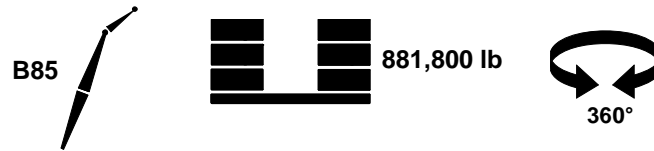


360°

		360.9 ft		41°			
						38.7 ft	60.0 ft
						lb	lb
ft	ft	ft	ft	°	lb	lb	lb
51							
52							
53							
54							
55	389.2	40.9	367.7	85.0	244,000	244,000	
56	389.1	41.9	367.6	84.9	244,000	244,000	
57	388.9	42.8	367.5	84.7	244,000	244,000	
58	388.8	43.8	367.4	84.6	244,000	244,000	
59	388.7	44.7	367.3	84.4	244,000	244,000	
60	388.5	45.6	367.1	84.3	244,000	244,000	
65	387.8	50.4	366.6	83.5	244,000	244,000	
70	386.9	55.1	365.9	82.8	244,000	244,000	
75	386.0	59.8	365.2	82.0	244,000	244,000	
80	385.1	64.5	364.5	81.2	244,000	244,000	
85	384.0	69.3	363.7	80.5	244,000	244,000	
90	382.9	74.0	362.8	79.7	244,000	244,000	
95	381.7	78.7	361.8	78.9	244,000	244,000	
100	380.5	83.5	360.8	78.2	244,000	244,000	
105	379.2	88.2	359.7	77.4	244,000	244,000	
110	377.8	92.9	358.5	76.6	244,000	244,000	
115	376.3	97.7	357.3	75.8	244,000	244,000	
120	374.8	102.4	356.0	75.0	244,000	244,000	
125	373.2	107.1	354.6	74.3	244,000	244,000	
130	371.5	111.9	353.2	73.5	244,000	244,000	
135	369.7	116.6	351.7	72.7	244,000	244,000	
140	367.9	121.4	350.1	71.9	244,000	244,000	
145	365.9	126.1	348.4	71.1	237,200	244,000	
150	363.9	130.9	346.7	70.3	224,700	244,000	
155	361.8	135.7	344.8	69.4	213,000	244,000	
160	359.7	140.4	342.9	68.6	202,100	244,000	
165	357.4	145.2	341.0	67.8	191,900	243,600	
170	355.0	150.0	338.9	67.0	182,200	241,000	
175	352.6	154.7	336.8	66.1	173,200	238,600	
180	350.1	159.5	334.5	65.3	164,600	236,200	
185	347.5	164.3	332.2	64.5	156,500	233,900	
190	344.7	169.0	329.8	63.6	148,900	231,700	
195	341.9	173.8	327.3	62.7	141,600	229,600	
200	339.0	178.6	324.7	61.9	134,800	227,600	
210	332.9	188.2	319.2	60.1	122,000	223,700	
220	326.3	197.7	313.4	58.3	110,400	212,900	
230	319.3	207.4	307.0	56.5	99,800	198,800	
240	311.7	217.0	300.2	54.6	90,100	185,900	
250	303.7	226.6	292.9	52.7	81,200	174,000	
260	295.0	236.2	285.1	50.7	72,900	163,200	
270	285.7	245.9	276.7	48.7	65,300	153,100	
280	275.8	255.6	267.6	46.5	58,100	143,800	
290	265.0	265.3	257.8	44.3	51,500	135,100	
300	253.3	275.0	247.1	42.0	45,200	127,000	
310							
320							
330							
340							
350							

MLC650 VPC-MAX S-3

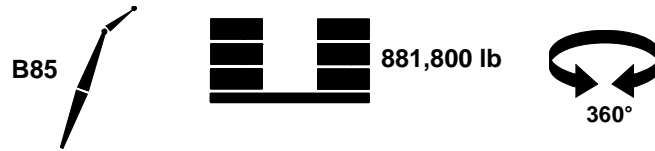
ASME B30.5



370.7 ft		28°				
ft	ft	ft	ft	°	38.7 ft lb	60.0 ft lb
52	401.9	42.6	377.3	84.9	341,600	341,600
53	401.8	43.6	377.2	84.7	341,600	341,600
54	401.6	44.5	377.1	84.6	341,600	341,600
55	401.5	45.5	377.0	84.5	341,600	341,600
56	401.4	46.4	376.9	84.3	341,600	341,600
57	401.2	47.3	376.8	84.2	341,600	341,600
58	401.1	48.3	376.7	84.0	341,600	341,600
59	401.0	49.2	376.6	83.9	341,600	341,600
60	400.8	50.1	376.5	83.7	341,600	341,600
65	400.1	54.9	375.9	83.0	341,600	341,600
70	399.3	59.5	375.2	82.3	341,600	341,600
75	398.4	64.2	374.5	81.5	341,600	341,600
80	397.5	68.9	373.7	80.8	341,600	341,600
85	396.5	73.6	372.8	80.0	341,600	341,600
90	395.4	78.3	371.9	79.3	341,600	341,600
95	394.3	83.0	370.9	78.5	341,600	341,600
100	393.1	87.7	369.9	77.8	341,600	341,600
105	391.8	92.4	368.8	77.1	341,600	341,600
110	390.5	97.1	367.6	76.3	341,600	341,600
115	389.0	101.8	366.3	75.5	328,300	341,600
120	387.6	106.5	365.0	74.8	308,500	341,600
125	386.0	111.2	363.6	74.0	290,300	341,600
130	384.4	115.9	362.2	73.3	273,600	341,600
135	382.7	120.6	360.7	72.5	258,100	341,600
140	380.9	125.3	359.1	71.7	243,800	341,600
145	379.0	130.0	357.4	71.0	230,600	341,600
150	377.1	134.7	355.7	70.2	218,200	340,700
155	375.1	139.5	353.9	69.4	206,700	334,900
160	373.0	144.1	352.0	68.6	195,900	329,400
165	370.8	148.9	350.0	67.8	185,800	318,900
170	368.5	153.6	348.0	67.0	176,200	305,700
175	366.2	158.3	345.9	66.2	167,300	293,400
180	363.7	163.0	343.7	65.4	158,800	281,800
185	361.2	167.7	341.4	64.6	150,900	270,900
190	358.6	172.4	339.1	63.8	143,300	260,500
195	355.9	177.2	336.6	62.9	136,200	250,800
200	353.1	181.9	334.1	62.1	129,400	241,500
210	347.2	191.3	328.7	60.4	116,800	224,500
220	341.0	200.8	323.0	58.7	105,300	209,000
230	334.2	210.2	316.9	57.0	94,900	195,000
240	327.1	219.7	310.3	55.2	85,300	182,200
250	319.4	229.2	303.3	53.3	76,500	170,500
260	311.2	238.7	295.8	51.5	68,400	159,700
270	302.4	248.2	287.8	49.5	60,900	149,700
280	293.0	257.7	279.2	47.5	53,900	140,500
290	283.0	267.2	269.9	45.5	47,300	131,900
300	272.1	276.7	259.9	43.3	41,200	123,900
310	260.4	286.3	249.1	41.1	35,500	116,400
320	247.7	295.8	237.3	38.7	30,100	109,400
330	233.8	305.4	224.5	36.3	25,000	102,800
340	218.5	315.0	210.4	33.6	20,100	96,600
350	201.5	324.6	194.7	30.7	15,500	90,700

MLC650 VPC-MAX S-3

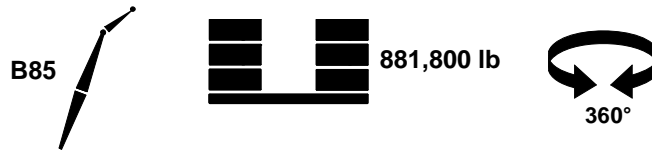
ASME B30.5



		370.7 ft		35°			
						38.7 ft	60.0 ft
ft	ft	ft	ft	°	lb	lb	
52							
53							
54	400.6	42.3	377.4	85.0	311,900	311,900	
55	400.5	43.2	377.3	84.8	311,900	311,900	
56	400.4	44.1	377.2	84.7	311,900	311,900	
57	400.2	45.1	377.1	84.5	311,900	311,900	
58	400.1	46.0	377.0	84.4	311,900	311,900	
59	400.0	46.9	376.9	84.2	311,900	311,900	
60	399.8	47.9	376.8	84.1	311,900	311,900	
65	399.1	52.6	376.2	83.3	311,900	311,900	
70	398.3	57.3	375.5	82.6	311,900	311,900	
75	397.4	62.0	374.8	81.9	311,900	311,900	
80	396.5	66.7	374.1	81.1	311,900	311,900	
85	395.5	71.5	373.2	80.4	311,900	311,900	
90	394.4	76.1	372.3	79.6	311,900	311,900	
95	393.2	80.9	371.4	78.9	311,900	311,900	
100	392.0	85.6	370.3	78.1	311,900	311,900	
105	390.8	90.3	369.3	77.4	311,900	311,900	
110	389.4	95.0	368.1	76.6	311,900	311,900	
115	388.0	99.7	366.9	75.9	311,900	311,900	
120	386.5	104.5	365.6	75.1	308,300	308,300	
125	384.9	109.2	364.2	74.4	292,600	303,400	
130	383.3	113.9	362.8	73.6	275,700	298,800	
135	381.6	118.6	361.3	72.8	260,200	294,300	
140	379.8	123.4	359.8	72.0	245,800	290,000	
145	377.9	128.1	358.1	71.3	232,400	285,900	
150	376.0	132.8	356.4	70.5	220,000	281,900	
155	374.0	137.6	354.6	69.7	208,400	278,000	
160	371.9	142.3	352.7	68.9	197,500	274,300	
165	369.7	147.0	350.8	68.1	187,300	270,700	
170	367.4	151.8	348.8	67.3	177,700	267,300	
175	365.1	156.5	346.7	66.5	168,700	264,000	
180	362.6	161.2	344.5	65.7	160,200	260,700	
185	360.1	166.0	342.3	64.9	152,200	257,600	
190	357.5	170.7	339.9	64.1	144,600	254,600	
195	354.8	175.5	337.5	63.2	137,400	251,700	
200	352.0	180.3	335.0	62.4	130,500	242,400	
210	346.1	189.8	329.6	60.7	117,800	225,300	
220	339.7	199.3	324.0	59.0	106,300	209,700	
230	333.0	208.8	317.8	57.2	95,800	195,700	
240	325.8	218.3	311.3	55.4	86,100	182,800	
250	318.1	227.9	304.3	53.6	77,300	171,000	
260	309.9	237.4	296.8	51.7	69,100	160,200	
270	301.1	247.0	288.8	49.8	61,500	150,100	
280	291.6	256.6	280.1	47.8	54,400	140,900	
290	281.5	266.2	270.9	45.7	47,800	132,200	
300	270.6	275.9	260.8	43.5	41,700	124,200	
310	258.8	285.5	250.0	41.3	35,900	116,700	
320	246.0	295.1	238.3	38.9	30,400	109,600	
330	232.0	304.8	225.3	36.4	25,200	103,000	
340							
350							

MLC650 VPC-MAX S-3

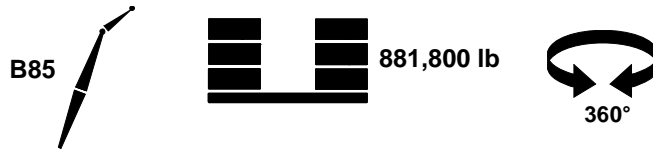
ASME B30.5



		370.7 ft		41°			
						38.7 ft	60.0 ft
						lb	lb
ft	ft	ft	ft	°			
52							
53							
54							
55							
56	399.0	41.9	377.4	85.0	244,000	244,000	
57	398.9	42.8	377.3	84.9	244,000	244,000	
58	398.7	43.8	377.2	84.7	244,000	244,000	
59	398.6	44.8	377.1	84.6	244,000	244,000	
60	398.4	45.7	377.0	84.4	244,000	244,000	
65	397.7	50.4	376.5	83.7	244,000	244,000	
70	396.9	55.1	375.8	82.9	244,000	244,000	
75	396.0	59.9	375.1	82.2	244,000	244,000	
80	395.1	64.6	374.4	81.5	244,000	244,000	
85	394.1	69.3	373.6	80.7	244,000	244,000	
90	393.0	74.1	372.7	80.0	244,000	244,000	
95	391.9	78.8	371.8	79.2	244,000	244,000	
100	390.6	83.5	370.8	78.5	244,000	244,000	
105	389.4	88.3	369.7	77.7	244,000	244,000	
110	388.0	93.0	368.6	77.0	244,000	244,000	
115	386.6	97.7	367.4	76.2	244,000	244,000	
120	385.1	102.5	366.1	75.4	244,000	244,000	
125	383.5	107.3	364.8	74.7	244,000	244,000	
130	381.9	112.0	363.4	73.9	244,000	244,000	
135	380.1	116.7	361.9	73.1	244,000	244,000	
140	378.3	121.5	360.4	72.3	244,000	244,000	
145	376.5	126.3	358.7	71.6	234,200	244,000	
150	374.5	131.1	357.0	70.8	221,700	244,000	
155	372.5	135.8	355.3	70.0	210,000	244,000	
160	370.4	140.6	353.4	69.2	199,000	244,000	
165	368.2	145.3	351.5	68.4	188,700	244,000	
170	365.9	150.1	349.5	67.6	179,100	242,900	
175	363.6	154.9	347.4	66.8	170,000	240,500	
180	361.1	159.7	345.3	66.0	161,500	238,100	
185	358.6	164.4	343.0	65.2	153,400	235,800	
190	355.9	169.2	340.7	64.3	145,700	233,600	
195	353.2	174.0	338.3	63.5	138,400	231,500	
200	350.4	178.7	335.8	62.7	131,600	229,400	
210	344.5	188.3	330.5	61.0	118,800	225,500	
220	338.1	197.9	324.8	59.2	107,200	210,400	
230	331.3	207.5	318.7	57.5	96,600	196,200	
240	324.1	217.1	312.2	55.7	86,800	183,300	
250	316.4	226.8	305.2	53.8	77,900	171,500	
260	308.1	236.4	297.6	51.9	69,600	160,600	
270	299.2	246.1	289.6	50.0	62,000	150,500	
280	289.7	255.8	280.9	47.9	54,900	141,200	
290	279.5	265.4	271.7	45.9	48,200	132,500	
300	268.5	275.2	261.6	43.7	42,000	124,400	
310	256.6	284.9	250.7	41.4	36,100	116,900	
320							
330							
340							
350							

MLC650 VPC-MAX S-3

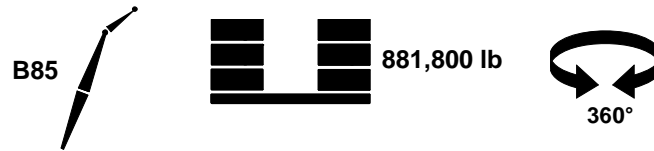
ASME B30.5



380.6 ft		28°				
ft	ft	ft	ft	°	38.7 ft lb	60.0 ft lb
52	411.8	42.7	387.3	85.0	341,600	341,600
53	411.7	43.7	387.2	84.9	341,600	341,600
54	411.5	44.6	387.1	84.7	341,600	341,600
55	411.4	45.5	387.0	84.6	341,600	341,600
56	411.3	46.5	386.9	84.4	341,600	341,600
57	411.2	47.4	386.8	84.3	341,600	341,600
58	411.0	48.3	386.7	84.2	341,600	341,600
59	410.9	49.2	386.6	84.0	341,600	341,600
60	410.8	50.2	386.4	83.9	341,600	341,600
61	410.6	51.2	386.3	83.7	341,600	341,600
65	410.1	54.9	385.9	83.2	341,600	341,600
70	409.3	59.6	385.2	82.4	341,600	341,600
75	408.4	64.3	384.5	81.7	341,600	341,600
80	407.5	69.0	383.7	81.0	341,600	341,600
85	406.5	73.7	382.9	80.3	341,600	341,600
90	405.5	78.4	382.0	79.6	341,600	341,600
95	404.4	83.1	381.0	78.8	341,600	341,600
100	403.2	87.8	380.0	78.1	341,600	341,600
105	402.0	92.5	378.9	77.4	341,600	341,600
110	400.7	97.2	377.8	76.6	341,600	341,600
115	399.3	102.0	376.5	75.9	326,700	341,600
120	397.8	106.6	375.3	75.2	306,800	341,600
125	396.3	111.3	373.9	74.4	288,600	341,600
130	394.7	116.1	372.5	73.7	271,900	341,600
135	393.1	120.8	371.0	72.9	256,400	341,600
140	391.3	125.5	369.5	72.2	242,100	340,800
145	389.5	130.2	367.9	71.4	228,800	336,100
150	387.6	135.0	366.2	70.7	216,500	331,400
155	385.7	139.7	364.4	69.9	204,900	326,600
160	383.6	144.4	362.6	69.2	194,100	321,800
165	381.5	149.1	360.7	68.4	184,000	316,900
170	379.3	153.8	358.7	67.6	174,500	304,500
175	377.1	158.5	356.7	66.8	165,500	292,100
180	374.7	163.3	354.5	66.0	157,100	280,500
185	372.3	168.0	352.3	65.3	149,100	269,600
190	369.7	172.7	350.0	64.5	141,600	259,200
195	367.1	177.4	347.6	63.7	134,400	249,500
200	364.4	182.1	345.2	62.9	127,600	240,200
210	358.7	191.6	340.0	61.2	115,000	223,200
220	352.6	201.1	334.5	59.6	103,600	207,700
230	346.1	210.5	328.6	57.9	93,100	193,700
240	339.2	220.1	322.2	56.2	83,600	180,900
250	331.8	229.5	315.4	54.4	74,800	169,200
260	324.0	239.0	308.2	52.6	66,700	158,400
270	315.6	248.5	300.5	50.7	59,100	148,400
280	306.6	258.1	292.2	48.8	52,100	139,200
290	297.0	267.6	283.4	46.9	45,600	130,600
300	286.7	277.1	274.0	44.8	39,500	122,600
310	275.6	286.6	263.7	42.7	33,800	115,100
320	263.7	296.2	252.7	40.5	28,400	108,100
330	250.7	305.8	240.7	38.2	23,300	101,500
340	236.6	315.4	227.6	35.7	18,500	95,300
350	221.0	325.0	213.2	33.1	13,900	89,500
360	203.7	334.7	197.1	30.3		83,900

MLC650 VPC-MAX S-3

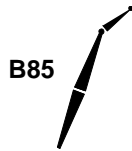
ASME B30.5



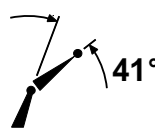
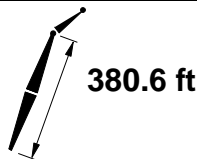
380.6 ft		35°				
ft	ft	ft	ft	°	lb	lb
52						
53						
54						
55	410.4	43.3	387.2	84.9	314,800	314,800
56	410.3	44.2	387.1	84.8	314,800	314,800
57	410.1	45.2	387.0	84.6	314,800	314,800
58	410.0	46.1	386.9	84.5	314,800	314,800
59	409.9	47.0	386.8	84.4	314,800	314,800
60	409.7	48.0	386.7	84.2	314,800	314,800
61	409.6	48.9	386.6	84.1	314,800	314,800
65	409.0	52.7	386.1	83.5	314,800	314,800
70	408.2	57.4	385.5	82.8	314,800	314,800
75	407.4	62.1	384.8	82.1	314,800	314,800
80	406.5	66.8	384.1	81.3	314,800	314,800
85	405.5	71.6	383.3	80.6	314,800	314,800
90	404.5	76.2	382.4	79.9	314,800	314,800
95	403.3	81.0	381.5	79.2	314,800	314,800
100	402.2	85.7	380.5	78.4	314,800	314,800
105	400.9	90.4	379.4	77.7	314,800	314,800
110	399.6	95.2	378.3	77.0	314,800	314,800
115	398.2	99.9	377.1	76.2	314,800	314,800
120	396.8	104.6	375.8	75.5	309,300	310,700
125	395.2	109.4	374.5	74.7	290,900	305,900
130	393.7	114.1	373.1	74.0	274,100	301,300
135	392.0	118.8	371.7	73.3	258,500	296,800
140	390.2	123.5	370.1	72.5	244,100	292,600
145	388.4	128.3	368.5	71.7	230,700	288,400
150	386.5	133.0	366.9	71.0	218,300	284,400
155	384.6	137.8	365.1	70.2	206,700	280,600
160	382.5	142.5	363.3	69.5	195,800	276,900
165	380.4	147.2	361.4	68.7	185,600	273,300
170	378.2	152.0	359.5	67.9	176,000	269,800
175	375.9	156.8	357.4	67.1	167,000	266,500
180	373.6	161.5	355.3	66.3	158,500	263,300
185	371.1	166.3	353.1	65.5	150,400	260,100
190	368.6	171.0	350.9	64.8	142,800	257,100
195	366.0	175.7	348.5	64.0	135,600	250,400
200	363.2	180.5	346.1	63.1	128,800	241,100
210	357.5	190.0	340.9	61.5	116,100	224,000
220	351.4	199.5	335.4	59.8	104,600	208,500
230	344.9	209.1	329.5	58.1	94,000	194,400
240	338.0	218.6	323.2	56.4	84,400	181,500
250	330.6	228.2	316.4	54.6	75,500	169,700
260	322.7	237.8	309.2	52.8	67,400	158,900
270	314.2	247.4	301.5	51.0	59,800	148,900
280	305.2	256.9	293.3	49.1	52,700	139,600
290	295.6	266.5	284.4	47.1	46,100	131,000
300	285.2	276.2	274.9	45.0	40,000	122,900
310	274.1	285.8	264.7	42.9	34,200	115,400
320	262.1	295.5	253.6	40.7	28,700	108,400
330	249.0	305.1	241.6	38.4	23,600	101,700
340	234.8	314.8	228.4	35.9	18,700	95,500
350						
360						

MLC650 VPC-MAX S-3

ASME B30.5



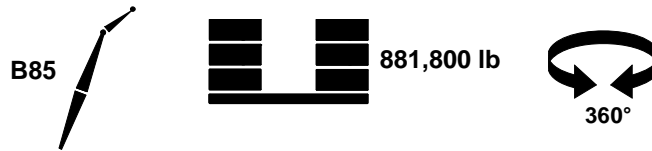
881,800 lb



	ft	ft	ft	ft	ft	lb	lb
52							
53							
54							
55							
56							
57	408.8	42.9	387.3	85.0	244,000	244,000	
58	408.6	43.9	387.2	84.8	244,000	244,000	
59	408.5	44.8	387.1	84.7	244,000	244,000	
60	408.4	45.8	387.0	84.6	244,000	244,000	
61	408.2	46.7	386.9	84.4	244,000	244,000	
65	407.7	50.5	386.4	83.8	244,000	244,000	
70	406.9	55.2	385.8	83.1	244,000	244,000	
75	406.0	59.9	385.1	82.4	244,000	244,000	
80	405.1	64.7	384.4	81.7	244,000	244,000	
85	404.1	69.4	383.6	80.9	244,000	244,000	
90	403.1	74.2	382.8	80.2	244,000	244,000	
95	401.9	78.9	381.9	79.5	244,000	244,000	
100	400.8	83.6	380.9	78.8	244,000	244,000	
105	399.5	88.4	379.9	78.0	244,000	244,000	
110	398.2	93.2	378.7	77.3	244,000	244,000	
115	396.8	97.9	377.6	76.5	244,000	244,000	
120	395.4	102.7	376.3	75.8	244,000	244,000	
125	393.8	107.4	375.1	75.1	244,000	244,000	
130	392.2	112.2	373.7	74.3	244,000	244,000	
135	390.6	116.9	372.2	73.6	244,000	244,000	
140	388.8	121.7	370.7	72.8	244,000	244,000	
145	387.0	126.5	369.1	72.0	232,600	244,000	
150	385.1	131.2	367.5	71.3	220,000	244,000	
155	383.1	136.0	365.8	70.5	208,300	244,000	
160	381.1	140.8	364.0	69.7	197,400	244,000	
165	378.9	145.5	362.1	69.0	187,100	244,000	
170	376.7	150.3	360.2	68.2	177,400	244,000	
175	374.4	155.1	358.2	67.4	168,300	242,300	
180	372.1	159.8	356.1	66.6	159,800	239,900	
185	369.6	164.7	353.9	65.8	151,700	237,700	
190	367.1	169.4	351.6	65.0	144,000	235,400	
195	364.4	174.2	349.3	64.2	136,800	233,300	
200	361.7	179.0	346.8	63.4	129,900	231,200	
210	355.9	188.6	341.7	61.8	117,100	224,700	
220	349.8	198.2	336.2	60.1	105,500	209,200	
230	343.3	207.8	330.3	58.4	94,900	195,000	
240	336.3	217.4	324.0	56.6	85,100	182,100	
250	328.9	227.0	317.3	54.9	76,200	170,200	
260	320.9	236.7	310.1	53.0	67,900	159,300	
270	312.4	246.3	302.3	51.2	60,300	149,300	
280	303.4	256.0	294.1	49.3	53,200	139,900	
290	293.6	265.7	285.2	47.3	46,500	131,300	
300	283.2	275.4	275.7	45.2	40,300	123,200	
310	272.0	285.1	265.4	43.1	34,500	115,600	
320							
330							
340							
350							
360							

MLC650 VPC-MAX S-3

ASME B30.5



 390.4 ft		 28°				
ft	ft	ft	ft	°	lb	lb
53	421.6	43.7	397.0	85.0	341,600	341,600
54	421.5	44.6	396.9	84.9	341,600	341,600
55	421.3	45.5	396.8	84.7	341,600	341,600
56	421.2	46.5	396.7	84.6	341,600	341,600
57	421.1	47.4	396.6	84.4	341,600	341,600
58	421.0	48.4	396.5	84.3	341,600	341,600
59	420.8	49.3	396.4	84.2	341,600	341,600
60	420.7	50.3	396.3	84.0	341,600	341,600
61	420.6	51.2	396.2	83.9	341,600	341,600
62	420.4	52.2	396.1	83.7	341,600	341,600
65	420.0	55.0	395.7	83.3	341,600	341,600
70	419.2	59.7	395.1	82.6	341,600	341,600
75	418.4	64.4	394.4	81.9	341,600	341,600
80	417.5	69.1	393.6	81.2	341,600	341,600
85	416.6	73.8	392.8	80.5	341,600	341,600
90	415.6	78.5	391.9	79.8	341,600	341,600
95	414.5	83.2	391.0	79.1	341,600	341,600
100	413.3	87.9	390.0	78.4	341,600	341,600
105	412.1	92.6	388.9	77.7	341,600	341,600
110	410.8	97.4	387.8	77.0	341,600	341,600
115	409.5	102.1	386.6	76.3	324,400	341,600
120	408.1	106.8	385.4	75.5	304,500	341,600
125	406.6	111.5	384.1	74.8	286,300	341,600
130	405.1	116.2	382.7	74.1	269,500	341,600
135	403.4	120.9	381.3	73.4	254,000	341,600
140	401.7	125.6	379.8	72.6	239,700	341,600
145	400.0	130.4	378.2	71.9	226,400	341,600
150	398.2	135.1	376.5	71.2	214,000	341,600
155	396.2	139.8	374.8	70.4	202,400	340,000
160	394.3	144.6	373.0	69.7	191,600	329,900
165	392.2	149.3	371.2	68.9	181,500	315,800
170	390.1	154.0	369.3	68.2	171,900	302,700
175	387.9	158.7	367.3	67.4	163,000	290,300
180	385.6	163.5	365.2	66.7	154,500	278,700
185	383.2	168.2	363.0	65.9	146,500	267,700
190	380.8	172.9	360.8	65.1	138,900	257,400
195	378.2	177.7	358.5	64.3	131,800	247,600
200	375.6	182.4	356.1	63.6	125,000	238,400
210	370.1	191.9	351.1	62.0	112,400	221,300
220	364.2	201.3	345.7	60.4	100,900	205,800
230	357.9	210.8	340.0	58.7	90,400	191,800
240	351.2	220.3	333.9	57.1	80,900	178,900
250	344.1	229.8	327.3	55.4	72,100	167,200
260	336.6	239.3	320.4	53.7	63,900	156,400
270	328.5	248.8	313.0	51.9	56,400	146,400
280	319.9	258.3	305.0	50.0	49,400	137,200
290	310.7	267.8	296.6	48.2	42,800	128,600
300	300.9	277.4	287.6	46.2	36,700	120,600
310	290.4	286.9	277.8	44.2	31,000	113,100
320	279.1	296.5	267.4	42.1	25,600	106,100
330	266.9	306.1	256.1	40.0	20,500	99,500
340	253.7	315.7	243.9	37.7	15,700	93,300
350	239.3	325.3	230.5	35.2		87,500
360	223.5	334.9	215.8	32.7		82,000
370	205.9	344.5	199.5	29.9		76,700

MLC650 VPC-MAX S-3

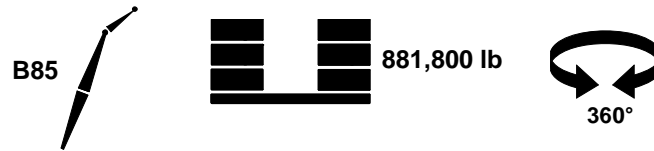
ASME B30.5



		ft	ft	ft	ft	lb	lb
53							
54							
55							
56		420.2	44.3	397.0	84.9	319,900	319,900
57		420.1	45.2	396.9	84.8	319,900	319,900
58		419.9	46.2	396.8	84.6	319,900	319,900
59		419.8	47.1	396.7	84.5	319,900	319,900
60		419.7	48.0	396.6	84.4	319,900	319,900
61		419.5	49.0	396.5	84.2	319,900	319,900
62		419.4	49.9	396.3	84.1	319,900	319,900
65		419.0	52.8	396.0	83.7	319,900	319,900
70		418.2	57.5	395.4	83.0	319,900	319,900
75		417.4	62.2	394.7	82.3	319,900	319,900
80		416.5	66.9	394.0	81.5	319,900	319,900
85		415.5	71.6	393.2	80.8	319,900	319,900
90		414.5	76.4	392.3	80.1	319,900	319,900
95		413.4	81.1	391.4	79.4	319,900	319,900
100		412.3	85.8	390.5	78.7	319,900	319,900
105		411.1	90.5	389.4	78.0	319,900	319,900
110		409.8	95.3	388.3	77.3	319,900	319,900
115		408.4	100.0	387.2	76.6	318,100	318,100
120		407.0	104.7	385.9	75.8	307,000	313,100
125		405.5	109.5	384.6	75.1	288,700	308,300
130		404.0	114.2	383.3	74.4	271,800	303,700
135		402.4	119.0	381.9	73.7	256,200	299,300
140		400.7	123.7	380.4	72.9	241,700	295,000
145		398.9	128.4	378.8	72.2	228,300	290,900
150		397.1	133.2	377.2	71.5	215,900	286,900
155		395.2	137.9	375.5	70.7	204,200	283,100
160		393.2	142.7	373.8	70.0	193,300	279,400
165		391.1	147.4	371.9	69.2	183,100	275,800
170		389.0	152.2	370.0	68.5	173,500	272,300
175		386.8	156.9	368.0	67.7	164,500	269,000
180		384.5	161.7	366.0	66.9	155,900	265,700
185		382.1	166.4	363.8	66.2	147,900	262,600
190		379.6	171.2	361.6	65.4	140,300	258,400
195		377.1	176.0	359.3	64.6	133,000	248,600
200		374.4	180.7	357.0	63.8	126,200	239,300
210		368.9	190.2	352.0	62.3	113,500	222,100
220		363.0	199.8	346.6	60.6	101,900	206,600
230		356.7	209.3	340.9	59.0	91,400	192,500
240		350.0	218.8	334.8	57.3	81,700	179,600
250		342.9	228.4	328.3	55.6	72,900	167,800
260		335.3	238.0	321.4	53.9	64,700	157,000
270		327.2	247.6	314.0	52.1	57,100	146,900
280		318.5	257.2	306.1	50.3	50,000	137,700
290		309.3	266.7	297.6	48.4	43,400	129,000
300		299.4	276.4	288.5	46.4	37,200	121,000
310		288.9	286.0	278.8	44.4	31,500	113,500
320		277.5	295.7	268.3	42.3	26,000	106,400
330		265.3	305.3	257.0	40.1	20,900	99,800
340		252.0	315.0	244.7	37.8	16,000	93,600
350		237.5	324.7	231.3	35.4		87,700
360							
370							

MLC650 VPC-MAX S-3

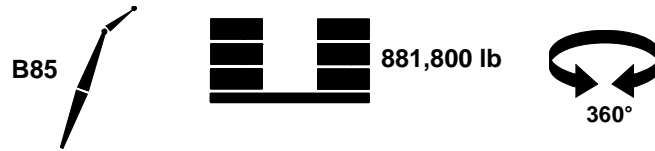
ASME B30.5



	390.4 ft		41°		38.7 ft	60.0 ft
	ft	ft	ft	ft	lb	lb
53						
54						
55						
56						
57						
58	418.6	43.9	397.0	85.0	244,000	244,000
59	418.4	44.9	396.9	84.8	244,000	244,000
60	418.3	45.8	396.8	84.7	244,000	244,000
61	418.2	46.8	396.7	84.5	244,000	244,000
62	418.0	47.7	396.6	84.4	244,000	244,000
65	417.6	50.5	396.3	84.0	244,000	244,000
70	416.8	55.3	395.7	83.3	244,000	244,000
75	416.0	60.0	395.0	82.6	244,000	244,000
80	415.1	64.8	394.3	81.9	244,000	244,000
85	414.1	69.5	393.6	81.2	244,000	244,000
90	413.1	74.2	392.7	80.5	244,000	244,000
95	412.0	79.0	391.8	79.7	244,000	244,000
100	410.9	83.7	390.9	79.0	244,000	244,000
105	409.7	88.5	389.9	78.3	244,000	244,000
110	408.4	93.2	388.8	77.6	244,000	244,000
115	407.0	98.0	387.7	76.9	244,000	244,000
120	405.6	102.8	386.4	76.1	244,000	244,000
125	404.1	107.5	385.2	75.4	244,000	244,000
130	402.6	112.3	383.9	74.7	244,000	244,000
135	400.9	117.0	382.5	74.0	244,000	244,000
140	399.2	121.8	381.0	73.2	243,700	244,000
145	397.5	126.6	379.4	72.5	230,200	244,000
150	395.6	131.4	377.8	71.7	217,600	244,000
155	393.7	136.1	376.2	71.0	205,900	244,000
160	391.7	140.9	374.4	70.3	194,900	244,000
165	389.6	145.7	372.6	69.5	184,600	244,000
170	387.5	150.4	370.7	68.7	175,000	244,000
175	385.3	155.2	368.8	68.0	165,900	244,000
180	383.0	160.0	366.7	67.2	157,300	241,700
185	380.6	164.8	364.6	66.4	149,200	239,400
190	378.1	169.6	362.4	65.7	141,500	237,200
195	375.5	174.4	360.1	64.9	134,200	235,100
200	372.9	179.2	357.7	64.1	127,300	233,000
210	367.3	188.8	352.8	62.5	114,500	222,900
220	361.4	198.4	347.4	60.9	102,900	207,300
230	355.1	207.9	341.8	59.2	92,200	193,100
240	348.3	217.6	335.7	57.6	82,500	180,200
250	341.2	227.2	329.2	55.9	73,600	168,300
260	333.5	236.8	322.2	54.1	65,300	157,400
270	325.4	246.5	314.8	52.3	57,600	147,400
280	316.7	256.2	306.9	50.5	50,500	138,000
290	307.4	265.9	298.4	48.6	43,800	129,400
300	297.5	275.6	289.3	46.6	37,600	121,300
310	286.9	285.3	279.5	44.6	31,800	113,700
320	275.4	295.1	269.0	42.5	26,300	106,600
330						
340						
350						
360						
370						

MLC650 VPC-MAX S-3

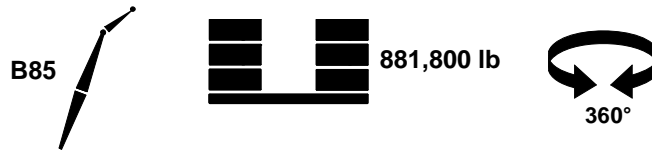
ASME B30.5



		400.3 ft		28°			
						38.7 ft	60.0 ft
ft	ft	ft	ft	°	lb	lb	
54	431.4	44.7	406.9	85.0	341,600	341,600	
55	431.2	45.6	406.8	84.8	341,600	341,600	
56	431.1	46.6	406.7	84.7	341,600	341,600	
57	431.0	47.5	406.6	84.6	341,600	341,600	
58	430.9	48.5	406.5	84.4	341,600	341,600	
59	430.8	49.4	406.4	84.3	341,600	341,600	
60	430.6	50.3	406.3	84.2	341,600	341,600	
61	430.5	51.3	406.2	84.0	341,600	341,600	
62	430.4	52.2	406.0	83.9	341,600	341,600	
63	430.2	53.2	405.9	83.8	341,600	341,600	
65	429.9	55.0	405.7	83.5	341,600	341,600	
70	429.2	59.8	405.1	82.8	341,600	341,600	
75	428.4	64.5	404.4	82.1	341,600	341,600	
80	427.5	69.2	403.6	81.4	341,600	341,600	
85	426.6	73.9	402.9	80.7	341,600	341,600	
90	425.6	78.6	402.0	80.1	341,600	341,600	
95	424.5	83.3	401.1	79.4	341,600	341,600	
100	423.4	88.1	400.1	78.7	341,600	341,600	
105	422.2	92.8	399.1	78.0	341,600	341,600	
110	421.0	97.5	398.0	77.3	341,600	341,600	
115	419.7	102.2	396.8	76.6	322,400	336,300	
120	418.3	107.0	395.6	75.9	302,500	330,900	
125	416.9	111.7	394.3	75.2	284,300	325,500	
130	415.4	116.4	393.0	74.5	267,500	320,300	
135	413.8	121.1	391.6	73.8	252,000	315,100	
140	412.1	125.8	390.1	73.1	237,700	310,100	
145	410.4	130.6	388.6	72.3	224,400	305,100	
150	408.6	135.3	386.9	71.6	212,000	300,300	
155	406.8	140.0	385.3	70.9	200,400	295,700	
160	404.9	144.7	383.5	70.2	189,600	291,000	
165	402.9	149.5	381.7	69.4	179,500	286,600	
170	400.8	154.2	379.9	68.7	170,000	282,400	
175	398.6	159.0	377.9	68.0	161,000	278,200	
180	396.4	163.7	375.9	67.2	152,500	274,200	
185	394.1	168.4	373.8	66.5	144,500	266,200	
190	391.7	173.2	371.6	65.7	137,000	255,900	
195	389.3	177.9	369.4	65.0	129,800	246,100	
200	386.7	182.6	367.1	64.2	123,000	236,900	
210	381.4	192.1	362.2	62.7	110,400	219,800	
220	375.7	201.6	357.0	61.1	98,900	204,300	
230	369.6	211.1	351.4	59.6	88,500	190,300	
240	363.1	220.6	345.5	58.0	78,900	177,500	
250	356.3	230.1	339.2	56.3	70,100	165,700	
260	349.0	239.6	332.5	54.6	62,000	154,900	
270	341.2	249.1	325.3	52.9	54,500	144,900	
280	332.9	258.6	317.7	51.2	47,500	135,700	
290	324.1	268.2	309.6	49.4	41,000	127,100	
300	314.8	277.8	300.9	47.5	34,900	119,100	
310	304.7	287.3	291.7	45.6	29,200	111,700	
320	294.0	296.8	281.7	43.6	23,800	104,700	
330	282.5	306.4	271.1	41.6	18,700	98,100	
340	270.1	316.0	259.6	39.4	13,900	91,900	
350	256.7	325.6	247.1	37.2		86,100	
360	242.0	335.2	233.5	34.8		80,600	
380	208.1	354.5	201.8	29.4		70,300	

MLC650 VPC-MAX S-3

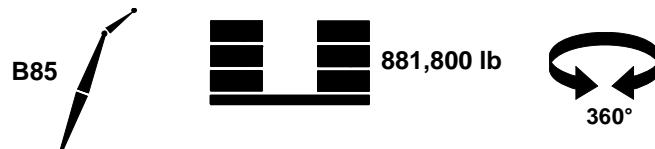
ASME B30.5



400.3 ft		35°				
ft	ft	ft	ft	°	38.7 ft lb	60.0 ft lb
54						
55						
56						
57	430.0	45.2	406.8	84.9	321,500	321,500
58	429.9	46.2	406.7	84.8	321,500	321,500
59	429.7	47.1	406.6	84.6	321,500	321,500
60	429.6	48.0	406.5	84.5	321,500	321,500
61	429.5	49.0	406.4	84.4	321,500	321,500
62	429.3	50.0	406.3	84.2	321,500	321,500
63	429.2	50.9	406.2	84.1	321,500	321,500
65	428.9	52.8	406.0	83.8	321,500	321,500
70	428.2	57.5	405.4	83.1	321,500	321,500
75	427.4	62.3	404.7	82.4	321,500	321,500
80	426.5	67.0	404.0	81.7	321,500	321,500
85	425.5	71.8	403.2	81.1	321,500	321,500
90	424.6	76.5	402.4	80.4	321,500	321,500
95	423.5	81.2	401.5	79.7	321,500	321,500
100	422.4	85.9	400.6	79.0	321,500	321,500
105	421.2	90.7	399.5	78.3	321,500	321,500
110	419.9	95.4	398.5	77.6	321,500	321,500
115	418.6	100.2	397.3	76.9	318,200	318,200
120	417.3	104.9	396.1	76.2	305,000	313,500
125	415.8	109.6	394.9	75.5	286,700	308,800
130	414.3	114.3	393.6	74.8	269,800	304,300
135	412.7	119.1	392.2	74.1	254,200	299,800
140	411.1	123.9	390.7	73.3	239,800	295,300
145	409.3	128.6	389.2	72.6	226,400	291,000
150	407.6	133.3	387.6	71.9	213,900	286,800
155	405.7	138.1	386.0	71.2	202,300	282,700
160	403.8	142.9	384.3	70.5	191,400	278,600
165	401.8	147.6	382.5	69.7	181,200	274,800
170	399.7	152.3	380.6	69.0	171,600	270,900
175	397.5	157.1	378.7	68.3	162,500	267,300
180	395.3	161.9	376.7	67.5	154,000	263,600
185	393.0	166.6	374.6	66.8	146,000	260,200
190	390.6	171.4	372.5	66.0	138,300	256,800
195	388.1	176.2	370.2	65.3	131,100	247,100
200	385.6	180.9	367.9	64.5	124,300	237,800
210	380.2	190.4	363.1	63.0	111,600	220,600
220	374.5	200.0	357.9	61.4	100,000	205,100
230	368.4	209.6	352.4	59.8	89,500	191,000
240	361.9	219.1	346.5	58.2	79,800	178,100
250	355.0	228.7	340.2	56.6	71,000	166,300
260	347.7	238.3	333.5	54.9	62,800	155,500
270	339.9	247.9	326.3	53.2	55,200	145,500
280	331.6	257.5	318.7	51.4	48,100	136,200
290	322.8	267.0	310.6	49.6	41,600	127,600
300	313.3	276.7	301.9	47.7	35,400	119,500
310	303.3	286.3	292.6	45.8	29,600	112,000
320	292.5	295.9	282.7	43.8	24,200	105,000
330	280.9	305.6	272.0	41.8	19,100	98,400
340	268.4	315.3	260.4	39.6	14,300	92,100
350	254.9	325.0	247.9	37.3		86,300
360	240.2	334.7	234.2	34.9		80,700
380						

MLC650 VPC-MAX S-3

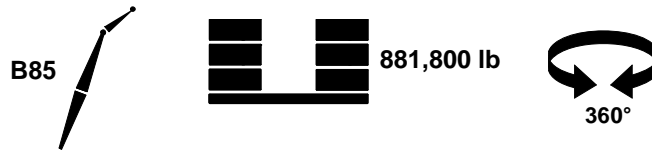
ASME B30.5



ft	ft	ft	ft	°	lb	lb
54						
55						
56						
57						
58						
59	428.4	44.9	406.9	85.0	244,000	244,000
60	428.2	45.8	406.8	84.8	244,000	244,000
61	428.1	46.8	406.7	84.7	244,000	244,000
62	428.0	47.8	406.6	84.5	244,000	244,000
63	427.8	48.7	406.5	84.4	244,000	244,000
65	427.5	50.6	406.2	84.1	244,000	244,000
70	426.8	55.3	405.7	83.4	244,000	244,000
75	426.0	60.1	405.0	82.8	244,000	244,000
80	425.1	64.8	404.3	82.1	244,000	244,000
85	424.2	69.6	403.6	81.4	244,000	244,000
90	423.2	74.4	402.8	80.7	244,000	244,000
95	422.1	79.1	401.9	80.0	244,000	244,000
100	421.0	83.9	401.0	79.3	244,000	244,000
105	419.8	88.6	400.0	78.6	244,000	244,000
110	418.5	93.4	398.9	77.9	244,000	244,000
115	417.2	98.1	397.8	77.2	244,000	244,000
120	415.8	102.9	396.6	76.5	244,000	244,000
125	414.4	107.6	395.4	75.8	244,000	244,000
130	412.9	112.4	394.1	75.1	244,000	244,000
135	411.3	117.2	392.7	74.3	244,000	244,000
140	409.6	122.0	391.3	73.6	241,800	244,000
145	407.9	126.7	389.8	72.9	228,300	244,000
150	406.1	131.5	388.2	72.2	215,700	244,000
155	404.2	136.3	386.6	71.5	204,000	244,000
160	402.3	141.1	384.9	70.7	193,000	244,000
165	400.3	145.9	383.1	70.0	182,700	244,000
170	398.2	150.6	381.3	69.3	173,100	244,000
175	396.0	155.4	379.4	68.5	164,000	244,000
180	393.8	160.2	377.4	67.8	155,400	243,500
185	391.5	165.0	375.3	67.0	147,300	241,200
190	389.1	169.8	373.2	66.3	139,600	239,000
195	386.6	174.6	371.0	65.5	132,300	236,800
200	384.0	179.4	368.7	64.8	125,400	234,700
210	378.6	189.0	363.9	63.2	112,600	221,500
220	372.9	198.6	358.7	61.6	101,000	205,900
230	366.8	208.2	353.2	60.1	90,400	191,700
240	360.3	217.8	347.3	58.4	80,600	178,800
250	353.3	227.4	341.0	56.8	71,700	166,900
260	346.0	237.1	334.3	55.1	63,400	156,000
270	338.1	246.8	327.2	53.4	55,800	145,900
280	329.8	256.4	319.5	51.6	48,700	136,600
290	320.9	266.1	311.4	49.8	42,000	127,900
300	311.4	275.8	302.7	47.9	35,800	119,800
310	301.3	285.5	293.4	46.0	30,000	112,300
320	290.4	295.3	283.4	44.0	24,500	105,200
330	278.8	305.0	272.6	41.9	19,400	98,600
340						
350						
360						
380						

MLC650 VPC-MAX S-3

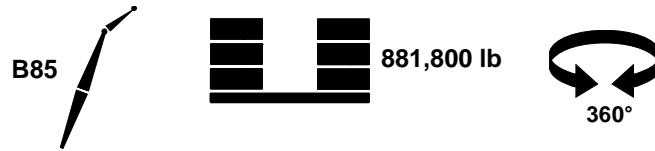
ASME B30.5



 410.1 ft		 28°				
ft	ft	ft	ft	°	lb	lb
55	441.2	45.7	416.6	85.0	341,600	341,600
56	441.0	46.7	416.5	84.8	341,600	341,600
57	440.9	47.6	416.4	84.7	341,600	341,600
58	440.8	48.5	416.3	84.6	341,600	341,600
59	440.7	49.4	416.2	84.4	341,600	341,600
60	440.5	50.4	416.1	84.3	341,600	341,600
61	440.4	51.3	416.0	84.2	341,600	341,600
62	440.3	52.2	415.9	84.0	341,600	341,600
63	440.2	53.2	415.8	83.9	341,600	341,600
64	440.0	54.2	415.7	83.8	341,600	341,600
65	439.9	55.1	415.6	83.6	341,600	341,600
70	439.1	59.8	415.0	83.0	341,600	341,600
75	438.4	64.5	414.3	82.3	341,600	341,600
80	437.5	69.3	413.6	81.6	341,600	341,600
85	436.6	74.0	412.8	81.0	341,600	341,600
90	435.6	78.7	411.9	80.3	341,500	341,500
95	434.6	83.4	411.0	79.6	336,000	336,000
100	433.5	88.1	410.1	78.9	330,500	330,500
105	432.4	92.9	409.1	78.3	324,900	324,900
110	431.1	97.6	408.0	77.6	319,500	319,500
115	429.9	102.3	406.9	76.9	314,000	314,000
120	428.5	107.1	405.7	76.2	302,200	308,700
125	427.1	111.8	404.4	75.5	284,000	303,400
130	425.6	116.5	403.1	74.8	267,200	298,300
135	424.1	121.2	401.8	74.1	251,700	293,200
140	422.5	125.9	400.3	73.5	237,400	288,300
145	420.8	130.7	398.8	72.8	224,100	283,500
150	419.1	135.4	397.3	72.1	211,700	278,800
155	417.3	140.2	395.6	71.4	200,100	274,200
160	415.4	144.9	393.9	70.6	189,300	269,800
165	413.5	149.7	392.2	69.9	179,200	265,400
170	411.4	154.4	390.3	69.2	169,700	261,300
175	409.4	159.1	388.5	68.5	160,700	257,200
180	407.2	163.8	386.5	67.8	152,200	253,200
185	404.9	168.6	384.4	67.1	144,200	249,400
190	402.6	173.4	382.3	66.3	136,700	245,700
195	400.2	178.1	380.1	65.6	129,500	242,100
200	397.8	182.8	377.9	64.9	122,700	236,700
210	392.6	192.3	373.2	63.4	110,100	219,600
220	387.0	201.8	368.1	61.9	98,600	204,100
230	381.1	211.3	362.7	60.3	88,200	190,100
240	374.9	220.8	357.0	58.8	78,600	177,300
250	368.2	230.3	350.8	57.2	69,800	165,500
260	361.2	239.8	344.4	55.6	61,700	154,700
270	353.7	249.4	337.5	53.9	54,200	144,700
280	345.8	258.9	330.1	52.2	47,200	135,500
290	337.3	268.4	322.3	50.5	40,700	126,900
300	328.3	278.0	314.0	48.7	34,600	118,900
310	318.7	287.6	305.1	46.9	28,900	111,500
320	308.5	297.1	295.7	45.0	23,600	104,500
330	297.6	306.7	285.5	43.1	18,500	97,900
340	285.9	316.3	274.6	41.0	13,700	91,800
350	273.2	325.9	262.9	38.9		85,900
360	259.6	335.5	250.2	36.7		80,400
380	228.4	354.8	221.1	31.8		70,300

MLC650 VPC-MAX S-3

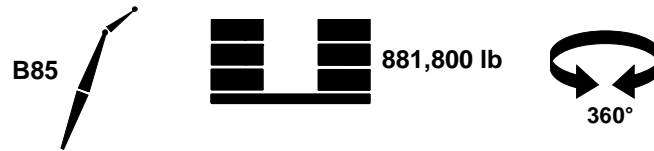
ASME B30.5



 410.1 ft		 35°				
ft	ft	ft	ft	°	lb	lb
55						
56						
57	439.9	45.3	416.7	85.0	320,400	320,400
58	439.8	46.2	416.6	84.9	320,400	320,400
59	439.6	47.1	416.5	84.8	320,400	320,400
60	439.5	48.1	416.4	84.6	320,400	320,400
61	439.4	49.1	416.3	84.5	320,400	320,400
62	439.3	50.1	416.2	84.3	320,400	320,400
63	439.1	51.0	416.1	84.2	320,400	320,400
64	439.0	51.9	416.0	84.1	320,400	320,400
65	438.8	52.9	415.8	83.9	320,400	320,400
70	438.1	57.6	415.3	83.3	320,400	320,400
75	437.3	62.3	414.6	82.6	320,400	320,400
80	436.5	67.1	413.9	81.9	320,400	320,400
85	435.6	71.8	413.1	81.3	320,400	320,400
90	434.6	76.5	412.3	80.6	320,400	320,400
95	433.6	81.3	411.5	79.9	317,700	317,700
100	432.5	86.0	410.5	79.2	312,900	312,900
105	431.3	90.8	409.5	78.6	308,100	308,100
110	430.1	95.5	408.5	77.9	303,300	303,300
115	428.8	100.2	407.4	77.2	298,600	298,600
120	427.5	105.0	406.2	76.5	293,800	293,800
125	426.1	109.7	405.0	75.8	286,400	289,200
130	424.6	114.5	403.7	75.1	269,500	284,600
135	423.0	119.3	402.3	74.4	253,900	280,100
140	421.4	124.0	400.9	73.7	239,500	275,700
145	419.8	128.7	399.5	73.0	226,100	271,500
150	418.0	133.5	397.9	72.3	213,600	267,300
155	416.2	138.3	396.3	71.6	202,000	263,100
160	414.3	143.0	394.6	70.9	191,100	259,100
165	412.4	147.7	392.9	70.2	180,900	255,300
170	410.3	152.5	391.1	69.5	171,300	251,500
175	408.2	157.3	389.2	68.8	162,200	247,900
180	406.1	162.1	387.2	68.1	153,700	244,300
185	403.8	166.8	385.2	67.3	145,700	240,800
190	401.5	171.5	383.1	66.6	138,000	237,500
195	399.1	176.4	381.0	65.9	130,800	234,200
200	396.6	181.1	378.7	65.1	124,000	231,100
210	391.4	190.6	374.0	63.6	111,300	220,500
220	385.8	200.2	369.0	62.1	99,700	204,900
230	379.9	209.7	363.6	60.6	89,200	190,800
240	373.7	219.3	357.9	59.0	79,600	178,000
250	367.0	228.9	351.8	57.4	70,700	166,200
260	359.9	238.5	345.3	55.8	62,500	155,300
270	352.4	248.0	338.5	54.2	54,900	145,300
280	344.4	257.7	331.1	52.5	47,900	136,000
290	335.9	267.2	323.3	50.7	41,300	127,400
300	326.9	276.9	315.0	48.9	35,200	119,400
310	317.3	286.5	306.1	47.1	29,400	111,900
320	307.0	296.2	296.6	45.2	24,000	104,800
330	296.0	305.8	286.5	43.2	18,900	98,200
340	284.3	315.5	275.6	41.2	14,100	92,000
350	271.6	325.2	263.8	39.1		86,200
360	257.8	334.9	251.0	36.8		80,600
380						

MLC650 VPC-MAX S-3

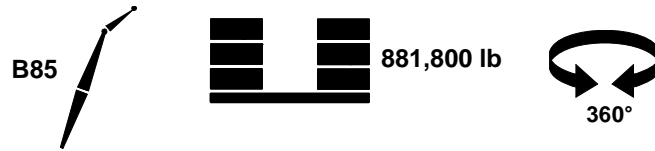
ASME B30.5



Capacity (lb)	Reach (ft)				Jib Length (ft)	
	41°	41°	41°	41°	38.7 ft	60.0 ft
55						
56						
57						
58						
59						
60	438.1	45.9	416.6	84.9	244,000	244,000
61	438.0	46.9	416.5	84.8	244,000	244,000
62	437.9	47.8	416.4	84.7	244,000	244,000
63	437.7	48.7	416.3	84.5	244,000	244,000
64	437.6	49.7	416.2	84.4	244,000	244,000
65	437.5	50.6	416.1	84.3	244,000	244,000
70	436.7	55.4	415.5	83.6	244,000	244,000
75	435.9	60.2	414.9	82.9	244,000	244,000
80	435.1	64.9	414.2	82.2	244,000	244,000
85	434.2	69.6	413.5	81.6	244,000	244,000
90	433.2	74.4	412.7	80.9	244,000	244,000
95	432.2	79.2	411.9	80.2	244,000	244,000
100	431.1	83.9	410.9	79.5	244,000	244,000
105	429.9	88.7	410.0	78.9	244,000	244,000
110	428.7	93.4	409.0	78.2	244,000	244,000
115	427.4	98.2	407.9	77.5	244,000	244,000
120	426.0	103.0	406.7	76.8	244,000	244,000
125	424.6	107.8	405.5	76.1	244,000	244,000
130	423.2	112.5	404.2	75.4	244,000	244,000
135	421.6	117.3	402.9	74.7	244,000	244,000
140	420.0	122.1	401.5	74.0	241,500	244,000
145	418.3	126.8	400.1	73.3	228,000	244,000
150	416.6	131.6	398.5	72.6	215,500	244,000
155	414.7	136.4	396.9	71.9	203,700	244,000
160	412.9	141.2	395.3	71.2	192,800	244,000
165	410.9	146.0	393.5	70.5	182,500	244,000
170	408.9	150.7	391.8	69.8	172,800	244,000
175	406.8	155.5	389.9	69.1	163,700	240,700
180	404.6	160.3	387.9	68.3	155,100	237,400
185	402.3	165.1	385.9	67.6	147,000	234,300
190	400.0	169.9	383.9	66.9	139,300	231,300
195	397.6	174.7	381.7	66.1	132,100	228,300
200	395.1	179.5	379.5	65.4	125,200	225,400
210	389.8	189.1	374.8	63.9	112,300	220,000
220	384.3	198.7	369.8	62.4	100,700	205,700
230	378.3	208.3	364.4	60.8	90,100	191,500
240	372.0	218.0	358.7	59.3	80,400	178,600
250	365.3	227.6	352.6	57.7	71,500	166,700
260	358.2	237.3	346.2	56.0	63,200	155,800
270	350.7	246.9	339.3	54.4	55,600	145,800
280	342.7	256.6	331.9	52.7	48,500	136,400
290	334.1	266.3	324.1	50.9	41,800	127,800
300	325.0	276.0	315.8	49.1	35,600	119,700
310	315.4	285.7	306.9	47.3	29,800	112,200
320	305.0	295.4	297.4	45.4	24,400	105,100
330	294.0	305.2	287.2	43.4	19,200	98,500
340	282.1	315.0	276.2	41.3	14,300	92,200
350						
360						
380						

MLC650 VPC-MAX S-3

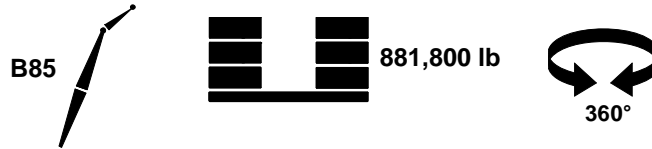
ASME B30.5



419.9 ft		28°		38.7 ft		60.0 ft	
ft	ft	ft	ft	°	lb	lb	lb
56	450.9	46.7	426.4	84.9	334,500	334,500	334,500
57	450.8	47.6	426.3	84.8	334,500	334,500	334,500
58	450.7	48.6	426.2	84.7	334,500	334,500	334,500
59	450.6	49.5	426.1	84.6	334,500	334,500	334,500
60	450.5	50.4	426.0	84.4	334,400	334,400	334,400
61	450.3	51.4	425.9	84.3	334,400	334,400	334,400
62	450.2	52.3	425.8	84.2	334,400	334,400	334,400
63	450.1	53.3	425.7	84.0	334,400	334,400	334,400
64	449.9	54.2	425.5	83.9	334,400	334,400	334,400
65	449.8	55.2	425.4	83.8	334,400	334,400	334,400
70	449.1	59.9	424.8	83.1	334,400	334,400	334,400
75	448.3	64.6	424.2	82.5	334,300	334,300	334,300
80	447.5	69.3	423.5	81.8	331,100	331,100	331,100
85	446.6	74.1	422.7	81.2	325,700	325,700	325,700
90	445.7	78.8	421.9	80.5	320,300	320,300	320,300
95	444.7	83.5	421.0	79.8	314,800	314,800	314,800
100	443.6	88.2	420.1	79.2	309,400	309,400	309,400
105	442.5	93.0	419.1	78.5	304,000	304,000	304,000
110	441.3	97.7	418.0	77.9	298,600	298,600	298,600
115	440.0	102.4	416.9	77.2	293,300	293,300	293,300
120	438.7	107.2	415.8	76.5	288,100	288,100	288,100
125	437.3	111.9	414.6	75.9	282,200	283,000	283,000
130	435.9	116.6	413.3	75.2	265,400	277,900	277,900
135	434.4	121.4	411.9	74.5	249,900	273,000	273,000
140	432.8	126.1	410.5	73.8	235,600	268,300	268,300
145	431.2	130.8	409.1	73.2	222,300	263,600	263,600
150	429.5	135.6	407.5	72.5	209,900	259,000	259,000
155	427.8	140.3	405.9	71.8	198,300	254,600	254,600
160	425.9	145.1	404.3	71.1	187,500	250,300	250,300
165	424.0	149.8	402.6	70.4	177,300	246,000	246,000
170	422.1	154.5	400.8	69.7	167,800	242,000	242,000
175	420.0	159.3	398.9	69.0	158,800	238,000	238,000
180	417.9	164.0	397.0	68.3	150,400	234,200	234,200
185	415.7	168.7	395.1	67.6	142,400	230,500	230,500
190	413.5	173.5	393.0	66.9	134,800	226,900	226,900
195	411.1	178.3	390.8	66.2	127,600	223,400	223,400
200	408.7	183.0	388.7	65.5	120,800	220,000	220,000
210	403.7	192.5	384.0	64.0	108,200	213,700	213,700
220	398.3	202.1	379.1	62.6	96,800	202,700	202,700
230	392.6	211.5	373.9	61.1	86,300	188,700	188,700
240	386.5	221.0	368.3	59.6	76,700	175,900	175,900
250	380.1	230.6	362.4	58.0	68,000	164,100	164,100
260	373.3	240.1	356.1	56.5	59,800	153,300	153,300
270	366.0	249.7	349.4	54.9	52,300	143,400	143,400
280	358.4	259.1	342.4	53.2	45,300	134,100	134,100
290	350.2	268.7	334.8	51.6	38,800	125,500	125,500
300	341.6	278.2	326.8	49.9	32,700	117,600	117,600
310	332.4	287.8	318.3	48.1	27,100	110,100	110,100
320	322.7	297.4	309.3	46.3	21,700	103,100	103,100
330	312.2	307.0	299.6	44.4	16,700	96,600	96,600
340	301.1	316.5	289.2	42.5		90,400	90,400
350	289.2	326.1	278.1	40.5		84,600	84,600
360	276.3	335.7	266.2	38.4		79,100	79,100
380	247.3	355.1	239.1	33.8		68,900	68,900
400	212.2	374.4	206.3	28.6		59,700	59,700

MLC650 VPC-MAX S-3

ASME B30.5



Capacity (lb)	Jib Length (ft)				Jib Angle (°)	
	35°	45°	60°	75°	35°	60°
56	419.9					
57						
58	449.7	46.3	426.4	85.0	38.7	60.0
59	449.6	47.2	426.3	84.9		
60	449.4	48.2	426.2	84.7		
61	449.3	49.1	426.1	84.6		
62	449.2	50.1	426.0	84.5		
63	449.0	51.0	425.9	84.3		
64	448.9	52.0	425.8	84.2		
65	448.8	52.9	425.7	84.1		
70	448.1	57.6	425.1	83.4		
75	447.3	62.4	424.5	82.8		
80	446.5	67.1	423.8	82.1		
85	445.6	71.9	423.1	81.5		
90	444.6	76.6	422.3	80.8		
95	443.6	81.3	421.4	80.1		
100	442.5	86.1	420.5	79.5		
105	441.4	90.9	419.5	78.8		
110	440.2	95.6	418.5	78.2		
115	439.0	100.3	417.4	77.5		
120	437.7	105.1	416.3	76.8		
125	436.3	109.8	415.1	76.1		
130	434.8	114.6	413.8	75.5		
135	433.3	119.4	412.5	74.8		
140	431.8	124.1	411.1	74.1		
145	430.1	128.9	409.7	73.4		
150	428.4	133.6	408.2	72.8		
155	426.7	138.4	406.6	72.1		
160	424.8	143.2	405.0	71.4		
165	422.9	147.9	403.3	70.7		
170	421.0	152.7	401.5	70.0		
175	418.9	157.5	399.7	69.3		
180	416.8	162.2	397.8	68.6		
185	414.6	166.9	395.8	67.9		
190	412.3	171.7	393.8	67.2		
195	410.0	176.5	391.7	66.5		
200	407.6	181.3	389.5	65.7		
210	402.5	190.8	384.9	64.3		
220	397.1	200.4	380.0	62.8		
230	391.4	209.9	374.8	61.3		
240	385.3	219.5	369.2	59.8		
250	378.9	229.1	363.3	58.3		
260	372.0	238.7	357.1	56.7		
270	364.8	248.3	350.4	55.1		
280	357.1	257.9	343.3	53.5		
290	348.9	267.5	335.8	51.8		
300	340.2	277.1	327.8	50.1		
310	331.0	286.7	319.3	48.3		
320	321.2	296.4	310.2	46.5		
330	310.7	306.0	300.6	44.6		
340	299.5	315.7	290.2	42.7		
350	287.5	325.4	279.0	40.7		
360	274.6	335.1	267.0	38.6		
380						
400						

MLC650 VPC-MAX S-3

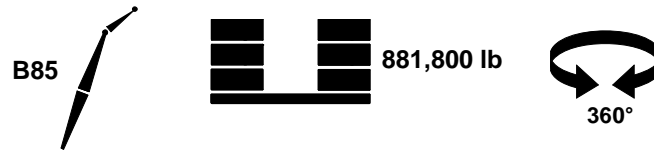
ASME B30.5



	ft	ft	ft	ft	lb	lb
56						
57						
58						
59						
60						
61	447.9	46.9	426.3	84.9	244,000	244,000
62	447.8	47.8	426.3	84.8	244,000	244,000
63	447.7	48.8	426.2	84.7	244,000	244,000
64	447.5	49.7	426.1	84.5	244,000	244,000
65	447.4	50.7	426.0	84.4	244,000	244,000
70	446.7	55.4	425.4	83.7	244,000	244,000
75	445.9	60.2	424.8	83.1	244,000	244,000
80	445.1	64.9	424.1	82.4	244,000	244,000
85	444.2	69.7	423.4	81.8	244,000	244,000
90	443.2	74.4	422.6	81.1	244,000	244,000
95	442.2	79.3	421.8	80.4	244,000	244,000
100	441.1	84.0	420.9	79.8	244,000	244,000
105	440.0	88.8	420.0	79.1	244,000	244,000
110	438.8	93.5	419.0	78.4	244,000	244,000
115	437.6	98.3	417.9	77.8	244,000	244,000
120	436.2	103.0	416.8	77.1	244,000	244,000
125	434.9	107.9	415.6	76.4	244,000	244,000
130	433.4	112.6	414.4	75.8	244,000	244,000
135	431.9	117.4	413.1	75.1	244,000	244,000
140	430.3	122.2	411.7	74.4	239,800	244,000
145	428.7	127.0	410.3	73.7	226,300	244,000
150	427.0	131.7	408.8	73.0	213,700	241,400
155	425.2	136.5	407.2	72.3	202,000	237,800
160	423.4	141.3	405.6	71.6	191,000	234,100
165	421.5	146.1	403.9	70.9	180,700	230,600
170	419.5	150.9	402.2	70.2	171,000	227,300
175	417.4	155.7	400.4	69.5	161,900	223,900
180	415.3	160.4	398.5	68.8	153,300	220,700
185	413.1	165.2	396.5	68.1	145,200	217,500
190	410.8	170.1	394.5	67.4	137,500	214,500
195	408.5	174.8	392.4	66.7	130,200	211,600
200	406.1	179.6	390.2	66.0	123,300	208,800
210	401.0	189.3	385.7	64.5	110,500	203,300
220	395.6	198.9	380.8	63.0	98,900	198,300
230	389.8	208.5	375.6	61.6	88,300	190,200
240	383.7	218.1	370.0	60.0	78,600	177,300
250	377.2	227.7	364.2	58.5	69,600	165,400
260	370.4	237.4	357.9	56.9	61,400	154,500
270	363.1	247.1	351.2	55.3	53,700	144,400
280	355.3	256.8	344.2	53.7	46,600	135,100
290	347.1	266.4	336.6	52.0	40,000	126,400
300	338.4	276.1	328.6	50.3	33,800	118,400
310	329.1	285.8	320.1	48.5	28,000	110,800
320	319.2	295.6	311.0	46.7	22,600	103,800
330	308.7	305.3	301.3	44.8	17,400	97,100
340	297.4	315.1	290.9	42.8		90,900
350						
360						
380						
400						

MLC650 VPC-MAX S-3

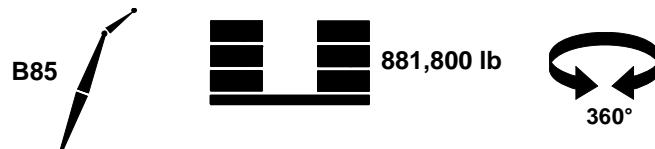
ASME B30.5



429.8 ft		28°				
ft	ft	ft	ft	°	38.7 ft lb	60.0 ft lb
57	460.7	47.7	436.2	84.9	320,900	320,900
58	460.6	48.6	436.1	84.8	320,900	320,900
59	460.5	49.5	436.0	84.7	320,900	320,900
60	460.4	50.5	435.9	84.5	320,900	320,900
61	460.3	51.5	435.8	84.4	320,900	320,900
62	460.1	52.4	435.7	84.3	320,900	320,900
63	460.0	53.3	435.6	84.2	320,900	320,900
64	459.9	54.3	435.5	84.0	320,900	320,900
65	459.7	55.3	435.4	83.9	320,900	320,900
70	459.0	59.9	434.8	83.3	320,800	320,800
75	458.3	64.7	434.2	82.6	320,700	320,700
80	457.5	69.4	433.5	82.0	320,600	320,600
85	456.6	74.1	432.7	81.4	320,500	320,500
90	455.7	78.9	431.9	80.7	320,300	320,300
95	454.7	83.6	431.1	80.1	320,100	320,100
100	453.7	88.3	430.2	79.4	320,000	320,000
105	452.6	93.1	429.2	78.8	319,700	319,700
110	451.4	97.8	428.2	78.1	319,500	319,500
115	450.2	102.6	427.1	77.5	316,600	319,300
120	448.9	107.3	425.9	76.8	296,600	319,100
125	447.6	112.1	424.7	76.2	278,300	318,900
130	446.2	116.8	423.5	75.5	261,500	317,100
135	444.7	121.5	422.2	74.9	246,000	312,900
140	443.2	126.3	420.8	74.2	231,600	308,800
145	441.6	131.0	419.4	73.5	218,300	304,800
150	439.9	135.8	417.9	72.9	205,800	300,800
155	438.2	140.5	416.3	72.2	194,200	296,900
160	436.4	145.3	414.7	71.5	183,400	293,100
165	434.6	150.0	413.0	70.9	173,200	289,300
170	432.6	154.8	411.3	70.2	163,600	285,600
175	430.7	159.5	409.5	69.5	154,600	282,100
180	428.6	164.2	407.6	68.8	146,100	272,500
185	426.5	169.0	405.7	68.1	138,100	261,500
190	424.3	173.8	403.7	67.4	130,500	251,200
195	422.0	178.5	401.6	66.7	123,300	241,400
200	419.7	183.3	399.5	66.0	116,500	232,100
210	414.7	192.8	395.0	64.6	103,900	215,000
220	409.5	202.3	390.2	63.2	92,400	199,500
230	404.0	211.8	385.1	61.8	81,900	185,400
240	398.1	221.3	379.7	60.3	72,300	172,600
250	391.8	230.8	373.9	58.8	63,500	160,800
260	385.2	240.4	367.8	57.3	55,300	150,000
270	378.2	249.9	361.4	55.8	47,800	140,000
280	370.8	259.5	354.5	54.2	40,800	130,800
290	363.0	269.0	347.2	52.6	34,300	122,200
300	354.7	278.6	339.5	50.9	28,200	114,200
310	345.8	288.2	331.3	49.2	22,500	106,700
320	336.5	297.7	322.6	47.5	17,100	99,700
330	326.5	307.3	313.4	45.7		93,200
340	315.9	316.9	303.5	43.9		87,000
350	304.6	326.5	293.0	42.0		81,200
360	292.4	336.1	281.6	40.0		75,700
370	279.4	345.7	269.4	37.9		70,500
380	265.3	355.3	256.3	35.7		65,500
400	233.0	374.7	226.1	30.9		56,300

MLC650 VPC-MAX S-3

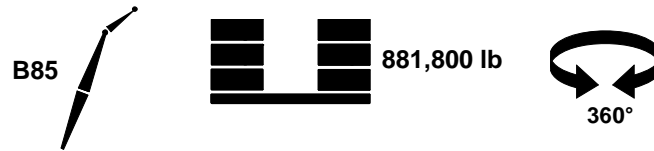
ASME B30.5



		429.8 ft		35°			
						38.7 ft	60.0 ft
						lb	lb
ft	ft	ft	ft	°			lb
57							
58							
59	459.5	47.2	436.3	85.0	317,300	317,300	
60	459.3	48.2	436.2	84.9	317,300	317,300	
61	459.2	49.2	436.1	84.7	317,300	317,300	
62	459.1	50.1	436.0	84.6	317,300	317,300	
63	459.0	51.1	435.9	84.5	317,300	317,300	
64	458.8	52.0	435.8	84.3	317,200	317,200	
65	458.7	53.0	435.7	84.2	317,200	317,200	
70	458.0	57.7	435.1	83.6	317,200	317,200	
75	457.2	62.5	434.5	82.9	317,200	317,200	
80	456.4	67.2	433.8	82.3	317,200	317,200	
85	455.6	71.9	433.1	81.7	317,100	317,100	
90	454.6	76.7	432.3	81.0	317,000	317,000	
95	453.7	81.4	431.5	80.4	316,900	316,900	
100	452.6	86.2	430.6	79.7	316,800	316,800	
105	451.5	91.0	429.6	79.1	316,700	316,700	
110	450.3	95.7	428.6	78.4	315,500	315,500	
115	449.1	100.5	427.6	77.8	311,800	311,800	
120	447.8	105.2	426.5	77.1	299,400	308,200	
125	446.5	110.0	425.3	76.5	280,900	304,500	
130	445.1	114.7	424.0	75.8	264,000	300,900	
135	443.6	119.5	422.7	75.1	248,300	297,300	
140	442.1	124.3	421.4	74.5	233,900	293,700	
145	440.5	129.0	420.0	73.8	220,400	290,100	
150	438.8	133.8	418.5	73.1	207,900	286,700	
155	437.1	138.5	417.0	72.5	196,200	283,300	
160	435.3	143.3	415.4	71.8	185,300	279,900	
165	433.5	148.1	413.7	71.1	175,000	276,600	
170	431.5	152.9	412.0	70.4	165,400	273,400	
175	429.5	157.6	410.2	69.8	156,300	270,200	
180	427.5	162.4	408.4	69.1	147,700	267,100	
185	425.4	167.1	406.5	68.4	139,700	262,700	
190	423.1	171.9	404.5	67.7	132,000	252,300	
195	420.9	176.7	402.4	67.0	124,800	242,500	
200	418.5	181.5	400.3	66.3	117,900	233,200	
210	413.6	191.0	395.8	64.9	105,100	216,000	
220	408.4	200.6	391.0	63.5	93,600	200,400	
230	402.8	210.2	386.0	62.0	83,000	186,300	
240	396.9	219.7	380.6	60.5	73,300	173,400	
250	390.6	229.3	374.9	59.1	64,400	161,600	
260	384.0	238.9	368.8	57.5	56,200	150,700	
270	377.0	248.5	362.3	56.0	48,600	140,700	
280	369.5	258.1	355.5	54.4	41,500	131,400	
290	361.7	267.7	348.2	52.8	35,000	122,700	
300	353.3	277.4	340.5	51.1	28,800	114,700	
310	344.5	287.0	332.4	49.5	23,000	107,200	
320	335.0	296.6	323.6	47.7	17,600	100,100	
330	325.0	306.3	314.4	45.9		93,500	
340	314.4	315.9	304.5	44.1		87,300	
350	303.0	325.6	293.9	42.2		81,500	
360	290.8	335.3	282.5	40.2		75,900	
370	277.6	345.1	270.3	38.1		70,700	
380	263.4	354.8	257.1	35.9		65,700	
400							

MLC650 VPC-MAX S-3

ASME B30.5



429.8 ft		41°				
ft	ft	ft	ft	°	lb	lb
57						
58						
59						
60						
61	457.8	46.9	436.3	85.0	244,000	244,000
62	457.7	47.9	436.2	84.9	244,000	244,000
63	457.6	48.8	436.1	84.8	244,000	244,000
64	457.5	49.8	436.0	84.6	244,000	244,000
65	457.3	50.7	435.9	84.5	244,000	244,000
70	456.6	55.5	435.4	83.9	244,000	244,000
75	455.9	60.2	434.8	83.2	244,000	244,000
80	455.1	65.0	434.1	82.6	244,000	244,000
85	454.2	69.8	433.4	81.9	244,000	244,000
90	453.2	74.6	432.7	81.3	244,000	244,000
95	452.3	79.3	431.9	80.7	244,000	244,000
100	451.2	84.1	431.0	80.0	244,000	244,000
105	450.1	88.8	430.1	79.4	244,000	244,000
110	448.9	93.7	429.1	78.7	244,000	244,000
115	447.7	98.4	428.0	78.0	244,000	244,000
120	446.4	103.2	426.9	77.4	244,000	244,000
125	445.1	107.9	425.8	76.7	244,000	244,000
130	443.7	112.7	424.6	76.1	244,000	244,000
135	442.2	117.6	423.3	75.4	244,000	244,000
140	440.7	122.3	422.0	74.7	236,000	244,000
145	439.1	127.1	420.6	74.1	222,500	244,000
150	437.4	131.9	419.1	73.4	209,800	244,000
155	435.7	136.7	417.6	72.7	198,100	244,000
160	433.9	141.4	416.0	72.1	187,000	244,000
165	432.0	146.2	414.4	71.4	176,700	244,000
170	430.1	151.0	412.7	70.7	167,000	244,000
175	428.1	155.9	410.9	70.0	157,900	244,000
180	426.0	160.6	409.1	69.3	149,200	244,000
185	423.9	165.4	407.2	68.6	141,100	244,000
190	421.7	170.2	405.2	67.9	133,400	244,000
195	419.4	175.1	403.1	67.2	126,100	241,800
200	417.0	179.8	401.0	66.5	119,200	234,100
210	412.1	189.4	396.6	65.1	106,300	216,900
220	406.8	199.1	391.8	63.7	94,600	201,200
230	401.2	208.7	386.8	62.2	84,000	187,000
240	395.3	218.3	381.4	60.8	74,200	174,100
250	389.0	228.0	375.7	59.3	65,300	162,200
260	382.3	237.6	369.6	57.7	57,000	151,300
270	375.3	247.3	363.2	56.2	49,300	141,200
280	367.8	257.0	356.3	54.6	42,200	131,800
290	359.9	266.7	349.1	53.0	35,500	123,200
300	351.5	276.4	341.3	51.3	29,300	115,100
310	342.6	286.1	333.1	49.6	23,500	107,500
320	333.1	295.8	324.4	47.9	18,000	100,400
330	323.1	305.5	315.1	46.1		93,800
340	312.3	315.3	305.2	44.2		87,600
350	300.9	325.0	294.6	42.3		81,700
360						
370						
380						
400						

MLC650 VPC-MAX S-3

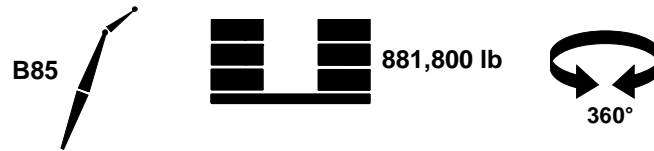
ASME B30.5



		439.6 ft		28°			
						38.7 ft	60.0 ft
ft	ft	ft	ft	°	lb	lb	
58	470.5	48.6	446.0	84.9	296,800	296,800	
59	470.4	49.6	445.9	84.8	296,800	296,800	
60	470.3	50.5	445.8	84.7	296,700	296,700	
61	470.2	51.5	445.7	84.5	296,700	296,700	
62	470.0	52.4	445.6	84.4	296,700	296,700	
63	469.9	53.4	445.5	84.3	296,700	296,700	
64	469.8	54.3	445.4	84.2	296,700	296,700	
65	469.7	55.2	445.3	84.0	296,700	296,700	
66	469.5	56.2	445.1	83.9	296,700	296,700	
70	469.0	60.0	444.7	83.4	296,600	296,600	
75	468.2	64.7	444.1	82.8	296,500	296,500	
80	467.5	69.5	443.4	82.2	296,400	296,400	
85	466.6	74.2	442.6	81.5	296,200	296,200	
90	465.7	79.0	441.9	80.9	296,100	296,100	
95	464.7	83.7	441.0	80.3	295,800	295,800	
100	463.7	88.5	440.1	79.6	295,600	295,600	
105	462.6	93.2	439.2	79.0	295,400	295,400	
110	461.5	97.9	438.2	78.4	295,300	295,300	
115	460.3	102.7	437.1	77.7	295,000	295,000	
120	459.1	107.4	436.0	77.1	294,800	294,800	
125	457.8	112.1	434.8	76.5	276,600	294,600	
130	456.4	116.9	433.6	75.8	259,700	294,300	
135	455.0	121.7	432.3	75.2	244,200	290,500	
140	453.5	126.4	431.0	74.5	229,800	286,400	
145	451.9	131.1	429.6	73.9	216,500	282,500	
150	450.3	135.9	428.1	73.2	204,000	278,600	
155	448.6	140.6	426.6	72.6	192,400	274,700	
160	446.9	145.4	425.0	71.9	181,500	270,900	
165	445.1	150.2	423.4	71.3	171,400	267,200	
170	443.2	154.9	421.7	70.6	161,800	263,600	
175	441.2	159.6	419.9	70.0	152,800	260,100	
180	439.2	164.4	418.1	69.3	144,300	256,600	
185	437.2	169.1	416.2	68.6	136,300	253,200	
190	435.0	173.9	414.2	67.9	128,700	249,800	
195	432.8	178.6	412.2	67.3	121,500	240,100	
200	430.5	183.4	410.2	66.6	114,700	230,800	
210	425.7	192.9	405.8	65.2	102,000	213,600	
220	420.7	202.5	401.1	63.8	90,500	198,100	
230	415.3	212.0	396.1	62.4	80,000	184,100	
240	409.5	221.5	390.9	61.0	70,400	171,200	
250	403.5	231.1	385.3	59.6	61,600	159,500	
260	397.1	240.6	379.3	58.1	53,500	148,700	
270	390.3	250.1	373.1	56.6	45,900	138,700	
280	383.1	259.7	366.5	55.1	38,900	129,400	
290	375.5	269.2	359.4	53.5	32,400	120,800	
300	367.5	278.8	352.0	51.9	26,300	112,800	
310	359.0	288.4	344.1	50.3	20,600	105,400	
320	350.0	298.0	335.7	48.6	15,300	98,400	
330	340.5	307.6	326.8	46.9		91,800	
340	330.3	317.1	317.4	45.2		85,600	
350	319.5	326.7	307.3	43.4		79,800	
360	308.0	336.4	296.5	41.5		74,300	
370	295.6	346.0	285.0	39.5		69,100	
380	282.4	355.6	272.6	37.4		64,200	
400	252.4	374.9	244.6	33.0		55,000	

MLC650 VPC-MAX S-3

ASME B30.5



	439.6 ft				35°	38.7 ft	60.0 ft
	ft	ft	ft	ft	°	lb	lb
58							
59							
60	469.2	48.2	446.0	85.0	293,700	293,700	
61	469.1	49.2	445.9	84.8	293,700	293,700	
62	469.0	50.2	445.8	84.7	293,700	293,700	
63	468.9	51.1	445.7	84.6	293,700	293,700	
64	468.8	52.1	445.6	84.5	293,700	293,700	
65	468.6	53.0	445.5	84.3	293,700	293,700	
66	468.5	54.0	445.4	84.2	293,700	293,700	
70	467.9	57.7	445.0	83.7	293,600	293,600	
75	467.2	62.5	444.4	83.1	293,500	293,500	
80	466.4	67.3	443.7	82.5	293,400	293,400	
85	465.6	72.0	443.0	81.8	293,300	293,300	
90	464.7	76.7	442.2	81.2	293,200	293,200	
95	463.7	81.6	441.4	80.6	293,100	293,100	
100	462.7	86.3	440.5	79.9	292,900	292,900	
105	461.6	91.0	439.6	79.3	292,800	292,800	
110	460.5	95.8	438.6	78.7	292,700	292,700	
115	459.3	100.5	437.6	78.0	291,900	291,900	
120	458.0	105.3	436.5	77.4	288,200	288,200	
125	456.7	110.0	435.4	76.8	279,200	284,500	
130	455.3	114.9	434.1	76.1	262,300	280,800	
135	453.9	119.6	432.9	75.5	246,600	277,100	
140	452.4	124.4	431.6	74.8	232,100	273,600	
145	450.8	129.2	430.2	74.2	218,600	270,000	
150	449.2	133.9	428.7	73.5	206,100	266,600	
155	447.5	138.6	427.3	72.9	194,400	263,100	
160	445.8	143.4	425.7	72.2	183,500	259,800	
165	444.0	148.2	424.1	71.5	173,200	256,500	
170	442.1	153.0	422.4	70.9	163,600	253,200	
175	440.1	157.7	420.7	70.2	154,500	250,100	
180	438.1	162.5	418.8	69.6	145,900	247,000	
185	436.1	167.3	417.0	68.9	137,800	243,900	
190	433.9	172.1	415.0	68.2	130,200	241,000	
195	431.7	176.9	413.0	67.5	122,900	238,100	
200	429.4	181.7	410.9	66.8	116,100	231,800	
210	424.6	191.2	406.6	65.5	103,300	214,600	
220	419.5	200.7	402.0	64.1	91,700	199,100	
230	414.1	210.3	397.0	62.7	81,200	184,900	
240	408.4	219.9	391.8	61.2	71,500	172,000	
250	402.3	229.5	386.2	59.8	62,600	160,200	
260	395.8	239.1	380.3	58.3	54,400	149,300	
270	389.0	248.7	374.1	56.8	46,800	139,300	
280	381.9	258.3	367.4	55.3	39,700	130,000	
290	374.2	267.9	360.4	53.7	33,100	121,400	
300	366.2	277.6	353.0	52.1	27,000	113,300	
310	357.7	287.2	345.1	50.5	21,200	105,800	
320	348.6	296.8	336.7	48.8	15,800	98,800	
330	339.0	306.5	327.8	47.1		92,200	
340	328.8	316.2	318.3	45.4		86,000	
350	318.0	325.9	308.2	43.5		80,100	
360	306.4	335.5	297.5	41.6		74,600	
370	294.0	345.3	285.9	39.7		69,400	
380	280.6	355.0	273.4	37.6		64,400	
400							

MLC650 VPC-MAX S-3

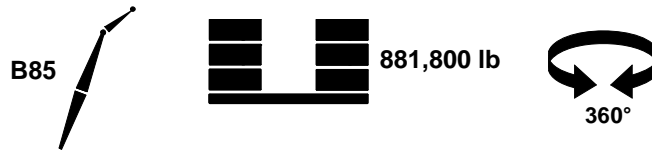
ASME B30.5



	439.6 ft		41°		38.7 ft	60.0 ft
	ft	ft	ft	ft	lb	lb
58						
59						
60						
61						
62	467.6	47.9	446.0	85.0	244,000	244,000
63	467.5	48.9	445.9	84.9	244,000	244,000
64	467.4	49.8	445.8	84.8	244,000	244,000
65	467.2	50.8	445.8	84.6	244,000	244,000
66	467.1	51.7	445.6	84.5	244,000	244,000
70	466.6	55.5	445.2	84.0	244,000	244,000
75	465.8	60.3	444.6	83.4	244,000	244,000
80	465.0	65.1	444.0	82.7	244,000	244,000
85	464.2	69.9	443.3	82.1	244,000	244,000
90	463.3	74.6	442.6	81.5	244,000	244,000
95	462.3	79.4	441.8	80.9	244,000	244,000
100	461.3	84.2	440.9	80.2	244,000	244,000
105	460.2	88.9	440.0	79.6	244,000	244,000
110	459.0	93.7	439.1	78.9	244,000	244,000
115	457.8	98.5	438.0	78.3	244,000	244,000
120	456.6	103.3	437.0	77.7	244,000	244,000
125	455.3	108.0	435.9	77.0	244,000	244,000
130	453.9	112.9	434.7	76.4	244,000	244,000
135	452.5	117.6	433.4	75.7	244,000	244,000
140	451.0	122.4	432.1	75.1	234,300	244,000
145	449.4	127.2	430.8	74.4	220,700	244,000
150	447.8	132.0	429.3	73.8	208,100	244,000
155	446.1	136.8	427.9	73.1	196,300	244,000
160	444.3	141.6	426.3	72.5	185,300	244,000
165	442.5	146.3	424.7	71.8	175,000	244,000
170	440.6	151.2	423.0	71.1	165,200	244,000
175	438.7	155.9	421.3	70.5	156,100	242,300
180	436.7	160.7	419.5	69.8	147,500	239,500
185	434.6	165.6	417.6	69.1	139,300	236,700
190	432.4	170.3	415.7	68.5	131,600	234,000
195	430.2	175.2	413.7	67.8	124,300	231,500
200	427.9	180.0	411.7	67.1	117,400	228,900
210	423.1	189.6	407.3	65.7	104,500	215,500
220	418.0	199.2	402.7	64.3	92,800	199,900
230	412.5	208.8	397.8	62.9	82,200	185,700
240	406.8	218.4	392.6	61.5	72,400	172,700
250	400.7	228.1	387.0	60.0	63,500	160,900
260	394.2	237.8	381.1	58.5	55,200	149,900
270	387.4	247.5	374.9	57.0	47,500	139,900
280	380.1	257.1	368.3	55.5	40,400	130,500
290	372.5	266.8	361.3	53.9	33,700	121,800
300	364.4	276.5	353.8	52.3	27,500	113,700
310	355.8	286.2	345.9	50.7	21,700	106,200
320	346.7	295.9	337.5	49.0	16,300	99,100
330	337.1	305.7	328.6	47.3		92,500
340	326.8	315.4	319.1	45.5		86,200
350	315.9	325.2	309.0	43.7		80,300
360	304.2	335.0	298.1	41.7		74,800
370						
380						
400						

MLC650 VPC-MAX S-3

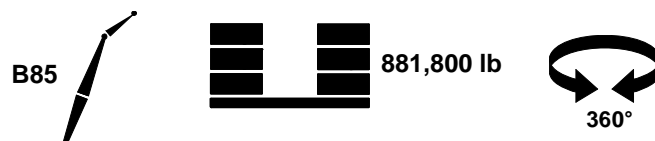
ASME B30.5



449.5 ft		28°				
ft	ft	ft	ft	°	38.7 ft lb	60.0 ft lb
58	480.4	48.7	455.9	85.0	274,900	274,900
59	480.3	49.7	455.8	84.9	274,800	274,800
60	480.2	50.6	455.7	84.8	274,800	274,800
61	480.1	51.5	455.6	84.7	274,800	274,800
62	480.0	52.5	455.5	84.5	274,800	274,800
63	479.8	53.5	455.4	84.4	274,800	274,800
64	479.7	54.4	455.3	84.3	274,700	274,700
65	479.6	55.3	455.2	84.2	274,700	274,700
66	479.5	56.3	455.1	84.0	274,700	274,700
67	479.3	57.2	455.0	83.9	274,700	274,700
70	478.9	60.1	454.6	83.6	274,600	274,600
75	478.2	64.8	454.0	82.9	274,500	274,500
80	477.4	69.6	453.4	82.3	274,300	274,300
85	476.6	74.3	452.7	81.7	274,200	274,200
90	475.7	79.0	451.9	81.1	274,000	274,000
95	474.8	83.8	451.1	80.5	273,800	273,800
100	473.8	88.6	450.2	79.9	273,500	273,500
105	472.7	93.3	449.3	79.2	273,300	273,300
110	471.6	98.1	448.3	78.6	273,200	273,200
115	470.4	102.8	447.2	78.0	272,900	272,900
120	469.2	107.5	446.2	77.4	272,700	272,700
125	467.9	112.3	445.0	76.8	272,400	272,400
130	466.6	117.0	443.8	76.1	259,400	272,200
135	465.2	121.8	442.6	75.5	243,900	270,300
140	463.7	126.5	441.2	74.9	229,500	266,400
145	462.2	131.3	439.9	74.2	216,100	262,500
150	460.6	136.0	438.4	73.6	203,700	258,600
155	459.0	140.8	436.9	73.0	192,100	254,900
160	457.3	145.6	435.4	72.3	181,200	251,200
165	455.5	150.3	433.8	71.7	171,000	247,600
170	453.7	155.0	432.2	71.0	161,500	244,000
175	451.8	159.8	430.4	70.4	152,400	240,600
180	449.9	164.6	428.6	69.7	144,000	237,200
185	447.8	169.3	426.8	69.1	135,900	233,900
190	445.7	174.1	424.9	68.4	128,300	230,700
195	443.6	178.9	422.9	67.8	121,100	227,600
200	441.4	183.6	420.9	67.1	114,300	224,500
210	436.7	193.2	416.6	65.8	101,700	213,400
220	431.7	202.7	412.0	64.4	90,200	197,900
230	426.5	212.2	407.2	63.1	79,700	183,800
240	420.9	221.7	402.1	61.7	70,100	171,000
250	415.0	231.3	396.6	60.3	61,300	159,200
260	408.8	240.8	390.9	58.8	53,100	148,400
270	402.2	250.4	384.8	57.4	45,600	138,400
280	395.3	260.0	378.4	55.9	38,600	129,200
290	387.9	269.5	371.6	54.4	32,100	120,600
300	380.2	279.1	364.4	52.9	26,000	112,600
310	372.0	288.7	356.7	51.3	20,300	105,100
320	363.3	298.3	348.7	49.7	15,000	98,200
330	354.1	307.9	340.1	48.1		91,600
340	344.4	317.5	331.0	46.4		85,400
360	323.1	336.7	311.1	42.8		74,100
380	298.8	356.0	288.4	39.0		64,000
400	270.8	375.3	262.1	34.9		54,900
420	237.5	394.6	231.0	30.2		46,600

**MLC650
VPC-MAX S-3**

ASME B30.5

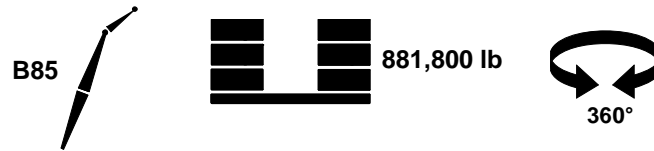


449.5 ft 35°

	ft	ft	ft	ft	ft	lb	lb
58							
59							
60							
61	479.0	49.3	455.9	84.9	272,100	272,100	
62	478.9	50.2	455.8	84.8	272,100	272,100	
63	478.8	51.1	455.7	84.7	272,100	272,100	
64	478.7	52.2	455.6	84.6	272,100	272,100	
65	478.5	53.1	455.5	84.5	272,100	272,100	
66	478.4	54.0	455.4	84.3	272,100	272,100	
67	478.3	54.9	455.3	84.2	272,100	272,100	
70	477.9	57.8	454.9	83.8	272,000	272,000	
75	477.2	62.6	454.3	83.2	271,900	271,900	
80	476.4	67.4	453.7	82.6	271,800	271,800	
85	475.5	72.1	453.0	82.0	271,700	271,700	
90	474.7	76.9	452.2	81.4	271,600	271,600	
95	473.7	81.6	451.4	80.8	271,400	271,400	
100	472.7	86.3	450.6	80.2	271,200	271,200	
105	471.7	91.1	449.7	79.5	271,100	271,100	
110	470.5	95.9	448.7	78.9	270,900	270,900	
115	469.4	100.7	447.7	78.3	270,700	270,700	
120	468.2	105.4	446.6	77.7	269,800	269,800	
125	466.9	110.2	445.5	77.0	266,200	266,200	
130	465.5	115.0	444.3	76.4	262,000	262,500	
135	464.1	119.7	443.1	75.8	246,300	258,900	
140	462.7	124.5	441.8	75.1	231,800	255,300	
145	461.1	129.3	440.4	74.5	218,300	251,900	
150	459.6	134.0	439.1	73.9	205,800	248,400	
155	457.9	138.8	437.6	73.2	194,100	244,900	
160	456.2	143.6	436.1	72.6	183,100	241,700	
165	454.4	148.3	434.5	72.0	172,900	238,400	
170	452.6	153.1	432.8	71.3	163,200	235,200	
175	450.7	157.9	431.1	70.7	154,200	232,100	
180	448.7	162.7	429.4	70.0	145,600	229,000	
185	446.7	167.5	427.5	69.3	137,500	226,000	
190	444.6	172.2	425.6	68.7	129,900	223,100	
195	442.5	177.1	423.7	68.0	122,600	220,200	
200	440.2	181.8	421.7	67.4	115,700	217,400	
210	435.5	191.4	417.4	66.0	103,000	212,100	
220	430.6	200.9	412.9	64.7	91,400	198,900	
230	425.3	210.6	408.1	63.3	80,800	184,700	
240	419.7	220.2	403.0	61.9	71,200	171,800	
250	413.8	229.8	397.5	60.5	62,300	160,000	
260	407.6	239.4	391.8	59.1	54,100	149,100	
270	401.0	248.9	385.8	57.6	46,500	139,100	
280	394.0	258.6	379.3	56.1	39,400	129,800	
290	386.7	268.2	372.5	54.6	32,800	121,200	
300	378.9	277.8	365.4	53.1	26,700	113,100	
310	370.6	287.5	357.7	51.5	20,900	105,600	
320	361.9	297.1	349.7	49.9	15,500	98,600	
330	352.7	306.8	341.1	48.3		92,000	
340	342.9	316.4	332.0	46.6		85,800	
360	321.5	335.8	312.1	43.0		74,400	
380	297.1	355.2	289.3	39.2		64,200	
400	268.9	374.7	262.9	35.0		55,000	
420							

MLC650 VPC-MAX S-3

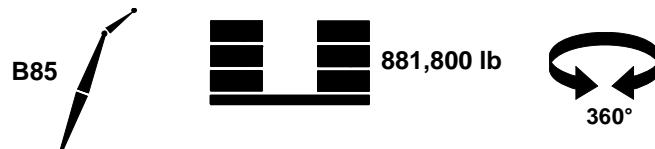
ASME B30.5



449.5 ft		41°				
ft	ft	ft	ft	°	lb	lb
58						
59						
60						
61						
62						
63	477.4	48.9	455.9	85.0	244,000	244,000
64	477.3	49.9	455.8	84.9	244,000	244,000
65	477.2	50.8	455.7	84.7	244,000	244,000
66	477.0	51.8	455.6	84.6	244,000	244,000
67	476.9	52.7	455.5	84.5	244,000	244,000
70	476.5	55.6	455.2	84.1	244,000	244,000
75	475.8	60.4	454.6	83.5	244,000	244,000
80	475.0	65.1	454.0	82.9	244,000	244,000
85	474.2	69.9	453.3	82.3	244,000	244,000
90	473.3	74.7	452.6	81.7	244,000	244,000
95	472.3	79.5	451.8	81.0	244,000	244,000
100	471.3	84.3	451.0	80.4	244,000	244,000
105	470.3	89.0	450.1	79.8	244,000	244,000
110	469.1	93.8	449.2	79.2	244,000	244,000
115	468.0	98.6	448.2	78.6	244,000	244,000
120	466.7	103.4	447.1	77.9	244,000	244,000
125	465.5	108.1	446.0	77.3	244,000	244,000
130	464.1	112.9	444.8	76.7	244,000	244,000
135	462.7	117.8	443.6	76.0	244,000	244,000
140	461.2	122.5	442.3	75.4	234,000	244,000
145	459.7	127.3	441.0	74.8	220,400	243,100
150	458.1	132.2	439.6	74.1	207,800	240,000
155	456.5	136.9	438.2	73.5	196,000	236,900
160	454.8	141.7	436.7	72.8	185,000	233,800
165	453.0	146.5	435.1	72.2	174,700	230,800
170	451.1	151.3	433.5	71.6	164,900	228,000
175	449.2	156.1	431.8	70.9	155,800	225,100
180	447.3	160.9	430.0	70.2	147,200	222,300
185	445.2	165.7	428.2	69.6	139,000	219,600
190	443.1	170.6	426.3	68.9	131,300	216,900
195	441.0	175.3	424.4	68.3	124,000	214,200
200	438.7	180.2	422.4	67.6	117,100	211,700
210	434.0	189.8	418.2	66.3	104,200	206,800
220	429.0	199.4	413.6	64.9	92,500	199,700
230	423.8	209.0	408.8	63.5	81,900	185,500
240	418.2	218.7	403.8	62.1	72,100	172,500
250	412.2	228.3	398.4	60.7	63,200	160,700
260	406.0	238.0	392.7	59.3	54,900	149,700
270	399.3	247.6	386.6	57.8	47,200	139,700
280	392.3	257.3	380.2	56.3	40,100	130,300
290	384.9	267.0	373.4	54.8	33,500	121,600
300	377.1	276.7	366.2	53.3	27,300	113,600
310	368.8	286.4	358.5	51.7	21,500	106,000
320	360.1	296.1	350.5	50.1	16,000	98,900
330	350.8	305.9	341.9	48.4		92,300
340	341.0	315.6	332.8	46.7		86,100
360	319.4	335.2	312.8	43.1		74,600
380						
400						
420						

MLC650 VPC-MAX S-3

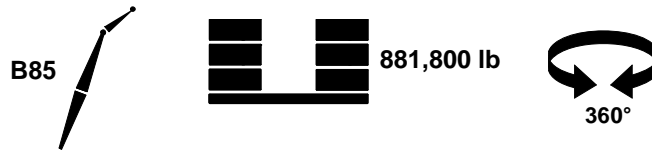
ASME B30.5



459.3 ft		28°				
ft	ft	ft	ft	°	lb	lb
59	490.2	49.7	465.7	85.0	254,000	254,000
60	490.1	50.6	465.6	84.9	254,000	254,000
61	490.0	51.6	465.5	84.8	253,900	253,900
62	489.9	52.5	465.4	84.6	253,900	253,900
63	489.7	53.5	465.3	84.5	253,900	253,900
64	489.6	54.4	465.2	84.4	253,900	253,900
65	489.5	55.4	465.1	84.3	253,900	253,900
66	489.4	56.3	465.0	84.2	253,900	253,900
67	489.2	57.3	464.9	84.0	253,800	253,800
68	489.1	58.2	464.7	83.9	253,800	253,800
70	488.8	60.1	464.5	83.7	253,700	253,700
75	488.1	64.9	463.9	83.1	253,600	253,600
80	487.4	69.6	463.3	82.5	253,400	253,400
85	486.6	74.4	462.6	81.9	253,200	253,200
90	485.7	79.1	461.8	81.3	253,000	253,000
95	484.8	83.8	461.0	80.7	252,800	252,800
100	483.8	88.6	460.1	80.1	252,600	252,600
105	482.8	93.3	459.2	79.5	252,400	252,400
110	481.7	98.1	458.3	78.9	252,100	252,100
115	480.5	102.9	457.3	78.3	251,900	251,900
120	479.4	107.6	456.2	77.6	251,700	251,700
125	478.1	112.4	455.1	77.0	251,400	251,400
130	476.8	117.1	453.9	76.4	251,100	251,100
135	475.4	121.9	452.7	75.8	242,000	250,900
140	474.0	126.6	451.4	75.2	227,600	247,300
145	472.5	131.4	450.0	74.6	214,300	243,600
150	471.0	136.1	448.7	74.0	201,800	239,900
155	469.4	140.9	447.2	73.3	190,200	236,200
160	467.7	145.7	445.7	72.7	179,300	232,600
165	466.0	150.5	444.1	72.1	169,100	229,100
170	464.2	155.2	442.5	71.4	159,600	225,700
175	462.3	160.0	440.8	70.8	150,500	222,400
180	460.4	164.8	439.0	70.2	142,000	219,100
185	458.4	169.5	437.3	69.5	134,000	215,900
190	456.4	174.2	435.4	68.9	126,400	212,800
195	454.3	179.0	433.5	68.3	119,200	209,800
200	452.1	183.8	431.5	67.6	112,400	206,900
210	447.6	193.3	427.3	66.3	99,700	201,200
220	442.8	202.9	422.8	65.0	88,200	195,900
230	437.6	212.4	418.1	63.7	77,800	182,400
240	432.2	222.0	413.1	62.3	68,200	169,600
250	426.5	231.5	407.9	60.9	59,300	157,800
260	420.4	241.1	402.3	59.6	51,200	147,000
270	414.1	250.6	396.3	58.1	43,700	137,000
280	407.3	260.2	390.1	56.7	36,700	127,800
290	400.2	269.7	383.5	55.3	30,200	119,200
300	392.7	279.3	376.5	53.8	24,100	111,200
310	384.8	288.9	369.1	52.3	18,400	103,700
320	376.4	298.5	361.3	50.7	13,000	96,700
330	367.6	308.1	353.1	49.1		90,200
340	358.2	317.7	344.3	47.5		84,000
360	337.8	336.9	325.2	44.1		72,700
380	314.7	356.2	303.7	40.5		62,600
400	288.2	375.5	278.8	36.6		53,500
420	257.4	394.8	249.9	32.2		45,200

MLC650 VPC-MAX S-3

ASME B30.5



		459.3 ft		35°			
						38.7 ft	60.0 ft
						lb	lb
59							
60							
61							
62	488.8	50.2	465.6	84.9	251,700	251,700	
63	488.7	51.2	465.5	84.8	251,700	251,700	
64	488.6	52.1	465.4	84.7	251,700	251,700	
65	488.5	53.1	465.3	84.6	251,700	251,700	
66	488.3	54.0	465.2	84.5	251,700	251,700	
67	488.2	55.0	465.1	84.3	251,700	251,700	
68	488.1	55.9	465.0	84.2	251,600	251,600	
70	487.8	57.8	464.8	84.0	251,500	251,500	
75	487.1	62.6	464.2	83.4	251,500	251,500	
80	486.3	67.4	463.6	82.8	251,300	251,300	
85	485.5	72.2	462.9	82.2	251,100	251,100	
90	484.7	76.9	462.2	81.6	251,000	251,000	
95	483.7	81.6	461.4	81.0	250,800	250,800	
100	482.8	86.4	460.5	80.4	250,600	250,600	
105	481.7	91.2	459.6	79.7	250,400	250,400	
110	480.6	96.0	458.7	79.1	250,200	250,200	
115	479.5	100.7	457.7	78.5	250,000	250,000	
120	478.3	105.5	456.7	77.9	249,800	249,800	
125	477.0	110.3	455.6	77.3	248,500	248,500	
130	475.7	115.0	454.4	76.7	245,000	245,000	
135	474.3	119.8	453.2	76.1	241,400	241,400	
140	472.9	124.6	451.9	75.5	230,000	237,900	
145	471.4	129.4	450.6	74.8	216,500	234,500	
150	469.9	134.1	449.2	74.2	204,000	231,100	
155	468.3	138.9	447.8	73.6	192,300	227,800	
160	466.6	143.7	446.3	73.0	181,300	224,500	
165	464.9	148.5	444.8	72.3	171,000	221,300	
170	463.1	153.2	443.2	71.7	161,400	218,200	
175	461.2	158.1	441.5	71.1	152,300	215,100	
180	459.3	162.8	439.8	70.4	143,700	212,100	
185	457.3	167.6	438.0	69.8	135,600	209,200	
190	455.3	172.4	436.1	69.2	128,000	206,300	
195	453.2	177.2	434.2	68.5	120,700	203,600	
200	451.0	182.0	432.2	67.9	113,800	200,800	
210	446.4	191.5	428.1	66.6	101,100	195,600	
220	441.6	201.1	423.7	65.2	89,500	190,600	
230	436.5	210.7	419.0	63.9	78,900	183,300	
240	431.0	220.3	414.0	62.5	69,300	170,400	
250	425.3	229.9	408.8	61.2	60,400	158,600	
260	419.2	239.5	403.2	59.8	52,100	147,700	
270	412.8	249.2	397.3	58.4	44,500	137,700	
280	406.1	258.7	391.0	56.9	37,500	128,400	
290	398.9	268.4	384.5	55.5	30,900	119,800	
300	391.4	278.0	377.5	54.0	24,800	111,700	
310	383.4	287.6	370.1	52.5	19,000	104,200	
320	375.0	297.3	362.3	50.9	13,600	97,200	
330	366.2	306.9	354.1	49.3		90,600	
340	356.8	316.6	345.4	47.7		84,400	
360	336.2	336.0	326.2	44.3		73,000	
380	313.0	355.4	304.6	40.6		62,900	
400	286.4	374.9	279.7	36.7		53,700	
420							

MLC650 VPC-MAX S-3

ASME B30.5



B85



881,800 lb

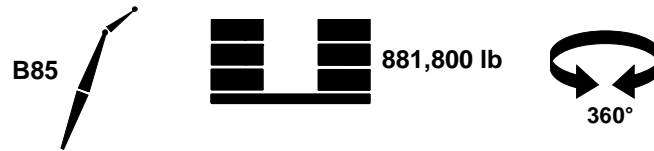


360°

		ft	ft	ft	ft	ft
					lb	lb
59						
60						
61						
62						
63						
64	487.2	49.9	465.6	85.0	244,000	244,000
65	487.1	50.9	465.5	84.9	244,000	244,000
66	487.0	51.8	465.4	84.7	244,000	244,000
67	486.8	52.8	465.4	84.6	244,000	244,000
68	486.7	53.7	465.2	84.5	244,000	244,000
70	486.4	55.6	465.0	84.3	244,000	244,000
75	485.7	60.4	464.5	83.7	244,000	244,000
80	484.9	65.2	463.9	83.0	244,000	244,000
85	484.1	70.0	463.2	82.4	244,000	244,000
90	483.3	74.8	462.5	81.8	244,000	244,000
95	482.3	79.5	461.7	81.2	244,000	244,000
100	481.4	84.3	460.9	80.6	244,000	244,000
105	480.3	89.1	460.0	80.0	244,000	244,000
110	479.2	93.9	459.1	79.4	244,000	244,000
115	478.1	98.7	458.2	78.8	244,000	244,000
120	476.9	103.4	457.1	78.2	243,100	243,100
125	475.6	108.3	456.0	77.6	239,800	239,800
130	474.3	113.0	454.9	77.0	236,500	236,500
135	472.9	117.8	453.7	76.3	233,300	233,300
140	471.5	122.6	452.5	75.7	230,100	230,100
145	470.0	127.4	451.2	75.1	218,700	226,900
150	468.4	132.2	449.8	74.5	206,000	223,800
155	466.8	137.0	448.4	73.8	194,200	220,700
160	465.2	141.8	446.9	73.2	183,200	217,800
165	463.4	146.6	445.4	72.6	172,800	214,800
170	461.6	151.4	443.8	71.9	163,100	211,900
175	459.8	156.2	442.1	71.3	154,000	209,100
180	457.8	161.0	440.4	70.7	145,300	206,400
185	455.9	165.8	438.7	70.0	137,200	203,600
190	453.8	170.7	436.8	69.4	129,500	201,000
195	451.7	175.4	434.9	68.7	122,100	198,400
200	449.5	180.3	432.9	68.1	115,200	195,900
210	444.9	189.9	428.8	66.8	102,300	191,100
220	440.1	199.5	424.4	65.5	90,600	186,400
230	434.9	209.1	419.8	64.1	80,000	182,100
240	429.5	218.8	414.8	62.8	70,200	171,200
250	423.7	228.5	409.6	61.4	61,300	159,300
260	417.6	238.1	404.0	60.0	53,000	148,400
270	411.2	247.8	398.1	58.6	45,300	138,300
280	404.4	257.5	391.9	57.1	38,200	128,900
290	397.2	267.2	385.3	55.7	31,600	120,300
300	389.7	276.8	378.3	54.2	25,400	112,200
310	381.7	286.6	370.9	52.6	19,600	104,600
320	373.2	296.3	363.1	51.1	14,100	97,600
330	364.3	306.0	354.9	49.5		90,900
340	354.8	315.8	346.1	47.8		84,700
360	334.2	335.3	327.0	44.4		73,300
380						
400						
420						

MLC650 VPC-MAX S-3

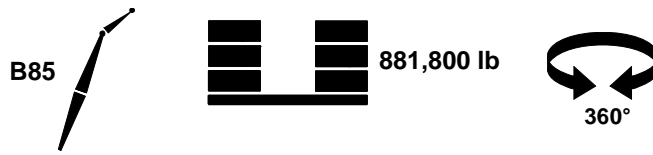
ASME B30.5



 469.2 ft		 28°				
ft	ft	ft	ft	°	lb	lb
60	500.0	50.7	475.5	85.0	245,500	245,500
61	499.9	51.7	475.4	84.9	245,400	245,400
62	499.8	52.6	475.3	84.8	245,400	245,400
63	499.7	53.5	475.2	84.6	245,400	245,400
64	499.5	54.5	475.1	84.5	245,400	245,400
65	499.4	55.5	475.0	84.4	245,300	245,300
66	499.3	56.4	474.9	84.3	245,300	245,300
67	499.2	57.3	474.8	84.2	245,300	245,300
68	499.0	58.3	474.7	84.0	245,300	245,300
69	498.9	59.2	474.6	83.9	245,200	245,200
70	498.8	60.2	474.5	83.8	245,200	245,200
75	498.1	65.0	473.9	83.2	245,100	245,100
80	497.3	69.7	473.2	82.6	244,900	244,900
85	496.5	74.4	472.6	82.1	244,800	244,800
90	495.7	79.2	471.8	81.5	244,600	244,600
95	494.8	83.9	471.0	80.9	244,400	244,400
100	493.8	88.7	470.2	80.3	244,200	244,200
105	492.8	93.5	469.3	79.7	244,000	244,000
110	491.8	98.2	468.4	79.1	243,800	243,800
115	490.6	103.0	467.4	78.5	243,500	243,500
120	489.5	107.8	466.3	77.9	243,400	243,400
125	488.2	112.5	465.2	77.3	243,100	243,100
130	487.0	117.2	464.1	76.7	242,900	242,900
135	485.6	122.1	462.9	76.1	237,500	242,700
140	484.2	126.8	461.6	75.5	223,100	242,400
145	482.8	131.6	460.3	74.9	209,700	242,200
150	481.3	136.3	458.9	74.3	197,200	241,900
155	479.7	141.1	457.5	73.7	185,500	241,600
160	478.1	145.8	456.0	73.1	174,600	241,400
165	476.4	150.6	454.5	72.4	164,400	241,200
170	474.6	155.4	452.9	71.8	154,800	240,900
175	472.8	160.1	451.3	71.2	145,800	240,600
180	471.0	164.9	449.5	70.6	137,300	240,400
185	469.0	169.6	447.8	70.0	129,200	240,100
190	467.0	174.4	446.0	69.3	121,600	239,000
195	465.0	179.2	444.1	68.7	114,400	234,900
200	462.9	184.0	442.1	68.1	107,500	225,600
210	458.4	193.5	438.0	66.8	94,800	208,400
220	453.7	203.1	433.7	65.5	83,300	192,900
230	448.7	212.7	429.1	64.2	72,800	178,800
240	443.4	222.2	424.2	62.9	63,200	165,900
250	437.9	231.7	419.1	61.6	54,400	154,200
260	432.0	241.3	413.6	60.2	46,200	143,300
270	425.8	250.9	407.9	58.9	38,600	133,300
280	419.2	260.5	401.8	57.5	31,600	124,100
290	412.3	270.0	395.4	56.1	25,100	115,500
300	405.0	279.6	388.6	54.6	19,000	107,400
310	397.4	289.2	381.5	53.2	13,300	100,000
320	389.3	298.8	373.9	51.7		93,000
340	371.7	318.0	357.5	48.6		80,200
360	352.1	337.2	339.2	45.3		68,900
380	330.0	356.5	318.5	41.9		58,800
400	305.0	375.8	295.0	38.1		49,700
420	276.1	395.1	267.8	34.0		41,400
440	241.9	414.6	235.7	29.4		33,000

MLC650 VPC-MAX S-3

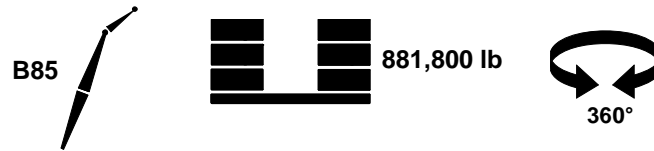
ASME B30.5



	469.2 ft		35°		360°	
	ft	ft	ft	ft	lb	lb
60						
61						
62	498.7	50.3	475.6	85.0	243,700	243,700
63	498.6	51.3	475.5	84.9	243,700	243,700
64	498.5	52.2	475.4	84.8	243,600	243,600
65	498.4	53.1	475.3	84.7	243,600	243,600
66	498.2	54.1	475.2	84.6	243,600	243,600
67	498.1	55.1	475.1	84.4	243,600	243,600
68	498.0	56.0	475.0	84.3	243,500	243,500
69	497.9	56.9	474.9	84.2	243,500	243,500
70	497.7	57.9	474.7	84.1	243,500	243,500
75	497.0	62.7	474.2	83.5	243,400	243,400
80	496.3	67.5	473.6	82.9	243,300	243,300
85	495.5	72.2	472.9	82.3	243,100	243,100
90	494.6	77.0	472.2	81.7	243,000	243,000
95	493.7	81.7	471.4	81.1	242,800	242,800
100	492.8	86.5	470.6	80.6	242,600	242,600
105	491.8	91.3	469.7	80.0	242,500	242,500
110	490.7	96.0	468.8	79.4	242,300	242,300
115	489.6	100.8	467.8	78.8	242,100	242,100
120	488.4	105.6	466.8	78.2	241,800	241,800
125	487.2	110.4	465.7	77.6	241,700	241,700
130	485.9	115.2	464.6	77.0	241,500	241,500
135	484.6	119.9	463.4	76.4	240,100	241,300
140	483.2	124.7	462.2	75.8	225,500	241,000
145	481.7	129.5	460.9	75.2	212,000	240,800
150	480.2	134.3	459.5	74.5	199,400	240,700
155	478.6	139.0	458.1	73.9	187,700	240,400
160	477.0	143.9	456.6	73.3	176,700	240,200
165	475.3	148.6	455.1	72.7	166,400	240,000
170	473.5	153.4	453.6	72.1	156,700	239,800
175	471.7	158.2	451.9	71.5	147,600	239,200
180	469.9	163.0	450.2	70.8	139,000	236,400
185	467.9	167.7	448.5	70.2	130,900	233,700
190	465.9	172.5	446.7	69.6	123,200	231,000
195	463.9	177.3	444.8	69.0	116,000	228,400
200	461.7	182.2	442.9	68.3	109,100	225,900
210	457.3	191.7	438.8	67.1	96,300	209,500
220	452.6	201.3	434.5	65.8	84,600	193,900
230	447.6	210.9	430.0	64.5	74,000	179,700
240	442.3	220.5	425.1	63.1	64,300	166,800
250	436.7	230.1	420.0	61.8	55,400	155,000
260	430.8	239.8	414.5	60.5	47,200	144,100
270	424.6	249.4	408.8	59.1	39,600	134,000
280	418.0	259.0	402.7	57.7	32,500	124,700
290	411.1	268.6	396.3	56.3	25,900	116,100
300	403.8	278.2	389.6	54.8	19,800	108,000
310	396.1	287.9	382.5	53.4	14,000	100,500
320	387.9	297.5	374.9	51.9		93,500
340	370.3	316.9	358.5	48.8		80,600
360	350.6	336.2	340.1	45.5		69,300
380	328.5	355.7	319.4	42.0		59,100
400	303.3	375.1	295.8	38.3		49,900
420						
440						

MLC650 VPC-MAX S-3

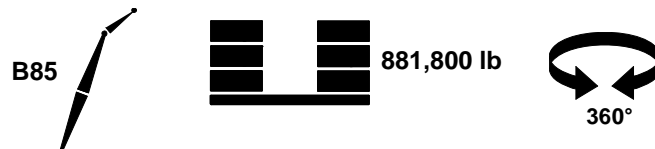
ASME B30.5



ft	ft	ft	ft	°	lb	
					38.7 ft	60.0 ft
60						
61						
62						
63						
64						
65	497.0	50.9	475.5	85.0	242,600	242,600
66	496.9	51.8	475.4	84.8	242,600	242,600
67	496.7	52.8	475.3	84.7	242,500	242,500
68	496.6	53.8	475.2	84.6	242,500	242,500
69	496.5	54.7	475.1	84.5	242,500	242,500
70	496.3	55.7	475.0	84.4	242,500	242,500
75	495.7	60.4	474.5	83.8	242,400	242,400
80	494.9	65.3	473.8	83.2	242,200	242,200
85	494.1	70.1	473.2	82.6	242,200	242,200
90	493.3	74.8	472.5	82.0	242,000	242,000
95	492.3	79.6	471.8	81.4	241,900	241,900
100	491.4	84.4	471.0	80.8	241,800	241,800
105	490.4	89.1	470.1	80.2	241,700	241,700
110	489.3	94.0	469.2	79.6	241,500	241,500
115	488.2	98.8	468.2	79.0	241,400	241,400
120	487.0	103.6	467.2	78.4	241,300	241,300
125	485.8	108.3	466.2	77.8	241,100	241,100
130	484.5	113.1	465.1	77.2	240,900	240,900
135	483.1	117.9	463.9	76.6	240,800	240,800
140	481.7	122.8	462.7	76.0	227,900	240,600
145	480.3	127.5	461.4	75.4	214,300	240,400
150	478.7	132.4	460.1	74.8	201,600	240,300
155	477.2	137.2	458.7	74.2	189,800	240,100
160	475.5	141.9	457.2	73.6	178,700	239,000
165	473.8	146.7	455.7	72.9	168,300	236,300
170	472.1	151.6	454.2	72.3	158,500	233,700
175	470.3	156.4	452.6	71.7	149,400	231,100
180	468.4	161.1	450.9	71.1	140,700	228,600
185	466.4	166.0	449.2	70.5	132,500	226,100
190	464.4	170.8	447.4	69.8	124,800	223,700
195	462.4	175.6	445.5	69.2	117,400	221,300
200	460.2	180.4	443.6	68.6	110,500	219,100
210	455.8	190.1	439.5	67.3	97,600	210,500
220	451.0	199.7	435.3	66.0	85,900	194,800
230	446.0	209.4	430.7	64.7	75,200	180,600
240	440.7	219.0	425.9	63.4	65,400	167,600
250	435.1	228.7	420.8	62.0	56,400	155,700
260	429.2	238.3	415.3	60.7	48,100	144,800
270	422.9	248.0	409.6	59.3	40,400	134,600
280	416.3	257.7	403.6	57.9	33,300	125,300
290	409.4	267.4	397.2	56.5	26,600	116,600
300	402.0	277.1	390.4	55.0	20,400	108,500
310	394.3	286.8	383.3	53.5	14,600	100,900
320	386.1	296.5	375.7	52.0		93,900
340	368.4	316.0	359.3	48.9		81,000
360	348.6	335.5	340.9	45.6		69,500
380	326.3	355.1	320.1	42.1		59,300
400						
420						
440						

MLC650 VPC-MAX S-3

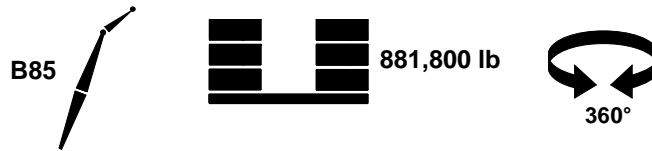
ASME B30.5



479.0 ft		28°				
ft	ft	ft	ft	°	38.7 ft lb	60.0 ft lb
61	509.8	51.7	485.3	85.0	231,800	231,800
62	509.7	52.6	485.2	84.9	231,800	231,800
63	509.6	53.6	485.1	84.7	231,800	231,800
64	509.4	54.5	485.0	84.6	231,700	231,700
65	509.3	55.4	484.9	84.5	231,700	231,700
66	509.2	56.4	484.8	84.4	231,700	231,700
67	509.1	57.3	484.7	84.3	231,700	231,700
68	509.0	58.3	484.6	84.2	231,600	231,600
69	508.8	59.2	484.5	84.1	231,600	231,600
70	508.7	60.2	484.3	83.9	231,600	231,600
75	508.0	65.0	483.8	83.4	231,400	231,400
80	507.3	69.7	483.1	82.8	231,200	231,200
85	506.5	74.5	482.5	82.2	231,000	231,000
90	505.7	79.2	481.7	81.6	230,900	230,900
95	504.8	84.0	481.0	81.1	230,600	230,600
100	503.9	88.8	480.1	80.5	230,400	230,400
105	502.9	93.5	479.3	79.9	230,200	230,200
110	501.8	98.3	478.3	79.3	230,000	230,000
115	500.7	103.1	477.4	78.7	229,700	229,700
120	499.6	107.8	476.3	78.1	229,500	229,500
125	498.4	112.6	475.3	77.6	229,300	229,300
130	497.1	117.4	474.1	77.0	229,000	229,000
135	495.8	122.1	472.9	76.4	228,700	228,700
140	494.5	126.9	471.7	75.8	221,300	228,500
145	493.0	131.7	470.4	75.2	207,800	228,200
150	491.6	136.4	469.1	74.6	195,300	228,000
155	490.0	141.2	467.7	74.0	183,700	227,700
160	488.4	146.0	466.3	73.4	172,800	227,500
165	486.8	150.7	464.7	72.8	162,600	227,200
170	485.1	155.5	463.2	72.2	153,000	226,900
175	483.3	160.3	461.6	71.6	143,900	226,700
180	481.5	165.0	459.9	71.0	135,400	226,400
185	479.6	169.8	458.2	70.4	127,300	224,000
190	477.6	174.6	456.4	69.8	119,700	221,100
195	475.6	179.4	454.5	69.2	112,500	218,200
200	473.6	184.1	452.7	68.5	105,700	215,400
210	469.2	193.7	448.7	67.3	92,900	207,100
220	464.6	203.2	444.4	66.0	81,400	191,500
230	459.8	212.8	439.9	64.8	70,900	177,400
240	454.6	222.4	435.2	63.5	61,300	164,500
250	449.2	231.9	430.1	62.2	52,400	152,800
260	443.4	241.5	424.8	60.9	44,300	141,900
270	437.4	251.0	419.2	59.6	36,700	131,900
280	431.0	260.6	413.3	58.2	29,700	122,600
290	424.3	270.2	407.0	56.8	23,200	114,000
300	417.3	279.8	400.5	55.4	17,100	106,000
310	409.8	289.4	393.6	54.0		98,600
320	402.0	299.0	386.2	52.6		91,600
330	393.7	308.6	378.5	51.1		85,000
340	385.0	318.2	370.4	49.6		78,800
360	366.1	337.5	352.7	46.4		67,500
380	345.0	356.7	332.9	43.1		57,400
400	321.2	376.0	310.5	39.6		48,300
420	293.9	395.3	284.9	35.7		40,000
440	262.2	414.8	255.0	31.4		31,100

MLC650 VPC-MAX S-3

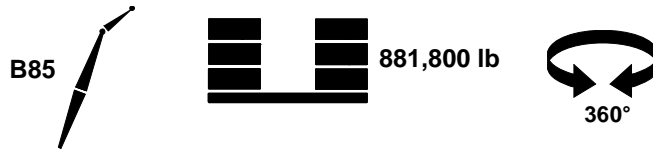
ASME B30.5



		479.0 ft		35°			
						38.7 ft	60.0 ft
						lb	lb
ft	ft	ft	ft	°	lb	lb	lb
61							
62							
63	508.5	51.3	485.3	85.0	230,400	230,400	230,400
64	508.4	52.2	485.2	84.9	230,400	230,400	230,400
65	508.3	53.2	485.1	84.8	230,300	230,300	230,300
66	508.2	54.1	485.0	84.7	230,300	230,300	230,300
67	508.0	55.1	484.9	84.6	230,300	230,300	230,300
68	507.9	56.0	484.8	84.4	230,300	230,300	230,300
69	507.8	57.0	484.7	84.3	230,200	230,200	230,200
70	507.7	57.9	484.6	84.2	230,200	230,200	230,200
75	507.0	62.7	484.0	83.6	230,100	230,100	230,100
80	506.2	67.5	483.4	83.1	229,900	229,900	229,900
85	505.5	72.3	482.8	82.5	229,700	229,700	229,700
90	504.6	77.0	482.1	81.9	229,500	229,500	229,500
95	503.7	81.8	481.3	81.3	229,300	229,300	229,300
100	502.8	86.6	480.5	80.7	229,100	229,100	229,100
105	501.8	91.4	479.7	80.2	229,000	229,000	229,000
110	500.8	96.1	478.8	79.6	228,800	228,800	228,800
115	499.7	101.0	477.8	79.0	228,500	228,500	228,500
120	498.5	105.7	476.8	78.4	228,300	228,300	228,300
125	497.3	110.5	475.7	77.8	228,100	228,100	228,100
130	496.1	115.3	474.6	77.2	227,900	227,900	227,900
135	494.7	120.0	473.5	76.6	227,600	227,600	227,600
140	493.4	124.8	472.3	76.0	223,700	227,400	227,400
145	492.0	129.6	471.0	75.5	210,200	227,200	227,200
150	490.5	134.4	469.7	74.9	197,600	227,000	227,000
155	488.9	139.2	468.3	74.3	185,900	226,800	226,800
160	487.3	144.0	466.9	73.7	174,900	226,500	226,500
165	485.7	148.8	465.4	73.1	164,600	226,300	226,300
170	484.0	153.5	463.8	72.5	154,900	224,800	224,800
175	482.2	158.3	462.2	71.8	145,800	222,000	222,000
180	480.4	163.1	460.6	71.2	137,200	219,200	219,200
185	478.5	167.9	458.9	70.6	129,100	216,500	216,500
190	476.5	172.7	457.1	70.0	121,400	213,800	213,800
195	474.5	177.5	455.3	69.4	114,100	211,200	211,200
200	472.4	182.2	453.4	68.8	107,200	208,700	208,700
210	468.1	191.9	449.4	67.5	94,400	203,800	203,800
220	463.5	201.5	445.2	66.3	82,800	192,600	192,600
230	458.6	211.1	440.8	65.0	72,200	178,400	178,400
240	453.4	220.6	436.0	63.7	62,500	165,400	165,400
250	448.0	230.3	431.0	62.4	53,500	153,600	153,600
260	442.2	239.9	425.7	61.1	45,300	142,700	142,700
270	436.2	249.5	420.1	59.8	37,700	132,600	132,600
280	429.8	259.1	414.3	58.4	30,600	123,300	123,300
290	423.1	268.8	408.0	57.0	24,000	114,700	114,700
300	416.0	278.4	401.5	55.6	17,900	106,600	106,600
310	408.5	288.0	394.6	54.2		99,100	99,100
320	400.7	297.7	387.2	52.8		92,100	92,100
330	392.4	307.4	379.5	51.3		85,500	85,500
340	383.6	317.1	371.4	49.8		79,300	79,300
360	364.7	336.4	353.7	46.6		67,900	67,900
380	343.5	355.8	333.9	43.3		57,700	57,700
400	319.5	375.3	311.4	39.7		48,500	48,500
420	292.1	394.8	285.7	35.8		40,200	40,200
440							

MLC650 VPC-MAX S-3

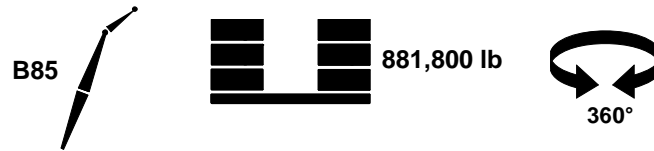
ASME B30.5



		479.0 ft		41°			
						38.7 ft	60.0 ft
						lb	lb
ft	ft	ft	ft	°	lb	lb	lb
61							
62							
63							
64							
65							
66	506.8	51.9	485.2	84.9	229,500	229,500	
67	506.7	52.9	485.1	84.8	229,400	229,400	
68	506.5	53.8	485.0	84.7	229,400	229,400	
69	506.4	54.8	484.9	84.6	229,400	229,400	
70	506.3	55.7	484.8	84.5	229,400	229,400	
75	505.6	60.5	484.3	83.9	229,200	229,200	
80	504.9	65.3	483.7	83.3	229,100	229,100	
85	504.1	70.1	483.1	82.7	228,900	228,900	
90	503.2	74.9	482.4	82.2	228,800	228,800	
95	502.3	79.6	481.7	81.6	228,600	228,600	
100	501.4	84.4	480.9	81.0	228,500	228,500	
105	500.4	89.3	480.1	80.4	228,300	228,300	
110	499.4	94.0	479.2	79.8	228,200	228,200	
115	498.3	98.8	478.2	79.2	228,000	228,000	
120	497.1	103.6	477.2	78.7	227,800	227,800	
125	495.9	108.4	476.2	78.1	227,600	227,600	
130	494.6	113.2	475.1	77.5	227,400	227,400	
135	493.3	118.0	474.0	76.9	227,200	227,200	
140	492.0	122.8	472.8	76.3	226,100	227,100	
145	490.5	127.6	471.5	75.7	212,500	226,900	
150	489.0	132.5	470.2	75.1	199,800	226,700	
155	487.5	137.3	468.9	74.5	188,000	225,700	
160	485.9	142.1	467.4	73.9	176,900	222,900	
165	484.2	146.8	466.0	73.3	166,500	220,200	
170	482.5	151.7	464.4	72.7	156,700	217,500	
175	480.7	156.4	462.9	72.1	147,500	215,000	
180	478.9	161.2	461.2	71.5	138,900	212,400	
185	477.0	166.1	459.5	70.9	130,700	209,900	
190	475.0	170.9	457.8	70.2	123,000	207,500	
195	473.0	175.7	456.0	69.6	115,600	205,100	
200	470.9	180.5	454.1	69.0	108,600	202,800	
210	466.6	190.2	450.2	67.8	95,700	198,300	
220	462.0	199.8	446.0	66.5	84,000	193,500	
230	457.1	209.5	441.5	65.2	73,300	179,300	
240	451.9	219.1	436.8	63.9	63,500	166,300	
250	446.4	228.8	431.8	62.6	54,500	154,300	
260	440.6	238.4	426.6	61.3	46,200	143,400	
270	434.6	248.1	421.0	60.0	38,500	133,300	
280	428.2	257.8	415.1	58.6	31,400	123,900	
290	421.4	267.5	408.8	57.2	24,800	115,200	
300	414.3	277.2	402.3	55.8	18,500	107,100	
310	406.8	286.9	395.4	54.4		99,600	
320	398.9	296.6	388.1	52.9		92,500	
330	390.6	306.4	380.4	51.4		85,900	
340	381.8	316.1	372.2	49.9		79,600	
360	362.7	335.6	354.5	46.7		68,200	
380	341.4	355.2	334.6	43.4		57,900	
400							
420							
440							

MLC650 VPC-MAX S-3

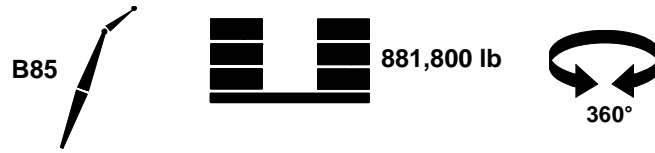
ASME B30.5



 488.8 ft		 28°				
ft	ft	ft	ft	°	lb	lb
62	519.6	52.7	495.0	85.0	219,600	219,600
63	519.5	53.6	494.9	84.8	219,600	219,600
64	519.4	54.6	494.8	84.7	219,600	219,600
65	519.2	55.5	494.7	84.6	219,600	219,600
66	519.1	56.5	494.6	84.5	219,500	219,500
67	519.0	57.4	494.5	84.4	219,500	219,500
68	518.9	58.4	494.4	84.3	219,500	219,500
69	518.7	59.3	494.3	84.2	219,400	219,400
70	518.6	60.3	494.2	84.1	219,300	219,300
71	518.5	61.2	494.1	83.9	219,300	219,300
75	518.0	65.1	493.6	83.5	219,200	219,200
80	517.2	69.8	493.0	82.9	219,000	219,000
85	516.5	74.6	492.3	82.4	218,700	218,700
90	515.7	79.3	491.6	81.8	218,600	218,600
95	514.8	84.1	490.9	81.2	218,300	218,300
100	513.9	88.9	490.1	80.7	218,100	218,100
105	512.9	93.6	489.2	80.1	217,800	217,800
110	511.9	98.4	488.3	79.5	217,600	217,600
115	510.8	103.2	487.4	78.9	217,300	217,300
120	509.7	107.9	486.4	78.4	217,100	217,100
125	508.5	112.7	485.3	77.8	216,800	216,800
130	507.3	117.4	484.2	77.2	216,600	216,600
135	506.0	122.2	483.0	76.6	216,300	216,300
140	504.7	127.0	481.8	76.1	216,000	216,000
145	503.3	131.8	480.6	75.5	209,200	215,800
150	501.8	136.5	479.2	74.9	196,700	215,500
155	500.3	141.3	477.9	74.3	185,000	215,200
160	498.8	146.1	476.5	73.7	174,100	215,000
165	497.1	150.9	475.0	73.1	163,900	214,700
170	495.5	155.7	473.5	72.6	154,300	214,400
175	493.7	160.4	471.9	72.0	145,200	213,400
180	492.0	165.2	470.3	71.4	136,700	210,500
185	490.1	170.0	468.6	70.8	128,600	207,600
190	488.2	174.7	466.8	70.2	121,000	204,700
195	486.2	179.5	465.0	69.6	113,800	201,900
200	484.2	184.3	463.1	69.0	106,900	199,200
210	480.0	193.8	459.3	67.8	94,200	194,100
220	475.5	203.4	455.1	66.5	82,700	189,100
230	470.7	213.0	450.7	65.3	72,200	178,700
240	465.7	222.6	446.1	64.0	62,600	165,800
250	460.4	232.1	441.2	62.8	53,700	154,000
260	454.8	241.7	436.0	61.5	45,600	143,100
270	448.9	251.3	430.5	60.2	38,000	133,100
280	442.7	260.8	424.8	58.9	31,000	123,800
290	436.2	270.4	418.7	57.6	24,500	115,200
300	429.4	280.0	412.3	56.2	18,400	107,200
310	422.1	289.6	405.6	54.8		99,700
320	414.5	299.2	398.4	53.4		92,700
340	398.1	318.4	383.1	50.5		80,000
360	379.9	337.6	366.1	47.5		68,700
380	359.6	356.9	347.0	44.3		58,600
400	336.8	376.2	325.6	40.9		49,500
420	311.0	395.6	301.3	37.3		41,200
440	281.3	415.0	273.3	33.3		32,500
460	246.2	434.4	240.2	28.7		24,300

MLC650 VPC-MAX S-3

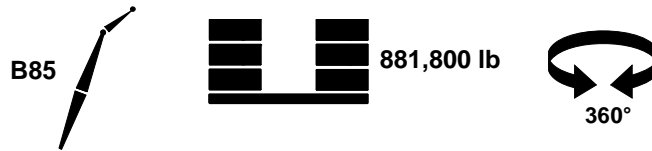
ASME B30.5



 488.8 ft		 35°				
ft	ft	ft	ft	°	lb	lb
					38.7 ft	60.0 ft
62						
63						
64	518.3	52.3	495.0	85.0	218,400	218,400
65	518.2	53.2	495.0	84.9	218,300	218,300
66	518.1	54.2	494.9	84.8	218,300	218,300
67	518.0	55.1	494.8	84.7	218,200	218,200
68	517.8	56.1	494.7	84.5	218,200	218,200
69	517.7	57.1	494.6	84.4	218,200	218,200
70	517.6	58.0	494.5	84.3	218,100	218,100
71	517.4	59.0	494.3	84.2	218,100	218,100
75	516.9	62.8	493.9	83.8	217,900	217,900
80	516.2	67.5	493.3	83.2	217,700	217,700
85	515.4	72.3	492.7	82.6	217,500	217,500
90	514.6	77.1	492.0	82.1	217,300	217,300
95	513.7	81.9	491.2	81.5	217,100	217,100
100	512.8	86.7	490.4	80.9	216,900	216,900
105	511.9	91.5	489.6	80.3	216,600	216,600
110	510.8	96.2	488.7	79.8	216,500	216,500
115	509.8	101.0	487.8	79.2	216,200	216,200
120	508.6	105.7	486.8	78.6	216,000	216,000
125	507.4	110.6	485.8	78.1	215,700	215,700
130	506.2	115.4	484.7	77.5	215,500	215,500
135	504.9	120.1	483.6	76.9	215,300	215,300
140	503.6	124.9	482.4	76.3	215,000	215,000
145	502.2	129.7	481.1	75.7	211,500	214,800
150	500.7	134.5	479.8	75.2	198,900	214,500
155	499.2	139.2	478.5	74.6	187,200	214,300
160	497.7	144.0	477.1	74.0	176,200	214,100
165	496.1	148.8	475.6	73.4	165,900	212,200
170	494.4	153.6	474.1	72.8	156,200	209,300
175	492.6	158.4	472.6	72.2	147,100	206,500
180	490.9	163.2	470.9	71.6	138,500	203,800
185	489.0	168.1	469.2	71.0	130,400	201,100
190	487.1	172.8	467.5	70.4	122,700	198,500
195	485.1	177.6	465.7	69.8	115,400	195,900
200	483.1	182.4	463.9	69.2	108,500	193,400
210	478.8	192.0	460.0	68.0	95,700	188,600
220	474.3	201.6	455.9	66.8	84,100	184,000
230	469.6	211.2	451.5	65.5	73,500	179,600
240	464.5	220.8	446.9	64.3	63,700	166,700
250	459.2	230.4	442.0	63.0	54,800	154,800
260	453.6	240.0	436.9	61.7	46,600	143,900
270	447.7	249.7	431.4	60.4	39,000	133,900
280	441.5	259.3	425.7	59.1	31,900	124,500
290	435.0	268.9	419.6	57.8	25,300	115,900
300	428.1	278.6	413.3	56.4	19,200	107,800
310	420.8	288.3	406.5	55.0	13,400	100,300
320	413.2	297.9	399.5	53.6		93,200
340	396.8	317.3	384.1	50.7		80,400
360	378.5	336.6	367.1	47.7		69,100
380	358.1	356.0	348.0	44.5		58,900
400	335.2	375.5	326.5	41.1		49,700
420	309.2	395.0	302.1	37.4		41,400
440						
460						

MLC650 VPC-MAX S-3

ASME B30.5

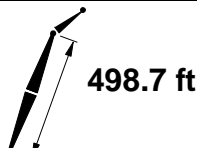
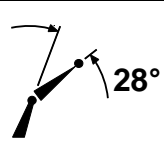


 488.8 ft		 41°				
ft	ft	ft	ft	°	lb	lb
62						
63						
64						
65						
66						
67	516.6	52.9	495.0	84.9	217,500	217,500
68	516.4	53.8	494.9	84.8	217,500	217,500
69	516.3	54.8	494.8	84.7	217,500	217,500
70	516.2	55.8	494.7	84.6	217,400	217,400
71	516.1	56.7	494.6	84.5	217,400	217,400
75	515.5	60.5	494.2	84.0	217,200	217,200
80	514.8	65.3	493.6	83.5	217,000	217,000
85	514.0	70.1	493.0	82.9	216,900	216,900
90	513.2	74.9	492.3	82.3	216,700	216,700
95	512.3	79.7	491.6	81.7	216,500	216,500
100	511.4	84.5	490.8	81.2	216,300	216,300
105	510.4	89.3	490.0	80.6	216,100	216,100
110	509.4	94.1	489.1	80.0	216,000	216,000
115	508.3	98.9	488.2	79.5	215,700	215,700
120	507.2	103.7	487.2	78.9	215,500	215,500
125	506.0	108.5	486.2	78.3	215,300	215,300
130	504.8	113.3	485.2	77.7	215,100	215,100
135	503.5	118.1	484.0	77.1	214,900	214,900
140	502.2	122.9	482.9	76.6	214,700	214,700
145	500.8	127.7	481.6	76.0	213,800	214,500
150	499.3	132.5	480.4	75.4	201,100	214,000
155	497.8	137.4	479.0	74.8	189,300	211,200
160	496.2	142.1	477.7	74.2	178,200	208,400
165	494.6	146.9	476.2	73.6	167,800	205,700
170	492.9	151.8	474.7	73.0	158,000	203,000
175	491.2	156.5	473.2	72.4	148,800	200,500
180	489.4	161.4	471.6	71.8	140,200	197,900
185	487.5	166.2	469.9	71.2	132,000	195,400
190	485.6	171.0	468.2	70.6	124,200	193,000
195	483.6	175.8	466.4	70.0	116,900	190,700
200	481.6	180.6	464.6	69.4	109,900	188,300
210	477.3	190.3	460.7	68.2	97,000	183,900
220	472.8	199.9	456.6	67.0	85,300	179,600
230	468.0	209.6	452.3	65.7	74,600	175,600
240	463.0	219.3	447.7	64.5	64,800	167,500
250	457.7	228.9	442.8	63.2	55,800	155,600
260	452.0	238.6	437.7	61.9	47,500	144,600
270	446.1	248.2	432.3	60.6	39,800	134,500
280	439.9	258.0	426.5	59.3	32,700	125,100
290	433.3	267.6	420.5	57.9	26,100	116,400
300	426.4	277.4	414.1	56.6	19,900	108,300
310	419.1	287.0	407.4	55.2	14,100	100,800
320	411.5	296.8	400.3	53.8		93,700
340	394.9	316.2	385.0	50.9		80,800
360	376.6	335.7	367.9	47.8		69,400
380	356.1	355.3	348.7	44.6		59,100
400	333.0	374.9	327.2	41.2		49,900
420						
440						
460						

MLC650 VPC-MAX S-3

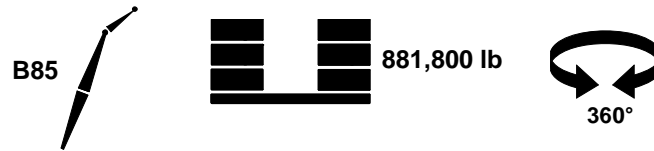
ASME B30.5



 498.7 ft		 28°				
ft	ft	ft	ft	°	38.7 ft lb	60.0 ft lb
63	529.4	53.7	504.9	84.9	207,500	207,500
64	529.3	54.6	504.8	84.8	207,400	207,400
65	529.1	55.6	504.7	84.7	207,400	207,400
66	529.0	56.5	504.6	84.6	207,400	207,400
67	528.9	57.5	504.5	84.5	207,300	207,300
68	528.8	58.4	504.4	84.4	207,300	207,300
69	528.7	59.4	504.3	84.3	207,200	207,200
70	528.5	60.3	504.2	84.2	207,200	207,200
71	528.4	61.3	504.0	84.1	207,100	207,100
75	527.9	65.1	503.6	83.6	207,000	207,000
80	527.2	69.9	503.0	83.1	206,700	206,700
85	526.4	74.6	502.3	82.5	206,500	206,500
90	525.6	79.4	501.6	81.9	206,300	206,300
95	524.8	84.2	500.9	81.4	206,000	206,000
100	523.9	88.9	500.1	80.8	205,700	205,700
105	522.9	93.7	499.3	80.3	205,500	205,500
110	521.9	98.5	498.4	79.7	205,200	205,200
115	520.9	103.3	497.4	79.2	205,000	205,000
120	519.8	108.0	496.4	78.6	204,700	204,700
125	518.6	112.8	495.4	78.0	204,500	204,500
130	517.4	117.6	494.3	77.5	204,200	204,200
135	516.2	122.3	493.2	76.9	203,900	203,900
140	514.9	127.1	492.0	76.3	203,600	203,600
145	513.5	131.9	490.8	75.8	203,300	203,300
150	512.1	136.7	489.5	75.2	194,600	203,100
155	510.6	141.4	488.1	74.6	183,000	202,800
160	509.1	146.2	486.8	74.1	172,100	202,500
165	507.5	151.0	485.3	73.5	161,800	202,200
170	505.9	155.7	483.8	72.9	152,200	201,100
175	504.2	160.5	482.3	72.3	143,200	198,200
180	502.4	165.3	480.7	71.7	134,700	195,300
185	500.6	170.1	479.0	71.2	126,600	192,400
190	498.7	174.9	477.3	70.6	119,000	189,700
195	496.8	179.7	475.5	70.0	111,800	187,000
200	494.8	184.5	473.7	69.4	104,900	184,300
210	490.7	194.0	469.9	68.2	92,200	179,300
220	486.3	203.6	465.8	67.0	80,700	174,500
230	481.7	213.1	461.6	65.8	70,200	169,900
240	476.8	222.8	457.0	64.6	60,600	164,300
250	471.6	232.3	452.2	63.3	51,700	152,500
260	466.1	241.9	447.1	62.1	43,600	141,700
270	460.4	251.4	441.8	60.8	36,000	131,700
280	454.4	261.1	436.2	59.5	29,000	122,400
290	448.0	270.7	430.3	58.2	22,500	113,800
300	441.3	280.2	424.1	56.9	16,400	105,800
310	434.3	289.8	417.5	55.6		98,300
320	426.9	299.5	410.6	54.2		91,300
330	419.2	309.1	403.4	52.8		84,700
340	411.0	318.7	395.7	51.4		78,500
360	393.4	337.9	379.2	48.5		67,200
380	373.9	357.2	360.9	45.4		57,100
400	352.1	376.5	340.3	42.2		48,000
420	327.5	395.8	317.2	38.7		39,300
440	299.5	415.2	290.8	34.9		30,500
460	266.8	434.7	260.0	30.7		22,400

MLC650 VPC-MAX S-3

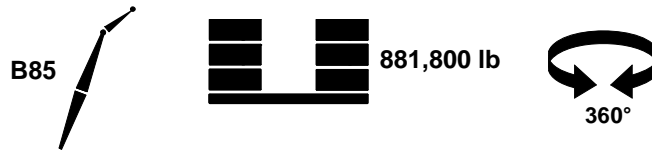
ASME B30.5



ft	ft	ft	ft	°	lb	lb
63						
64						
65	528.1	53.3	504.9	85.0	206,400	206,400
66	528.0	54.2	504.8	84.9	206,300	206,300
67	527.9	55.2	504.7	84.8	206,300	206,300
68	527.7	56.1	504.6	84.7	206,200	206,200
69	527.6	57.1	504.5	84.5	206,200	206,200
70	527.5	58.0	504.4	84.4	206,100	206,100
71	527.4	59.1	504.3	84.3	206,100	206,100
75	526.8	62.8	503.9	83.9	205,900	205,900
80	526.1	67.6	503.3	83.3	205,700	205,700
85	525.4	72.4	502.7	82.8	205,400	205,400
90	524.6	77.2	502.0	82.2	205,200	205,200
95	523.7	81.9	501.3	81.7	205,000	205,000
100	522.8	86.7	500.5	81.1	204,800	204,800
105	521.9	91.5	499.7	80.5	204,500	204,500
110	520.9	96.3	498.8	80.0	204,300	204,300
115	519.8	101.1	497.9	79.4	204,000	204,000
120	518.7	105.9	496.9	78.8	203,800	203,800
125	517.6	110.7	495.9	78.3	203,500	203,500
130	516.4	115.4	494.8	77.7	203,300	203,300
135	515.1	120.2	493.7	77.2	203,000	203,000
140	513.8	125.0	492.5	76.6	202,800	202,800
145	512.4	129.8	491.3	76.0	202,500	202,500
150	511.0	134.6	490.0	75.4	197,000	202,200
155	509.5	139.4	488.7	74.9	185,200	202,000
160	508.0	144.2	487.3	74.3	174,200	200,600
165	506.4	148.9	485.9	73.7	163,900	197,800
170	504.8	153.7	484.5	73.1	154,200	194,900
175	503.1	158.5	482.9	72.6	145,100	192,200
180	501.3	163.4	481.3	72.0	136,500	189,500
185	499.5	168.2	479.7	71.4	128,400	186,900
190	497.6	173.0	478.0	70.8	120,700	184,200
195	495.7	177.8	476.2	70.2	113,400	181,800
200	493.7	182.6	474.4	69.6	106,500	179,300
210	489.6	192.2	470.6	68.4	93,700	174,500
220	485.2	201.8	466.6	67.2	82,100	170,100
230	480.5	211.4	462.4	66.0	71,500	165,700
240	475.6	221.0	457.9	64.8	61,800	161,700
250	470.4	230.6	453.1	63.6	52,800	153,400
260	464.9	240.2	448.1	62.3	44,600	142,500
270	459.2	249.9	442.7	61.0	37,000	132,400
280	453.1	259.5	437.1	59.8	29,900	123,100
290	446.8	269.2	431.2	58.5	23,300	114,400
300	440.1	278.8	425.0	57.1	17,200	106,400
310	433.0	288.5	418.5	55.8		98,800
320	425.6	298.1	411.6	54.4		91,800
330	417.9	307.8	404.3	53.0		85,200
340	409.7	317.5	396.7	51.6		79,000
360	392.0	336.8	380.2	48.7		67,600
380	372.4	356.2	361.9	45.6		57,500
400	350.5	375.7	341.3	42.3		48,300
420	325.8	395.1	318.1	38.8		39,500
440	297.6	414.7	291.6	35.0		30,700
460						

MLC650 VPC-MAX S-3

ASME B30.5



508.5 ft		28°				
ft	ft	ft	ft	°	38.7 ft lb	60.0 ft lb
63	539.3	53.7	514.7	85.0	197,800	197,800
64	539.2	54.7	514.6	84.9	197,800	197,800
65	539.0	55.6	514.5	84.8	197,700	197,700
66	538.9	56.6	514.4	84.7	197,700	197,700
67	538.8	57.6	514.3	84.6	197,600	197,600
68	538.7	58.4	514.2	84.5	197,600	197,600
69	538.6	59.4	514.1	84.4	197,600	197,600
70	538.5	60.4	514.0	84.3	197,500	197,500
71	538.3	61.3	513.9	84.2	197,500	197,500
72	538.2	62.3	513.8	84.1	197,400	197,400
75	537.8	65.1	513.5	83.7	197,300	197,300
80	537.1	69.9	512.9	83.2	197,000	197,000
85	536.4	74.7	512.2	82.6	196,800	196,800
90	535.6	79.5	511.5	82.1	196,500	196,500
95	534.8	84.2	510.8	81.6	196,200	196,200
100	533.9	89.0	510.0	81.0	196,000	196,000
105	533.0	93.8	509.2	80.5	195,700	195,700
110	532.0	98.5	508.3	79.9	195,500	195,500
115	530.9	103.3	507.4	79.4	195,200	195,200
120	529.9	108.1	506.5	78.8	194,900	194,900
125	528.7	112.9	505.4	78.3	194,600	194,600
130	527.6	117.7	504.4	77.7	194,300	194,300
135	526.3	122.4	503.3	77.2	194,100	194,100
140	525.0	127.2	502.1	76.6	193,800	193,800
145	523.7	132.0	500.9	76.0	193,500	193,500
150	522.3	136.8	499.6	75.5	193,200	193,200
155	520.9	141.6	498.3	74.9	184,500	192,900
160	519.4	146.3	496.9	74.4	173,500	192,700
165	517.8	151.1	495.5	73.8	163,300	191,300
170	516.2	155.9	494.0	73.2	153,700	188,300
175	514.6	160.6	492.6	72.7	144,700	185,400
180	512.8	165.4	491.0	72.1	136,200	182,700
185	511.1	170.2	489.4	71.5	128,100	179,900
190	509.3	175.0	487.7	70.9	120,500	177,200
195	507.4	179.8	485.9	70.4	113,300	174,600
200	505.4	184.6	484.2	69.8	106,400	172,000
210	501.4	194.2	480.4	68.6	93,700	167,100
220	497.1	203.7	476.5	67.5	82,200	162,400
230	492.5	213.3	472.3	66.3	71,700	157,900
240	487.7	222.9	467.8	65.1	62,100	153,700
250	482.7	232.4	463.1	63.9	53,300	149,700
260	477.4	242.0	458.2	62.7	45,100	142,900
270	471.8	251.7	453.0	61.4	37,600	132,900
280	465.9	261.3	447.5	60.2	30,600	123,600
290	459.7	270.8	441.7	58.9	24,100	115,000
300	453.2	280.5	435.6	57.6	18,000	107,000
320	439.2	299.6	422.6	55.0		92,500
340	423.8	318.9	408.1	52.3		79,800
360	406.7	338.1	392.2	49.5		68,500
380	387.9	357.4	374.4	46.5		58,400
400	366.9	376.7	354.7	43.4		49,300
420	343.4	396.1	332.6	40.1		40,800
440	316.9	415.4	307.6	36.5		32,100
460	286.3	434.8	278.7	32.5		24,000
480	250.3	454.3	244.6	28.1		16,500

MLC650 VPC-MAX S-3

ASME B30.5



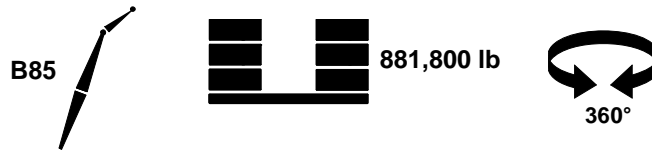
881,800 lb



	ft	ft	ft	ft	lb	lb
63						
64						
65						
66	537.9	54.3	514.6	85.0	196,800	196,800
67	537.8	55.2	514.6	84.9	196,800	196,800
68	537.7	56.2	514.5	84.8	196,800	196,800
69	537.5	57.1	514.4	84.6	196,700	196,700
70	537.4	58.1	514.3	84.5	196,700	196,700
71	537.3	59.1	514.2	84.4	196,600	196,600
72	537.2	60.0	514.1	84.3	196,600	196,600
75	536.8	62.8	513.7	84.0	196,400	196,400
80	536.1	67.7	513.2	83.4	196,100	196,100
85	535.3	72.4	512.5	82.9	195,900	195,900
90	534.6	77.2	511.9	82.4	195,600	195,600
95	533.7	82.0	511.2	81.8	195,400	195,400
100	532.8	86.8	510.4	81.3	195,100	195,100
105	531.9	91.6	509.6	80.7	194,900	194,900
110	530.9	96.3	508.7	80.2	194,600	194,600
115	529.9	101.1	507.8	79.6	194,400	194,400
120	528.8	106.0	506.9	79.1	194,100	194,100
125	527.7	110.7	505.9	78.5	193,900	193,900
130	526.5	115.5	504.8	78.0	193,600	193,600
135	525.2	120.3	503.7	77.4	193,300	193,300
140	524.0	125.1	502.6	76.8	193,100	193,100
145	522.6	129.9	501.4	76.3	192,800	192,800
150	521.2	134.7	500.2	75.7	192,500	192,500
155	519.8	139.4	498.9	75.2	186,700	191,400
160	518.3	144.3	497.5	74.6	175,700	188,500
165	516.7	149.1	496.1	74.0	165,400	185,700
170	515.1	153.9	494.7	73.5	155,700	182,900
175	513.5	158.7	493.2	72.9	146,600	180,200
180	511.7	163.5	491.6	72.3	138,000	177,600
185	510.0	168.3	490.0	71.8	129,900	175,000
190	508.1	173.0	488.4	71.2	122,200	172,500
195	506.3	177.9	486.6	70.6	114,900	170,000
200	504.3	182.7	484.9	70.0	108,000	167,600
210	500.3	192.3	481.2	68.9	95,200	162,900
220	495.9	201.9	477.2	67.7	83,600	158,600
230	491.4	211.5	473.1	66.5	73,000	154,300
240	486.6	221.1	468.6	65.3	63,300	150,400
250	481.5	230.8	464.0	64.1	54,400	146,600
260	476.2	240.4	459.1	62.9	46,200	143,100
270	470.6	250.1	453.9	61.6	38,600	133,600
280	464.7	259.7	448.4	60.4	31,500	124,300
290	458.5	269.3	442.6	59.1	25,000	115,600
300	452.0	279.0	436.6	57.8	18,800	107,600
320	437.9	298.3	423.6	55.2		93,000
340	422.4	317.6	409.1	52.5		80,200
360	405.4	337.0	393.1	49.6		68,900
380	386.4	356.4	375.4	46.7		58,700
400	365.4	375.8	355.7	43.5		49,600
420	341.8	395.3	333.5	40.2		41,100
440	315.1	414.9	308.3	36.6		32,300
460						
480						

MLC650 VPC-MAX S-3

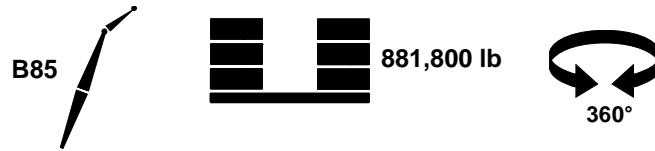
ASME B30.5



	508.5 ft		41°		38.7 ft	60.0 ft
	ft	ft	ft	ft	lb	lb
63						
64						
65						
66						
67						
68	536.3	53.9	514.7	85.0	196,300	196,300
69	536.1	54.8	514.6	84.9	196,300	196,300
70	536.0	55.8	514.5	84.8	196,200	196,200
71	535.9	56.8	514.4	84.7	196,200	196,200
72	535.8	57.7	514.3	84.6	196,100	196,100
75	535.4	60.6	514.0	84.2	196,000	196,000
80	534.7	65.4	513.4	83.7	195,800	195,800
85	533.9	70.2	512.8	83.2	195,500	195,500
90	533.2	75.0	512.2	82.6	195,300	195,300
95	532.3	79.8	511.5	82.1	195,000	195,000
100	531.4	84.7	510.7	81.5	194,800	194,800
105	530.5	89.5	510.0	81.0	194,600	194,600
110	529.5	94.3	509.1	80.4	194,300	194,300
115	528.5	99.0	508.2	79.9	194,100	194,100
120	527.4	103.8	507.3	79.3	193,800	193,800
125	526.3	108.7	506.3	78.7	193,600	193,600
130	525.1	113.4	505.3	78.2	193,400	193,400
135	523.8	118.3	504.2	77.6	193,100	193,100
140	522.5	123.1	503.1	77.1	192,900	192,900
145	521.2	127.9	501.9	76.5	191,600	191,600
150	519.8	132.7	500.7	76.0	188,800	188,800
155	518.3	137.5	499.4	75.4	186,000	186,000
160	516.8	142.3	498.1	74.8	177,700	183,300
165	515.3	147.1	496.7	74.3	167,300	180,600
170	513.7	151.9	495.3	73.7	157,500	178,100
175	512.0	156.8	493.8	73.1	148,400	175,600
180	510.3	161.6	492.3	72.6	139,700	173,100
185	508.5	166.4	490.6	72.0	131,500	170,700
190	506.7	171.2	489.0	71.4	123,800	168,300
195	504.8	176.0	487.3	70.8	116,400	166,000
200	502.8	180.9	485.5	70.2	109,500	163,700
210	498.8	190.5	481.9	69.1	96,600	159,300
220	494.4	200.2	477.9	67.9	84,900	155,200
230	489.9	209.9	473.8	66.7	74,200	151,200
240	485.1	219.5	469.4	65.5	64,400	147,500
250	480.0	229.2	464.8	64.3	55,400	144,000
260	474.6	238.9	459.8	63.1	47,200	140,600
270	469.0	248.6	454.7	61.8	39,500	134,300
280	463.1	258.3	449.2	60.6	32,400	124,900
290	456.8	268.0	443.5	59.3	25,700	116,200
300	450.3	277.7	437.4	58.0	19,500	108,100
320	436.2	297.1	424.4	55.4		93,500
340	420.7	316.6	409.9	52.6		80,600
360	403.5	336.1	394.0	49.8		69,200
380	384.5	355.6	376.2	46.8		59,000
400	363.3	375.2	356.4	43.6		49,800
420						
440						
460						
480						

MLC650 VPC-MAX S-3

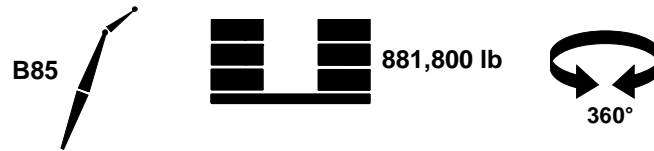
ASME B30.5



		518.4 ft		28°			
						38.7 ft	60.0 ft
ft	ft	ft	ft	°	lb	lb	lb
64	549.1	54.7	524.5	85.0	186,600	186,600	186,600
65	548.9	55.6	524.5	84.9	186,600	186,600	186,600
66	548.8	56.6	524.4	84.8	186,600	186,600	186,600
67	548.7	57.6	524.3	84.7	186,500	186,500	186,500
68	548.6	58.5	524.2	84.6	186,400	186,400	186,400
69	548.5	59.5	524.1	84.5	186,400	186,400	186,400
70	548.4	60.5	524.0	84.4	186,300	186,300	186,300
71	548.2	61.4	523.9	84.3	186,300	186,300	186,300
72	548.1	62.3	523.8	84.2	186,200	186,200	186,200
73	548.0	63.3	523.6	84.1	186,100	186,100	186,100
75	547.7	65.2	523.4	83.8	186,100	186,100	186,100
80	547.1	70.0	522.8	83.3	185,800	185,800	185,800
85	546.3	74.8	522.2	82.8	185,600	185,600	185,600
90	545.6	79.5	521.5	82.2	185,300	185,300	185,300
95	544.8	84.3	520.8	81.7	185,000	185,000	185,000
100	543.9	89.1	520.1	81.2	184,700	184,700	184,700
105	543.0	93.9	519.2	80.6	184,500	184,500	184,500
110	542.0	98.7	518.4	80.1	184,200	184,200	184,200
115	541.0	103.4	517.5	79.6	183,800	183,800	183,800
120	539.9	108.2	516.5	79.0	183,600	183,600	183,600
125	538.8	113.0	515.5	78.5	183,300	183,300	183,300
130	537.7	117.7	514.5	77.9	183,000	183,000	183,000
135	536.5	122.6	513.4	77.4	182,700	182,700	182,700
140	535.2	127.3	512.3	76.8	182,400	182,400	182,400
145	533.9	132.1	511.1	76.3	182,100	182,100	182,100
150	532.5	136.8	509.8	75.8	181,800	181,800	181,800
155	531.1	141.6	508.5	75.2	181,500	181,500	181,500
160	529.6	146.4	507.2	74.7	171,500	181,300	181,300
165	528.1	151.3	505.8	74.1	161,200	178,900	178,900
170	526.6	156.0	504.4	73.5	151,600	176,000	176,000
175	524.9	160.8	502.9	73.0	142,600	173,200	173,200
180	523.3	165.6	501.4	72.4	134,100	170,400	170,400
185	521.5	170.4	499.8	71.9	126,000	167,700	167,700
190	519.7	175.1	498.1	71.3	118,400	165,100	165,100
195	517.9	180.0	496.4	70.7	111,200	162,600	162,600
200	516.0	184.7	494.7	70.2	104,300	160,000	160,000
210	512.0	194.3	491.0	69.0	91,600	155,300	155,300
220	507.8	203.9	487.1	67.9	80,100	150,600	150,600
230	503.4	213.5	483.0	66.7	69,600	146,300	146,300
240	498.7	223.1	478.7	65.6	60,000	142,200	142,200
250	493.8	232.7	474.1	64.4	51,200	138,300	138,300
260	488.6	242.3	469.2	63.2	43,000	134,700	134,700
270	483.1	251.9	464.1	62.0	35,500	130,700	130,700
280	477.3	261.4	458.8	60.8	28,500	122,000	122,000
290	471.3	271.1	453.2	59.5	22,000	113,400	113,400
300	465.0	280.7	447.2	58.3	15,900	105,400	105,400
320	451.4	299.9	434.5	55.7		90,900	90,900
340	436.4	319.2	420.5	53.1		78,200	78,200
360	419.9	338.4	405.0	50.4		66,900	66,900
380	401.6	357.7	387.8	47.5		56,800	56,800
400	381.4	377.0	368.8	44.5		47,700	47,700
420	358.9	396.4	347.6	41.3		38,700	38,700
440	333.6	415.7	323.7	37.9		29,900	29,900
460	304.9	435.1	296.6	34.2		21,900	21,900
480	271.4	454.6	264.8	30.1		14,400	14,400

MLC650 VPC-MAX S-3

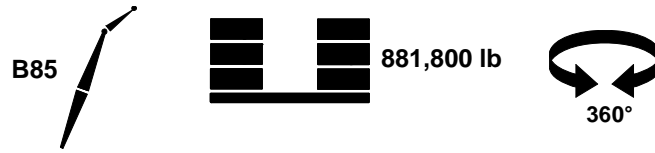
ASME B30.5



		518.4 ft		35°			
						38.7 ft	60.0 ft
						lb	lb
64							
65							
66							
67	547.7	55.3	524.5	85.0	185,800	185,800	
68	547.6	56.2	524.4	84.8	185,800	185,800	
69	547.4	57.1	524.3	84.7	185,700	185,700	
70	547.3	58.1	524.2	84.6	185,700	185,700	
71	547.2	59.1	524.1	84.5	185,600	185,600	
72	547.1	60.0	524.0	84.4	185,500	185,500	
73	547.0	61.0	523.9	84.3	185,500	185,500	
75	546.7	62.9	523.7	84.1	185,300	185,300	
80	546.0	67.7	523.1	83.6	185,100	185,100	
85	545.3	72.5	522.5	83.0	184,800	184,800	
90	544.5	77.3	521.9	82.5	184,600	184,600	
95	543.7	82.1	521.2	82.0	184,300	184,300	
100	542.8	86.8	520.4	81.4	184,000	184,000	
105	541.9	91.6	519.6	80.9	183,800	183,800	
110	541.0	96.4	518.8	80.3	183,500	183,500	
115	539.9	101.2	517.9	79.8	183,200	183,200	
120	538.9	106.0	517.0	79.3	182,900	182,900	
125	537.8	110.8	516.0	78.7	182,700	182,700	
130	536.6	115.6	515.0	78.2	182,400	182,400	
135	535.4	120.4	513.9	77.6	182,100	182,100	
140	534.1	125.2	512.8	77.1	181,800	181,800	
145	532.8	130.0	511.6	76.5	181,600	181,600	
150	531.4	134.8	510.4	76.0	181,300	181,300	
155	530.0	139.6	509.1	75.4	179,600	179,600	
160	528.6	144.4	507.8	74.9	173,600	176,700	
165	527.0	149.2	506.4	74.3	163,300	173,900	
170	525.5	154.0	505.0	73.8	153,600	171,200	
175	523.8	158.8	503.5	73.2	144,500	168,500	
180	522.2	163.6	502.0	72.7	135,900	165,900	
185	520.4	168.4	500.4	72.1	127,800	163,500	
190	518.6	173.3	498.8	71.5	120,100	160,900	
195	516.8	178.0	497.1	71.0	112,800	158,500	
200	514.9	182.9	495.4	70.4	105,900	156,200	
210	510.9	192.5	491.7	69.3	93,100	151,600	
220	506.7	202.1	487.9	68.1	81,500	147,300	
230	502.2	211.7	483.8	67.0	70,900	143,300	
240	497.5	221.3	479.5	65.8	61,200	139,300	
250	492.6	231.0	474.9	64.6	52,300	135,600	
260	487.4	240.6	470.1	63.4	44,100	132,100	
270	481.9	250.2	465.0	62.2	36,500	128,800	
280	476.1	259.9	459.7	61.0	29,400	122,700	
290	470.1	269.5	454.1	59.7	22,800	114,100	
300	463.7	279.2	448.2	58.5	16,700	106,000	
320	450.1	298.5	435.5	55.9		91,500	
340	435.0	317.9	421.4	53.3		78,700	
360	418.5	337.2	406.0	50.5		67,300	
380	400.2	356.6	388.8	47.7		57,200	
400	379.9	376.0	369.8	44.6		48,000	
420	357.3	395.5	348.6	41.4		39,000	
440	331.9	415.1	324.6	38.0		30,200	
460	302.9	434.7	297.2	34.3		22,100	
480							

MLC650 VPC-MAX S-3

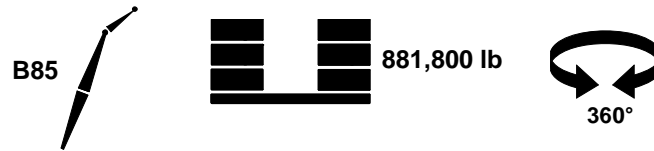
ASME B30.5



	518.4 ft		41°		38.7 ft	60.0 ft
	ft	ft	ft	ft	lb	lb
64						
65						
66						
67						
68						
69	546.1	54.9	524.5	85.0	185,400	185,400
70	545.9	55.9	524.4	84.9	185,400	185,400
71	545.8	56.8	524.3	84.8	185,300	185,300
72	545.7	57.8	524.2	84.7	185,300	185,300
73	545.6	58.8	524.1	84.6	185,300	185,300
75	545.3	60.6	523.9	84.4	185,100	185,100
80	544.6	65.5	523.4	83.8	184,900	184,900
85	543.9	70.3	522.8	83.3	184,600	184,600
90	543.1	75.1	522.2	82.7	184,400	184,400
95	542.3	79.9	521.5	82.2	184,100	184,100
100	541.4	84.7	520.8	81.7	183,800	183,800
105	540.5	89.5	520.0	81.1	183,600	183,600
110	539.5	94.3	519.2	80.6	183,300	183,300
115	538.5	99.1	518.3	80.0	183,100	183,100
120	537.5	103.9	517.4	79.5	182,800	182,800
125	536.3	108.7	516.4	79.0	182,600	182,600
130	535.2	113.5	515.4	78.4	182,300	182,300
135	534.0	118.4	514.4	77.9	182,100	182,100
140	532.7	123.2	513.2	77.3	181,700	181,700
145	531.4	128.0	512.1	76.8	180,300	180,300
150	530.0	132.8	510.9	76.2	177,600	177,600
155	528.6	137.6	509.6	75.7	174,800	174,800
160	527.1	142.4	508.3	75.1	172,200	172,200
165	525.6	147.3	507.0	74.6	165,300	169,500
170	524.0	152.0	505.6	74.0	155,500	166,900
175	522.4	156.9	504.1	73.4	146,300	164,400
180	520.7	161.7	502.6	72.9	137,700	162,000
185	519.0	166.5	501.1	72.3	129,500	159,600
190	517.2	171.4	499.4	71.8	121,700	157,300
195	515.3	176.2	497.8	71.2	114,400	155,000
200	513.4	181.0	496.0	70.6	107,400	152,800
210	509.4	190.7	492.4	69.5	94,500	148,500
220	505.2	200.4	488.6	68.3	82,800	144,400
230	500.7	210.0	484.5	67.2	72,100	140,500
240	496.0	219.7	480.2	66.0	62,400	136,800
250	491.0	229.4	475.7	64.8	53,400	133,300
260	485.8	239.1	470.9	63.6	45,100	129,900
270	480.3	248.7	465.8	62.4	37,400	126,800
280	474.5	258.5	460.5	61.2	30,300	123,400
290	468.5	268.1	454.9	59.9	23,600	114,700
300	462.1	277.9	449.0	58.7	17,500	106,600
320	448.4	297.3	436.3	56.1		92,000
340	433.3	316.7	422.3	53.4		79,100
360	416.7	336.3	406.8	50.7		67,700
380	398.3	355.8	389.6	47.8		57,500
400	377.9	375.4	370.5	44.8		48,300
420	355.2	395.0	349.2	41.5		39,200
440						
460						
480						

MLC650 VPC-MAX S-3

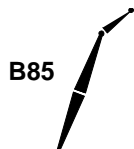
ASME B30.5



528.2 ft		28°				
ft	ft	ft	ft	°	38.7 ft lb	60.0 ft lb
65	558.8	55.7	534.3	85.0	175,900	175,900
66	558.7	56.7	534.2	84.9	175,900	175,900
67	558.6	57.6	534.1	84.8	175,800	175,800
68	558.5	58.6	534.0	84.7	175,700	175,700
69	558.4	59.5	533.9	84.6	175,700	175,700
70	558.3	60.4	533.8	84.5	175,600	175,600
71	558.2	61.4	533.7	84.4	175,600	175,600
72	558.0	62.3	533.6	84.3	175,500	175,500
73	557.9	63.3	533.5	84.2	175,500	175,500
74	557.8	64.3	533.4	84.1	175,400	175,400
75	557.7	65.3	533.3	84.0	175,400	175,400
80	557.0	70.0	532.7	83.4	175,000	175,000
85	556.3	74.8	532.1	82.9	174,700	174,700
90	555.5	79.6	531.4	82.4	174,400	174,400
95	554.7	84.4	530.7	81.9	174,000	174,000
100	553.9	89.1	530.0	81.3	173,800	173,800
105	553.0	93.9	529.2	80.8	173,500	173,500
110	552.0	98.7	528.3	80.3	173,100	173,100
115	551.0	103.5	527.4	79.7	172,800	172,800
120	550.0	108.3	526.5	79.2	172,500	172,500
125	548.9	113.1	525.5	78.7	172,200	172,200
130	547.8	117.8	524.5	78.2	171,900	171,900
135	546.6	122.7	523.4	77.6	171,600	171,600
140	545.4	127.4	522.3	77.1	171,300	171,300
145	544.1	132.2	521.1	76.5	171,000	171,000
150	542.7	136.9	519.9	76.0	168,200	168,200
155	541.3	141.7	518.7	75.5	165,200	165,200
160	539.9	146.5	517.4	74.9	162,200	162,200
165	538.4	151.3	516.0	74.4	159,400	159,400
170	536.9	156.2	514.6	73.8	151,100	156,600
175	535.3	160.9	513.1	73.3	142,100	153,900
180	533.6	165.7	511.6	72.8	133,600	151,300
185	531.9	170.5	510.0	72.2	125,500	148,700
190	530.2	175.3	508.4	71.7	117,900	146,200
195	528.4	180.1	506.8	71.1	110,700	143,700
200	526.5	184.9	505.1	70.6	103,800	141,400
210	522.6	194.5	501.5	69.4	91,100	136,800
220	518.5	204.1	497.7	68.3	79,600	132,500
230	514.2	213.6	493.6	67.2	69,100	128,400
240	509.6	223.2	489.4	66.0	59,500	124,500
250	504.8	232.9	484.9	64.9	50,700	120,800
260	499.7	242.4	480.2	63.7	42,500	117,400
270	494.3	252.1	475.2	62.5	35,000	114,000
280	488.7	261.7	469.9	61.4	28,000	110,900
290	482.8	271.2	464.5	60.2	21,500	108,000
300	476.7	280.8	458.7	58.9	15,400	104,800
320	463.4	300.1	446.3	56.4		90,400
340	448.8	319.3	432.6	53.9		77,700
360	432.8	338.6	417.6	51.2		66,400
380	415.2	357.9	401.0	48.4		56,300
400	395.7	377.2	382.6	45.5		47,300
420	374.0	396.6	362.2	42.5		38,000
440	349.9	416.0	339.4	39.2		29,300
460	322.6	435.3	313.6	35.7		21,200
480	291.2	454.8	283.9	31.9		13,800

MLC650 VPC-MAX S-3

ASME B30.5



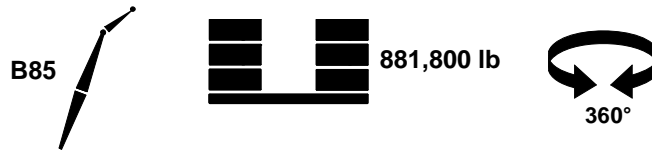
881,800 lb



	528.2 ft		35°			
	ft	ft	ft	ft	ft	ft
				°	lb	lb
65						
66						
67						
68	557.5	56.2	534.2	84.9	174,600	174,600
69	557.3	57.2	534.1	84.8	174,500	174,500
70	557.2	58.1	534.1	84.7	174,500	174,500
71	557.1	59.1	534.0	84.6	174,400	174,400
72	557.0	60.1	533.9	84.5	174,400	174,400
73	556.9	61.1	533.8	84.4	174,300	174,300
74	556.7	62.0	533.7	84.3	174,300	174,300
75	556.6	63.0	533.5	84.2	174,200	174,200
80	556.0	67.7	533.0	83.7	173,900	173,900
85	555.2	72.6	532.4	83.2	173,600	173,600
90	554.5	77.3	531.8	82.6	173,300	173,300
95	553.7	82.1	531.1	82.1	173,000	173,000
100	552.8	86.9	530.3	81.6	172,700	172,700
105	551.9	91.7	529.5	81.0	172,300	172,300
110	551.0	96.5	528.7	80.5	172,100	172,100
115	550.0	101.3	527.9	80.0	171,700	171,700
120	548.9	106.1	526.9	79.5	171,500	171,500
125	547.9	110.9	526.0	78.9	171,200	171,200
130	546.7	115.7	525.0	78.4	170,900	170,900
135	545.5	120.5	523.9	77.9	170,600	170,600
140	544.3	125.3	522.8	77.3	169,300	169,300
145	543.0	130.1	521.7	76.8	166,300	166,300
150	541.7	134.9	520.5	76.2	163,400	163,400
155	540.3	139.7	519.2	75.7	160,600	160,600
160	538.8	144.5	517.9	75.2	157,900	157,900
165	537.3	149.3	516.6	74.6	155,200	155,200
170	535.8	154.1	515.2	74.1	152,600	152,600
175	534.2	158.9	513.8	73.5	144,000	150,000
180	532.5	163.7	512.2	73.0	135,400	147,500
185	530.8	168.5	510.7	72.4	127,300	145,100
190	529.1	173.3	509.1	71.9	119,600	142,700
195	527.3	178.1	507.5	71.3	112,400	140,400
200	525.4	183.0	505.8	70.8	105,500	138,100
210	521.5	192.6	502.2	69.7	92,600	133,800
220	517.4	202.2	498.4	68.5	81,000	129,700
230	513.0	211.8	494.4	67.4	70,400	125,800
240	508.4	221.5	490.2	66.3	60,700	122,100
250	503.6	231.1	485.7	65.1	51,800	118,600
260	498.5	240.7	481.0	63.9	43,600	115,300
270	493.2	250.4	476.1	62.8	36,000	112,100
280	487.5	260.1	470.8	61.6	28,900	109,100
290	481.6	269.6	465.4	60.4	22,400	106,300
300	475.4	279.4	459.6	59.1	16,200	103,700
320	462.1	298.7	447.2	56.6		91,000
340	447.5	318.0	433.6	54.1		78,200
360	431.4	337.4	418.6	51.4		66,800
380	413.7	356.8	401.9	48.6		56,700
400	394.2	376.2	383.6	45.7		47,600
420	372.5	395.7	363.2	42.6		38,300
440	348.2	415.2	340.3	39.4		29,600
460	320.7	434.8	314.3	35.8		21,400
480						

MLC650 VPC-MAX S-3

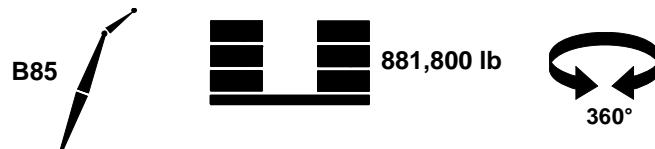
ASME B30.5



	528.2 ft		41°		38.7 ft	60.0 ft
	ft	ft	ft	ft	lb	lb
65						
66						
67						
68						
69						
70	555.8	55.9	534.3	85.0	173,800	173,800
71	555.7	56.9	534.2	84.9	173,700	173,700
72	555.6	57.9	534.1	84.8	173,600	173,600
73	555.5	58.8	534.0	84.7	173,600	173,600
74	555.3	59.8	533.9	84.6	173,500	173,500
75	555.2	60.7	533.8	84.5	173,500	173,500
80	554.6	65.5	533.3	83.9	173,200	173,200
85	553.8	70.3	532.7	83.4	172,900	172,900
90	553.1	75.1	532.1	82.9	172,600	172,600
95	552.3	79.9	531.4	82.3	172,400	172,400
100	551.4	84.8	530.7	81.8	172,100	172,100
105	550.5	89.6	529.9	81.3	171,800	171,800
110	549.6	94.4	529.1	80.8	171,400	171,400
115	548.6	99.2	528.3	80.2	171,200	171,200
120	547.5	104.0	527.4	79.7	170,900	170,900
125	546.4	108.8	526.4	79.2	170,700	170,700
130	545.3	113.6	525.4	78.6	170,400	170,400
135	544.1	118.4	524.4	78.1	167,600	167,600
140	542.9	123.2	523.3	77.6	164,700	164,700
145	541.6	128.0	522.2	77.0	162,000	162,000
150	540.2	132.8	521.0	76.5	159,300	159,300
155	538.8	137.7	519.8	75.9	156,600	156,600
160	537.4	142.5	518.5	75.4	154,000	154,000
165	535.9	147.3	517.1	74.8	151,400	151,400
170	534.3	152.2	515.7	74.3	149,000	149,000
175	532.7	156.9	514.3	73.8	145,900	146,600
180	531.1	161.8	512.9	73.2	137,200	144,200
185	529.4	166.6	511.3	72.7	129,000	141,900
190	527.6	171.5	509.7	72.1	121,300	139,600
195	525.8	176.3	508.1	71.5	113,900	137,400
200	523.9	181.1	506.4	71.0	107,000	135,300
210	520.0	190.8	502.9	69.9	94,100	131,100
220	515.9	200.5	499.1	68.7	82,400	127,200
230	511.5	210.1	495.2	67.6	71,700	123,500
240	506.9	219.8	490.9	66.5	61,900	120,000
250	502.1	229.5	486.5	65.3	52,900	116,700
260	496.9	239.1	481.8	64.1	44,600	113,400
270	491.6	248.9	476.8	62.9	36,900	110,500
280	485.9	258.5	471.7	61.7	29,800	107,600
290	480.0	268.3	466.2	60.5	23,200	104,900
300	473.8	277.9	460.5	59.3	17,000	102,300
320	460.4	297.4	448.1	56.8		91,500
340	445.8	316.9	434.4	54.2		78,600
360	429.6	336.4	419.4	51.5		67,200
380	411.8	355.9	402.7	48.7		57,000
400	392.2	375.5	384.4	45.8		47,800
420	370.4	395.1	363.8	42.7		38,600
440						
460						
480						

MLC650 VPC-MAX S-3

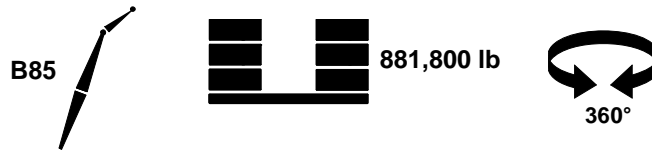
ASME B30.5



		538.1 ft		28°			
						38.7 ft	60.0 ft
ft	ft	ft	ft	°	lb	lb	lb
66	568.6	56.7	544.1	85.0	164,800	164,800	164,800
67	568.5	57.6	544.1	84.9	164,800	164,800	164,800
68	568.4	58.6	544.0	84.8	164,700	164,700	164,700
69	568.3	59.5	543.9	84.7	164,600	164,600	164,600
70	568.2	60.5	543.8	84.6	164,600	164,600	164,600
71	568.1	61.5	543.7	84.5	164,500	164,500	164,500
72	568.0	62.4	543.6	84.4	164,400	164,400	164,400
73	567.8	63.4	543.5	84.3	164,300	164,300	164,300
74	567.7	64.4	543.4	84.2	164,300	164,300	164,300
75	567.6	65.3	543.2	84.1	164,200	164,200	164,200
80	566.9	70.1	542.7	83.5	163,900	163,900	163,900
85	566.2	74.9	542.1	83.0	163,600	163,600	163,600
90	565.5	79.7	541.4	82.5	163,200	163,200	163,200
95	564.7	84.4	540.7	82.0	162,900	162,900	162,900
100	563.9	89.2	540.0	81.5	162,600	162,600	162,600
105	563.0	94.0	539.2	81.0	162,300	162,300	162,300
110	562.1	98.8	538.4	80.4	161,900	161,900	161,900
115	561.1	103.6	537.5	79.9	161,600	161,600	161,600
120	560.1	108.4	536.6	79.4	161,200	161,200	161,200
125	559.0	113.2	535.6	78.9	159,300	159,300	159,300
130	557.9	117.9	534.6	78.4	156,600	156,600	156,600
135	556.7	122.7	533.6	77.8	153,800	153,800	153,800
140	555.5	127.5	532.5	77.3	150,800	150,800	150,800
145	554.2	132.3	531.3	76.8	147,800	147,800	147,800
150	552.9	137.1	530.1	76.3	144,900	144,900	144,900
155	551.6	141.9	528.9	75.7	142,100	142,100	142,100
160	550.2	146.7	527.6	75.2	139,300	139,300	139,300
165	548.7	151.4	526.3	74.7	136,400	136,400	136,400
170	547.2	156.2	524.9	74.1	133,600	133,600	133,600
175	545.6	161.1	523.4	73.6	131,000	131,000	131,000
180	544.0	165.8	522.0	73.1	128,400	128,400	128,400
185	542.3	170.6	520.4	72.5	125,800	125,800	125,800
190	540.6	175.4	518.8	72.0	120,200	123,400	123,400
195	538.9	180.2	517.2	71.5	113,000	121,000	121,000
200	537.0	185.1	515.5	70.9	106,100	118,600	118,600
210	533.2	194.6	512.0	69.8	93,400	114,200	114,200
220	529.2	204.2	508.3	68.7	81,900	110,000	110,000
230	524.9	213.8	504.3	67.6	71,400	106,100	106,100
240	520.4	223.4	500.2	66.5	61,800	102,400	102,400
250	515.7	233.0	495.8	65.4	53,000	98,900	98,900
260	510.7	242.6	491.1	64.2	44,900	95,600	95,600
270	505.5	252.2	486.3	63.1	37,400	92,400	92,400
280	500.0	261.8	481.2	61.9	30,400	89,300	89,300
290	494.3	271.5	475.8	60.7	23,900	86,400	86,400
300	488.3	281.1	470.1	59.5	17,800	83,700	83,700
310	481.9	290.7	464.2	58.3		81,200	81,200
320	475.3	300.3	458.0	57.1		78,900	78,900
340	461.1	319.6	444.7	54.6		74,600	74,600
360	445.6	338.9	430.0	52.0		68,300	68,300
380	428.5	358.2	414.0	49.3		58,200	58,200
400	409.6	377.5	396.2	46.5		49,200	49,200
420	388.8	396.8	376.5	43.6		40,400	40,400
440	365.6	416.2	354.7	40.5		31,700	31,700
460	339.7	435.6	330.1	37.1		23,800	23,800
480	310.1	455.1	302.1	33.5		16,300	16,300

MLC650 VPC-MAX S-3

ASME B30.5



		538.1 ft		35°			
						38.7 ft	60.0 ft
						lb	lb
66							
67							
68	567.4	56.3	544.2	85.0	163,700	163,700	
69	567.3	57.3	544.1	84.9	163,700	163,700	
70	567.1	58.2	544.0	84.8	163,700	163,700	
71	567.0	59.1	543.9	84.7	163,600	163,600	
72	566.9	60.2	543.8	84.6	163,500	163,500	
73	566.8	61.1	543.7	84.5	163,400	163,400	
74	566.7	62.0	543.6	84.4	163,400	163,400	
75	566.5	63.0	543.5	84.3	163,300	163,300	
80	565.9	67.8	543.0	83.8	163,000	163,000	
85	565.2	72.6	542.4	83.3	162,700	162,700	
90	564.4	77.4	541.7	82.8	162,300	162,300	
95	563.6	82.2	541.1	82.2	162,000	162,000	
100	562.8	87.0	540.3	81.7	161,600	161,600	
105	561.9	91.8	539.6	81.2	161,400	161,400	
110	561.0	96.6	538.8	80.7	160,600	160,600	
115	560.0	101.4	537.9	80.2	158,100	158,100	
120	559.0	106.2	537.0	79.6	155,600	155,600	
125	557.9	111.0	536.1	79.1	153,100	153,100	
130	556.8	115.8	535.1	78.6	150,600	150,600	
135	555.6	120.6	534.0	78.1	148,100	148,100	
140	554.4	125.4	532.9	77.5	145,500	145,500	
145	553.2	130.2	531.8	77.0	142,800	142,800	
150	551.8	135.0	530.7	76.5	140,100	140,100	
155	550.5	139.8	529.4	76.0	137,400	137,400	
160	549.1	144.6	528.2	75.4	134,800	134,800	
165	547.6	149.4	526.8	74.9	132,300	132,300	
170	546.1	154.2	525.5	74.4	129,900	129,900	
175	544.5	159.0	524.1	73.8	127,400	127,400	
180	542.9	163.8	522.6	73.3	125,100	125,100	
185	541.2	168.7	521.1	72.8	122,800	122,800	
190	539.5	173.5	519.5	72.2	120,600	120,600	
195	537.7	178.3	517.9	71.7	114,600	118,400	
200	535.9	183.1	516.2	71.1	107,700	116,300	
210	532.1	192.7	512.7	70.0	94,900	112,100	
220	528.1	202.3	509.0	68.9	83,300	108,100	
230	523.8	212.0	505.1	67.8	72,800	104,300	
240	519.3	221.6	501.0	66.7	63,100	100,700	
250	514.6	231.2	496.6	65.6	54,200	97,400	
260	509.6	240.9	492.0	64.4	46,000	94,200	
270	504.3	250.6	487.1	63.3	38,400	91,100	
280	498.9	260.2	482.1	62.1	31,300	88,100	
290	493.1	269.8	476.7	60.9	24,800	85,300	
300	487.0	279.5	471.0	59.7	18,700	82,700	
310	480.7	289.2	465.1	58.5		80,200	
320	474.1	298.8	459.0	57.3		78,000	
340	459.8	318.2	445.7	54.8		73,900	
360	444.2	337.7	431.0	52.2		68,700	
380	427.1	357.0	415.0	49.5		58,600	
400	408.2	376.5	397.2	46.7		49,500	
420	387.3	395.9	377.5	43.7		40,700	
440	364.0	415.4	355.6	40.6		32,000	
460	337.9	435.0	331.0	37.2		24,000	
480							

MLC650 VPC-MAX S-3

ASME B30.5



	538.1 ft		41°		38.7 ft	60.0 ft
	ft	ft	ft	ft	lb	lb
66						
67						
68						
69						
70						
71	565.6	56.9	544.1	85.0	163,100	163,100
72	565.5	57.8	544.0	84.9	163,000	163,000
73	565.4	58.9	543.9	84.8	162,900	162,900
74	565.3	59.8	543.8	84.7	162,900	162,900
75	565.1	60.7	543.7	84.6	162,800	162,800
80	564.5	65.6	543.2	84.0	162,500	162,500
85	563.8	70.4	542.6	83.5	162,100	162,100
90	563.0	75.1	542.0	83.0	161,800	161,800
95	562.2	80.0	541.4	82.5	161,000	161,000
100	561.4	84.8	540.7	82.0	158,800	158,800
105	560.5	89.6	539.9	81.4	156,600	156,600
110	559.6	94.4	539.1	80.9	154,400	154,400
115	558.6	99.3	538.3	80.4	152,100	152,100
120	557.6	104.1	537.4	79.9	149,800	149,800
125	556.5	108.9	536.5	79.4	147,500	147,500
130	555.4	113.7	535.5	78.8	145,300	145,300
135	554.2	118.5	534.5	78.3	143,100	143,100
140	553.0	123.3	533.4	77.8	140,800	140,800
145	551.7	128.2	532.3	77.2	138,300	138,300
150	550.4	133.0	531.1	76.7	135,700	135,700
155	549.0	137.8	529.9	76.2	133,300	133,300
160	547.6	142.6	528.7	75.7	130,900	130,900
165	546.2	147.5	527.4	75.1	128,500	128,500
170	544.6	152.3	526.0	74.6	126,200	126,200
175	543.1	157.1	524.6	74.0	123,900	123,900
180	541.5	162.0	523.2	73.5	121,700	121,700
185	539.8	166.8	521.7	73.0	119,600	119,600
190	538.1	171.6	520.1	72.4	117,500	117,500
195	536.3	176.4	518.5	71.9	115,400	115,400
200	534.4	181.3	516.8	71.3	109,200	113,400
210	530.6	190.9	513.4	70.2	96,300	109,600
220	526.6	200.6	509.7	69.1	84,600	106,000
230	522.3	210.2	505.8	68.0	74,000	102,600
240	517.8	220.0	501.7	66.9	64,200	99,300
250	513.0	229.6	497.3	65.8	55,300	96,000
260	508.0	239.3	492.7	64.6	47,000	92,900
270	502.8	249.0	487.9	63.5	39,300	89,900
280	497.3	258.7	482.9	62.3	32,200	87,000
290	491.5	268.5	477.5	61.1	25,600	84,300
300	485.4	278.2	471.9	59.9	19,400	81,800
310	479.1	287.9	466.0	58.7	13,600	79,400
320	472.4	297.6	459.8	57.5		77,200
340	458.1	317.1	446.5	54.9		73,200
360	442.4	336.5	431.9	52.3		69,100
380	425.2	356.1	415.8	49.6		58,900
400	406.2	375.6	398.0	46.8		49,800
420	385.2	395.2	378.3	43.8		41,000
440						
460						
480						