

Liftcrane Boom

Extended Upper Point Capacities

MLC300 VPC-MAX SERIES 2

Boom No. B85:505-500
with Mast No. M11:503 and
23.0 ft Extended Upper Boom Point
386,000 lb VPC (Variable Position Counterweight)
360 Degree Rating



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 must be reduced by applicable deducts.

Upper boom point (upper sheave) capacity for liftcrane service with single part whip line from Drum 6 is 30,000 lb. When Drum 2 or Drum 3 is used, capacity with single part whip line is 36,700 lb. In all cases, upper boom point capacities cannot exceed those listed for extended upper boom point (lower sheave) capacity.

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. 80134736**, Mast Rigging **No. 84045340**, Wire Rope Specifications chart **No. 9884-A**, Counterweight Arrangements chart **No. 9345-A**, and Wind Conditions chart **No. 9885-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 Specifications chart **No. 9883-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 ANGLE: Boom angle in degrees ($^{\circ}$) 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.

MACHINE EQUIPMENT: Machine equipped with VPC-MAX, 31 ft 10 in. crawlers, 48 in. or 60 in. treads, 30 ft live mast, 98.4 ft mast, 10 part boom hoist reeving, boom support straps, and 386,000 lb VPC.

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

Select counterweight position from Table 1 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 extended upper boom point (lower or upper sheaves) must not exceed block weight shown.

Table 1a: Without Luffing Jib Backstays

Over End or Side of Crawlers		
Boom Length (ft)	34.8 ft Counterweight Position	48.0 ft Counterweight Position
	Block Weight (lb)	
272.3	10,400	10,400
282.2	10,400	10,400
292.0	10,400	10,400
301.8	10,400	10,400
311.7	10,400	10,400
321.5	10,400	10,400
331.4	10,400	10,400
341.2	8,000	10,400
351.0	7,900	10,400
360.9	4,500	10,400
370.7	#	10,400
380.6	Raising Not Permitted	10,400
390.4		10,400
400.3		8,200
410.1		5,900
419.9		#
429.8	#	#

Table 1b: Without Luffing Jib Backstays

Over End of Blocked Crawlers		
Boom Length (ft)	34.8 ft Counterweight Position	48.0 ft Counterweight Position
	Block Weight (lb)	
272.3	10,400	10,400
282.2	10,400	10,400
292.0	10,400	10,400
301.8	10,400	10,400
311.7	10,400	10,400
321.5	10,400	10,400
331.4	10,400	10,400
341.2	10,400	10,400
351.0	10,400	10,400
360.9	7,800	10,400
370.7	5,400	10,400
380.6	#	10,400
390.4	#	10,400
400.3	Raising Not Permitted	9,000
410.1		6,800
419.9		3,600
429.8		3,400

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

Explanation of Symbols



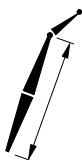
Boom No. B85:505-500



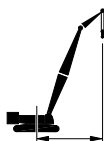
VPC (Variable Position Counterweight)



360 Degree Rating



Boom Length



Extended Upper Boom Point Operating Radius
(see page 1)



Boom Angle
(see page 1)



Extended Upper Boom Point Elevation
(see page 1)



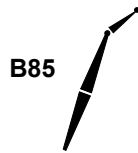
Counterweight Position
from Axis of Rotation



Lifting Capacities
(see page 1)

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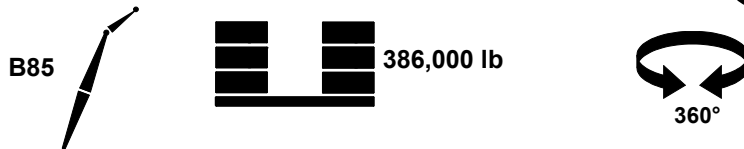


272.3 ft				
ft	ft	ft	lb	lb
55	82.9	295.9	183,800	183,800
56	82.7	295.7	183,800	183,800
58	82.3	295.3	183,800	183,800
60	81.9	295.0	183,800	183,800
62	81.5	294.6	183,200	183,200
64	81.1	294.2	182,400	182,400
66	80.7	293.8	181,500	181,500
68	80.3	293.3	180,700	180,700
70	79.9	292.9	179,800	179,800
72	79.5	292.4	178,900	178,900
74	79.1	291.9	178,000	178,000
76	78.7	291.4	177,200	177,200
78	78.3	290.9	176,300	176,300
80	77.9	290.4	175,400	175,400
85	76.9	289.0	173,200	173,200
90	75.9	287.6	171,000	171,000
95	74.8	286.0	168,800	168,800
100	73.8	284.3	166,500	166,500
105	72.8	282.6	161,700	164,100
110	71.7	280.7	151,600	161,800
115	70.7	278.7	142,400	159,500
120	69.6	276.7	134,000	157,300
125	68.5	274.5	126,400	155,000
130	67.5	272.2	119,400	152,900
135	66.4	269.8	113,000	147,200
140	65.3	267.2	107,100	140,000
145	64.2	264.6	101,600	133,300
150	63.1	261.8	96,500	127,000
155	61.9	258.9	91,800	121,200
160	60.8	255.8	87,400	115,800
165	59.6	252.6	83,200	110,700
170	58.4	249.3	79,300	106,000
175	57.3	245.8	75,700	101,500
180	56.0	242.2	72,200	97,300
185	54.8	238.4	69,000	93,300
190	53.6	234.4	65,900	89,600
195	52.3	230.2	63,000	86,000
200	51.0	225.9	60,300	82,700
205	49.7	221.3	57,400	79,500
210	48.3	216.5	54,700	76,400
215	46.9	211.5	52,000	73,500
220	45.5	206.2	49,500	70,800
225	44.1	200.7	47,100	68,100
230	42.6	194.9	44,800	65,600
235	41.0	188.7	42,600	63,200
240	39.4	182.2	40,500	60,900
245	37.7	175.3	38,500	58,700
250	36.0	167.9	36,500	56,500
252	35.3	164.8	35,700	55,700

282.2 ft				
ft	ft	ft	lb	lb
56	82.9	305.7	185,700	185,700
58	82.5	305.3	185,000	185,000
60	82.2	305.0	184,300	184,300
62	81.8	304.6	183,500	183,500
64	81.4	304.2	182,800	182,800
66	81.0	303.8	182,000	182,000
68	80.6	303.4	181,200	181,200
70	80.2	302.9	180,500	180,500
72	79.8	302.5	179,700	179,700
74	79.5	302.0	178,900	178,900
76	79.1	301.6	178,100	178,100
78	78.7	301.1	177,300	177,300
80	78.3	300.6	176,500	176,500
85	77.3	299.2	174,500	174,500
90	76.3	297.8	172,500	172,500
95	75.3	296.3	170,400	170,400
100	74.3	294.7	168,300	168,300
105	73.3	293.0	160,700	166,100
110	72.3	291.2	150,500	163,900
115	71.3	289.3	141,300	161,700
120	70.3	287.3	132,900	159,500
125	69.3	285.2	125,300	157,300
130	68.2	283.0	118,300	154,000
135	67.2	280.7	111,900	146,100
140	66.2	278.2	106,000	138,800
145	65.1	275.7	100,500	132,100
150	64.0	273.0	95,400	125,900
155	62.9	270.2	90,600	120,100
160	61.8	267.3	86,200	114,600
165	60.7	264.3	82,000	109,600
170	59.6	261.1	78,200	104,800
175	58.5	257.8	74,500	100,300
180	57.3	254.3	71,100	96,100
185	56.2	250.7	67,800	92,200
190	55.0	246.9	64,700	88,400
195	53.8	243.0	61,700	84,900
200	52.5	238.9	58,700	81,500
205	51.3	234.6	55,800	78,300
210	50.0	230.1	53,000	75,300
215	48.7	225.4	50,400	72,400
220	47.4	220.4	47,900	69,600
225	46.0	215.3	45,500	67,000
230	44.6	209.9	43,200	64,400
235	43.2	204.2	41,000	62,000
240	41.7	198.2	38,900	59,700
245	40.2	191.9	36,900	57,500
250	38.6	185.2	34,900	55,400
255	37.0	178.1	33,000	53,300
260	35.3	170.5	31,200	51,300

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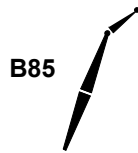


		292.0 ft		
ft	ft	ft	lb	lb
57	83.0	315.5	194,900	194,900
58	82.8	315.3	194,500	194,500
60	82.4	315.0	193,900	193,900
62	82.0	314.6	193,300	193,300
64	81.7	314.2	192,600	192,600
66	81.3	313.8	192,000	192,000
68	80.9	313.4	191,300	191,300
70	80.5	313.0	190,600	190,600
72	80.2	312.6	190,000	190,000
74	79.8	312.1	189,200	189,200
76	79.4	311.7	188,600	188,600
78	79.0	311.2	187,800	187,800
80	78.7	310.7	187,100	187,100
85	77.7	309.4	185,300	185,300
90	76.8	308.1	183,400	183,400
95	75.8	306.6	181,500	181,500
100	74.9	305.1	171,200	179,600
105	73.9	303.4	159,900	177,500
110	72.9	301.7	149,700	175,300
115	71.9	299.8	140,500	173,200
120	71.0	297.9	132,100	171,000
125	70.0	295.9	124,500	161,700
130	69.0	293.8	117,500	153,100
135	68.0	291.5	111,100	145,300
140	67.0	289.2	105,100	138,000
145	65.9	286.7	99,600	131,300
150	64.9	284.2	94,500	125,000
155	63.9	281.5	89,800	119,200
160	62.8	278.7	85,300	113,800
165	61.8	275.8	81,200	108,700
170	60.7	272.8	77,300	103,900
175	59.6	269.6	73,600	99,500
180	58.5	266.3	70,200	95,300
185	57.4	262.8	66,900	91,300
190	56.3	259.2	63,600	87,500
195	55.1	255.5	60,500	84,000
200	54.0	251.6	57,400	80,600
205	52.8	247.5	54,500	77,400
210	51.6	243.3	51,800	74,400
215	50.4	238.8	49,200	71,500
220	49.1	234.2	46,700	68,700
225	47.8	229.4	44,300	66,100
230	46.5	224.3	42,000	63,600
235	45.2	219.0	39,800	61,100
240	43.8	213.4	37,700	58,800
245	42.4	207.6	35,600	56,600
250	41.0	201.4	33,700	54,500
255	39.5	195.0	31,800	52,500
260	37.9	188.1	30,000	50,500
265	36.3	180.9	28,200	48,600
268	35.3	176.3	27,200	47,500

		301.8 ft		
ft	ft	ft	lb	lb
59	82.8	325.1	202,900	202,900
60	82.6	324.9	202,700	202,700
62	82.3	324.6	202,100	202,100
64	81.9	324.2	201,600	201,600
66	81.6	323.8	201,100	201,100
68	81.2	323.5	200,500	200,500
70	80.8	323.1	200,000	200,000
72	80.5	322.6	199,400	199,400
74	80.1	322.2	198,800	198,800
76	79.7	321.8	198,300	198,300
78	79.4	321.3	198,200	198,200
80	79.0	320.8	198,200	198,200
85	78.1	319.6	198,200	198,200
90	77.2	318.3	196,900	198,200
95	76.3	316.9	182,500	196,200
100	75.3	315.4	169,800	191,900
105	74.4	313.8	158,500	187,800
110	73.5	312.1	148,200	183,800
115	72.5	310.3	139,000	179,800
120	71.6	308.5	130,600	169,500
125	70.6	306.5	123,000	160,200
130	69.7	304.5	115,900	151,600
135	68.7	302.3	109,500	143,700
140	67.7	300.1	103,600	136,400
145	66.7	297.7	98,000	129,700
150	65.7	295.2	92,900	123,400
155	64.7	292.7	88,200	117,600
160	63.7	290.0	83,700	112,200
165	62.7	287.2	79,600	107,100
170	61.7	284.3	75,700	102,300
175	60.7	281.2	72,000	97,800
180	59.6	278.1	68,300	93,600
185	58.5	274.8	64,700	89,600
190	57.5	271.3	61,400	85,900
195	56.4	267.8	58,200	82,300
200	55.3	264.0	55,200	79,000
205	54.1	260.2	52,300	75,800
210	53.0	256.1	49,500	72,700
215	51.8	251.9	46,900	69,800
220	50.7	247.6	44,400	67,100
225	49.5	243.0	42,000	64,400
230	48.2	238.2	39,700	61,900
235	47.0	233.2	37,500	59,500
240	45.7	228.0	35,400	57,200
245	44.4	222.6	33,400	55,000
250	43.0	216.9	31,500	52,900
255	41.6	210.9	29,600	50,800
260	40.2	204.6	27,800	48,900
265	38.7	198.0	26,000	47,000
270	37.2	191.0	24,300	45,100
275	35.6	183.6	22,700	43,400
276	35.3	182.0	22,400	43,000

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311.7 ft				
ft	ft	ft	lb	lb
60	82.9	334.9	199,800	199,800
62	82.5	334.6	199,800	199,800
64	82.2	334.2	199,800	199,800
66	81.8	333.9	199,800	199,800
68	81.5	333.5	199,800	199,800
70	81.1	333.1	199,800	199,800
72	80.8	332.7	199,800	199,800
74	80.4	332.3	199,800	199,800
76	80.1	331.8	199,800	199,800
78	79.7	331.4	199,800	199,800
80	79.4	330.9	199,800	199,800
85	78.5	329.7	199,800	199,800
90	77.6	328.4	195,900	195,900
95	76.7	327.1	183,300	191,500
100	75.8	325.6	170,600	187,300
105	74.9	324.1	159,200	183,200
110	74.0	322.5	149,000	179,100
115	73.1	320.8	139,800	175,300
120	72.1	319.0	131,400	170,300
125	71.2	317.1	123,800	161,000
130	70.3	315.1	116,800	152,400
135	69.4	313.0	110,300	144,500
140	68.4	310.8	104,400	137,200
145	67.5	308.6	98,900	130,500
150	66.5	306.2	93,700	124,200
155	65.6	303.7	89,000	118,400
160	64.6	301.1	84,500	113,000
165	63.6	298.5	80,400	107,900
170	62.6	295.7	76,500	103,100
175	61.6	292.7	72,800	98,700
180	60.6	289.7	69,400	94,500
185	59.6	286.5	65,800	90,500
190	58.6	283.3	62,500	86,700
195	57.5	279.8	59,300	83,200
200	56.5	276.3	56,300	79,800
205	55.4	272.6	53,400	76,600
210	54.3	268.7	50,600	73,600
215	53.2	264.8	48,000	70,700
220	52.1	260.6	45,500	67,900
225	50.9	256.3	43,100	65,300
230	49.8	251.8	40,900	62,800
235	48.6	247.1	38,700	60,400
240	47.4	242.2	36,600	58,100
245	46.2	237.1	34,600	55,900
250	44.9	231.7	32,600	53,800
255	43.6	226.1	30,800	51,700
260	42.3	220.3	29,000	49,800
265	40.9	214.2	27,200	47,900
270	39.5	207.7	25,600	46,100
275	38.1	201.0	23,900	44,300
280	36.6	193.8	22,400	42,600
284	35.3	187.8	21,200	41,300

321.5 ft				
ft	ft	ft	lb	lb
61	82.9	344.7	183,800	183,800
62	82.7	344.6	183,800	183,800
64	82.4	344.2	183,800	183,800
66	82.1	343.9	183,800	183,800
68	81.7	343.5	183,800	183,800
70	81.4	343.1	183,800	183,800
72	81.0	342.7	183,800	183,800
74	80.7	342.3	183,800	183,800
76	80.3	341.9	183,800	183,800
78	80.0	341.5	183,800	183,800
80	79.7	341.0	183,800	183,800
85	78.8	339.9	183,800	183,800
90	77.9	338.6	181,800	181,800
95	77.1	337.3	177,500	177,500
100	76.2	335.9	169,500	173,200
105	75.3	334.4	158,100	169,100
110	74.5	332.8	147,900	165,000
115	73.6	331.2	138,600	161,100
120	72.7	329.4	130,200	157,500
125	71.8	327.6	122,600	153,900
130	70.9	325.7	115,500	150,500
135	70.0	323.7	109,100	143,300
140	69.1	321.6	103,100	136,000
145	68.2	319.4	97,600	129,300
150	67.3	317.1	92,500	123,000
155	66.3	314.7	87,700	117,200
160	65.4	312.2	83,300	111,700
165	64.4	309.6	79,100	106,700
170	63.5	306.9	75,200	101,900
175	62.5	304.1	71,400	97,400
180	61.6	301.2	67,600	93,200
185	60.6	298.2	64,100	89,200
190	59.6	295.0	60,700	85,500
195	58.6	291.7	57,500	81,900
200	57.6	288.3	54,500	78,500
205	56.6	284.8	51,600	75,300
210	55.5	281.1	48,900	72,300
215	54.5	277.3	46,300	69,400
220	53.4	273.4	43,800	66,600
225	52.3	269.2	41,400	64,000
230	51.2	265.0	39,100	61,500
235	50.1	260.5	36,900	59,100
240	49.0	255.9	34,800	56,800
245	47.8	251.1	32,800	54,600
250	46.6	246.0	30,900	52,500
255	45.4	240.8	29,000	50,400
260	44.1	235.3	27,200	48,500
265	42.9	229.6	25,500	46,600
270	41.6	223.6	23,800	44,800
280	38.8	210.8	20,700	41,400
290	35.9	196.5	17,700	38,200
293	35.0	191.9	16,800	37,200

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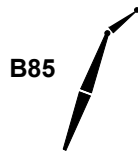


331.4 ft				
ft	ft	ft	lb	lb
62	82.9	354.5	178,900	178,900
64	82.6	354.2	178,900	178,900
66	82.3	353.8	178,900	178,900
68	81.9	353.5	178,900	178,900
70	81.6	353.1	178,900	178,900
72	81.3	352.7	178,900	178,900
74	81.0	352.3	178,900	178,900
76	80.6	351.9	178,900	178,900
78	80.3	351.5	178,900	178,900
80	80.0	351.1	178,900	178,900
85	79.1	350.0	178,900	178,900
90	78.3	348.8	178,800	178,800
95	77.4	347.5	174,600	174,600
100	76.6	346.1	169,100	170,400
105	75.8	344.7	157,700	166,200
110	74.9	343.1	147,500	162,200
115	74.1	341.5	138,200	158,400
120	73.2	339.9	129,800	154,700
125	72.3	338.1	122,200	151,100
130	71.5	336.2	115,200	147,700
135	70.6	334.3	108,700	142,900
140	69.7	332.3	102,700	135,600
145	68.8	330.1	97,200	128,900
150	67.9	327.9	92,100	122,600
155	67.0	325.6	87,300	116,800
160	66.1	323.2	82,900	111,300
165	65.2	320.7	78,700	106,200
170	64.3	318.1	74,700	101,500
175	63.4	315.4	70,800	97,000
180	62.4	312.6	67,000	92,800
185	61.5	309.7	63,500	88,800
190	60.6	306.6	60,100	85,000
195	59.6	303.5	56,900	81,500
200	58.6	300.2	53,900	78,100
205	57.6	296.8	51,000	74,900
210	56.6	293.3	48,300	71,900
215	55.6	289.7	45,700	69,000
220	54.6	285.9	43,200	66,200
225	53.6	282.0	40,800	63,600
230	52.5	277.9	38,500	61,100
235	51.5	273.6	36,300	58,700
240	50.4	269.2	34,200	56,400
245	49.3	264.7	32,200	54,200
250	48.2	259.9	30,300	52,100
255	47.0	255.0	28,400	50,000
260	45.8	249.8	26,600	48,100
265	44.6	244.5	24,900	46,200
270	43.4	238.9	23,200	44,400
280	40.9	226.9	20,100	41,000
290	38.2	213.8	17,100	37,800
300	35.3	199.2	14,300	34,800
301	35.0	197.7	14,100	34,500

341.2 ft				
ft	ft	ft	lb	lb
63	83.0	364.3	168,200	168,200
64	82.8	364.2	168,200	168,200
66	82.5	363.8	168,200	168,200
68	82.2	363.5	168,200	168,200
70	81.8	363.1	168,200	168,200
72	81.5	362.7	168,200	168,200
74	81.2	362.4	168,200	168,200
76	80.9	362.0	168,200	168,200
78	80.6	361.6	168,200	168,200
80	80.2	361.1	168,200	168,200
85	79.4	360.1	168,200	168,200
90	78.6	358.9	166,800	166,800
95	77.8	357.6	162,600	162,600
100	77.0	356.3	158,500	158,500
105	76.2	354.9	154,500	154,500
110	75.3	353.4	146,300	150,500
115	74.5	351.9	137,100	146,700
120	73.7	350.2	128,600	143,100
125	72.8	348.5	121,000	139,600
130	72.0	346.7	113,900	136,300
135	71.1	344.8	107,500	133,000
140	70.3	342.9	101,500	129,900
145	69.4	340.8	96,000	126,900
150	68.6	338.7	90,800	121,300
155	67.7	336.5	86,100	115,500
160	66.8	334.1	81,600	110,100
165	66.0	331.7	77,200	105,000
170	65.1	329.2	73,000	100,200
175	64.2	326.6	69,000	95,700
180	63.3	323.9	65,300	91,500
185	62.4	321.1	61,700	87,500
190	61.5	318.1	58,300	83,700
195	60.5	315.1	55,200	80,200
200	59.6	312.0	52,100	76,800
205	58.6	308.7	49,300	73,600
210	57.7	305.3	46,500	70,600
215	56.7	301.8	43,900	67,700
220	55.7	298.2	41,400	64,900
225	54.8	294.4	39,000	62,300
230	53.8	290.6	36,700	59,800
235	52.7	286.5	34,600	57,400
240	51.7	282.3	32,500	55,100
245	50.7	278.0	30,400	52,900
250	49.6	273.5	28,500	50,800
255	48.5	268.8	26,700	48,700
260	47.4	263.9	24,900	46,800
265	46.3	258.8	23,100	44,900
270	45.1	253.6	21,500	43,100
280	42.7	242.3	18,300	39,700
290	40.2	230.1	15,400	36,500
300	37.6	216.7	12,600	33,500
309	35.0	203.4	10,300	31,000

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ASME B30.5

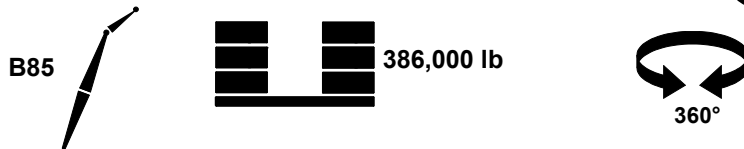


351.0 ft				
ft	ft	ft	lb	lb
65	82.9	374.0	156,400	156,400
66	82.7	373.8	155,900	155,900
68	82.4	373.5	154,700	154,700
70	82.1	373.1	153,600	153,600
72	81.8	372.8	152,500	152,500
74	81.4	372.4	151,500	151,500
76	81.1	372.0	150,400	150,400
78	80.8	371.6	149,300	149,300
80	80.5	371.2	148,300	148,300
85	79.7	370.1	145,600	145,600
90	78.9	369.0	143,000	143,000
95	78.1	367.8	140,400	140,400
100	77.3	366.5	138,000	138,000
105	76.5	365.1	135,500	135,500
110	75.7	363.7	133,100	133,100
115	74.9	362.2	130,800	130,800
120	74.1	360.6	128,600	128,600
125	73.3	358.9	122,200	126,400
130	72.5	357.2	115,200	124,400
135	71.7	355.4	108,700	122,400
140	70.8	353.5	102,700	120,500
145	70.0	351.5	97,200	118,100
150	69.2	349.4	92,100	115,300
155	68.3	347.2	87,300	112,700
160	67.5	345.0	82,900	110,200
165	66.6	342.6	78,700	106,200
170	65.8	340.2	74,600	101,500
175	64.9	337.7	70,700	97,000
180	64.1	335.1	66,900	92,800
185	63.2	332.4	63,400	88,800
190	62.3	329.5	60,000	85,000
195	61.4	326.6	56,800	81,500
200	60.5	323.6	53,800	78,100
205	59.6	320.4	51,000	74,900
210	58.7	317.2	48,200	71,900
215	57.7	313.8	45,600	69,000
220	56.8	310.4	43,100	66,200
225	55.8	306.7	40,700	63,600
230	54.9	303.0	38,500	61,100
235	53.9	299.1	36,300	58,700
240	52.9	295.1	34,200	56,400
245	51.9	291.0	32,200	54,200
250	50.9	286.7	30,300	52,100
255	49.9	282.2	28,400	50,100
260	48.8	277.6	26,600	48,100
265	47.8	272.8	24,900	46,200
270	46.7	267.8	23,300	44,400
280	44.4	257.2	20,100	41,000
290	42.1	245.8	17,200	37,900
300	39.6	233.3	14,400	34,900
310	37.0	219.6	11,900	32,100
317	35.1	209.2	10,100	30,300

360.9 ft				
ft	ft	ft	lb	lb
66	82.9	383.8	147,000	147,000
68	82.6	383.4	147,000	147,000
70	82.3	383.1	147,000	147,000
72	82.0	382.7	147,000	147,000
74	81.7	382.4	147,000	147,000
76	81.4	382.0	147,000	147,000
78	81.1	381.6	146,700	146,700
80	80.7	381.2	145,600	145,600
85	80.0	380.2	143,000	143,000
90	79.2	379.1	140,500	140,500
95	78.4	377.9	137,900	137,900
100	77.7	376.7	135,500	135,500
105	76.9	375.3	133,100	133,100
110	76.1	373.9	130,700	130,700
115	75.3	372.5	128,500	128,500
120	74.5	370.9	125,400	125,400
125	73.8	369.3	121,000	122,000
130	73.0	367.6	114,000	118,800
135	72.2	365.8	107,500	115,800
140	71.4	364.0	101,600	112,900
145	70.6	362.1	96,000	110,100
150	69.7	360.1	90,900	107,400
155	68.9	358.0	86,100	104,800
160	68.1	355.8	81,700	102,300
165	67.3	353.5	77,200	99,900
170	66.5	351.2	73,000	97,600
175	65.6	348.7	69,000	95,400
180	64.8	346.2	65,200	91,500
185	63.9	343.5	61,700	87,600
190	63.1	340.8	58,300	83,800
195	62.2	338.0	55,100	80,200
200	61.3	335.1	52,100	76,900
205	60.5	332.1	49,200	73,700
210	59.6	328.9	46,500	70,600
215	58.7	325.7	43,900	67,700
220	57.8	322.3	41,400	65,000
225	56.9	318.9	39,000	62,400
230	55.9	315.3	36,800	59,800
235	55.0	311.6	34,600	57,400
240	54.1	307.7	32,500	55,100
245	53.1	303.7	30,500	52,900
250	52.1	299.6	28,600	50,800
255	51.1	295.4	26,700	48,800
260	50.1	290.9	24,900	46,900
265	49.1	286.4	23,200	45,000
270	48.1	281.6	21,600	43,200
280	46.0	271.6	18,400	39,800
290	43.8	260.8	15,500	36,600
300	41.4	249.1	12,700	33,600
310	39.0	236.4	10,200	30,900
320	36.4	222.4		28,300
325	35.1	214.9		27,000

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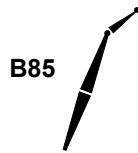


370.7 ft			34.8 ft		48.0 ft	
ft	ft	ft	lb	lb	lb	lb
67	82.9	393.6	140,500	140,500		
68	82.8	393.4	140,500	140,500		
70	82.5	393.1	140,500	140,500		
72	82.2	392.7	140,400	140,400		
74	81.9	392.4	140,400	140,400		
76	81.6	392.0	140,400	140,400		
78	81.3	391.6	140,400	140,400		
80	81.0	391.3	140,300	140,300		
85	80.2	390.3	139,900	139,900		
90	79.5	389.2	137,400	137,400		
95	78.7	388.0	134,900	134,900		
100	78.0	386.8	131,900	131,900		
105	77.2	385.5	128,200	128,200		
110	76.5	384.2	124,600	124,600		
115	75.7	382.7	121,200	121,200		
120	74.9	381.2	117,800	117,800		
125	74.2	379.7	114,500	114,500		
130	73.4	378.0	111,500	111,500		
135	72.6	376.3	107,000	108,500		
140	71.9	374.5	101,100	105,700		
145	71.1	372.6	95,500	102,900		
150	70.3	370.7	90,400	100,300		
155	69.5	368.6	85,600	97,800		
160	68.7	366.5	81,000	95,400		
165	67.9	364.3	76,500	93,000		
170	67.1	362.0	72,200	90,800		
175	66.3	359.7	68,300	88,700		
180	65.5	357.2	64,500	86,600		
185	64.7	354.7	61,000	84,600		
190	63.8	352.0	57,600	82,700		
195	63.0	349.3	54,400	79,700		
200	62.1	346.5	51,400	76,400		
205	61.3	343.6	48,500	73,200		
210	60.4	340.5	45,800	70,100		
215	59.6	337.4	43,200	67,200		
220	58.7	334.2	40,700	64,500		
225	57.8	330.8	38,300	61,800		
230	56.9	327.4	36,000	59,300		
235	56.0	323.8	33,900	56,900		
240	55.1	320.1	31,800	54,600		
245	54.2	316.3	29,800	52,400		
250	53.3	312.3	27,800	50,300		
255	52.3	308.3	26,000	48,300		
260	51.4	304.0	24,200	46,400		
270	49.4	295.1	20,900	42,700		
280	47.4	285.6	17,700	39,300		
290	45.3	275.4	14,800	36,100		
300	43.1	264.3	12,100	33,100		
310	40.8	252.4		30,400		
320	38.4	239.4		27,800		
330	35.9	225.2		25,300		
333	35.1	220.7		24,600		

380.6 ft			34.8 ft		48.0 ft	
ft	ft	ft	lb	lb	lb	lb
68	82.9	403.4	132,000	132,000		
70	82.7	403.1	132,000	132,000		
72	82.4	402.7	131,900	131,900		
74	82.1	402.4	131,900	131,900		
76	81.8	402.0	131,900	131,900		
78	81.5	401.7	131,800	131,800		
80	81.2	401.3	131,800	131,800		
85	80.5	400.3	131,700	131,700		
90	79.8	399.2	131,600	131,600		
95	79.0	398.1	131,500	131,500		
100	78.3	396.9	131,400	131,400		
105	77.5	395.7	131,300	131,300		
110	76.8	394.4	128,500	128,500		
115	76.1	393.0	125,000	125,000		
120	75.3	391.5	121,700	121,700		
125	74.6	390.0	118,500	118,500		
130	73.8	388.4	112,400	115,400		
135	73.1	386.7	105,900	112,400		
140	72.3	385.0	99,900	109,500		
145	71.6	383.1	94,400	106,700		
150	70.8	381.2	89,300	104,000		
155	70.0	379.3	84,100	101,500		
160	69.3	377.2	79,300	98,900		
165	68.5	375.1	74,800	96,500		
170	67.7	372.9	70,600	94,200		
175	66.9	370.6	66,600	92,000		
180	66.1	368.2	62,900	89,800		
185	65.3	365.7	59,300	85,900		
190	64.5	363.2	56,000	82,100		
195	63.7	360.5	52,800	78,500		
200	62.9	357.8	49,700	75,200		
205	62.1	354.9	46,900	71,900		
210	61.3	352.0	44,100	68,900		
215	60.4	349.0	41,500	66,000		
220	59.6	345.9	39,000	63,200		
225	58.7	342.7	36,600	60,600		
230	57.9	339.3	34,400	58,100		
235	57.0	335.9	32,200	55,700		
240	56.1	332.3	30,100	53,400		
245	55.2	328.7	28,100	51,200		
250	54.3	324.9	26,200	49,100		
255	53.4	320.9	24,300	47,100		
260	52.5	316.9	22,500	45,100		
270	50.6	308.4	19,200	41,400		
280	48.7	299.3	16,000	38,000		
290	46.7	289.5	13,100	34,900		
300	44.7	279.1	10,400	31,900		
310	42.5	267.8		29,100		
320	40.2	255.6		26,500		
330	37.9	242.4		24,100		
340	35.4	227.9		21,800		
341	35.1	226.4		21,500		

MLC300 VPC-MAX S-2

ASME B30.5

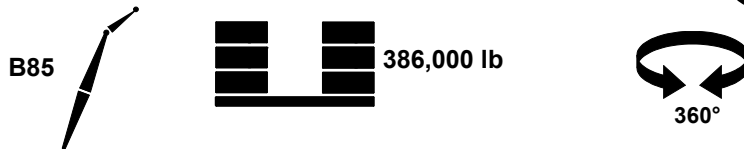


390.4 ft				
ft	ft	ft	lb	lb
69	83.0	413.2	123,600	123,600
70	82.8	413.0	123,500	123,500
72	82.6	412.7	123,500	123,500
74	82.3	412.4	123,400	123,400
76	82.0	412.0	123,400	123,400
78	81.7	411.7	123,300	123,300
80	81.4	411.3	123,300	123,300
85	80.7	410.3	123,200	123,200
90	80.0	409.3	123,100	123,100
95	79.3	408.2	120,600	120,600
100	78.6	407.1	118,000	118,000
105	77.9	405.8	115,600	115,600
110	77.1	404.6	113,100	113,100
115	76.4	403.2	110,700	110,700
120	75.7	401.8	108,400	108,400
125	75.0	400.3	106,200	106,200
130	74.2	398.7	104,000	104,000
135	73.5	397.1	101,900	101,900
140	72.8	395.4	99,900	99,900
145	72.0	393.6	94,800	98,000
150	71.3	391.8	89,600	96,100
155	70.5	389.8	84,600	94,300
160	69.8	387.8	79,800	92,600
165	69.0	385.8	75,300	90,800
170	68.3	383.6	71,100	88,500
175	67.5	381.4	67,100	86,400
180	66.7	379.1	63,300	84,400
185	66.0	376.7	59,800	82,400
190	65.2	374.2	56,400	80,500
195	64.4	371.6	53,200	78,700
200	63.6	369.0	50,200	75,500
205	62.8	366.2	47,300	72,300
210	62.0	363.4	44,600	69,300
215	61.2	360.5	42,000	66,400
220	60.4	357.5	39,500	63,600
225	59.6	354.4	37,100	61,000
230	58.7	351.1	34,900	58,500
235	57.9	347.8	32,700	56,100
240	57.1	344.4	30,600	53,800
245	56.2	340.8	28,600	51,600
250	55.3	337.2	26,700	49,500
255	54.5	333.4	24,800	47,500
260	53.6	329.5	23,000	45,500
270	51.8	321.4	19,700	41,800
280	49.9	312.6	16,500	38,400
290	48.0	303.3	13,600	35,300
300	46.1	293.4	10,900	32,300
310	44.0	282.7		29,500
320	41.9	271.2		27,000
330	39.7	258.8		24,500
340	37.3	245.3		22,200
349	35.1	232.1		20,200

400.3 ft				
ft	ft	ft	lb	lb
71	82.9	422.8	115,500	115,500
72	82.7	422.7	115,400	115,400
74	82.5	422.3	115,300	115,300
76	82.2	422.0	115,300	115,300
78	81.9	421.6	115,200	115,200
80	81.6	421.3	115,200	115,200
85	80.9	420.4	115,100	115,100
90	80.2	419.4	114,900	114,900
95	79.5	418.3	114,800	114,800
100	78.8	417.2	114,600	114,600
105	78.1	416.0	112,400	112,400
110	77.4	414.7	110,100	110,100
115	76.7	413.4	107,800	107,800
120	76.0	412.0	105,600	105,600
125	75.3	410.6	103,400	103,400
130	74.6	409.0	101,300	101,300
135	73.9	407.4	99,300	99,300
140	73.2	405.8	97,100	97,100
145	72.5	404.1	93,600	94,500
150	71.7	402.3	88,100	92,000
155	71.0	400.4	83,000	89,600
160	70.3	398.4	78,200	87,200
165	69.5	396.4	73,700	85,000
170	68.8	394.3	69,400	82,900
175	68.1	392.2	65,400	80,800
180	67.3	389.9	61,700	78,800
185	66.6	387.6	58,100	76,900
190	65.8	385.2	54,800	75,000
195	65.1	382.7	51,600	73,300
200	64.3	380.1	48,600	71,600
205	63.5	377.5	45,700	70,000
210	62.7	374.7	42,900	68,100
215	62.0	371.9	40,300	65,200
220	61.2	369.0	37,800	62,400
225	60.4	365.9	35,400	59,800
230	59.6	362.8	33,200	57,300
235	58.8	359.6	31,000	54,900
240	57.9	356.3	28,900	52,600
245	57.1	352.9	26,900	50,400
250	56.3	349.4	25,000	48,200
255	55.4	345.7	23,100	46,200
260	54.6	342.0	21,300	44,300
270	52.9	334.1	18,000	40,600
280	51.1	325.8	14,900	37,200
290	49.3	316.8	11,900	34,000
300	47.4	307.3		31,100
310	45.4	297.2		28,300
320	43.4	286.3		25,700
330	41.3	274.6		23,300
340	39.1	261.9		21,000
350	36.8	248.2		18,800
357	35.1	237.9		17,400

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410.1 ft			34.8 ft		48.0 ft	
ft	ft	ft	lb	lb		
72	82.9	432.6	108,200	108,200		
74	82.6	432.3	108,200	108,200		
76	82.4	432.0	108,100	108,100		
78	82.1	431.6	108,000	108,000		
80	81.8	431.3	108,000	108,000		
85	81.1	430.4	107,800	107,800		
90	80.5	429.4	107,700	107,700		
95	79.8	428.4	107,500	107,500		
100	79.1	427.3	107,400	107,400		
105	78.4	426.1	106,800	106,800		
110	77.7	424.9	105,800	105,800		
115	77.1	423.6	105,000	105,000		
120	76.4	422.2	104,100	104,100		
125	75.7	420.8	103,100	103,100		
130	75.0	419.3	102,200	102,200		
135	74.3	417.8	101,300	101,300		
140	73.6	416.2	98,800	99,500		
145	72.9	414.5	93,100	96,900		
150	72.2	412.7	87,600	94,400		
155	71.5	410.9	82,400	92,000		
160	70.8	409.0	77,600	89,700		
165	70.0	407.0	73,100	87,400		
170	69.3	405.0	68,900	85,200		
175	68.6	402.9	64,900	83,100		
180	67.9	400.7	61,100	81,200		
185	67.1	398.4	57,600	79,200		
190	66.4	396.1	54,200	77,300		
195	65.7	393.7	51,000	75,500		
200	64.9	391.2	48,000	73,800		
205	64.2	388.6	45,100	70,700		
210	63.4	385.9	42,400	67,700		
215	62.7	383.2	39,700	64,800		
220	61.9	380.4	37,200	62,000		
225	61.1	377.4	34,900	59,400		
230	60.4	374.4	32,600	56,900		
235	59.6	371.3	30,400	54,400		
240	58.8	368.1	28,300	52,100		
245	58.0	364.8	26,300	49,900		
250	57.2	361.4	24,400	47,800		
255	56.4	357.9	22,500	45,800		
260	55.5	354.3	20,800	43,900		
270	53.9	346.7	17,400	40,200		
280	52.2	338.6	14,300	36,800		
290	50.4	330.1	11,400	33,600		
300	48.6	321.0		30,700		
310	46.8	311.3		27,900		
320	44.8	300.9		25,300		
330	42.9	289.8		22,900		
340	40.8	277.9		20,600		
350	38.6	265.0		18,400		
360	36.3	251.1		16,400		
365	35.1	243.6		15,400		

419.9 ft			34.8 ft		48.0 ft	
ft	ft	ft	lb	lb		
73	82.9	442.4	100,800	100,800		
74	82.8	442.3	100,700	100,700		
76	82.5	441.9	100,700	100,700		
78	82.3	441.6	100,600	100,600		
80	82.0	441.3	100,500	100,500		
85	81.3	440.4	100,400	100,400		
90	80.7	439.4	100,200	100,200		
95	80.0	438.4	100,000	100,000		
100	79.4	437.3	99,800	99,800		
105	78.7	436.2	99,700	99,700		
110	78.0	435.0	99,500	99,500		
115	77.3	433.7	99,300	99,300		
120	76.7	432.4	99,100	99,100		
125	76.0	431.0	98,600	98,600		
130	75.3	429.6	97,700	97,700		
135	74.6	428.1	96,800	96,800		
140	74.0	426.5	95,900	95,900		
145	73.3	424.9	91,500	94,900		
150	72.6	423.2	86,000	93,200		
155	71.9	421.4	80,800	91,500		
160	71.2	419.5	76,000	89,500		
165	70.5	417.6	71,500	87,200		
170	69.8	415.6	67,300	85,000		
175	69.1	413.6	63,300	83,000		
180	68.4	411.5	59,500	81,000		
185	67.7	409.2	55,900	79,100		
190	67.0	407.0	52,600	77,200		
195	66.3	404.6	49,400	75,400		
200	65.5	402.2	46,300	72,700		
205	64.8	399.7	43,500	69,500		
210	64.1	397.1	40,700	66,500		
215	63.3	394.4	38,100	63,600		
220	62.6	391.7	35,600	60,800		
225	61.8	388.8	33,200	58,200		
230	61.1	385.9	30,900	55,600		
235	60.3	382.9	28,800	53,200		
240	59.6	379.8	26,700	50,900		
245	58.8	376.6	24,700	48,700		
250	58.0	373.3	22,700	46,600		
260	56.4	366.4	19,100	42,600		
270	54.8	359.1	15,700	39,000		
280	53.2	351.3	12,600	35,600		
290	51.5	343.1		32,400		
300	49.8	334.3		29,400		
310	48.0	325.0		26,700		
320	46.2	315.1		24,100		
330	44.3	304.6		21,600		
340	42.3	293.3		19,300		
350	40.3	281.1		17,200		
360	38.1	268.0		15,100		
370	35.9	253.8		13,200		
373	35.2	249.4		12,600		

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ft	ft	ft	lb	lb
74	83.0	452.2	93,500	93,500
76	82.7	451.9	93,500	93,500
78	82.4	451.6	93,500	93,500
80	82.2	451.2	93,300	93,300
85	81.5	450.4	93,100	93,100
90	80.9	449.4	93,000	93,000
95	80.2	448.5	92,800	92,800
100	79.6	447.4	92,600	92,600
105	78.9	446.3	92,400	92,400
110	78.3	445.1	92,200	92,200
115	77.6	443.9	91,500	91,500
120	77.0	442.6	89,800	89,800
125	76.3	441.3	87,700	87,700
130	75.7	439.8	85,800	85,800
135	75.0	438.4	83,800	83,800
140	74.3	436.8	81,800	81,800
145	73.7	435.2	80,000	80,000
150	73.0	433.6	78,200	78,200
155	72.3	431.8	76,600	76,600
160	71.6	430.0	74,900	74,900
165	71.0	428.2	72,700	73,400
170	70.3	426.2	68,500	71,800
175	69.6	424.2	64,500	70,300
180	68.9	422.1	60,700	68,900
185	68.2	420.0	57,200	67,500
190	67.5	417.8	53,800	66,200
195	66.8	415.5	50,600	64,900
200	66.1	413.1	47,600	63,700
205	65.4	410.7	44,700	62,400
210	64.7	408.2	42,000	61,300
215	64.0	405.6	39,400	60,200
220	63.3	402.9	36,900	59,100
225	62.5	400.1	34,500	58,100
230	61.8	397.3	32,200	56,600
235	61.1	394.4	30,000	54,200
240	60.3	391.4	27,900	51,900
245	59.6	388.3	25,900	49,700
250	58.8	385.1	24,000	47,600
260	57.3	378.4	20,400	43,600
270	55.7	371.3	17,000	39,900
280	54.1	363.8	13,900	36,500
290	52.5	355.9	11,000	33,400
300	50.8	347.5		30,400
310	49.1	338.5		27,700
320	47.4	329.1		25,100
330	45.6	319.0		22,700
340	43.7	308.2		20,400
350	41.8	296.7		18,200
360	39.7	284.3		16,200
370	37.6	271.0		14,200
380	35.4	256.6		12,400
381	35.2	255.1		12,200