

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

440,900 lb VPC (Variable Position Counterweight)

360 Degree Rating

MLC650
VPC-MAX
SERIES 1



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.



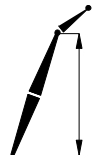
BOOM POINT OPERATING RADIUS: Boom point operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block on boom point.



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 440,900 lb VPC.

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

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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

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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.

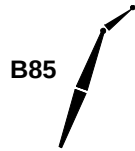
Table 1

Over End or Side of Crawlers		
Boom Length (ft)	38.7 ft Counterweight Position	60.0 ft Counterweight Position
	Block Weight (lb)	
351.1	Raising Not Permitted	9,300
360.9		9,300
370.7		#
380.6		
390.4		

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	Raising Not Permitted	9,300
360.9		9,300
370.7		#
380.6		#
390.4		#
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. <i>Crane tipping or structural damage can occur.</i>		

Explanation of Symbols



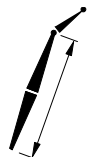
Boom No. B85:685-680-681-682



VPC (Variable Position Counterweight)



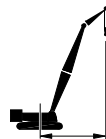
360 Degree Rating



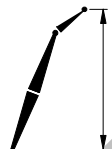
Boom Length



Extended Upper Boom Point
Offset Angle



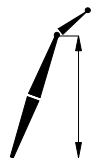
Extended Upper Boom Point Operating Radius
(see page 1)



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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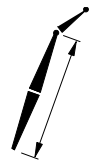
B85



440,900 lb



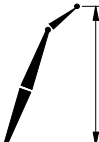
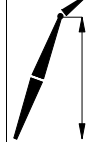
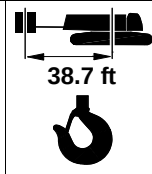
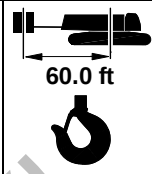
360°



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	332,300	341,600
80	377.4	68.7	353.7	80.3	302,200	341,600
85	376.4	73.4	352.8	79.5	275,900	341,600
90	375.3	78.0	351.8	78.7	252,700	341,600
95	374.0	82.7	350.8	77.9	232,000	341,600
100	372.8	87.4	349.7	77.1	213,400	341,600
105	371.4	92.1	348.5	76.4	196,800	325,700
110	370.0	96.8	347.3	75.6	181,700	304,300
115	368.5	101.5	346.0	74.8	168,000	285,000
120	366.9	106.1	344.6	74.0	155,500	267,500
125	365.3	110.9	343.1	73.2	144,000	251,600
130	363.6	115.5	341.6	72.3	133,400	237,000
135	361.7	120.2	340.0	71.5	123,700	223,700
140	359.9	124.9	338.3	70.7	114,700	211,400
145	357.9	129.6	336.6	69.9	106,300	200,000
150	355.8	134.3	334.7	69.1	98,500	189,400
155	353.7	139.0	332.8	68.2	91,200	179,600
160	351.5	143.7	330.8	67.4	84,400	170,400
165	349.1	148.4	328.7	66.6	77,900	161,900
170	346.7	153.1	326.6	65.7	71,900	153,900
175	344.2	157.8	324.4	64.9	66,300	146,400
180	341.7	162.5	322.0	64.0	60,900	139,300
185	339.0	167.2	319.6	63.1	55,900	132,600
190	336.2	171.9	317.1	62.3	51,100	126,300
195	333.3	176.7	314.5	61.4	46,500	120,400
200	330.3	181.4	311.8	60.5	42,200	114,800
210	324.0	190.7	306.1	58.7	34,200	104,400
220	317.2	200.2	299.9	56.8	26,900	94,900
230	310.0	209.6	293.3	54.9	20,300	86,400
240	302.2	219.1	286.2	53.0	14,200	78,500
250	293.9	228.6	278.6	51.0		71,400
260	284.9	238.0	270.5	49.0		64,700
270	275.3	247.5	261.7	46.8		58,600
280	264.9	257.0	252.1	44.6		53,000
290	253.6	266.5	241.8	42.3		47,700
300	241.4	276.0	230.6	39.9		42,700
310	228.0	285.6	218.3	37.4		38,100
320	213.3	295.1	204.8	34.6		33,800
330	196.9	304.7	189.6	31.7		29,600
340	178.3	314.4	172.5	28.5		25,800

MLC650 VPC-MAX S-1

ASME B30.5



B85



440,900 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	279,300	302,600
90	374.2	75.9	352.3	79.1	255,800	302,600
95	373.0	80.7	351.3	78.3	234,900	302,600
100	371.7	85.4	350.2	77.5	216,200	302,600
105	370.4	90.0	349.0	76.7	199,400	302,600
110	369.0	94.8	347.8	75.9	184,200	302,600
115	367.5	99.5	346.5	75.1	170,300	286,900
120	365.9	104.1	345.2	74.3	157,700	269,300
125	364.2	108.9	343.7	73.5	146,100	253,300
130	362.5	113.6	342.2	72.7	135,400	238,600
135	360.7	118.3	340.7	71.9	125,600	225,200
140	358.8	123.0	339.0	71.0	116,500	212,800
145	356.8	127.7	337.3	70.2	108,000	201,300
150	354.7	132.5	335.5	69.4	100,100	190,700
155	352.6	137.2	333.6	68.6	92,700	180,800
160	350.4	141.9	331.6	67.7	85,800	171,600
165	348.0	146.6	329.5	66.9	79,400	163,000
170	345.6	151.4	327.4	66.0	73,300	154,900
175	343.1	156.1	325.2	65.2	67,600	147,400
180	340.5	160.8	322.9	64.3	62,200	140,300
185	337.8	165.5	320.5	63.4	57,000	133,600
190	335.0	170.3	318.0	62.6	52,200	127,200
195	332.1	175.1	315.4	61.7	47,600	121,200
200	329.1	179.8	312.7	60.8	43,300	115,600
210	322.8	189.3	307.0	59.0	35,200	105,100
220	316.0	198.8	300.9	57.1	27,800	95,600
230	308.7	208.3	294.3	55.2	21,100	87,000
240	300.9	217.8	287.2	53.3	14,900	79,100
250	292.5	227.4	279.6	51.3		71,900
260	283.5	236.9	271.5	49.2		65,200
270	273.8	246.5	262.6	47.1		59,000
280	263.4	256.0	253.1	44.9		53,300
290	252.1	265.7	242.8	42.5		48,000
300	239.8	275.3	231.5	40.1		43,000
310	226.3	285.0	219.2	37.5		38,300
320	211.4	294.6	205.5	34.8		33,900
330						
340						

MLC650 VPC-MAX S-1

ASME B30.5



B85



440,900 lb



360°

	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	237,900	244,000
100	370.3	83.3	350.7	77.8	219,000	244,000
105	369.0	88.1	349.5	77.0	202,000	244,000
110	367.5	92.8	348.3	76.2	186,600	244,000
115	366.0	97.5	347.1	75.4	172,600	244,000
120	364.5	102.3	345.7	74.6	159,800	244,000
125	362.8	107.0	344.3	73.8	148,100	244,000
130	361.1	111.7	342.8	73.0	137,400	240,100
135	359.2	116.5	341.3	72.2	127,400	226,600
140	357.3	121.2	339.7	71.4	118,200	214,100
145	355.3	126.0	337.9	70.5	109,600	202,600
150	353.3	130.7	336.2	69.7	101,700	191,900
155	351.1	135.5	334.3	68.9	94,200	181,900
160	348.9	140.2	332.3	68.0	87,200	172,700
165	346.5	145.0	330.3	67.2	80,700	164,000
170	344.1	149.8	328.1	66.3	74,600	155,900
175	341.6	154.5	325.9	65.5	68,800	148,300
180	339.0	159.3	323.6	64.6	63,300	141,100
185	336.3	164.0	321.2	63.7	58,100	134,400
190	333.5	168.8	318.8	62.8	53,200	128,000
195	330.5	173.6	316.2	61.9	48,600	122,000
200	327.5	178.3	313.5	61.0	44,200	116,300
210	321.2	187.9	307.8	59.2	36,000	105,700
220	314.3	197.5	301.7	57.4	28,600	96,200
230	307.0	207.1	295.1	55.4	21,800	87,500
240	299.2	216.7	288.1	53.5	15,500	79,600
250	290.7	226.4	280.5	51.5		72,300
260	281.7	236.0	272.3	49.4		65,600
270	271.9	245.7	263.4	47.3		59,300
280	261.4	255.3	253.9	45.0		53,600
290	250.0	265.1	243.4	42.7		48,200
300						
310						
320						
330						
340						

MLC650 VPC-MAX S-1

ASME B30.5



B85



440,900 lb



360°

360.9 ft					28°	
ft	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	331,100	341,600
80	387.5	68.8	363.7	80.5	301,000	341,600
85	386.4	73.5	362.9	79.8	274,600	341,600
90	385.3	78.2	361.9	79.0	251,400	341,600
95	384.2	82.9	360.9	78.3	230,700	341,600
100	382.9	87.6	359.8	77.5	212,200	341,600
105	381.6	92.2	358.7	76.7	195,600	324,900
110	380.2	96.9	357.5	75.9	180,500	303,500
115	378.8	101.6	356.2	75.2	166,700	284,200
120	377.3	106.3	354.9	74.4	154,200	266,700
125	375.7	111.0	353.4	73.6	142,700	250,700
130	374.0	115.8	351.9	72.8	132,100	236,100
135	372.2	120.5	350.4	72.0	122,300	222,700
140	370.4	125.1	348.8	71.2	113,300	210,400
145	368.5	129.8	347.1	70.4	104,900	199,000
150	366.5	134.5	345.3	69.6	97,000	188,400
155	364.4	139.3	343.4	68.8	89,700	178,600
160	362.2	144.0	341.5	68.0	82,900	169,400
165	360.0	148.6	339.5	67.2	76,400	160,900
170	357.7	153.4	337.4	66.4	70,400	152,900
175	355.2	158.1	335.2	65.6	64,700	145,300
180	352.7	162.8	332.9	64.7	59,400	138,300
185	350.1	167.5	330.6	63.9	54,300	131,600
190	347.4	172.2	328.2	63.0	49,500	125,300
195	344.7	176.9	325.6	62.2	45,000	119,300
200	341.8	181.6	323.0	61.3	40,600	113,700
210	335.7	191.1	317.5	59.6	32,600	103,300
220	329.2	200.5	311.6	57.8	25,300	93,800
230	322.2	210.0	305.2	56.0	18,700	85,300
240	314.7	219.4	298.4	54.1		77,400
250	306.7	228.9	291.1	52.2		70,200
260	298.2	238.4	283.3	50.3		63,600
270	289.0	247.9	274.9	48.2		57,500
280	279.1	257.4	265.9	46.1		51,800
290	268.5	266.9	256.1	44.0		46,600
300	257.0	276.4	245.5	41.7		41,600
310	244.6	286.0	234.0	39.3		37,000
320	230.9	295.5	221.5	36.8		32,700
330	215.9	305.1	207.6	34.1		28,600
340	199.2	314.7	192.2	31.2		24,700
350	180.3	324.4	174.7	28.0		21,000

MLC650 VPC-MAX S-1

ASME B30.5



B85



440,900 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	304,700	305,500
85	385.4	71.4	363.3	80.1	278,100	305,500
90	384.3	76.0	362.4	79.4	254,600	305,500
95	383.1	80.8	361.4	78.6	233,700	305,500
100	381.9	85.5	360.3	77.8	215,000	305,500
105	380.6	90.2	359.2	77.1	198,200	305,500
110	379.2	94.9	358.0	76.3	183,000	305,500
115	377.7	99.6	356.8	75.5	169,100	286,100
120	376.2	104.4	355.4	74.7	156,500	268,500
125	374.6	109.1	354.1	73.9	144,800	252,400
130	372.9	113.8	352.6	73.1	134,100	237,700
135	371.1	118.5	351.0	72.4	124,300	224,300
140	369.3	123.2	349.4	71.6	115,100	211,800
145	367.4	128.0	347.7	70.8	106,600	200,400
150	365.4	132.7	346.0	70.0	98,700	189,700
155	363.3	137.4	344.2	69.1	91,300	179,800
160	361.1	142.1	342.3	68.3	84,400	170,600
165	358.9	146.8	340.3	67.5	77,900	162,000
170	356.5	151.6	338.2	66.7	71,800	153,900
175	354.1	156.4	336.0	65.9	66,100	146,400
180	351.6	161.1	333.8	65.0	60,600	139,200
185	349.0	165.8	331.4	64.2	55,500	132,500
190	346.3	170.5	329.0	63.3	50,700	126,200
195	343.5	175.3	326.5	62.5	46,100	120,200
200	340.6	180.0	323.9	61.6	41,700	114,500
210	334.5	189.5	318.4	59.9	33,600	104,000
220	327.9	199.1	312.5	58.1	26,200	94,500
230	320.9	208.6	306.2	56.3	19,500	85,900
240	313.4	218.1	299.4	54.4	13,300	78,000
250	305.4	227.6	292.1	52.5		70,800
260	296.8	237.2	284.3	50.5		64,100
270	287.6	246.8	275.9	48.5		57,900
280	277.7	256.4	266.8	46.4		52,200
290	267.0	266.0	257.1	44.2		46,900
300	255.5	275.6	246.5	41.9		41,900
310	242.9	285.2	235.0	39.5		37,200
320	229.2	294.9	222.3	37.0		32,900
330						
340						
350						

MLC650 VPC-MAX S-1

ASME B30.5



B85



440,900 lb



360°

360.9 ft 41°						
	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	236,700	244,000
100	380.5	83.5	360.8	78.2	217,800	244,000
105	379.2	88.2	359.7	77.4	200,800	244,000
110	377.8	92.9	358.5	76.6	185,400	244,000
115	376.3	97.7	357.3	75.8	171,500	244,000
120	374.8	102.4	356.0	75.0	158,700	244,000
125	373.2	107.1	354.6	74.3	146,900	244,000
130	371.5	111.9	353.2	73.5	136,100	239,300
135	369.7	116.6	351.7	72.7	126,100	225,700
140	367.9	121.4	350.1	71.9	116,900	213,200
145	365.9	126.1	348.4	71.1	108,300	201,700
150	363.9	130.9	346.7	70.3	100,300	191,000
155	361.8	135.7	344.8	69.4	92,800	181,000
160	359.7	140.4	342.9	68.6	85,800	171,700
165	357.4	145.2	341.0	67.8	79,300	163,100
170	355.0	150.0	338.9	67.0	73,100	154,900
175	352.6	154.7	336.8	66.1	67,300	147,300
180	350.1	159.5	334.5	65.3	61,800	140,200
185	347.5	164.3	332.2	64.5	56,600	133,400
190	344.7	169.0	329.8	63.6	51,700	127,000
195	341.9	173.8	327.3	62.7	47,100	121,000
200	339.0	178.6	324.7	61.9	42,700	115,300
210	332.9	188.2	319.2	60.1	34,500	104,700
220	326.3	197.7	313.4	58.3	27,000	95,100
230	319.3	207.4	307.0	56.5	20,200	86,400
240	311.7	217.0	300.2	54.6	14,000	78,500
250	303.7	226.6	292.9	52.7		71,200
260	295.0	236.2	285.1	50.7		64,500
270	285.7	245.9	276.7	48.7		58,300
280	275.8	255.6	267.6	46.5		52,500
290	265.0	265.3	257.8	44.3		47,100
300	253.3	275.0	247.1	42.0		42,100
310						
320						
330						
340						
350						

MLC650 VPC-MAX S-1

ASME B30.5



B85



440,900 lb



360°

ft	ft	ft	ft	°	lb	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	328,200	341,600
80	397.5	68.9	373.7	80.8	298,000	341,600
85	396.5	73.6	372.8	80.0	271,600	341,600
90	395.4	78.3	371.9	79.3	248,300	341,600
95	394.3	83.0	370.9	78.5	227,600	341,600
100	393.1	87.7	369.9	77.8	209,100	341,600
105	391.8	92.4	368.8	77.1	192,400	322,600
110	390.5	97.1	367.6	76.3	177,300	301,200
115	389.0	101.8	366.3	75.5	163,600	281,900
120	387.6	106.5	365.0	74.8	151,000	264,300
125	386.0	111.2	363.6	74.0	139,500	248,400
130	384.4	115.9	362.2	73.3	128,900	233,700
135	382.7	120.6	360.7	72.5	119,100	220,300
140	380.9	125.3	359.1	71.7	110,000	208,000
145	379.0	130.0	357.4	71.0	101,600	196,600
150	377.1	134.7	355.7	70.2	93,700	186,000
155	375.1	139.5	353.9	69.4	86,400	176,100
160	373.0	144.1	352.0	68.6	79,600	166,900
165	370.8	148.9	350.0	67.8	73,100	158,400
170	368.5	153.6	348.0	67.0	67,100	150,300
175	366.2	158.3	345.9	66.2	61,400	142,800
180	363.7	163.0	343.7	65.4	56,000	135,700
185	361.2	167.7	341.4	64.6	50,900	129,000
190	358.6	172.4	339.1	63.8	46,100	122,700
195	355.9	177.2	336.6	62.9	41,600	116,800
200	353.1	181.9	334.1	62.1	37,300	111,100
210	347.2	191.3	328.7	60.4	29,200	100,700
220	341.0	200.8	323.0	58.7	21,900	91,200
230	334.2	210.2	316.9	57.0	15,300	82,700
240	327.1	219.7	310.3	55.2		74,800
250	319.4	229.2	303.3	53.3		67,600
260	311.2	238.7	295.8	51.5		61,000
270	302.4	248.2	287.8	49.5		54,900
280	293.0	257.7	279.2	47.5		49,200
290	283.0	267.2	269.9	45.5		43,900
300	272.1	276.7	259.9	43.3		39,000
310	260.4	286.3	249.1	41.1		34,400
320	247.7	295.8	237.3	38.7		30,000
330	233.8	305.4	224.5	36.3		25,900
340	218.5	315.0	210.4	33.6		22,100
350	201.5	324.6	194.7	30.7		17,800

MLC650 VPC-MAX S-1

ASME B30.5



B85



440,900 lb



360°

370.7 ft					35°	
ft	ft	ft	ft	°	lb	lb
52						
53						
54	400.6	42.3	377.4	85.0	311,900	311,900
55	400.5	43.2	377.3	84.8	311,900	311,900
56	400.4	44.1	377.2	84.7	311,900	311,900
57	400.2	45.1	377.1	84.5	311,900	311,900
58	400.1	46.0	377.0	84.4	311,900	311,900
59	400.0	46.9	376.9	84.2	311,900	311,900
60	399.8	47.9	376.8	84.1	311,900	311,900
65	399.1	52.6	376.2	83.3	311,900	311,900
70	398.3	57.3	375.5	82.6	311,900	311,900
75	397.4	62.0	374.8	81.9	311,900	311,900
80	396.5	66.7	374.1	81.1	301,900	311,900
85	395.5	71.5	373.2	80.4	275,200	311,900
90	394.4	76.1	372.3	79.6	251,600	311,900
95	393.2	80.9	371.4	78.9	230,700	311,900
100	392.0	85.6	370.3	78.1	212,000	311,900
105	390.8	90.3	369.3	77.4	195,200	311,900
110	389.4	95.0	368.1	76.6	179,900	303,300
115	388.0	99.7	366.9	75.9	166,000	283,800
120	386.5	104.5	365.6	75.1	153,400	266,200
125	384.9	109.2	364.2	74.4	141,700	250,100
130	383.3	113.9	362.8	73.6	131,000	235,400
135	381.6	118.6	361.3	72.8	121,100	221,900
140	379.8	123.4	359.8	72.0	111,900	209,500
145	377.9	128.1	358.1	71.3	103,400	198,000
150	376.0	132.8	356.4	70.5	95,500	187,300
155	374.0	137.6	354.6	69.7	88,100	177,400
160	371.9	142.3	352.7	68.9	81,100	168,200
165	369.7	147.0	350.8	68.1	74,600	159,600
170	367.4	151.8	348.8	67.3	68,500	151,500
175	365.1	156.5	346.7	66.5	62,800	143,900
180	362.6	161.2	344.5	65.7	57,400	136,800
185	360.1	166.0	342.3	64.9	52,200	130,000
190	357.5	170.7	339.9	64.1	47,400	123,700
195	354.8	175.5	337.5	63.2	42,800	117,700
200	352.0	180.3	335.0	62.4	38,400	112,000
210	346.1	189.8	329.6	60.7	30,300	101,500
220	339.7	199.3	324.0	59.0	22,900	92,000
230	333.0	208.8	317.8	57.2	16,100	83,300
240	325.8	218.3	311.3	55.4		75,400
250	318.1	227.9	304.3	53.6		68,200
260	309.9	237.4	296.8	51.7		61,500
270	301.1	247.0	288.8	49.8		55,300
280	291.6	256.6	280.1	47.8		49,600
290	281.5	266.2	270.9	45.7		44,300
300	270.6	275.9	260.8	43.5		39,300
310	258.8	285.5	250.0	41.3		34,600
320	246.0	295.1	238.3	38.9		30,300
330	232.0	304.8	225.3	36.4		26,100
340						
350						

MLC650 VPC-MAX S-1

ASME B30.5



B85



440,900 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	233,800	244,000
100	390.6	83.5	370.8	78.5	214,900	244,000
105	389.4	88.3	369.7	77.7	197,800	244,000
110	388.0	93.0	368.6	77.0	182,400	244,000
115	386.6	97.7	367.4	76.2	168,400	244,000
120	385.1	102.5	366.1	75.4	155,600	244,000
125	383.5	107.3	364.8	74.7	143,900	244,000
130	381.9	112.0	363.4	73.9	133,000	237,000
135	380.1	116.7	361.9	73.1	123,000	223,400
140	378.3	121.5	360.4	72.3	113,800	210,900
145	376.5	126.3	358.7	71.6	105,200	199,300
150	374.5	131.1	357.0	70.8	97,100	188,600
155	372.5	135.8	355.3	70.0	89,700	178,700
160	370.4	140.6	353.4	69.2	82,600	169,400
165	368.2	145.3	351.5	68.4	76,100	160,700
170	365.9	150.1	349.5	67.6	69,900	152,500
175	363.6	154.9	347.4	66.8	64,100	144,900
180	361.1	159.7	345.3	66.0	58,600	137,700
185	358.6	164.4	343.0	65.2	53,400	130,900
190	355.9	169.2	340.7	64.3	48,500	124,600
195	353.2	174.0	338.3	63.5	43,800	118,500
200	350.4	178.7	335.8	62.7	39,400	112,800
210	344.5	188.3	330.5	61.0	31,200	102,200
220	338.1	197.9	324.8	59.2	23,700	92,600
230	331.3	207.5	318.7	57.5	16,900	83,900
240	324.1	217.1	312.2	55.7		76,000
250	316.4	226.8	305.2	53.8		68,700
260	308.1	236.4	297.6	51.9		61,900
270	299.2	246.1	289.6	50.0		55,700
280	289.7	255.8	280.9	47.9		49,900
290	279.5	265.4	271.7	45.9		44,600
300	268.5	275.2	261.6	43.7		39,500
310	256.6	284.9	250.7	41.4		34,800
320						
330						
340						
350						

MLC650 VPC-MAX S-1

ASME B30.5



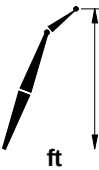
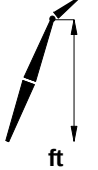
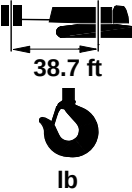
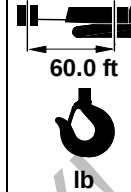
B85



440,900 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	327,000	341,600
80	407.5	69.0	383.7	81.0	296,700	341,600
85	406.5	73.7	382.9	80.3	270,300	341,600
90	405.5	78.4	382.0	79.6	247,000	341,600
95	404.4	83.1	381.0	78.8	226,200	341,600
100	403.2	87.8	380.0	78.1	207,600	341,600
105	402.0	92.5	378.9	77.4	190,800	321,600
110	400.7	97.2	377.8	76.6	175,700	300,100
115	399.3	102.0	376.5	75.9	161,900	280,700
120	397.8	106.6	375.3	75.2	149,300	263,200
125	396.3	111.3	373.9	74.4	137,800	247,200
130	394.7	116.1	372.5	73.7	127,100	232,600
135	393.1	120.8	371.0	72.9	117,300	219,100
140	391.3	125.5	369.5	72.2	108,300	206,800
145	389.5	130.2	367.9	71.4	99,800	195,300
150	387.6	135.0	366.2	70.7	92,000	184,700
155	385.7	139.7	364.4	69.9	84,600	174,900
160	383.6	144.4	362.6	69.2	77,800	165,700
165	381.5	149.1	360.7	68.4	71,300	157,100
170	379.3	153.8	358.7	67.6	65,300	149,100
175	377.1	158.5	356.7	66.8	59,600	141,500
180	374.7	163.3	354.5	66.0	54,200	134,400
185	372.3	168.0	352.3	65.3	49,100	127,800
190	369.7	172.7	350.0	64.5	44,300	121,500
195	367.1	177.4	347.6	63.7	39,800	115,500
200	364.4	182.1	345.2	62.9	35,400	109,800
210	358.7	191.6	340.0	61.2	27,400	99,400
220	352.6	201.1	334.5	59.6	20,100	89,900
230	346.1	210.5	328.6	57.9	13,500	81,400
240	339.2	220.1	322.2	56.2		73,500
250	331.8	229.5	315.4	54.4		66,300
260	324.0	239.0	308.2	52.6		59,700
270	315.6	248.5	300.5	50.7		53,600
280	306.6	258.1	292.2	48.8		47,900
290	297.0	267.6	283.4	46.9		42,600
300	286.7	277.1	274.0	44.8		37,700
310	275.6	286.6	263.7	42.7		33,100
320	263.7	296.2	252.7	40.5		28,700
330	250.7	305.8	240.7	38.2		24,700
340	236.6	315.4	227.6	35.7		20,500
350	221.0	325.0	213.2	33.1		16,000

MLC650 VPC-MAX S-1

ASME B30.5



B85



440,900 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	300,700	314,800
85	405.5	71.6	383.3	80.6	273,900	314,800
90	404.5	76.2	382.4	79.9	250,400	314,800
95	403.3	81.0	381.5	79.2	229,400	314,800
100	402.2	85.7	380.5	78.4	210,600	314,800
105	400.9	90.4	379.4	77.7	193,700	314,800
110	399.6	95.2	378.3	77.0	178,400	302,200
115	398.2	99.9	377.1	76.2	164,400	282,700
120	396.8	104.6	375.8	75.5	151,700	265,100
125	395.2	109.4	374.5	74.7	140,000	249,000
130	393.7	114.1	373.1	74.0	129,300	234,300
135	392.0	118.8	371.7	73.3	119,400	220,800
140	390.2	123.5	370.1	72.5	110,200	208,300
145	388.4	128.3	368.5	71.7	101,700	196,800
150	386.5	133.0	366.9	71.0	93,800	186,100
155	384.6	137.8	365.1	70.2	86,300	176,200
160	382.5	142.5	363.3	69.5	79,400	167,000
165	380.4	147.2	361.4	68.7	72,900	158,300
170	378.2	152.0	359.5	67.9	66,800	150,200
175	375.9	156.8	357.4	67.1	61,000	142,700
180	373.6	161.5	355.3	66.3	55,600	135,500
185	371.1	166.3	353.1	65.5	50,500	128,800
190	368.6	171.0	350.9	64.8	45,600	122,400
195	366.0	175.7	348.5	64.0	41,000	116,400
200	363.2	180.5	346.1	63.1	36,600	110,700
210	357.5	190.0	340.9	61.5	28,500	100,200
220	351.4	199.5	335.4	59.8	21,100	90,700
230	344.9	209.1	329.5	58.1	14,400	82,100
240	338.0	218.6	323.2	56.4		74,100
250	330.6	228.2	316.4	54.6		66,900
260	322.7	237.8	309.2	52.8		60,200
270	314.2	247.4	301.5	51.0		54,100
280	305.2	256.9	293.3	49.1		48,300
290	295.6	266.5	284.4	47.1		43,000
300	285.2	276.2	274.9	45.0		38,000
310	274.1	285.8	264.7	42.9		33,400
320	262.1	295.5	253.6	40.7		29,000
330	249.0	305.1	241.6	38.4		24,900
340	234.8	314.8	228.4	35.9		20,800
350						

MLC650 VPC-MAX S-1

ASME B30.5



B85



440,900 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	232,500	244,000
100	400.8	83.6	380.9	78.8	213,600	244,000
105	399.5	88.4	379.9	78.0	196,400	244,000
110	398.2	93.2	378.7	77.3	181,000	244,000
115	396.8	97.9	377.6	76.5	166,900	244,000
120	395.4	102.7	376.3	75.8	154,000	244,000
125	393.8	107.4	375.1	75.1	142,200	244,000
130	392.2	112.2	373.7	74.3	131,400	235,900
135	390.6	116.9	372.2	73.6	121,400	222,300
140	388.8	121.7	370.7	72.8	112,100	209,800
145	387.0	126.5	369.1	72.0	103,500	198,200
150	385.1	131.2	367.5	71.3	95,500	187,500
155	383.1	136.0	365.8	70.5	88,000	177,500
160	381.1	140.8	364.0	69.7	80,900	168,200
165	378.9	145.5	362.1	69.0	74,400	159,500
170	376.7	150.3	360.2	68.2	68,200	151,300
175	374.4	155.1	358.2	67.4	62,400	143,700
180	372.1	159.8	356.1	66.6	56,900	136,500
185	369.6	164.7	353.9	65.8	51,700	129,700
190	367.1	169.4	351.6	65.0	46,800	123,300
195	364.4	174.2	349.3	64.2	42,100	117,300
200	361.7	179.0	346.8	63.4	37,700	111,600
210	355.9	188.6	341.7	61.8	29,500	101,000
220	349.8	198.2	336.2	60.1	22,000	91,400
230	343.3	207.8	330.3	58.4	15,200	82,700
240	336.3	217.4	324.0	56.6		74,700
250	328.9	227.0	317.3	54.9		67,400
260	320.9	236.7	310.1	53.0		60,700
270	312.4	246.3	302.3	51.2		54,500
280	303.4	256.0	294.1	49.3		48,700
290	293.6	265.7	285.2	47.3		43,300
300	283.2	275.4	275.7	45.2		38,300
310	272.0	285.1	265.4	43.1		33,600
320						
330						
340						
350						

MLC650 VPC-MAX S-1

ASME B30.5



B85



440,900 lb



360°

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	324,700	341,600
80	417.5	69.1	393.6	81.2	294,400	341,600
85	416.6	73.8	392.8	80.5	267,900	341,600
90	415.6	78.5	391.9	79.8	244,500	341,600
95	414.5	83.2	391.0	79.1	223,700	341,600
100	413.3	87.9	390.0	78.4	205,100	341,600
105	412.1	92.6	388.9	77.7	188,400	320,000
110	410.8	97.4	387.8	77.0	173,300	298,500
115	409.5	102.1	386.6	76.3	159,500	279,100
120	408.1	106.8	385.4	75.5	146,900	261,500
125	406.6	111.5	384.1	74.8	135,300	245,500
130	405.1	116.2	382.7	74.1	124,600	230,900
135	403.4	120.9	381.3	73.4	114,800	217,400
140	401.7	125.6	379.8	72.6	105,700	205,000
145	400.0	130.4	378.2	71.9	97,300	193,600
150	398.2	135.1	376.5	71.2	89,400	183,000
155	396.2	139.8	374.8	70.4	82,000	173,100
160	394.3	144.6	373.0	69.7	75,200	163,900
165	392.2	149.3	371.2	68.9	68,700	155,300
170	390.1	154.0	369.3	68.2	62,600	147,200
175	387.9	158.7	367.3	67.4	56,900	139,700
180	385.6	163.5	365.2	66.7	51,500	132,600
185	383.2	168.2	363.0	65.9	46,500	125,900
190	380.8	172.9	360.8	65.1	41,600	119,600
195	378.2	177.7	358.5	64.3	37,100	113,600
200	375.6	182.4	356.1	63.6	32,700	107,900
210	370.1	191.9	351.1	62.0	24,700	97,500
220	364.2	201.3	345.7	60.4	17,400	88,000
230	357.9	210.8	340.0	58.7		79,400
240	351.2	220.3	333.9	57.1		71,600
250	344.1	229.8	327.3	55.4		64,400
260	336.6	239.3	320.4	53.7		57,700
270	328.5	248.8	313.0	51.9		51,600
280	319.9	258.3	305.0	50.0		45,900
290	310.7	267.8	296.6	48.2		40,600
300	300.9	277.4	287.6	46.2		35,700
310	290.4	286.9	277.8	44.2		31,100
320	279.1	296.5	267.4	42.1		26,800
330	266.9	306.1	256.1	40.0		22,500
340	253.7	315.7	243.9	37.7		17,800
350	239.3	325.3	230.5	35.2		13,300

MLC650 VPC-MAX S-1

ASME B30.5



B85



440,900 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	298,500	319,900
85	415.5	71.6	393.2	80.8	271,700	319,900
90	414.5	76.4	392.3	80.1	248,000	319,900
95	413.4	81.1	391.4	79.4	227,000	319,900
100	412.3	85.8	390.5	78.7	208,200	319,900
105	411.1	90.5	389.4	78.0	191,300	319,900
110	409.8	95.3	388.3	77.3	176,000	300,700
115	408.4	100.0	387.2	76.6	162,100	281,200
120	407.0	104.7	385.9	75.8	149,300	263,500
125	405.5	109.5	384.6	75.1	137,600	247,300
130	404.0	114.2	383.3	74.4	126,900	232,600
135	402.4	119.0	381.9	73.7	116,900	219,100
140	400.7	123.7	380.4	72.9	107,700	206,600
145	398.9	128.4	378.8	72.2	99,200	195,100
150	397.1	133.2	377.2	71.5	91,200	184,400
155	395.2	137.9	375.5	70.7	83,800	174,500
160	393.2	142.7	373.8	70.0	76,800	165,200
165	391.1	147.4	371.9	69.2	70,300	156,600
170	389.0	152.2	370.0	68.5	64,200	148,400
175	386.8	156.9	368.0	67.7	58,400	140,800
180	384.5	161.7	366.0	66.9	53,000	133,700
185	382.1	166.4	363.8	66.2	47,800	126,900
190	379.6	171.2	361.6	65.4	42,900	120,600
195	377.1	176.0	359.3	64.6	38,300	114,600
200	374.4	180.7	357.0	63.8	33,900	108,900
210	368.9	190.2	352.0	62.3	25,800	98,300
220	363.0	199.8	346.6	60.6	18,400	88,800
230	356.7	209.3	340.9	59.0		80,100
240	350.0	218.8	334.8	57.3		72,200
250	342.9	228.4	328.3	55.6		65,000
260	335.3	238.0	321.4	53.9		58,300
270	327.2	247.6	314.0	52.1		52,100
280	318.5	257.2	306.1	50.3		46,400
290	309.3	266.7	297.6	48.4		41,100
300	299.4	276.4	288.5	46.4		36,100
310	288.9	286.0	278.8	44.4		31,400
320	277.5	295.7	268.3	42.3		27,100
330	265.3	305.3	257.0	40.1		22,800
340	252.0	315.0	244.7	37.8		18,100
350	237.5	324.7	231.3	35.4		13,500

MLC650 VPC-MAX S-1

ASME B30.5



B85



440,900 lb



360°

390.4 ft 41°						
	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	230,200	244,000
100	410.9	83.7	390.9	79.0	211,200	244,000
105	409.7	88.5	389.9	78.3	194,100	244,000
110	408.4	93.2	388.8	77.6	178,600	244,000
115	407.0	98.0	387.7	76.9	164,600	244,000
120	405.6	102.8	386.4	76.1	151,700	244,000
125	404.1	107.5	385.2	75.4	139,900	244,000
130	402.6	112.3	383.9	74.7	129,000	234,300
135	400.9	117.0	382.5	74.0	119,000	220,700
140	399.2	121.8	381.0	73.2	109,700	208,100
145	397.5	126.6	379.4	72.5	101,000	196,500
150	395.6	131.4	377.8	71.7	93,000	185,800
155	393.7	136.1	376.2	71.0	85,500	175,800
160	391.7	140.9	374.4	70.3	78,400	166,400
165	389.6	145.7	372.6	69.5	71,800	157,700
170	387.5	150.4	370.7	68.7	65,600	149,600
175	385.3	155.2	368.8	68.0	59,800	141,900
180	383.0	160.0	366.7	67.2	54,300	134,700
185	380.6	164.8	364.6	66.4	49,100	127,900
190	378.1	169.6	362.4	65.7	44,200	121,500
195	375.5	174.4	360.1	64.9	39,500	115,500
200	372.9	179.2	357.7	64.1	35,000	109,700
210	367.3	188.8	352.8	62.5	26,800	99,100
220	361.4	198.4	347.4	60.9	19,300	89,500
230	355.1	207.9	341.8	59.2		80,800
240	348.3	217.6	335.7	57.6		72,800
250	341.2	227.2	329.2	55.9		65,500
260	333.5	236.8	322.2	54.1		58,800
270	325.4	246.5	314.8	52.3		52,500
280	316.7	256.2	306.9	50.5		46,800
290	307.4	265.9	298.4	48.6		41,400
300	297.5	275.6	289.3	46.6		36,400
310	286.9	285.3	279.5	44.6		31,700
320	275.4	295.1	269.0	42.5		27,300
330						
340						
350						