

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

661,300 lb VPC (Variable Position Counterweight)

360 Degree Rating

MLC650
VPC-MAX
SERIES 2



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.



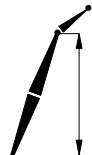
BOOM POINT OPERATING RADIUS: Boom point operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block on boom point.



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 661,300 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

MLC650

VPC-MAX S-2

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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

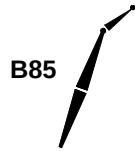
Over End or Side of Crawlers		
Boom Length (ft)	38.7 ft Counterweight Position	60.0 ft Counterweight Position
	Block Weight (lb)	
351.1	9,300	22,400
360.9	9,300	22,400
370.7	#	22,400
380.6	Raising Not Permitted	22,400
390.4		22,400
400.3		22,400
410.1		22,400
419.9		9,300
429.8		#
439.6		#
449.5		#
459.3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

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	9,300	22,400
360.9	9,300	22,400
370.7	#	22,400
380.6	#	22,400
390.4	#	22,400
400.3	Raising Not Permitted	22,400
410.1		22,400
419.9		9,300
429.8		#
439.6		#
449.5		#
459.3		#

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



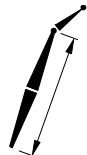
Boom No. B85:685-680-681-682



VPC (Variable Position Counterweight)



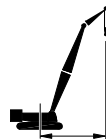
360 Degree Rating



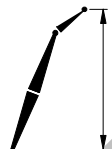
Boom Length



Extended Upper Boom Point
Offset Angle



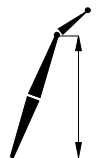
Extended Upper Boom Point Operating Radius
(see page 1)



Extended Upper Boom Point Elevation
(see page 1)



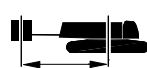
Boom Point Operating Radius
(see page 1)



Boom Point Elevation
(see page 1)



Boom Angle
(see page 1)



Counterweight Position
from Axis of Rotation



Lifting Capacities
(see page 1)

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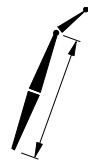
B85



661,300 lb



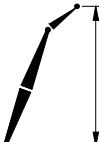
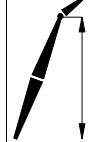
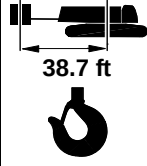
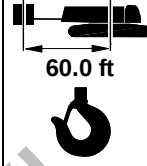
360°



351.0 ft



28°

 351.0 ft					 28°	
 ft	 ft	 ft	 ft	 °	 38.7 ft lb	 60.0 ft 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	332,700	341,600
100	372.8	87.4	349.7	77.1	308,800	341,600
105	371.4	92.1	348.5	76.4	287,300	341,600
110	370.0	96.8	347.3	75.6	267,900	341,600
115	368.5	101.5	346.0	74.8	250,200	341,600
120	366.9	106.1	344.6	74.0	234,100	341,600
125	365.3	110.9	343.1	73.2	219,300	341,600
130	363.6	115.5	341.6	72.3	205,700	341,400
135	361.7	120.2	340.0	71.5	193,100	323,800
140	359.9	124.9	338.3	70.7	181,500	307,500
145	357.9	129.6	336.6	69.9	170,700	292,400
150	355.8	134.3	334.7	69.1	160,600	278,500
155	353.7	139.0	332.8	68.2	151,200	265,500
160	351.5	143.7	330.8	67.4	142,400	253,400
165	349.1	148.4	328.7	66.6	134,200	242,200
170	346.7	153.1	326.6	65.7	126,400	231,600
175	344.2	157.8	324.4	64.9	119,100	221,700
180	341.7	162.5	322.0	64.0	112,200	212,300
185	339.0	167.2	319.6	63.1	105,700	203,500
190	336.2	171.9	317.1	62.3	99,600	195,200
195	333.3	176.7	314.5	61.4	93,800	187,400
200	330.3	181.4	311.8	60.5	88,200	180,000
210	324.0	190.7	306.1	58.7	77,900	166,200
220	317.2	200.2	299.9	56.8	68,600	153,800
230	310.0	209.6	293.3	54.9	60,100	142,500
240	302.2	219.1	286.2	53.0	52,200	132,200
250	293.9	228.6	278.6	51.0	45,000	122,800
260	284.9	238.0	270.5	49.0	38,400	114,100
270	275.3	247.5	261.7	46.8	32,200	106,000
280	264.9	257.0	252.1	44.6	26,400	98,600
290	253.6	266.5	241.8	42.3	21,100	91,600
300	241.4	276.0	230.6	39.9	16,000	85,200
310	228.0	285.6	218.3	37.4		79,100
320	213.3	295.1	204.8	34.6		73,400
330	196.9	304.7	189.6	31.7		68,100
340	178.3	314.4	172.5	28.5		63,000

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

351.0 ft					35°	
ft	ft	ft	ft	°	lb	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	290,000	302,600
110	369.0	94.8	347.8	75.9	270,400	302,600
115	367.5	99.5	346.5	75.1	252,600	302,600
120	365.9	104.1	345.2	74.3	236,300	302,600
125	364.2	108.9	343.7	73.5	221,400	298,300
130	362.5	113.6	342.2	72.7	207,700	293,600
135	360.7	118.3	340.7	71.9	195,000	289,100
140	358.8	123.0	339.0	71.0	183,300	284,800
145	356.8	127.7	337.3	70.2	172,400	280,600
150	354.7	132.5	335.5	69.4	162,300	276,600
155	352.6	137.2	333.6	68.6	152,800	266,700
160	350.4	141.9	331.6	67.7	143,900	254,600
165	348.0	146.6	329.5	66.9	135,600	243,300
170	345.6	151.4	327.4	66.0	127,800	232,600
175	343.1	156.1	325.2	65.2	120,400	222,700
180	340.5	160.8	322.9	64.3	113,500	213,300
185	337.8	165.5	320.5	63.4	106,900	204,500
190	335.0	170.3	318.0	62.6	100,700	196,100
195	332.1	175.1	315.4	61.7	94,800	188,200
200	329.1	179.8	312.7	60.8	89,300	180,800
210	322.8	189.3	307.0	59.0	78,900	167,000
220	316.0	198.8	300.9	57.1	69,500	154,500
230	308.7	208.3	294.3	55.2	60,900	143,100
240	300.9	217.8	287.2	53.3	53,000	132,800
250	292.5	227.4	279.6	51.3	45,700	123,300
260	283.5	236.9	271.5	49.2	39,000	114,500
270	273.8	246.5	262.6	47.1	32,700	106,400
280	263.4	256.0	253.1	44.9	26,900	98,900
290	252.1	265.7	242.8	42.5	21,500	92,000
300	239.8	275.3	231.5	40.1	16,400	85,400
310	226.3	285.0	219.2	37.5		79,300
320	211.4	294.6	205.5	34.8		73,600
330						
340						

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

351.0 ft 41°						
	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	238,500	244,000
125	362.8	107.0	344.3	73.8	223,400	244,000
130	361.1	111.7	342.8	73.0	209,600	244,000
135	359.2	116.5	341.3	72.2	196,800	244,000
140	357.3	121.2	339.7	71.4	185,000	244,000
145	355.3	126.0	337.9	70.5	174,000	244,000
150	353.3	130.7	336.2	69.7	163,800	244,000
155	351.1	135.5	334.3	68.9	154,300	244,000
160	348.9	140.2	332.3	68.0	145,300	244,000
165	346.5	145.0	330.3	67.2	136,900	241,600
170	344.1	149.8	328.1	66.3	129,100	233,600
175	341.6	154.5	325.9	65.5	121,600	223,600
180	339.0	159.3	323.6	64.6	114,600	214,200
185	336.3	164.0	321.2	63.7	108,000	205,300
190	333.5	168.8	318.8	62.8	101,800	196,900
195	330.5	173.6	316.2	61.9	95,800	189,000
200	327.5	178.3	313.5	61.0	90,200	181,500
210	321.2	187.9	307.8	59.2	79,700	167,600
220	314.3	197.5	301.7	57.4	70,200	155,100
230	307.0	207.1	295.1	55.4	61,500	143,700
240	299.2	216.7	288.1	53.5	53,600	133,200
250	290.7	226.4	280.5	51.5	46,200	123,700
260	281.7	236.0	272.3	49.4	39,400	114,900
270	271.9	245.7	263.4	47.3	33,100	106,700
280	261.4	255.3	253.9	45.0	27,200	99,200
290	250.0	265.1	243.4	42.7	21,800	92,200
300						
310						
320						
330						
340						

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

360.9 ft 28°						
	ft	ft	ft	ft	lb	lb
51	392.1	41.6	367.6	84.9	341,600	341,600
52	392.0	42.6	367.5	84.8	341,600	341,600
53	391.8	43.5	367.4	84.6	341,600	341,600
54	391.7	44.5	367.3	84.5	341,600	341,600
55	391.6	45.4	367.2	84.3	341,600	341,600
56	391.5	46.3	367.1	84.2	341,600	341,600
57	391.3	47.3	367.0	84.0	341,600	341,600
58	391.2	48.2	366.8	83.9	341,600	341,600
59	391.0	49.1	366.7	83.7	341,600	341,600
60	390.9	50.1	366.6	83.6	341,600	341,600
65	390.1	54.8	366.0	82.8	341,600	341,600
70	389.3	59.4	365.3	82.1	341,600	341,600
75	388.4	64.1	364.6	81.3	341,600	341,600
80	387.5	68.8	363.7	80.5	341,600	341,600
85	386.4	73.5	362.9	79.8	341,600	341,600
90	385.3	78.2	361.9	79.0	341,600	341,600
95	384.2	82.9	360.9	78.3	331,500	341,600
100	382.9	87.6	359.8	77.5	307,700	341,600
105	381.6	92.2	358.7	76.7	286,200	341,600
110	380.2	96.9	357.5	75.9	266,800	341,600
115	378.8	101.6	356.2	75.2	249,100	341,600
120	377.3	106.3	354.9	74.4	232,900	341,600
125	375.7	111.0	353.4	73.6	218,000	341,600
130	374.0	115.8	351.9	72.8	204,400	340,500
135	372.2	120.5	350.4	72.0	191,800	322,800
140	370.4	125.1	348.8	71.2	180,100	306,500
145	368.5	129.8	347.1	70.4	169,300	291,500
150	366.5	134.5	345.3	69.6	159,200	277,500
155	364.4	139.3	343.4	68.8	149,800	264,500
160	362.2	144.0	341.5	68.0	141,000	252,400
165	360.0	148.6	339.5	67.2	132,700	241,100
170	357.7	153.4	337.4	66.4	124,900	230,600
175	355.2	158.1	335.2	65.6	117,600	220,600
180	352.7	162.8	332.9	64.7	110,700	211,300
185	350.1	167.5	330.6	63.9	104,200	202,500
190	347.4	172.2	328.2	63.0	98,100	194,200
195	344.7	176.9	325.6	62.2	92,200	186,300
200	341.8	181.6	323.0	61.3	86,700	178,900
210	335.7	191.1	317.5	59.6	76,400	165,200
220	329.2	200.5	311.6	57.8	67,000	152,700
230	322.2	210.0	305.2	56.0	58,500	141,400
240	314.7	219.4	298.4	54.1	50,600	131,100
250	306.7	228.9	291.1	52.2	43,400	121,700
260	298.2	238.4	283.3	50.3	36,800	113,000
270	289.0	247.9	274.9	48.2	30,600	104,900
280	279.1	257.4	265.9	46.1	24,800	97,500
290	268.5	266.9	256.1	44.0	19,400	90,500
300	257.0	276.4	245.5	41.7	14,400	84,100
310	244.6	286.0	234.0	39.3		78,000
320	230.9	295.5	221.5	36.8		72,300
330	215.9	305.1	207.6	34.1		67,000
340	199.2	314.7	192.2	31.2		61,900
350	180.3	324.4	174.7	28.0		57,200

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

360.9 ft					35°	
ft	ft	ft	ft	°	38.7 ft lb	60.0 ft 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	288,900	305,500
110	379.2	94.9	358.0	76.3	269,300	305,500
115	377.7	99.6	356.8	75.5	251,500	305,500
120	376.2	104.4	355.4	74.7	235,200	305,500
125	374.6	109.1	354.1	73.9	220,200	300,900
130	372.9	113.8	352.6	73.1	206,500	296,200
135	371.1	118.5	351.0	72.4	193,800	291,700
140	369.3	123.2	349.4	71.6	182,000	287,400
145	367.4	128.0	347.7	70.8	171,100	283,300
150	365.4	132.7	346.0	70.0	160,900	278,800
155	363.3	137.4	344.2	69.1	151,400	265,800
160	361.1	142.1	342.3	68.3	142,500	253,600
165	358.9	146.8	340.3	67.5	134,200	242,300
170	356.5	151.6	338.2	66.7	126,400	231,600
175	354.1	156.4	336.0	65.9	119,000	221,700
180	351.6	161.1	333.8	65.0	112,000	212,300
185	349.0	165.8	331.4	64.2	105,500	203,400
190	346.3	170.5	329.0	63.3	99,200	195,100
195	343.5	175.3	326.5	62.5	93,300	187,200
200	340.6	180.0	323.9	61.6	87,700	179,700
210	334.5	189.5	318.4	59.9	77,300	165,900
220	327.9	199.1	312.5	58.1	67,900	153,400
230	320.9	208.6	306.2	56.3	59,300	142,100
240	313.4	218.1	299.4	54.4	51,400	131,700
250	305.4	227.6	292.1	52.5	44,100	122,200
260	296.8	237.2	284.3	50.5	37,400	113,400
270	287.6	246.8	275.9	48.5	31,100	105,300
280	277.7	256.4	266.8	46.4	25,300	97,800
290	267.0	266.0	257.1	44.2	19,900	90,900
300	255.5	275.6	246.5	41.9	14,800	84,400
310	242.9	285.2	235.0	39.5		78,300
320	229.2	294.9	222.3	37.0		72,500
330						
340						
350						

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

	ft	ft	ft	ft	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	237,400	244,000
125	373.2	107.1	354.6	74.3	222,300	244,000
130	371.5	111.9	353.2	73.5	208,400	244,000
135	369.7	116.6	351.7	72.7	195,600	244,000
140	367.9	121.4	350.1	71.9	183,800	244,000
145	365.9	126.1	348.4	71.1	172,800	244,000
150	363.9	130.9	346.7	70.3	162,500	244,000
155	361.8	135.7	344.8	69.4	152,900	244,000
160	359.7	140.4	342.9	68.6	144,000	244,000
165	357.4	145.2	341.0	67.8	135,600	243,300
170	355.0	150.0	338.9	67.0	127,700	232,700
175	352.6	154.7	336.8	66.1	120,200	222,600
180	350.1	159.5	334.5	65.3	113,200	213,200
185	347.5	164.3	332.2	64.5	106,600	204,300
190	344.7	169.0	329.8	63.6	100,300	195,900
195	341.9	173.8	327.3	62.7	94,400	188,000
200	339.0	178.6	324.7	61.9	88,700	180,500
210	332.9	188.2	319.2	60.1	78,200	166,600
220	326.3	197.7	313.4	58.3	68,700	154,000
230	319.3	207.4	307.0	56.5	60,000	142,600
240	311.7	217.0	300.2	54.6	52,000	132,200
250	303.7	226.6	292.9	52.7	44,700	122,600
260	295.0	236.2	285.1	50.7	37,900	113,800
270	285.7	245.9	276.7	48.7	31,600	105,700
280	275.8	255.6	267.6	46.5	25,700	98,100
290	265.0	265.3	257.8	44.3	20,200	91,100
300	253.3	275.0	247.1	42.0	15,100	84,600
310						
320						
330						
340						
350						

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

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	328,500	341,600
100	393.1	87.7	369.9	77.8	304,600	341,600
105	391.8	92.4	368.8	77.1	283,100	341,600
110	390.5	97.1	367.6	76.3	263,600	341,600
115	389.0	101.8	366.3	75.5	245,900	341,600
120	387.6	106.5	365.0	74.8	229,700	341,600
125	386.0	111.2	363.6	74.0	214,900	341,600
130	384.4	115.9	362.2	73.3	201,200	338,100
135	382.7	120.6	360.7	72.5	188,600	320,400
140	380.9	125.3	359.1	71.7	176,900	304,100
145	379.0	130.0	357.4	71.0	166,100	289,000
150	377.1	134.7	355.7	70.2	156,000	275,100
155	375.1	139.5	353.9	69.4	146,500	262,100
160	373.0	144.1	352.0	68.6	137,700	250,000
165	370.8	148.9	350.0	67.8	129,400	238,600
170	368.5	153.6	348.0	67.0	121,700	228,000
175	366.2	158.3	345.9	66.2	114,300	218,100
180	363.7	163.0	343.7	65.4	107,400	208,800
185	361.2	167.7	341.4	64.6	100,900	199,900
190	358.6	172.4	339.1	63.8	94,700	191,600
195	355.9	177.2	336.6	62.9	88,900	183,800
200	353.1	181.9	334.1	62.1	83,300	176,300
210	347.2	191.3	328.7	60.4	73,000	162,600
220	341.0	200.8	323.0	58.7	63,600	150,100
230	334.2	210.2	316.9	57.0	55,100	138,800
240	327.1	219.7	310.3	55.2	47,200	128,500
250	319.4	229.2	303.3	53.3	40,000	119,000
260	311.2	238.7	295.8	51.5	33,400	110,300
270	302.4	248.2	287.8	49.5	27,200	102,300
280	293.0	257.7	279.2	47.5	21,400	94,800
290	283.0	267.2	269.9	45.5	16,000	87,900
300	272.1	276.7	259.9	43.3		81,400
310	260.4	286.3	249.1	41.1		75,400
320	247.7	295.8	237.3	38.7		69,700
330	233.8	305.4	224.5	36.3		64,400
340	218.5	315.0	210.4	33.6		59,300
350	201.5	324.6	194.7	30.7		54,600

MLC650 VPC-MAX S-2

ASME B30.5



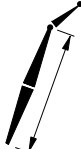
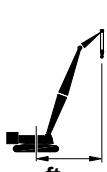
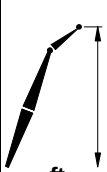
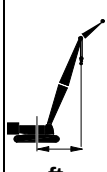
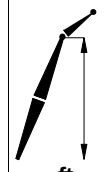
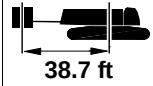
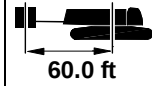
B85



661,300 lb



360°

 370.7 ft  35°						
 ft	 ft	 ft	 ft	 o	 38.7 ft  lb	 60.0 ft  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	307,600	311,900
105	390.8	90.3	369.3	77.4	285,900	311,900
110	389.4	95.0	368.1	76.6	266,300	311,900
115	388.0	99.7	366.9	75.9	248,400	311,900
120	386.5	104.5	365.6	75.1	232,100	308,300
125	384.9	109.2	364.2	74.4	217,100	303,400
130	383.3	113.9	362.8	73.6	203,400	298,800
135	381.6	118.6	361.3	72.8	190,600	294,300
140	379.8	123.4	359.8	72.0	178,900	290,000
145	377.9	128.1	358.1	71.3	167,900	285,900
150	376.0	132.8	356.4	70.5	157,700	276,400
155	374.0	137.6	354.6	69.7	148,200	263,400
160	371.9	142.3	352.7	68.9	139,300	251,200
165	369.7	147.0	350.8	68.1	131,000	239,800
170	367.4	151.8	348.8	67.3	123,100	229,200
175	365.1	156.5	346.7	66.5	115,700	219,200
180	362.6	161.2	344.5	65.7	108,800	209,800
185	360.1	166.0	342.3	64.9	102,200	200,900
190	357.5	170.7	339.9	64.1	96,000	192,600
195	354.8	175.5	337.5	63.2	90,100	184,700
200	352.0	180.3	335.0	62.4	84,500	177,200
210	346.1	189.8	329.6	60.7	74,000	163,400
220	339.7	199.3	324.0	59.0	64,600	150,900
230	333.0	208.8	317.8	57.2	56,000	139,500
240	325.8	218.3	311.3	55.4	48,000	129,100
250	318.1	227.9	304.3	53.6	40,800	119,600
260	309.9	237.4	296.8	51.7	34,000	110,800
270	301.1	247.0	288.8	49.8	27,800	102,700
280	291.6	256.6	280.1	47.8	22,000	95,200
290	281.5	266.2	270.9	45.7	16,500	88,300
300	270.6	275.9	260.8	43.5		81,700
310	258.8	285.5	250.0	41.3		75,700
320	246.0	295.1	238.3	38.9		69,900
330	232.0	304.8	225.3	36.4		64,600
340						
350						

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

ft	ft	ft	ft	°	lb	lb
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	234,400	244,000
125	383.5	107.3	364.8	74.7	219,300	244,000
130	381.9	112.0	363.4	73.9	205,400	244,000
135	380.1	116.7	361.9	73.1	192,600	244,000
140	378.3	121.5	360.4	72.3	180,700	244,000
145	376.5	126.3	358.7	71.6	169,700	244,000
150	374.5	131.1	357.0	70.8	159,400	244,000
155	372.5	135.8	355.3	70.0	149,800	244,000
160	370.4	140.6	353.4	69.2	140,800	244,000
165	368.2	145.3	351.5	68.4	132,400	240,900
170	365.9	150.1	349.5	67.6	124,500	230,200
175	363.6	154.9	347.4	66.8	117,000	220,200
180	361.1	159.7	345.3	66.0	110,000	210,700
185	358.6	164.4	343.0	65.2	103,400	201,800
190	355.9	169.2	340.7	64.3	97,100	193,400
195	353.2	174.0	338.3	63.5	91,100	185,500
200	350.4	178.7	335.8	62.7	85,500	178,000
210	344.5	188.3	330.5	61.0	75,000	164,100
220	338.1	197.9	324.8	59.2	65,400	151,500
230	331.3	207.5	318.7	57.5	56,700	140,100
240	324.1	217.1	312.2	55.7	48,700	129,600
250	316.4	226.8	305.2	53.8	41,400	120,100
260	308.1	236.4	297.6	51.9	34,600	111,300
270	299.2	246.1	289.6	50.0	28,300	103,100
280	289.7	255.8	280.9	47.9	22,400	95,600
290	279.5	265.4	271.7	45.9	16,900	88,500
300	268.5	275.2	261.6	43.7		82,000
310	256.6	284.9	250.7	41.4		75,800
320						
330						
340						
350						

MLC650 VPC-MAX S-2

ASME B30.5



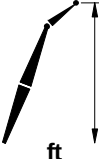
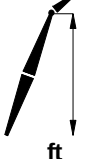
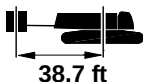
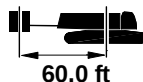
B85



661,300 lb



360°

 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	327,200	341,600
100	403.2	87.8	380.0	78.1	303,200	341,600
105	402.0	92.5	378.9	77.4	281,600	341,600
110	400.7	97.2	377.8	76.6	262,000	341,600
115	399.3	102.0	376.5	75.9	244,300	341,600
120	397.8	106.6	375.3	75.2	228,100	341,600
125	396.3	111.3	373.9	74.4	213,200	341,600
130	394.7	116.1	372.5	73.7	199,500	336,900
135	393.1	120.8	371.0	72.9	186,900	319,200
140	391.3	125.5	369.5	72.2	175,200	302,900
145	389.5	130.2	367.9	71.4	164,300	287,800
150	387.6	135.0	366.2	70.7	154,200	273,800
155	385.7	139.7	364.4	69.9	144,800	260,800
160	383.6	144.4	362.6	69.2	136,000	248,700
165	381.5	149.1	360.7	68.4	127,700	237,400
170	379.3	153.8	358.7	67.6	119,900	226,800
175	377.1	158.5	356.7	66.8	112,600	216,800
180	374.7	163.3	354.5	66.0	105,700	207,500
185	372.3	168.0	352.3	65.3	99,100	198,700
190	369.7	172.7	350.0	64.5	92,900	190,400
195	367.1	177.4	347.6	63.7	87,100	182,500
200	364.4	182.1	345.2	62.9	81,500	175,000
210	358.7	191.6	340.0	61.2	71,200	161,300
220	352.6	201.1	334.5	59.6	61,800	148,800
230	346.1	210.5	328.6	57.9	53,300	137,500
240	339.2	220.1	322.2	56.2	45,500	127,200
250	331.8	229.5	315.4	54.4	38,200	117,700
260	324.0	239.0	308.2	52.6	31,600	109,000
270	315.6	248.5	300.5	50.7	25,400	101,000
280	306.6	258.1	292.2	48.8	19,700	93,500
290	297.0	267.6	283.4	46.9	14,300	86,600
300	286.7	277.1	274.0	44.8		80,100
310	275.6	286.6	263.7	42.7		74,100
320	263.7	296.2	252.7	40.5		68,400
330	250.7	305.8	240.7	38.2		63,100
340	236.6	315.4	227.6	35.7		58,100
350	221.0	325.0	213.2	33.1		53,300
360	203.7	334.7	197.1	30.3		48,800

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

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	306,200	314,800
105	400.9	90.4	379.4	77.7	284,500	314,800
110	399.6	95.2	378.3	77.0	264,700	314,800
115	398.2	99.9	377.1	76.2	246,800	314,800
120	396.8	104.6	375.8	75.5	230,500	310,700
125	395.2	109.4	374.5	74.7	215,500	305,900
130	393.7	114.1	373.1	74.0	201,700	301,300
135	392.0	118.8	371.7	73.3	189,000	296,800
140	390.2	123.5	370.1	72.5	177,200	292,600
145	388.4	128.3	368.5	71.7	166,200	288,400
150	386.5	133.0	366.9	71.0	156,000	275,200
155	384.6	137.8	365.1	70.2	146,500	262,200
160	382.5	142.5	363.3	69.5	137,600	250,000
165	380.4	147.2	361.4	68.7	129,200	238,600
170	378.2	152.0	359.5	67.9	121,400	227,900
175	375.9	156.8	357.4	67.1	114,000	217,900
180	373.6	161.5	355.3	66.3	107,000	208,500
185	371.1	166.3	353.1	65.5	100,400	199,700
190	368.6	171.0	350.9	64.8	94,200	191,300
195	366.0	175.7	348.5	64.0	88,300	183,400
200	363.2	180.5	346.1	63.1	82,700	175,900
210	357.5	190.0	340.9	61.5	72,300	162,100
220	351.4	199.5	335.4	59.8	62,800	149,600
230	344.9	209.1	329.5	58.1	54,200	138,200
240	338.0	218.6	323.2	56.4	46,300	127,800
250	330.6	228.2	316.4	54.6	39,000	118,300
260	322.7	237.8	309.2	52.8	32,300	109,600
270	314.2	247.4	301.5	51.0	26,000	101,500
280	305.2	256.9	293.3	49.1	20,200	94,000
290	295.6	266.5	284.4	47.1	14,800	87,000
300	285.2	276.2	274.9	45.0		80,500
310	274.1	285.8	264.7	42.9		74,400
320	262.1	295.5	253.6	40.7		68,700
330	249.0	305.1	241.6	38.4		63,300
340	234.8	314.8	228.4	35.9		58,300
350						
360						

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

	380.6 ft		41°			
	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	232,800	244,000
125	393.8	107.4	375.1	75.1	217,700	244,000
130	392.2	112.2	373.7	74.3	203,800	244,000
135	390.6	116.9	372.2	73.6	190,900	244,000
140	388.8	121.7	370.7	72.8	179,100	244,000
145	387.0	126.5	369.1	72.0	168,000	244,000
150	385.1	131.2	367.5	71.3	157,700	244,000
155	383.1	136.0	365.8	70.5	148,100	244,000
160	381.1	140.8	364.0	69.7	139,100	244,000
165	378.9	145.5	362.1	69.0	130,700	239,700
170	376.7	150.3	360.2	68.2	122,800	229,000
175	374.4	155.1	358.2	67.4	115,400	219,000
180	372.1	159.8	356.1	66.6	108,300	209,500
185	369.6	164.7	353.9	65.8	101,700	200,600
190	367.1	169.4	351.6	65.0	95,400	192,200
195	364.4	174.2	349.3	64.2	89,400	184,300
200	361.7	179.0	346.8	63.4	83,800	176,800
210	355.9	188.6	341.7	61.8	73,300	162,800
220	349.8	198.2	336.2	60.1	63,700	150,300
230	343.3	207.8	330.3	58.4	55,000	138,800
240	336.3	217.4	324.0	56.6	47,000	128,400
250	328.9	227.0	317.3	54.9	39,700	118,800
260	320.9	236.7	310.1	53.0	32,900	110,000
270	312.4	246.3	302.3	51.2	26,600	101,900
280	303.4	256.0	294.1	49.3	20,700	94,300
290	293.6	265.7	285.2	47.3	15,200	87,300
300	283.2	275.4	275.7	45.2		80,700
310	272.0	285.1	265.4	43.1		74,600
320						
330						
340						
350						
360						

MLC650 VPC-MAX S-2

ASME B30.5



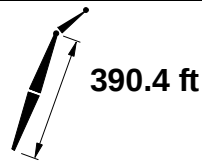
B85



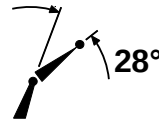
661,300 lb



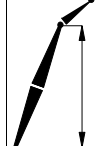
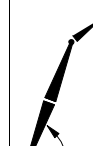
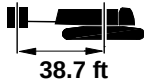
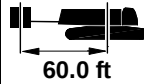
360°



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	324,800	341,600
100	413.3	87.9	390.0	78.4	300,800	341,600
105	412.1	92.6	388.9	77.7	279,200	341,600
110	410.8	97.4	387.8	77.0	259,700	341,600
115	409.5	102.1	386.6	76.3	241,900	341,600
120	408.1	106.8	385.4	75.5	225,700	341,600
125	406.6	111.5	384.1	74.8	210,800	341,600
130	405.1	116.2	382.7	74.1	197,100	335,200
135	403.4	120.9	381.3	73.4	184,400	317,500
140	401.7	125.6	379.8	72.6	172,700	301,200
145	400.0	130.4	378.2	71.9	161,800	286,100
150	398.2	135.1	376.5	71.2	151,700	272,000
155	396.2	139.8	374.8	70.4	142,200	259,000
160	394.3	144.6	373.0	69.7	133,400	246,900
165	392.2	149.3	371.2	68.9	125,100	235,600
170	390.1	154.0	369.3	68.2	117,300	225,000
175	387.9	158.7	367.3	67.4	109,900	215,000
180	385.6	163.5	365.2	66.7	103,000	205,600
185	383.2	168.2	363.0	65.9	96,500	196,800
190	380.8	172.9	360.8	65.1	90,300	188,500
195	378.2	177.7	358.5	64.3	84,400	180,600
200	375.6	182.4	356.1	63.6	78,900	173,100
210	370.1	191.9	351.1	62.0	68,500	159,400
220	364.2	201.3	345.7	60.4	59,100	146,900
230	357.9	210.8	340.0	58.7	50,600	135,600
240	351.2	220.3	333.9	57.1	42,700	125,300
250	344.1	229.8	327.3	55.4	35,500	115,800
260	336.6	239.3	320.4	53.7	28,800	107,100
270	328.5	248.8	313.0	51.9	22,600	99,000
280	319.9	258.3	305.0	50.0	16,900	91,600
290	310.7	267.8	296.6	48.2		84,600
300	300.9	277.4	287.6	46.2		78,200
310	290.4	286.9	277.8	44.2		72,100
320	279.1	296.5	267.4	42.1		66,400
330	266.9	306.1	256.1	40.0		61,100
340	253.7	315.7	243.9	37.7		56,100
350	239.3	325.3	230.5	35.2		51,400
360	223.5	334.9	215.8	32.7		46,900
370	205.9	344.5	199.5	29.9		42,600

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

390.4 ft 35°						
	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	303,900	319,900
105	411.1	90.5	389.4	78.0	282,100	319,900
110	409.8	95.3	388.3	77.3	262,400	319,900
115	408.4	100.0	387.2	76.6	244,500	318,100
120	407.0	104.7	385.9	75.8	228,200	313,100
125	405.5	109.5	384.6	75.1	213,100	308,300
130	404.0	114.2	383.3	74.4	199,300	303,700
135	402.4	119.0	381.9	73.7	186,600	299,300
140	400.7	123.7	380.4	72.9	174,700	295,000
145	398.9	128.4	378.8	72.2	163,800	287,600
150	397.1	133.2	377.2	71.5	153,500	273,500
155	395.2	137.9	375.5	70.7	144,000	260,400
160	393.2	142.7	373.8	70.0	135,100	248,200
165	391.1	147.4	371.9	69.2	126,700	236,800
170	389.0	152.2	370.0	68.5	118,800	226,200
175	386.8	156.9	368.0	67.7	111,400	216,100
180	384.5	161.7	366.0	66.9	104,500	206,700
185	382.1	166.4	363.8	66.2	97,900	197,900
190	379.6	171.2	361.6	65.4	91,600	189,500
195	377.1	176.0	359.3	64.6	85,700	181,600
200	374.4	180.7	357.0	63.8	80,100	174,100
210	368.9	190.2	352.0	62.3	69,600	160,200
220	363.0	199.8	346.6	60.6	60,200	147,700
230	356.7	209.3	340.9	59.0	51,500	136,300
240	350.0	218.8	334.8	57.3	43,600	125,900
250	342.9	228.4	328.3	55.6	36,300	116,400
260	335.3	238.0	321.4	53.9	29,600	107,600
270	327.2	247.6	314.0	52.1	23,300	99,500
280	318.5	257.2	306.1	50.3	17,500	92,000
290	309.3	266.7	297.6	48.4		85,000
300	299.4	276.4	288.5	46.4		78,500
310	288.9	286.0	278.8	44.4		72,400
320	277.5	295.7	268.3	42.3		66,700
330	265.3	305.3	257.0	40.1		61,400
340	252.0	315.0	244.7	37.8		56,300
350	237.5	324.7	231.3	35.4		51,500
360						
370						

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

	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	230,600	244,000
125	404.1	107.5	385.2	75.4	215,400	244,000
130	402.6	112.3	383.9	74.7	201,500	244,000
135	400.9	117.0	382.5	74.0	188,600	244,000
140	399.2	121.8	381.0	73.2	176,700	244,000
145	397.5	126.6	379.4	72.5	165,600	244,000
150	395.6	131.4	377.8	71.7	155,300	244,000
155	393.7	136.1	376.2	71.0	145,700	244,000
160	391.7	140.9	374.4	70.3	136,700	244,000
165	389.6	145.7	372.6	69.5	128,200	238,000
170	387.5	150.4	370.7	68.7	120,300	227,300
175	385.3	155.2	368.8	68.0	112,800	217,200
180	383.0	160.0	366.7	67.2	105,800	207,800
185	380.6	164.8	364.6	66.4	99,100	198,800
190	378.1	169.6	362.4	65.7	92,800	190,400
195	375.5	174.4	360.1	64.9	86,800	182,500
200	372.9	179.2	357.7	64.1	81,200	174,900
210	367.3	188.8	352.8	62.5	70,700	161,000
220	361.4	198.4	347.4	60.9	61,100	148,400
230	355.1	207.9	341.8	59.2	52,400	137,000
240	348.3	217.6	335.7	57.6	44,400	126,500
250	341.2	227.2	329.2	55.9	37,000	116,900
260	333.5	236.8	322.2	54.1	30,200	108,100
270	325.4	246.5	314.8	52.3	23,900	100,000
280	316.7	256.2	306.9	50.5	18,000	92,400
290	307.4	265.9	298.4	48.6		85,400
300	297.5	275.6	289.3	46.6		78,800
310	286.9	285.3	279.5	44.6		72,700
320	275.4	295.1	269.0	42.5		66,900
330						
340						
350						
360						
370						

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

400.3 ft 28°						
	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	323,000	341,600
100	423.4	88.1	400.1	78.7	298,900	341,600
105	422.2	92.8	399.1	78.0	277,300	341,600
110	421.0	97.5	398.0	77.3	257,700	341,600
115	419.7	102.2	396.8	76.6	239,900	336,300
120	418.3	107.0	395.6	75.9	223,700	330,900
125	416.9	111.7	394.3	75.2	208,800	325,500
130	415.4	116.4	393.0	74.5	195,100	320,300
135	413.8	121.1	391.6	73.8	182,400	315,100
140	412.1	125.8	390.1	73.1	170,700	299,700
145	410.4	130.6	388.6	72.3	159,800	284,600
150	408.6	135.3	386.9	71.6	149,700	270,600
155	406.8	140.0	385.3	70.9	140,200	257,600
160	404.9	144.7	383.5	70.2	131,400	245,400
165	402.9	149.5	381.7	69.4	123,100	234,100
170	400.8	154.2	379.9	68.7	115,300	223,500
175	398.6	159.0	377.9	68.0	108,000	213,500
180	396.4	163.7	375.9	67.2	101,000	204,100
185	394.1	168.4	373.8	66.5	94,500	195,300
190	391.7	173.2	371.6	65.7	88,300	187,000
195	389.3	177.9	369.4	65.0	82,500	179,100
200	386.7	182.6	367.1	64.2	76,900	171,700
210	381.4	192.1	362.2	62.7	66,600	157,900
220	375.7	201.6	357.0	61.1	57,200	145,400
230	369.6	211.1	351.4	59.6	48,600	134,100
240	363.1	220.6	345.5	58.0	40,800	123,800
250	356.3	230.1	339.2	56.3	33,600	114,300
260	349.0	239.6	332.5	54.6	26,900	105,600
270	341.2	249.1	325.3	52.9	20,700	97,500
280	332.9	258.6	317.7	51.2	15,000	90,100
290	324.1	268.2	309.6	49.4		83,100
300	314.8	277.8	300.9	47.5		76,700
310	304.7	287.3	291.7	45.6		70,600
320	294.0	296.8	281.7	43.6		65,000
330	282.5	306.4	271.1	41.6		59,700
340	270.1	316.0	259.6	39.4		54,700
350	256.7	325.6	247.1	37.2		49,900
360	242.0	335.2	233.5	34.8		45,500
380	208.1	354.5	201.8	29.4		37,200

MLC650 VPC-MAX S-2

ASME B30.5



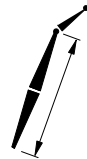
B85



661,300 lb



360°



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	302,100	321,500
105		421.2	90.7	399.5	78.3	280,300	321,500
110		419.9	95.4	398.5	77.6	260,500	321,500
115		418.6	100.2	397.3	76.9	242,600	318,200
120		417.3	104.9	396.1	76.2	226,200	313,500
125		415.8	109.6	394.9	75.5	211,200	308,800
130		414.3	114.3	393.6	74.8	197,400	304,300
135		412.7	119.1	392.2	74.1	184,600	299,800
140		411.1	123.9	390.7	73.3	172,800	295,300
145		409.3	128.6	389.2	72.6	161,800	286,100
150		407.6	133.3	387.6	71.9	151,600	272,100
155		405.7	138.1	386.0	71.2	142,100	259,000
160		403.8	142.9	384.3	70.5	133,100	246,800
165		401.8	147.6	382.5	69.7	124,800	235,400
170		399.7	152.3	380.6	69.0	116,900	224,700
175		397.5	157.1	378.7	68.3	109,500	214,700
180		395.3	161.9	376.7	67.5	102,500	205,300
185		393.0	166.6	374.6	66.8	95,900	196,400
190		390.6	171.4	372.5	66.0	89,700	188,000
195		388.1	176.2	370.2	65.3	83,800	180,100
200		385.6	180.9	367.9	64.5	78,100	172,600
210		380.2	190.4	363.1	63.0	67,700	158,800
220		374.5	200.0	357.9	61.4	58,200	146,200
230		368.4	209.6	352.4	59.8	49,600	134,800
240		361.9	219.1	346.5	58.2	41,700	124,500
250		355.0	228.7	340.2	56.6	34,400	114,900
260		347.7	238.3	333.5	54.9	27,700	106,200
270		339.9	247.9	326.3	53.2	21,400	98,100
280		331.6	257.5	318.7	51.4	15,600	90,600
290		322.8	267.0	310.6	49.6		83,600
300		313.3	276.7	301.9	47.7		77,100
310		303.3	286.3	292.6	45.8		71,000
320		292.5	295.9	282.7	43.8		65,300
330		280.9	305.6	272.0	41.8		60,000
340		268.4	315.3	260.4	39.6		54,900
350		254.9	325.0	247.9	37.3		50,100
360		240.2	334.7	234.2	34.9		45,600
380							

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

	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	228,700	244,000
125	414.4	107.6	395.4	75.8	213,500	244,000
130	412.9	112.4	394.1	75.1	199,600	244,000
135	411.3	117.2	392.7	74.3	186,700	244,000
140	409.6	122.0	391.3	73.6	174,800	244,000
145	407.9	126.7	389.8	72.9	163,700	244,000
150	406.1	131.5	388.2	72.2	153,400	244,000
155	404.2	136.3	386.6	71.5	143,800	244,000
160	402.3	141.1	384.9	70.7	134,800	244,000
165	400.3	145.9	383.1	70.0	126,300	236,600
170	398.2	150.6	381.3	69.3	118,400	225,900
175	396.0	155.4	379.4	68.5	110,900	215,800
180	393.8	160.2	377.4	67.8	103,900	206,300
185	391.5	165.0	375.3	67.0	97,200	197,400
190	389.1	169.8	373.2	66.3	90,900	189,000
195	386.6	174.6	371.0	65.5	85,000	181,000
200	384.0	179.4	368.7	64.8	79,300	173,500
210	378.6	189.0	363.9	63.2	68,800	159,600
220	372.9	198.6	358.7	61.6	59,200	147,000
230	366.8	208.2	353.2	60.1	50,500	135,500
240	360.3	217.8	347.3	58.4	42,500	125,100
250	353.3	227.4	341.0	56.8	35,100	115,500
260	346.0	237.1	334.3	55.1	28,300	106,700
270	338.1	246.8	327.2	53.4	22,000	98,500
280	329.8	256.4	319.5	51.6	16,200	91,000
290	320.9	266.1	311.4	49.8		83,900
300	311.4	275.8	302.7	47.9		77,400
310	301.3	285.5	293.4	46.0		71,300
320	290.4	295.3	283.4	44.0		65,500
330	278.8	305.0	272.6	41.9		60,100
340						
350						
360						
380						

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

410.1 ft 28°						
	ft	ft	ft	ft	°	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	322,700	336,000
100	433.5	88.1	410.1	78.9	298,600	330,500
105	432.4	92.9	409.1	78.3	277,000	324,900
110	431.1	97.6	408.0	77.6	257,400	319,500
115	429.9	102.3	406.9	76.9	239,600	314,000
120	428.5	107.1	405.7	76.2	223,400	308,700
125	427.1	111.8	404.4	75.5	208,500	303,400
130	425.6	116.5	403.1	74.8	194,800	298,300
135	424.1	121.2	401.8	74.1	182,100	293,200
140	422.5	125.9	400.3	73.5	170,400	288,300
145	420.8	130.7	398.8	72.8	159,500	283,500
150	419.1	135.4	397.3	72.1	149,400	270,400
155	417.3	140.2	395.6	71.4	139,900	257,400
160	415.4	144.9	393.9	70.6	131,100	245,300
165	413.5	149.7	392.2	69.9	122,800	233,900
170	411.4	154.4	390.3	69.2	115,000	223,300
175	409.4	159.1	388.5	68.5	107,600	213,300
180	407.2	163.8	386.5	67.8	100,700	204,000
185	404.9	168.6	384.4	67.1	94,200	195,100
190	402.6	173.4	382.3	66.3	88,000	186,800
195	400.2	178.1	380.1	65.6	82,100	178,900
200	397.8	182.8	377.9	64.9	76,600	171,500
210	392.6	192.3	373.2	63.4	66,200	157,700
220	387.0	201.8	368.1	61.9	56,900	145,200
230	381.1	211.3	362.7	60.3	48,300	133,900
240	374.9	220.8	357.0	58.8	40,500	123,600
250	368.2	230.3	350.8	57.2	33,300	114,100
260	361.2	239.8	344.4	55.6	26,600	105,400
270	353.7	249.4	337.5	53.9	20,400	97,300
280	345.8	258.9	330.1	52.2	14,700	89,900
290	337.3	268.4	322.3	50.5		83,000
300	328.3	278.0	314.0	48.7		76,500
310	318.7	287.6	305.1	46.9		70,500
320	308.5	297.1	295.7	45.0		64,800
330	297.6	306.7	285.5	43.1		59,500
340	285.9	316.3	274.6	41.0		54,500
350	273.2	325.9	262.9	38.9		49,800
360	259.6	335.5	250.2	36.7		45,300
380	228.4	354.8	221.1	31.8		37,100

MLC650 VPC-MAX S-2

ASME B30.5



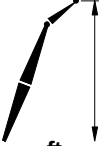
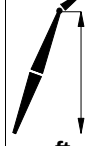
B85



661,300 lb



360°

 410.1 ft  35°						
 ft	 ft	 ft	 ft	 o	 38.7 ft  lb	 60.0 ft  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	301,900	312,900
105	431.3	90.8	409.5	78.6	280,000	308,100
110	430.1	95.5	408.5	77.9	260,300	303,300
115	428.8	100.2	407.4	77.2	242,300	298,600
120	427.5	105.0	406.2	76.5	225,900	293,800
125	426.1	109.7	405.0	75.8	210,900	289,200
130	424.6	114.5	403.7	75.1	197,100	284,600
135	423.0	119.3	402.3	74.4	184,300	280,100
140	421.4	124.0	400.9	73.7	172,500	275,700
145	419.8	128.7	399.5	73.0	161,500	271,500
150	418.0	133.5	397.9	72.3	151,300	267,300
155	416.2	138.3	396.3	71.6	141,800	258,800
160	414.3	143.0	394.6	70.9	132,800	246,600
165	412.4	147.7	392.9	70.2	124,500	235,200
170	410.3	152.5	391.1	69.5	116,600	224,500
175	408.2	157.3	389.2	68.8	109,200	214,500
180	406.1	162.1	387.2	68.1	102,200	205,100
185	403.8	166.8	385.2	67.3	95,600	196,200
190	401.5	171.5	383.1	66.6	89,400	187,800
195	399.1	176.4	381.0	65.9	83,400	179,900
200	396.6	181.1	378.7	65.1	77,800	172,400
210	391.4	190.6	374.0	63.6	67,400	158,600
220	385.8	200.2	369.0	62.1	57,900	146,000
230	379.9	209.7	363.6	60.6	49,300	134,700
240	373.7	219.3	357.9	59.0	41,400	124,300
250	367.0	228.9	351.8	57.4	34,100	114,700
260	359.9	238.5	345.3	55.8	27,400	106,000
270	352.4	248.0	338.5	54.2	21,200	97,900
280	344.4	257.7	331.1	52.5	15,400	90,400
290	335.9	267.2	323.3	50.7		83,400
300	326.9	276.9	315.0	48.9		76,900
310	317.3	286.5	306.1	47.1		70,900
320	307.0	296.2	296.6	45.2		65,200
330	296.0	305.8	286.5	43.2		59,800
340	284.3	315.5	275.6	41.2		54,800
350	271.6	325.2	263.8	39.1		50,000
360	257.8	334.9	251.0	36.8		45,500
380						

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

	ft	ft	ft	ft	lb	lb
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	228,400	244,000
125	424.6	107.8	405.5	76.1	213,200	244,000
130	423.2	112.5	404.2	75.4	199,300	244,000
135	421.6	117.3	402.9	74.7	186,400	244,000
140	420.0	122.1	401.5	74.0	174,500	244,000
145	418.3	126.8	400.1	73.3	163,400	244,000
150	416.6	131.6	398.5	72.6	153,100	244,000
155	414.7	136.4	396.9	71.9	143,500	244,000
160	412.9	141.2	395.3	71.2	134,500	244,000
165	410.9	146.0	393.5	70.5	126,000	236,400
170	408.9	150.7	391.8	69.8	118,100	225,700
175	406.8	155.5	389.9	69.1	110,600	215,600
180	404.6	160.3	387.9	68.3	103,600	206,200
185	402.3	165.1	385.9	67.6	96,900	197,200
190	400.0	169.9	383.9	66.9	90,600	188,800
195	397.6	174.7	381.7	66.1	84,700	180,900
200	395.1	179.5	379.5	65.4	79,000	173,300
210	389.8	189.1	374.8	63.9	68,500	159,400
220	384.3	198.7	369.8	62.4	58,900	146,800
230	378.3	208.3	364.4	60.8	50,200	135,400
240	372.0	218.0	358.7	59.3	42,200	124,900
250	365.3	227.6	352.6	57.7	34,900	115,300
260	358.2	237.3	346.2	56.0	28,100	106,500
270	350.7	246.9	339.3	54.4	21,800	98,400
280	342.7	256.6	331.9	52.7	15,900	90,800
290	334.1	266.3	324.1	50.9		83,800
300	325.0	276.0	315.8	49.1		77,300
310	315.4	285.7	306.9	47.3		71,200
320	305.0	295.4	297.4	45.4		65,400
330	294.0	305.2	287.2	43.4		60,000
340	282.1	315.0	276.2	41.3		55,000
350						
360						
380						

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

	419.9 ft	28°				
	ft	ft	ft	ft	lb	lb
56	450.9	46.7	426.4	84.9	334,500	334,500
57	450.8	47.6	426.3	84.8	334,500	334,500
58	450.7	48.6	426.2	84.7	334,500	334,500
59	450.6	49.5	426.1	84.6	334,500	334,500
60	450.5	50.4	426.0	84.4	334,400	334,400
61	450.3	51.4	425.9	84.3	334,400	334,400
62	450.2	52.3	425.8	84.2	334,400	334,400
63	450.1	53.3	425.7	84.0	334,400	334,400
64	449.9	54.2	425.5	83.9	334,400	334,400
65	449.8	55.2	425.4	83.8	334,400	334,400
70	449.1	59.9	424.8	83.1	334,400	334,400
75	448.3	64.6	424.2	82.5	334,300	334,300
80	447.5	69.3	423.5	81.8	331,100	331,100
85	446.6	74.1	422.7	81.2	325,700	325,700
90	445.7	78.8	421.9	80.5	320,300	320,300
95	444.7	83.5	421.0	79.8	314,800	314,800
100	443.6	88.2	420.1	79.2	296,900	309,400
105	442.5	93.0	419.1	78.5	275,300	304,000
110	441.3	97.7	418.0	77.9	255,700	298,600
115	440.0	102.4	416.9	77.2	237,800	293,300
120	438.7	107.2	415.8	76.5	221,600	288,100
125	437.3	111.9	414.6	75.9	206,700	283,000
130	435.9	116.6	413.3	75.2	192,900	277,900
135	434.4	121.4	411.9	74.5	180,300	273,000
140	432.8	126.1	410.5	73.8	168,600	268,300
145	431.2	130.8	409.1	73.2	157,700	263,600
150	429.5	135.6	407.5	72.5	147,500	259,000
155	427.8	140.3	405.9	71.8	138,100	254,600
160	425.9	145.1	404.3	71.1	129,200	243,900
165	424.0	149.8	402.6	70.4	120,900	232,600
170	422.1	154.5	400.8	69.7	113,100	222,000
175	420.0	159.3	398.9	69.0	105,800	212,000
180	417.9	164.0	397.0	68.3	98,800	202,600
185	415.7	168.7	395.1	67.6	92,300	193,800
190	413.5	173.5	393.0	66.9	86,100	185,400
195	411.1	178.3	390.8	66.2	80,200	177,600
200	408.7	183.0	388.7	65.5	74,700	170,100
210	403.7	192.5	384.0	64.0	64,300	156,300
220	398.3	202.1	379.1	62.6	55,000	143,800
230	392.6	211.5	373.9	61.1	46,400	132,500
240	386.5	221.0	368.3	59.6	38,600	122,200
250	380.1	230.6	362.4	58.0	31,400	112,700
260	373.3	240.1	356.1	56.5	24,700	104,000
270	366.0	249.7	349.4	54.9	18,500	95,900
280	358.4	259.1	342.4	53.2		88,500
290	350.2	268.7	334.8	51.6		81,600
300	341.6	278.2	326.8	49.9		75,100
310	332.4	287.8	318.3	48.1		69,100
320	322.7	297.4	309.3	46.3		63,400
330	312.2	307.0	299.6	44.4		58,100
340	301.1	316.5	289.2	42.5		53,100
350	289.2	326.1	278.1	40.5		48,400
360	276.3	335.7	266.2	38.4		44,000
380	247.3	355.1	239.1	33.8		35,700
400	212.2	374.4	206.3	28.6		28,300

MLC650 VPC-MAX S-2

ASME B30.5



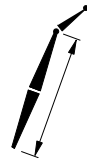
B85



661,300 lb



360°



419.9 ft



35°

	ft	ft	ft	ft	°	38.7 ft lb	60.0 ft lb
56							
57							
58		449.7	46.3	426.4	85.0	320,700	320,700
59		449.6	47.2	426.3	84.9	320,700	320,700
60		449.4	48.2	426.2	84.7	320,700	320,700
61		449.3	49.1	426.1	84.6	320,700	320,700
62		449.2	50.1	426.0	84.5	320,700	320,700
63		449.0	51.0	425.9	84.3	320,700	320,700
64		448.9	52.0	425.8	84.2	320,700	320,700
65		448.8	52.9	425.7	84.1	320,700	320,700
70		448.1	57.6	425.1	83.4	320,700	320,700
75		447.3	62.4	424.5	82.8	317,800	317,800
80		446.5	67.1	423.8	82.1	313,200	313,200
85		445.6	71.9	423.1	81.5	308,500	308,500
90		444.6	76.6	422.3	80.8	303,800	303,800
95		443.6	81.3	421.4	80.1	299,000	299,000
100		442.5	86.1	420.5	79.5	294,200	294,200
105		441.4	90.9	419.5	78.8	278,300	289,400
110		440.2	95.6	418.5	78.2	258,600	284,700
115		439.0	100.3	417.4	77.5	240,600	279,900
120		437.7	105.1	416.3	76.8	224,200	275,300
125		436.3	109.8	415.1	76.1	209,100	270,700
130		434.8	114.6	413.8	75.5	195,300	266,300
135		433.3	119.4	412.5	74.8	182,500	261,800
140		431.8	124.1	411.1	74.1	170,700	257,500
145		430.1	128.9	409.7	73.4	159,700	253,300
150		428.4	133.6	408.2	72.8	149,500	249,100
155		426.7	138.4	406.6	72.1	139,900	245,100
160		424.8	143.2	405.0	71.4	131,000	241,200
165		422.9	147.9	403.3	70.7	122,600	233,900
170		421.0	152.7	401.5	70.0	114,800	223,200
175		418.9	157.5	399.7	69.3	107,400	213,200
180		416.8	162.2	397.8	68.6	100,400	203,800
185		414.6	166.9	395.8	67.9	93,800	194,900
190		412.3	171.7	393.8	67.2	87,500	186,500
195		410.0	176.5	391.7	66.5	81,600	178,600
200		407.6	181.3	389.5	65.7	76,000	171,100
210		402.5	190.8	384.9	64.3	65,500	157,200
220		397.1	200.4	380.0	62.8	56,100	144,700
230		391.4	209.9	374.8	61.3	47,400	133,300
240		385.3	219.5	369.2	59.8	39,500	122,900
250		378.9	229.1	363.3	58.3	32,200	113,400
260		372.0	238.7	357.1	56.7	25,500	104,600
270		364.8	248.3	350.4	55.1	19,300	96,500
280		357.1	257.9	343.3	53.5	13,500	89,000
290		348.9	267.5	335.8	51.8		82,100
300		340.2	277.1	327.8	50.1		75,600
310		331.0	286.7	319.3	48.3		69,500
320		321.2	296.4	310.2	46.5		63,800
330		310.7	306.0	300.6	44.6		58,500
340		299.5	315.7	290.2	42.7		53,400
350		287.5	325.4	279.0	40.7		48,700
360		274.6	335.1	267.0	38.6		44,200
380							
400							

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

	419.9 ft		41°			
	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	243,300	244,000
120	436.2	103.0	416.8	77.1	226,700	244,000
125	434.9	107.9	415.6	76.4	211,500	244,000
130	433.4	112.6	414.4	75.8	197,600	244,000
135	431.9	117.4	413.1	75.1	184,700	244,000
140	430.3	122.2	411.7	74.4	172,800	244,000
145	428.7	127.0	410.3	73.7	161,700	244,000
150	427.0	131.7	408.8	73.0	151,400	241,400
155	425.2	136.5	407.2	72.3	141,700	237,800
160	423.4	141.3	405.6	71.6	132,700	234,100
165	421.5	146.1	403.9	70.9	124,300	230,600
170	419.5	150.9	402.2	70.2	116,300	224,400
175	417.4	155.7	400.4	69.5	108,800	214,400
180	415.3	160.4	398.5	68.8	101,800	204,900
185	413.1	165.2	396.5	68.1	95,100	195,900
190	410.8	170.1	394.5	67.4	88,800	187,500
195	408.5	174.8	392.4	66.7	82,800	179,600
200	406.1	179.6	390.2	66.0	77,200	172,000
210	401.0	189.3	385.7	64.5	66,600	158,100
220	395.6	198.9	380.8	63.0	57,100	145,500
230	389.8	208.5	375.6	61.6	48,400	134,000
240	383.7	218.1	370.0	60.0	40,400	123,600
250	377.2	227.7	364.2	58.5	33,000	114,000
260	370.4	237.4	357.9	56.9	26,200	105,200
270	363.1	247.1	351.2	55.3	19,900	97,000
280	355.3	256.8	344.2	53.7	14,100	89,500
290	347.1	266.4	336.6	52.0		82,500
300	338.4	276.1	328.6	50.3		75,900
310	329.1	285.8	320.1	48.5		69,800
320	319.2	295.6	311.0	46.7		64,100
330	308.7	305.3	301.3	44.8		58,700
340	297.4	315.1	290.9	42.8		53,600
350						
360						
380						
400						

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

ft	ft	ft	ft	°	lb	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	317,400	320,100
100	453.7	88.3	430.2	79.4	293,300	320,000
105	452.6	93.1	429.2	78.8	271,500	319,700
110	451.4	97.8	428.2	78.1	251,900	319,500
115	450.2	102.6	427.1	77.5	234,000	319,300
120	448.9	107.3	425.9	76.8	217,700	319,100
125	447.6	112.1	424.7	76.2	202,700	318,900
130	446.2	116.8	423.5	75.5	189,000	317,100
135	444.7	121.5	422.2	74.9	176,300	311,700
140	443.2	126.3	420.8	74.2	164,500	295,300
145	441.6	131.0	419.4	73.5	153,600	280,200
150	439.9	135.8	417.9	72.9	143,400	266,100
155	438.2	140.5	416.3	72.2	133,900	253,100
160	436.4	145.3	414.7	71.5	125,000	240,900
165	434.6	150.0	413.0	70.9	116,700	229,500
170	432.6	154.8	411.3	70.2	108,900	218,900
175	430.7	159.5	409.5	69.5	101,500	208,900
180	428.6	164.2	407.6	68.8	94,600	199,500
185	426.5	169.0	405.7	68.1	88,000	190,600
190	424.3	173.8	403.7	67.4	81,800	182,300
195	422.0	178.5	401.6	66.7	75,900	174,400
200	419.7	183.3	399.5	66.0	70,300	166,900
210	414.7	192.8	395.0	64.6	59,900	153,100
220	409.5	202.3	390.2	63.2	50,500	140,600
230	404.0	211.8	385.1	61.8	41,900	129,300
240	398.1	221.3	379.7	60.3	34,100	118,900
250	391.8	230.8	373.9	58.8	26,800	109,400
260	385.2	240.4	367.8	57.3	20,200	100,700
270	378.2	249.9	361.4	55.8	14,000	92,600
280	370.8	259.5	354.5	54.2		85,200
290	363.0	269.0	347.2	52.6		78,200
300	354.7	278.6	339.5	50.9		71,800
310	345.8	288.2	331.3	49.2		65,700
320	336.5	297.7	322.6	47.5		60,100
330	326.5	307.3	313.4	45.7		54,800
340	315.9	316.9	303.5	43.9		49,800
350	304.6	326.5	293.0	42.0		45,000
360	292.4	336.1	281.6	40.0		40,600
370	279.4	345.7	269.4	37.9		36,400
380	265.3	355.3	256.3	35.7		32,300
400	233.0	374.7	226.1	30.9		24,900

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

429.8 ft 35°						
ft	ft	ft	ft	ft	ft	ft
ft	ft	ft	ft	ft	lb	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	296,700	316,800
105	451.5	91.0	429.6	79.1	274,700	316,700
110	450.3	95.7	428.6	78.4	254,900	315,500
115	449.1	100.5	427.6	77.8	236,900	311,800
120	447.8	105.2	426.5	77.1	220,400	308,200
125	446.5	110.0	425.3	76.5	205,300	304,500
130	445.1	114.7	424.0	75.8	191,400	300,900
135	443.6	119.5	422.7	75.1	178,600	297,300
140	442.1	124.3	421.4	74.5	166,700	293,700
145	440.5	129.0	420.0	73.8	155,700	281,800
150	438.8	133.8	418.5	73.1	145,500	267,700
155	437.1	138.5	417.0	72.5	135,900	254,600
160	435.3	143.3	415.4	71.8	126,900	242,300
165	433.5	148.1	413.7	71.1	118,500	230,900
170	431.5	152.9	412.0	70.4	110,600	220,200
175	429.5	157.6	410.2	69.8	103,200	210,200
180	427.5	162.4	408.4	69.1	96,200	200,700
185	425.4	167.1	406.5	68.4	89,500	191,800
190	423.1	171.9	404.5	67.7	83,300	183,400
195	420.9	176.7	402.4	67.0	77,300	175,500
200	418.5	181.5	400.3	66.3	71,700	168,000
210	413.6	191.0	395.8	64.9	61,200	154,100
220	408.4	200.6	391.0	63.5	51,700	141,500
230	402.8	210.2	386.0	62.0	43,000	130,100
240	396.9	219.7	380.6	60.5	35,100	119,700
250	390.6	229.3	374.9	59.1	27,800	110,100
260	384.0	238.9	368.8	57.5	21,000	101,400
270	377.0	248.5	362.3	56.0	14,800	93,200
280	369.5	258.1	355.5	54.4		85,700
290	361.7	267.7	348.2	52.8		78,700
300	353.3	277.4	340.5	51.1		72,200
310	344.5	287.0	332.4	49.5		66,200
320	335.0	296.6	323.6	47.7		60,500
330	325.0	306.3	314.4	45.9		55,100
340	314.4	315.9	304.5	44.1		50,100
350	303.0	325.6	293.9	42.2		45,300
360	290.8	335.3	282.5	40.2		40,800
370	277.6	345.1	270.3	38.1		36,600
380	263.4	354.8	257.1	35.9		32,500
400						

MLC650 VPC-MAX S-2

ASME B30.5



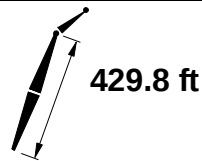
B85



661,300 lb



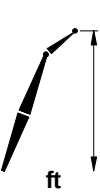
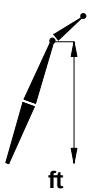
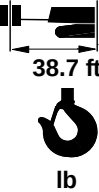
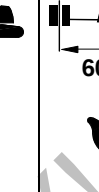
360°



429.8 ft



41°

							
	ft	ft	ft	ft	°	38.7 ft lb	60.0 ft 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	239,600	244,000
120		446.4	103.2	426.9	77.4	223,000	244,000
125		445.1	107.9	425.8	76.7	207,800	244,000
130		443.7	112.7	424.6	76.1	193,800	244,000
135		442.2	117.6	423.3	75.4	180,900	244,000
140		440.7	122.3	422.0	74.7	168,900	244,000
145		439.1	127.1	420.6	74.1	157,800	244,000
150		437.4	131.9	419.1	73.4	147,400	244,000
155		435.7	136.7	417.6	72.7	137,700	244,000
160		433.9	141.4	416.0	72.1	128,700	243,700
165		432.0	146.2	414.4	71.4	120,200	232,200
170		430.1	151.0	412.7	70.7	112,200	221,500
175		428.1	155.9	410.9	70.0	104,700	211,400
180		426.0	160.6	409.1	69.3	97,600	201,900
185		423.9	165.4	407.2	68.6	91,000	192,900
190		421.7	170.2	405.2	67.9	84,600	184,500
195		419.4	175.1	403.1	67.2	78,600	176,500
200		417.0	179.8	401.0	66.5	72,900	168,900
210		412.1	189.4	396.6	65.1	62,400	155,000
220		406.8	199.1	391.8	63.7	52,800	142,300
230		401.2	208.7	386.8	62.2	44,000	130,900
240		395.3	218.3	381.4	60.8	36,000	120,400
250		389.0	228.0	375.7	59.3	28,600	110,800
260		382.3	237.6	369.6	57.7	21,800	101,900
270		375.3	247.3	363.2	56.2	15,500	93,800
280		367.8	257.0	356.3	54.6		86,200
290		359.9	266.7	349.1	53.0		79,200
300		351.5	276.4	341.3	51.3		72,600
310		342.6	286.1	333.1	49.6		66,500
320		333.1	295.8	324.4	47.9		60,800
330		323.1	305.5	315.1	46.1		55,400
340		312.3	315.3	305.2	44.2		50,300
350		300.9	325.0	294.6	42.3		45,500
360							
370							
380							
400							

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

	439.6 ft		28°			
	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	291,600	295,600
105	462.6	93.2	439.2	79.0	269,800	295,400
110	461.5	97.9	438.2	78.4	250,100	295,300
115	460.3	102.7	437.1	77.7	232,200	295,000
120	459.1	107.4	436.0	77.1	215,900	294,800
125	457.8	112.1	434.8	76.5	200,900	294,600
130	456.4	116.9	433.6	75.8	187,200	294,300
135	455.0	121.7	432.3	75.2	174,500	290,500
140	453.5	126.4	431.0	74.5	162,700	286,400
145	451.9	131.1	429.6	73.9	151,800	278,900
150	450.3	135.9	428.1	73.2	141,600	264,800
155	448.6	140.6	426.6	72.6	132,100	251,800
160	446.9	145.4	425.0	71.9	123,200	239,600
165	445.1	150.2	423.4	71.3	114,900	228,200
170	443.2	154.9	421.7	70.6	107,000	217,600
175	441.2	159.6	419.9	70.0	99,700	207,600
180	439.2	164.4	418.1	69.3	92,700	198,200
185	437.2	169.1	416.2	68.6	86,100	189,300
190	435.0	173.9	414.2	67.9	79,900	180,900
195	432.8	178.6	412.2	67.3	74,000	173,100
200	430.5	183.4	410.2	66.6	68,400	165,600
210	425.7	192.9	405.8	65.2	58,100	151,800
220	420.7	202.5	401.1	63.8	48,700	139,300
230	415.3	212.0	396.1	62.4	40,100	127,900
240	409.5	221.5	390.9	61.0	32,200	117,500
250	403.5	231.1	385.3	59.6	25,000	108,100
260	397.1	240.6	379.3	58.1	18,300	99,300
270	390.3	250.1	373.1	56.6		91,300
280	383.1	259.7	366.5	55.1		83,800
290	375.5	269.2	359.4	53.5		76,900
300	367.5	278.8	352.0	51.9		70,400
310	359.0	288.4	344.1	50.3		64,300
320	350.0	298.0	335.7	48.6		58,700
330	340.5	307.6	326.8	46.9		53,400
340	330.3	317.1	317.4	45.2		48,400
350	319.5	326.7	307.3	43.4		43,700
360	308.0	336.4	296.5	41.5		39,200
370	295.6	346.0	285.0	39.5		35,000
380	282.4	355.6	272.6	37.4		31,000
400	252.4	374.9	244.6	33.0		23,600

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

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	273,100	292,800
110	460.5	95.8	438.6	78.7	253,200	292,700
115	459.3	100.5	437.6	78.0	235,200	291,900
120	458.0	105.3	436.5	77.4	218,700	288,200
125	456.7	110.0	435.4	76.8	203,600	284,500
130	455.3	114.9	434.1	76.1	189,700	280,800
135	453.9	119.6	432.9	75.5	176,800	277,100
140	452.4	124.4	431.6	74.8	165,000	273,600
145	450.8	129.2	430.2	74.2	153,900	270,000
150	449.2	133.9	428.7	73.5	143,700	266,500
155	447.5	138.6	427.3	72.9	134,100	253,300
160	445.8	143.4	425.7	72.2	125,100	241,100
165	444.0	148.2	424.1	71.5	116,700	229,600
170	442.1	153.0	422.4	70.9	108,800	218,900
175	440.1	157.7	420.7	70.2	101,300	208,900
180	438.1	162.5	418.8	69.6	94,300	199,400
185	436.1	167.3	417.0	68.9	87,700	190,500
190	433.9	172.1	415.0	68.2	81,400	182,100
195	431.7	176.9	413.0	67.5	75,500	174,200
200	429.4	181.7	410.9	66.8	69,800	166,600
210	424.6	191.2	406.6	65.5	59,400	152,700
220	419.5	200.7	402.0	64.1	49,900	140,200
230	414.1	210.3	397.0	62.7	41,200	128,800
240	408.4	219.9	391.8	61.2	33,200	118,300
250	402.3	229.5	386.2	59.8	25,900	108,800
260	395.8	239.1	380.3	58.3	19,200	100,000
270	389.0	248.7	374.1	56.8		91,900
280	381.9	258.3	367.4	55.3		84,400
290	374.2	267.9	360.4	53.7		77,400
300	366.2	277.6	353.0	52.1		70,900
310	357.7	287.2	345.1	50.5		64,800
320	348.6	296.8	336.7	48.8		59,100
330	339.0	306.5	327.8	47.1		53,800
340	328.8	316.2	318.3	45.4		48,700
350	318.0	325.9	308.2	43.5		44,000
360	306.4	335.5	297.5	41.6		39,500
370	294.0	345.3	285.9	39.7		35,200
380	280.6	355.0	273.4	37.6		31,200
400						

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

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	238,000	244,000
120	456.6	103.3	437.0	77.7	221,400	244,000
125	455.3	108.0	435.9	77.0	206,100	244,000
130	453.9	112.9	434.7	76.4	192,100	244,000
135	452.5	117.6	433.4	75.7	179,100	244,000
140	451.0	122.4	432.1	75.1	167,200	244,000
145	449.4	127.2	430.8	74.4	156,000	244,000
150	447.8	132.0	429.3	73.8	145,700	244,000
155	446.1	136.8	427.9	73.1	136,000	244,000
160	444.3	141.6	426.3	72.5	126,900	242,500
165	442.5	146.3	424.7	71.8	118,400	231,000
170	440.6	151.2	423.0	71.1	110,500	220,200
175	438.7	155.9	421.3	70.5	102,900	210,100
180	436.7	160.7	419.5	69.8	95,900	200,600
185	434.6	165.6	417.6	69.1	89,200	191,600
190	432.4	170.3	415.7	68.5	82,800	183,200
195	430.2	175.2	413.7	67.8	76,800	175,200
200	427.9	180.0	411.7	67.1	71,100	167,600
210	423.1	189.6	407.3	65.7	60,600	153,700
220	418.0	199.2	402.7	64.3	51,000	141,000
230	412.5	208.8	397.8	62.9	42,200	129,500
240	406.8	218.4	392.6	61.5	34,200	119,100
250	400.7	228.1	387.0	60.0	26,800	109,400
260	394.2	237.8	381.1	58.5	20,000	100,600
270	387.4	247.5	374.9	57.0	13,700	92,400
280	380.1	257.1	368.3	55.5		84,900
290	372.5	266.8	361.3	53.9		77,900
300	364.4	276.5	353.8	52.3		71,300
310	355.8	286.2	345.9	50.7		65,200
320	346.7	295.9	337.5	49.0		59,400
330	337.1	305.7	328.6	47.3		54,100
340	326.8	315.4	319.1	45.5		49,000
350	315.9	325.2	309.0	43.7		44,200
360	304.2	335.0	298.1	41.7		39,700
370						
380						
400						

MLC650 VPC-MAX S-2

ASME B30.5



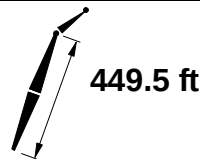
B85



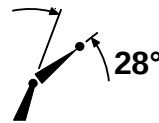
661,300 lb



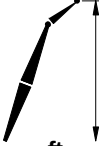
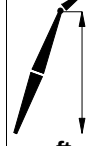
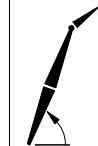
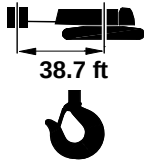
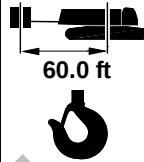
360°



449.5 ft



28°

 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	269,500	273,300
110	471.6	98.1	448.3	78.6	249,800	273,200
115	470.4	102.8	447.2	78.0	231,900	272,900
120	469.2	107.5	446.2	77.4	215,600	272,700
125	467.9	112.3	445.0	76.8	200,600	272,400
130	466.6	117.0	443.8	76.1	186,800	272,200
135	465.2	121.8	442.6	75.5	174,100	270,300
140	463.7	126.5	441.2	74.9	162,300	266,400
145	462.2	131.3	439.9	74.2	151,400	262,500
150	460.6	136.0	438.4	73.6	141,200	258,600
155	459.0	140.8	436.9	73.0	131,700	251,600
160	457.3	145.6	435.4	72.3	122,800	239,400
165	455.5	150.3	433.8	71.7	114,500	228,000
170	453.7	155.0	432.2	71.0	106,700	217,300
175	451.8	159.8	430.4	70.4	99,300	207,300
180	449.9	164.6	428.6	69.7	92,400	197,900
185	447.8	169.3	426.8	69.1	85,800	189,100
190	445.7	174.1	424.9	68.4	79,600	180,700
195	443.6	178.9	422.9	67.8	73,700	172,800
200	441.4	183.6	420.9	67.1	68,100	165,400
210	436.7	193.2	416.6	65.8	57,700	151,500
220	431.7	202.7	412.0	64.4	48,300	139,000
230	426.5	212.2	407.2	63.1	39,700	127,700
240	420.9	221.7	402.1	61.7	31,900	117,300
250	415.0	231.3	396.6	60.3	24,600	107,800
260	408.8	240.8	390.9	58.8	17,900	99,100
270	402.2	250.4	384.8	57.4		91,000
280	395.3	260.0	378.4	55.9		83,600
290	387.9	269.5	371.6	54.4		76,600
300	380.2	279.1	364.4	52.9		70,200
310	372.0	288.7	356.7	51.3		64,100
320	363.3	298.3	348.7	49.7		58,500
330	354.1	307.9	340.1	48.1		53,200
340	344.4	317.5	331.0	46.4		48,200
360	323.1	336.7	311.1	42.8		39,000
380	298.8	356.0	288.4	39.0		30,800
400	270.8	375.3	262.1	34.9		23,400
420	237.5	394.6	231.0	30.2		15,400

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

449.5 ft 35°						
	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	252,900	270,900
115	469.4	100.7	447.7	78.3	234,800	270,700
120	468.2	105.4	446.6	77.7	218,400	269,800
125	466.9	110.2	445.5	77.0	203,300	266,200
130	465.5	115.0	444.3	76.4	189,400	262,500
135	464.1	119.7	443.1	75.8	176,500	258,900
140	462.7	124.5	441.8	75.1	164,600	255,300
145	461.1	129.3	440.4	74.5	153,600	251,900
150	459.6	134.0	439.1	73.9	143,300	248,400
155	457.9	138.8	437.6	73.2	133,700	244,900
160	456.2	143.6	436.1	72.6	124,800	240,900
165	454.4	148.3	434.5	72.0	116,400	229,400
170	452.6	153.1	432.8	71.3	108,500	218,700
175	450.7	157.9	431.1	70.7	101,000	208,700
180	448.7	162.7	429.4	70.0	94,000	199,200
185	446.7	167.5	427.5	69.3	87,400	190,300
190	444.6	172.2	425.6	68.7	81,100	181,900
195	442.5	177.1	423.7	68.0	75,100	174,000
200	440.2	181.8	421.7	67.4	69,500	166,400
210	435.5	191.4	417.4	66.0	59,000	152,500
220	430.6	200.9	412.9	64.7	49,500	140,000
230	425.3	210.6	408.1	63.3	40,900	128,500
240	419.7	220.2	403.0	61.9	32,900	118,100
250	413.8	229.8	397.5	60.5	25,600	108,600
260	407.6	239.4	391.8	59.1	18,900	99,800
270	401.0	248.9	385.8	57.6		91,700
280	394.0	258.6	379.3	56.1		84,200
290	386.7	268.2	372.5	54.6		77,200
300	378.9	277.8	365.4	53.1		70,700
310	370.6	287.5	357.7	51.5		64,600
320	361.9	297.1	349.7	49.9		58,900
330	352.7	306.8	341.1	48.3		53,600
340	342.9	316.4	332.0	46.6		48,600
360	321.5	335.8	312.1	43.0		39,300
380	297.1	355.2	289.3	39.2		31,100
400	268.9	374.7	262.9	35.0		23,600
420						

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

	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	237,700	244,000
120	466.7	103.4	447.1	77.9	221,100	244,000
125	465.5	108.1	446.0	77.3	205,800	244,000
130	464.1	112.9	444.8	76.7	191,800	244,000
135	462.7	117.8	443.6	76.0	178,800	244,000
140	461.2	122.5	442.3	75.4	166,800	244,000
145	459.7	127.3	441.0	74.8	155,700	243,100
150	458.1	132.2	439.6	74.1	145,300	240,000
155	456.5	136.9	438.2	73.5	135,700	236,900
160	454.8	141.7	436.7	72.8	126,600	233,800
165	453.0	146.5	435.1	72.2	118,100	230,800
170	451.1	151.3	433.5	71.6	110,100	220,000
175	449.2	156.1	431.8	70.9	102,600	209,900
180	447.3	160.9	430.0	70.2	95,500	200,400
185	445.2	165.7	428.2	69.6	88,800	191,400
190	443.1	170.6	426.3	68.9	82,500	183,000
195	441.0	175.3	424.4	68.3	76,500	175,000
200	438.7	180.2	422.4	67.6	70,800	167,400
210	434.0	189.8	418.2	66.3	60,200	153,500
220	429.0	199.4	413.6	64.9	50,600	140,800
230	423.8	209.0	408.8	63.5	41,900	129,300
240	418.2	218.7	403.8	62.1	33,900	118,900
250	412.2	228.3	398.4	60.7	26,500	109,300
260	406.0	238.0	392.7	59.3	19,700	100,400
270	399.3	247.6	386.6	57.8	13,400	92,300
280	392.3	257.3	380.2	56.3		84,700
290	384.9	267.0	373.4	54.8		77,700
300	377.1	276.7	366.2	53.3		71,100
310	368.8	286.4	358.5	51.7		65,000
320	360.1	296.1	350.5	50.1		59,300
330	350.8	305.9	341.9	48.4		53,900
340	341.0	315.6	332.8	46.7		48,800
360	319.4	335.2	312.8	43.1		39,500
380						
400						
420						

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

	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	248,000	252,100
115	480.5	102.9	457.3	78.3	230,100	251,900
120	479.4	107.6	456.2	77.6	213,700	251,700
125	478.1	112.4	455.1	77.0	198,800	251,400
130	476.8	117.1	453.9	76.4	185,000	251,100
135	475.4	121.9	452.7	75.8	172,300	250,900
140	474.0	126.6	451.4	75.2	160,500	247,300
145	472.5	131.4	450.0	74.6	149,500	243,600
150	471.0	136.1	448.7	74.0	139,300	239,900
155	469.4	140.9	447.2	73.3	129,800	236,200
160	467.7	145.7	445.7	72.7	120,900	232,600
165	466.0	150.5	444.1	72.1	112,600	226,600
170	464.2	155.2	442.5	71.4	104,800	216,000
175	462.3	160.0	440.8	70.8	97,400	206,000
180	460.4	164.8	439.0	70.2	90,400	196,600
185	458.4	169.5	437.3	69.5	83,900	187,700
190	456.4	174.2	435.4	68.9	77,600	179,300
195	454.3	179.0	433.5	68.3	71,700	171,400
200	452.1	183.8	431.5	67.6	66,100	164,000
210	447.6	193.3	427.3	66.3	55,800	150,100
220	442.8	202.9	422.8	65.0	46,400	137,600
230	437.6	212.4	418.1	63.7	37,800	126,300
240	432.2	222.0	413.1	62.3	29,900	115,900
250	426.5	231.5	407.9	60.9	22,700	106,400
260	420.4	241.1	402.3	59.6	16,000	97,700
270	414.1	250.6	396.3	58.1		89,600
280	407.3	260.2	390.1	56.7		82,100
290	400.2	269.7	383.5	55.3		75,200
300	392.7	279.3	376.5	53.8		68,700
310	384.8	288.9	369.1	52.3		62,700
320	376.4	298.5	361.3	50.7		57,100
330	367.6	308.1	353.1	49.1		51,700
340	358.2	317.7	344.3	47.5		46,800
360	337.8	336.9	325.2	44.1		37,600
380	314.7	356.2	303.7	40.5		29,400
400	288.2	375.5	278.8	36.6		21,800
420	257.4	394.8	249.9	32.2		13,500

MLC650 VPC-MAX S-2

ASME B30.5



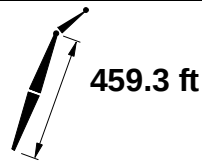
B85



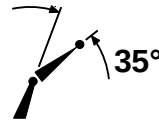
661,300 lb



360°



459.3 ft



35°

	ft	ft	ft	ft	°	38.7 ft lb	60.0 ft 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	233,100	250,000
120		478.3	105.5	456.7	77.9	216,600	249,800
125		477.0	110.3	455.6	77.3	201,500	248,500
130		475.7	115.0	454.4	76.7	187,500	245,000
135		474.3	119.8	453.2	76.1	174,700	241,400
140		472.9	124.6	451.9	75.5	162,800	237,900
145		471.4	129.4	450.6	74.8	151,800	234,500
150		469.9	134.1	449.2	74.2	141,500	231,100
155		468.3	138.9	447.8	73.6	131,900	227,800
160		466.6	143.7	446.3	73.0	122,900	224,500
165		464.9	148.5	444.8	72.3	114,500	221,300
170		463.1	153.2	443.2	71.7	106,600	217,400
175		461.2	158.1	441.5	71.1	99,100	207,300
180		459.3	162.8	439.8	70.4	92,100	197,900
185		457.3	167.6	438.0	69.8	85,500	188,900
190		455.3	172.4	436.1	69.2	79,200	180,500
195		453.2	177.2	434.2	68.5	73,200	172,600
200		451.0	182.0	432.2	67.9	67,600	165,100
210		446.4	191.5	428.1	66.6	57,100	151,100
220		441.6	201.1	423.7	65.2	47,600	138,600
230		436.5	210.7	419.0	63.9	38,900	127,200
240		431.0	220.3	414.0	62.5	31,000	116,700
250		425.3	229.9	408.8	61.2	23,700	107,200
260		419.2	239.5	403.2	59.8	16,900	98,400
270		412.8	249.2	397.3	58.4		90,300
280		406.1	258.7	391.0	56.9		82,800
290		398.9	268.4	384.5	55.5		75,800
300		391.4	278.0	377.5	54.0		69,300
310		383.4	287.6	370.1	52.5		63,200
320		375.0	297.3	362.3	50.9		57,500
330		366.2	306.9	354.1	49.3		52,200
340		356.8	316.6	345.4	47.7		47,100
360		336.2	336.0	326.2	44.3		37,900
380		313.0	355.4	304.6	40.6		29,700
400		286.4	374.9	279.7	36.7		22,000
420							

MLC650 VPC-MAX S-2

ASME B30.5



B85



661,300 lb



360°

459.3 ft 41°						
	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	236,000	244,000
120	476.9	103.4	457.1	78.2	219,300	243,100
125	475.6	108.3	456.0	77.6	204,100	239,800
130	474.3	113.0	454.9	77.0	190,000	236,500
135	472.9	117.8	453.7	76.3	177,100	233,300
140	471.5	122.6	452.5	75.7	165,100	230,100
145	470.0	127.4	451.2	75.1	153,900	226,900
150	468.4	132.2	449.8	74.5	143,500	223,800
155	466.8	137.0	448.4	73.8	133,800	220,700
160	465.2	141.8	446.9	73.2	124,800	217,800
165	463.4	146.6	445.4	72.6	116,300	214,800
170	461.6	151.4	443.8	71.9	108,300	211,900
175	459.8	156.2	442.1	71.3	100,800	208,600
180	457.8	161.0	440.4	70.7	93,700	199,100
185	455.9	165.8	438.7	70.0	87,000	190,100
190	453.8	170.7	436.8	69.4	80,600	181,700
195	451.7	175.4	434.9	68.7	74,600	173,700
200	449.5	180.3	432.9	68.1	68,900	166,100
210	444.9	189.9	428.8	66.8	58,400	152,100
220	440.1	199.5	424.4	65.5	48,800	139,500
230	434.9	209.1	419.8	64.1	40,000	128,000
240	429.5	218.8	414.8	62.8	32,000	117,500
250	423.7	228.5	409.6	61.4	24,600	107,900
260	417.6	238.1	404.0	60.0	17,800	99,000
270	411.2	247.8	398.1	58.6		90,900
280	404.4	257.5	391.9	57.1		83,300
290	397.2	267.2	385.3	55.7		76,300
300	389.7	276.8	378.3	54.2		69,700
310	381.7	286.6	370.9	52.6		63,600
320	373.2	296.3	363.1	51.1		57,900
330	364.3	306.0	354.9	49.5		52,500
340	354.8	315.8	346.1	47.8		47,400
360	334.2	335.3	327.0	44.4		38,200
380						
400						
420						