


Liftcrane Boom

Extended Upper Point Capacities

MLC300 VPC-MAX SERIES 3

Boom No. B85:505-500
with Mast No. M11:503 and
23.0 ft Extended Upper Boom Point
474,100 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.


BOOM BACKWARD STABILITY: Capacities indicated by (b) requires 5,200 lb minimum weight suspended beneath boom point. **Caution: Do not operate in areas indicated by (b) without required minimum weight.** *Boom may not lower and boom hoist wire rope may go slack causing wire rope damage or failure.*

OPERATING CONDITIONS: Machine to operate on a firm, level, and uniformly supporting surface. Refer to Boom Rigging **No. 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 474,100 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.




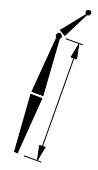


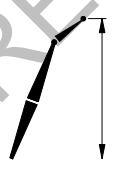
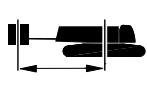

Select counterweight position from Table 1 that will allow raising and lowering of boom length. Counterweight position selection may be changed with boom on ground or while boom is within operating range of capacity chart.

Combined weight beneath extended upper boom point (lower or upper sheaves) must not exceed block weight shown.

Table 1: Without Luffing Jib Backstays

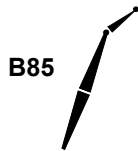
Over End or Side of Crawlers		
Boom Length (ft)	34.8 ft Counterweight Position	48.0 ft Counterweight Position
	Block Weight (lb)	
272.3	10,400	10,400
282.2	10,400	10,400
292.0	10,400	10,400
301.8	10,400	10,400
311.7	10,400	10,400
321.5	10,400	10,400
331.4	10,400	10,400
341.2	10,400	10,400
351.0	10,400	10,400
360.9	10,400	10,400
370.7	8,200	10,400
380.6	4,900	10,400
390.4	3,800	10,400
400.3	#	10,400
410.1		10,000
419.9	Raising Not Permitted	6,700
429.8		6,300

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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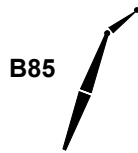


272.3 ft				
ft	ft	ft	34.8 ft lb	48.0 ft lb
55	82.9	295.9	183,800b	183,800b
56	82.7	295.7	183,800b	183,800b
58	82.3	295.3	183,800b	183,800b
60	81.9	295.0	183,800b	183,800b
62	81.5	294.6	183,200	183,200
64	81.1	294.2	182,400	182,400
66	80.7	293.8	181,500	181,500
68	80.3	293.3	180,700	180,700
70	79.9	292.9	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	164,100	164,100
110	71.7	280.7	161,800	161,800
115	70.7	278.7	159,500	159,500
120	69.6	276.7	157,300	157,300
125	68.5	274.5	153,200	155,000
130	67.5	272.2	145,100	152,900
135	66.4	269.8	137,700	150,700
140	65.3	267.2	130,800	148,600
145	64.2	264.6	124,400	146,600
150	63.1	261.8	118,500	144,600
155	61.9	258.9	113,000	142,600
160	60.8	255.8	107,900	140,800
165	59.6	252.6	103,000	136,200
170	58.4	249.3	98,500	130,700
175	57.3	245.8	94,300	125,500
180	56.0	242.2	90,300	120,600
185	54.8	238.4	86,500	115,900
190	53.6	234.4	83,000	111,500
195	52.3	230.2	79,600	107,400
200	51.0	225.9	76,400	103,500
205	49.7	221.3	73,400	99,700
210	48.3	216.5	70,500	96,200
215	46.9	211.5	67,700	92,800
220	45.5	206.2	65,100	89,600
225	44.1	200.7	62,500	86,500
230	42.6	194.9	59,900	83,600
235	41.0	188.7	57,300	80,700
240	39.4	182.2	54,900	78,000
245	37.7	175.3	52,600	75,500
250	36.0	167.9	50,300	73,000
252	35.3	164.8	49,400	72,000

282.2 ft				
ft	ft	ft	34.8 ft lb	48.0 ft lb
56	82.9	305.7	185,700b	185,700b
58	82.5	305.3	185,000b	185,000b
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	166,100	166,100
110	72.3	291.2	163,900	163,900
115	71.3	289.3	161,700	161,700
120	70.3	287.3	159,500	159,500
125	69.3	285.2	152,100	157,300
130	68.2	283.0	144,000	155,200
135	67.2	280.7	136,500	153,100
140	66.2	278.2	129,600	151,000
145	65.1	275.7	123,300	148,900
150	64.0	273.0	117,300	146,900
155	62.9	270.2	111,800	145,000
160	61.8	267.3	106,700	141,000
165	60.7	264.3	101,900	135,100
170	59.6	261.1	97,400	129,500
175	58.5	257.8	93,100	124,300
180	57.3	254.3	89,100	119,400
185	56.2	250.7	85,400	114,700
190	55.0	246.9	81,800	110,400
195	53.8	243.0	78,400	106,200
200	52.5	238.9	75,200	102,300
205	51.3	234.6	72,200	98,500
210	50.0	230.1	69,300	95,000
215	48.7	225.4	66,500	91,600
220	47.4	220.4	63,700	88,400
225	46.0	215.3	60,900	85,300
230	44.6	209.9	58,300	82,400
235	43.2	204.2	55,700	79,600
240	41.7	198.2	53,300	76,900
245	40.2	191.9	51,000	74,300
250	38.6	185.2	48,700	71,800
255	37.0	178.1	46,600	69,400
260	35.3	170.5	44,500	67,100

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292.0 ft				
ft	ft	ft	lb	lb
57	83.0	315.5	194,900b	194,900b
58	82.8	315.3	194,500b	194,500b
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	179,600	179,600
105	73.9	303.4	177,500	177,500
110	72.9	301.7	175,300	175,300
115	71.9	299.8	169,900	173,200
120	71.0	297.9	160,200	171,000
125	70.0	295.9	151,300	168,800
130	69.0	293.8	143,200	166,600
135	68.0	291.5	135,700	164,400
140	67.0	289.2	128,800	162,200
145	65.9	286.7	122,400	160,000
150	64.9	284.2	116,500	153,300
155	63.9	281.5	111,000	146,500
160	62.8	278.7	105,800	140,200
165	61.8	275.8	101,000	134,200
170	60.7	272.8	96,500	128,700
175	59.6	269.6	92,200	123,400
180	58.5	266.3	88,200	118,500
185	57.4	262.8	84,500	113,900
190	56.3	259.2	80,900	109,500
195	55.1	255.5	77,500	105,300
200	54.0	251.6	74,300	101,400
205	52.8	247.5	71,300	97,700
210	51.6	243.3	68,300	94,100
215	50.4	238.8	65,300	90,700
220	49.1	234.2	62,400	87,500
225	47.8	229.4	59,700	84,400
230	46.5	224.3	57,000	81,500
235	45.2	219.0	54,500	78,700
240	43.8	213.4	52,100	76,000
245	42.4	207.6	49,800	73,400
250	41.0	201.4	47,500	70,900
255	39.5	195.0	45,400	68,500
260	37.9	188.1	43,300	66,200
265	36.3	180.9	41,300	64,000
268	35.3	176.3	40,100	62,800

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	198,200	198,200
95	76.3	316.9	196,200	196,200
100	75.3	315.4	191,900	191,900
105	74.4	313.8	187,800	187,800
110	73.5	312.1	179,100	183,800
115	72.5	310.3	168,400	180,100
120	71.6	308.5	158,700	176,300
125	70.6	306.5	149,800	172,800
130	69.7	304.5	141,600	169,300
135	68.7	302.3	134,100	166,100
140	67.7	300.1	127,200	162,900
145	66.7	297.7	120,800	159,000
150	65.7	295.2	114,900	151,700
155	64.7	292.7	109,400	144,900
160	63.7	290.0	104,200	138,500
165	62.7	287.2	99,400	132,600
170	61.7	284.3	94,900	127,000
175	60.7	281.2	90,600	121,800
180	59.6	278.1	86,600	116,900
185	58.5	274.8	82,800	112,200
190	57.5	271.3	79,300	107,800
195	56.4	267.8	75,900	103,700
200	55.3	264.0	72,500	99,700
205	54.1	260.2	69,200	96,000
210	53.0	256.1	66,100	92,500
215	51.8	251.9	63,000	89,100
220	50.7	247.6	60,200	85,800
225	49.5	243.0	57,400	82,800
230	48.2	238.2	54,800	79,800
235	47.0	233.2	52,300	77,000
240	45.7	228.0	49,800	74,300
245	44.4	222.6	47,500	71,800
250	43.0	216.9	45,300	69,300
255	41.6	210.9	43,100	66,900
260	40.2	204.6	41,100	64,600
265	38.7	198.0	39,100	62,400
270	37.2	191.0	37,100	60,300
275	35.6	183.6	35,300	58,300
276	35.3	182.0	34,900	57,900

MLC300 VPC-MAX S-3

ASME B30.5

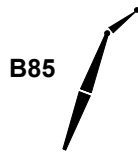


311.7 ft				
ft	ft	ft	lb	lb
60	82.9	334.9	199,800	199,800
62	82.5	334.6	199,800	199,800
64	82.2	334.2	199,800	199,800
66	81.8	333.9	199,800	199,800
68	81.5	333.5	199,800	199,800
70	81.1	333.1	199,800	199,800
72	80.8	332.7	199,800	199,800
74	80.4	332.3	199,800	199,800
76	80.1	331.8	199,800	199,800
78	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	191,500	191,500
100	75.8	325.6	187,300	187,300
105	74.9	324.1	183,200	183,200
110	74.0	322.5	179,100	179,100
115	73.1	320.8	169,200	175,300
120	72.1	319.0	159,500	171,600
125	71.2	317.1	150,600	168,000
130	70.3	315.1	142,400	164,500
135	69.4	313.0	135,000	161,200
140	68.4	310.8	128,000	158,000
145	67.5	308.6	121,700	154,900
150	66.5	306.2	115,700	151,900
155	65.6	303.7	110,200	145,700
160	64.6	301.1	105,000	139,400
165	63.6	298.5	100,200	133,400
170	62.6	295.7	95,700	127,900
175	61.6	292.7	91,400	122,600
180	60.6	289.7	87,400	117,700
185	59.6	286.5	83,700	113,100
190	58.6	283.3	80,100	108,700
195	57.5	279.8	76,700	104,500
200	56.5	276.3	73,500	100,600
205	55.4	272.6	70,300	96,900
210	54.3	268.7	67,200	93,300
215	53.2	264.8	64,200	89,900
220	52.1	260.6	61,300	86,700
225	50.9	256.3	58,600	83,600
230	49.8	251.8	55,900	80,700
235	48.6	247.1	53,400	77,900
240	47.4	242.2	51,000	75,200
245	46.2	237.1	48,700	72,600
250	44.9	231.7	46,400	70,200
255	43.6	226.1	44,300	67,800
260	42.3	220.3	42,200	65,500
265	40.9	214.2	40,300	63,300
270	39.5	207.7	38,300	61,200
275	38.1	201.0	36,500	59,200
280	36.6	193.8	34,700	57,200
284	35.3	187.8	33,300	55,700

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	173,200	173,200
105	75.3	334.4	169,100	169,100
110	74.5	332.8	165,000	165,000
115	73.6	331.2	161,100	161,100
120	72.7	329.4	157,500	157,500
125	71.8	327.6	149,400	153,900
130	70.9	325.7	141,200	150,500
135	70.0	323.7	133,700	147,100
140	69.1	321.6	126,800	144,000
145	68.2	319.4	120,400	140,900
150	67.3	317.1	114,500	138,000
155	66.3	314.7	109,000	135,200
160	65.4	312.2	103,800	132,400
165	64.4	309.6	99,000	129,900
170	63.5	306.9	94,400	126,600
175	62.5	304.1	90,200	121,400
180	61.6	301.2	86,200	116,400
185	60.6	298.2	82,400	111,800
190	59.6	295.0	78,800	107,400
195	58.6	291.7	75,400	103,200
200	57.6	288.3	71,900	99,300
205	56.6	284.8	68,600	95,600
210	55.5	281.1	65,400	92,000
215	54.5	277.3	62,400	88,700
220	53.4	273.4	59,500	85,400
225	52.3	269.2	56,800	82,400
230	51.2	265.0	54,200	79,400
235	50.1	260.5	51,700	76,600
240	49.0	255.9	49,200	73,900
245	47.8	251.1	46,900	71,400
250	46.6	246.0	44,700	68,900
255	45.4	240.8	42,600	66,500
260	44.1	235.3	40,500	64,300
265	42.9	229.6	38,500	62,100
270	41.6	223.6	36,600	60,000
280	38.8	210.8	33,000	56,000
290	35.9	196.5	29,600	52,200
293	35.0	191.9	28,600	51,200

MLC300 VPC-MAX S-3

ASME B30.5



331.4 ft

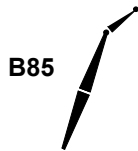
ft	ft	ft	lb	lb
62	82.9	354.5	178,900	178,900
64	82.6	354.2	178,900	178,900
66	82.3	353.8	178,900	178,900
68	81.9	353.5	178,900	178,900
70	81.6	353.1	178,900	178,900
72	81.3	352.7	178,900	178,900
74	81.0	352.3	178,900	178,900
76	80.6	351.9	178,900	178,900
78	80.3	351.5	178,900	178,900
80	80.0	351.1	178,900	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	170,400	170,400
105	75.8	344.7	166,200	166,200
110	74.9	343.1	162,200	162,200
115	74.1	341.5	158,400	158,400
120	73.2	339.9	154,700	154,700
125	72.3	338.1	149,000	151,100
130	71.5	336.2	140,800	147,700
135	70.6	334.3	133,300	144,300
140	69.7	332.3	126,400	141,100
145	68.8	330.1	120,000	138,000
150	67.9	327.9	114,100	135,000
155	67.0	325.6	108,500	132,200
160	66.1	323.2	103,400	129,500
165	65.2	320.7	98,500	126,900
170	64.3	318.1	94,000	124,400
175	63.4	315.4	89,800	120,900
180	62.4	312.6	85,800	116,000
185	61.5	309.7	82,000	111,400
190	60.6	306.6	78,400	107,000
195	59.6	303.5	74,800	102,800
200	58.6	300.2	71,300	98,900
205	57.6	296.8	68,000	95,100
210	56.6	293.3	64,800	91,600
215	55.6	289.7	61,800	88,200
220	54.6	285.9	58,900	85,000
225	53.6	282.0	56,200	81,900
230	52.5	277.9	53,600	79,000
235	51.5	273.6	51,100	76,200
240	50.4	269.2	48,600	73,500
245	49.3	264.7	46,300	70,900
250	48.2	259.9	44,100	68,500
255	47.0	255.0	42,000	66,100
260	45.8	249.8	39,900	63,800
265	44.6	244.5	37,900	61,600
270	43.4	238.9	36,000	59,500
280	40.9	226.9	32,400	55,500
290	38.2	213.8	29,000	51,800
300	35.3	199.2	25,800	48,400
301	35.0	197.7	25,500	48,000

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	150,500	150,500
115	74.5	351.9	146,700	146,700
120	73.7	350.2	143,100	143,100
125	72.8	348.5	139,600	139,600
130	72.0	346.7	136,300	136,300
135	71.1	344.8	132,100	133,000
140	70.3	342.9	128,200	129,900
145	69.4	340.8	118,800	126,900
150	68.6	338.7	112,800	124,000
155	67.7	336.5	107,300	121,200
160	66.8	334.1	102,100	118,500
165	66.0	331.7	97,300	116,000
170	65.1	329.2	92,700	113,600
175	64.2	326.6	88,500	111,300
180	63.3	323.9	84,500	109,000
185	62.4	321.1	80,500	106,900
190	61.5	318.1	76,700	104,900
195	60.5	315.1	73,000	101,500
200	59.6	312.0	69,500	97,600
205	58.6	308.7	66,200	93,900
210	57.7	305.3	63,000	90,300
215	56.7	301.8	60,000	86,900
220	55.7	298.2	57,200	83,700
225	54.8	294.4	54,400	80,600
230	53.8	290.6	51,800	77,700
235	52.7	286.5	49,300	74,900
240	51.7	282.3	46,900	72,200
245	50.7	278.0	44,600	69,600
250	49.6	273.5	42,300	67,200
255	48.5	268.8	40,200	64,800
260	47.4	263.9	38,200	62,500
265	46.3	258.8	36,200	60,400
270	45.1	253.6	34,300	58,200
280	42.7	242.3	30,600	54,300
290	40.2	230.1	27,300	50,500
300	37.6	216.7	24,100	47,100
309	35.0	203.4	21,400	44,100

MLC300 VPC-MAX S-3

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474,100 lb

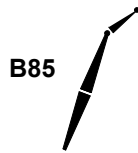


351.0 ft			34.8 ft		48.0 ft	
ft	ft	ft	lb	lb	lb	lb
65	82.9	374.0	156,400	156,400		
66	82.7	373.8	155,900	155,900		
68	82.4	373.5	154,700	154,700		
70	82.1	373.1	153,600	153,600		
72	81.8	372.8	152,500	152,500		
74	81.4	372.4	151,500	151,500		
76	81.1	372.0	150,400	150,400		
78	80.8	371.6	149,300	149,300		
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	126,400	126,400		
130	72.5	357.2	124,400	124,400		
135	71.7	355.4	122,400	122,400		
140	70.8	353.5	120,500	120,500		
145	70.0	351.5	118,100	118,100		
150	69.2	349.4	114,100	115,300		
155	68.3	347.2	108,500	112,700		
160	67.5	345.0	103,400	110,200		
165	66.6	342.6	98,500	107,700		
170	65.8	340.2	94,000	105,300		
175	64.9	337.7	89,800	103,100		
180	64.1	335.1	85,800	100,900		
185	63.2	332.4	82,000	98,900		
190	62.3	329.5	78,400	96,900		
195	61.4	326.6	74,700	95,100		
200	60.5	323.6	71,200	93,300		
205	59.6	320.4	67,900	91,600		
210	58.7	317.2	64,800	89,900		
215	57.7	313.8	61,800	88,200		
220	56.8	310.4	58,900	85,000		
225	55.8	306.7	56,200	82,000		
230	54.9	303.0	53,500	79,000		
235	53.9	299.1	51,000	76,200		
240	52.9	295.1	48,600	73,500		
245	51.9	291.0	46,300	71,000		
250	50.9	286.7	44,100	68,500		
255	49.9	282.2	42,000	66,200		
260	48.8	277.6	39,900	63,900		
265	47.8	272.8	38,000	61,700		
270	46.7	267.8	36,000	59,600		
280	44.4	257.2	32,400	55,600		
290	42.1	245.8	29,100	51,900		
300	39.6	233.3	25,900	48,500		
310	37.0	219.6	23,000	45,200		
317	35.1	209.2	21,000	43,100		

360.9 ft			34.8 ft		48.0 ft	
ft	ft	ft	lb	lb	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	122,000	122,000		
130	73.0	367.6	118,800	118,800		
135	72.2	365.8	115,800	115,800		
140	71.4	364.0	112,900	112,900		
145	70.6	362.1	110,100	110,100		
150	69.7	360.1	107,400	107,400		
155	68.9	358.0	104,800	104,800		
160	68.1	355.8	102,200	102,300		
165	67.3	353.5	97,300	99,900		
170	66.5	351.2	92,800	97,600		
175	65.6	348.7	88,500	95,400		
180	64.8	346.2	84,500	93,300		
185	63.9	343.5	80,500	91,300		
190	63.1	340.8	76,700	89,300		
195	62.2	338.0	73,000	87,500		
200	61.3	335.1	69,500	85,700		
205	60.5	332.1	66,200	84,000		
210	59.6	328.9	63,000	82,400		
215	58.7	325.7	60,000	80,800		
220	57.8	322.3	57,200	79,400		
225	56.9	318.9	54,400	78,000		
230	55.9	315.3	51,800	76,600		
235	55.0	311.6	49,300	75,000		
240	54.1	307.7	46,900	72,300		
245	53.1	303.7	44,600	69,700		
250	52.1	299.6	42,400	67,300		
255	51.1	295.4	40,300	64,900		
260	50.1	290.9	38,200	62,600		
265	49.1	286.4	36,200	60,400		
270	48.1	281.6	34,300	58,300		
280	46.0	271.6	30,700	54,400		
290	43.8	260.8	27,400	50,700		
300	41.4	249.1	24,200	47,200		
310	39.0	236.4	21,300	44,000		
320	36.4	222.4	18,500	41,000		
325	35.1	214.9	17,200	39,500		

MLC300 VPC-MAX S-3

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370.7 ft				
ft	ft	ft	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	108,500	108,500
140	71.9	374.5	105,700	105,700
145	71.1	372.6	102,900	102,900
150	70.3	370.7	100,300	100,300
155	69.5	368.6	97,800	97,800
160	68.7	366.5	95,400	95,400
165	67.9	364.3	93,000	93,000
170	67.1	362.0	90,800	90,800
175	66.3	359.7	88,000	88,700
180	65.5	357.2	83,900	86,600
185	64.7	354.7	79,800	84,600
190	63.8	352.0	75,900	82,700
195	63.0	349.3	72,300	80,900
200	62.1	346.5	68,800	79,200
205	61.3	343.6	65,500	77,500
210	60.4	340.5	62,300	76,000
215	59.6	337.4	59,300	74,500
220	58.7	334.2	56,500	73,000
225	57.8	330.8	53,700	71,600
230	56.9	327.4	51,100	70,300
235	56.0	323.8	48,600	69,100
240	55.1	320.1	46,200	67,900
245	54.2	316.3	43,900	66,700
250	53.3	312.3	41,700	65,600
255	52.3	308.3	39,500	64,400
260	51.4	304.0	37,500	62,100
270	49.4	295.1	33,600	57,800
280	47.4	285.6	30,000	53,900
290	45.3	275.4	26,700	50,200
300	43.1	264.3	23,500	46,700
310	40.8	252.4	20,600	43,500
320	38.4	239.4	17,800	40,500
330	35.9	225.2	15,200	37,600
333	35.1	220.7	14,400	36,800

380.6 ft				
ft	ft	ft	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	115,400	115,400
135	73.1	386.7	112,400	112,400
140	72.3	385.0	109,500	109,500
145	71.6	383.1	106,700	106,700
150	70.8	381.2	104,000	104,000
155	70.0	379.3	101,500	101,500
160	69.3	377.2	98,900	98,900
165	68.5	375.1	95,700	96,500
170	67.7	372.9	91,100	94,200
175	66.9	370.6	86,600	92,000
180	66.1	368.2	82,300	89,800
185	65.3	365.7	78,200	87,700
190	64.5	363.2	74,300	85,800
195	63.7	360.5	70,600	83,900
200	62.9	357.8	67,100	82,100
205	62.1	354.9	63,800	80,400
210	61.3	352.0	60,700	78,700
215	60.4	349.0	57,700	77,100
220	59.6	345.9	54,800	75,600
225	58.7	342.7	52,100	74,200
230	57.9	339.3	49,400	72,800
235	57.0	335.9	46,900	71,400
240	56.1	332.3	44,500	70,200
245	55.2	328.7	42,200	68,000
250	54.3	324.9	40,000	65,500
255	53.4	320.9	37,900	63,100
260	52.5	316.9	35,800	60,900
270	50.6	308.4	31,900	56,600
280	48.7	299.3	28,300	52,600
290	46.7	289.5	25,000	48,900
300	44.7	279.1	21,900	45,500
310	42.5	267.8	18,900	42,300
320	40.2	255.6	16,100	39,200
330	37.9	242.4	13,500	36,400
340	35.4	227.9	11,100	33,700
341	35.1	226.4	10,800	33,400

MLC300 VPC-MAX S-3

ASME B30.5

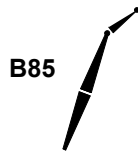


390.4 ft				
ft	ft	ft	lb	lb
69	83.0	413.2	123,600	123,600
70	82.8	413.0	123,500	123,500
72	82.6	412.7	123,500	123,500
74	82.3	412.4	123,400	123,400
76	82.0	412.0	123,400	123,400
78	81.7	411.7	123,300	123,300
80	81.4	411.3	123,300	123,300
85	80.7	410.3	123,200	123,200
90	80.0	409.3	123,100	123,100
95	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	98,000	98,000
150	71.3	391.8	96,100	96,100
155	70.5	389.8	94,300	94,300
160	69.8	387.8	92,600	92,600
165	69.0	385.8	90,800	90,800
170	68.3	383.6	88,500	88,500
175	67.5	381.4	86,400	86,400
180	66.7	379.1	82,700	84,400
185	66.0	376.7	78,600	82,400
190	65.2	374.2	74,800	80,500
195	64.4	371.6	71,100	78,700
200	63.6	369.0	67,600	76,900
205	62.8	366.2	64,300	75,300
210	62.0	363.4	61,100	73,600
215	61.2	360.5	58,100	72,200
220	60.4	357.5	55,300	70,700
225	59.6	354.4	52,500	69,300
230	58.7	351.1	49,900	67,900
235	57.9	347.8	47,400	66,600
240	57.1	344.4	45,000	65,400
245	56.2	340.8	42,700	64,200
250	55.3	337.2	40,500	63,100
255	54.5	333.4	38,400	62,000
260	53.6	329.5	36,300	61,100
270	51.8	321.4	32,500	57,000
280	49.9	312.6	28,900	53,000
290	48.0	303.3	25,500	49,300
300	46.1	293.4	22,400	45,900
310	44.0	282.7	19,500	42,700
320	41.9	271.2	16,700	39,700
330	39.7	258.8	14,100	36,800
340	37.3	245.3	11,600	34,100
349	35.1	232.1		31,900

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	94,500	94,500
150	71.7	402.3	92,000	92,000
155	71.0	400.4	89,600	89,600
160	70.3	398.4	87,200	87,200
165	69.5	396.4	85,000	85,000
170	68.8	394.3	82,900	82,900
175	68.1	392.2	80,800	80,800
180	67.3	389.9	78,800	78,800
185	66.6	387.6	76,900	76,900
190	65.8	385.2	73,100	75,000
195	65.1	382.7	69,400	73,300
200	64.3	380.1	65,900	71,600
205	63.5	377.5	62,600	70,000
210	62.7	374.7	59,500	68,400
215	62.0	371.9	56,500	66,900
220	61.2	369.0	53,600	65,500
225	60.4	365.9	50,900	64,100
230	59.6	362.8	48,200	62,700
235	58.8	359.6	45,700	61,500
240	57.9	356.3	43,300	60,300
245	57.1	352.9	41,000	59,100
250	56.3	349.4	38,800	58,000
255	55.4	345.7	36,700	56,900
260	54.6	342.0	34,600	55,900
270	52.9	334.1	30,800	54,100
280	51.1	325.8	27,200	51,800
290	49.3	316.8	23,800	48,100
300	47.4	307.3	20,700	44,700
310	45.4	297.2	17,800	41,400
320	43.4	286.3	15,000	38,400
330	41.3	274.6	12,400	35,600
340	39.1	261.9	10,000	32,900
350	36.8	248.2		30,400
357	35.1	237.9		27,900

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410.1 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	99,500	99,500
145	72.9	414.5	96,900	96,900
150	72.2	412.7	94,400	94,400
155	71.5	410.9	92,000	92,000
160	70.8	409.0	89,700	89,700
165	70.0	407.0	87,400	87,400
170	69.3	405.0	85,200	85,200
175	68.6	402.9	83,100	83,100
180	67.9	400.7	80,500	81,200
185	67.1	398.4	76,400	79,200
190	66.4	396.1	72,500	77,300
195	65.7	393.7	68,900	75,500
200	64.9	391.2	65,400	73,800
205	64.2	388.6	62,100	72,000
210	63.4	385.9	58,900	70,500
215	62.7	383.2	55,900	69,000
220	61.9	380.4	53,000	67,400
225	61.1	377.4	50,300	66,100
230	60.4	374.4	47,700	64,700
235	59.6	371.3	45,200	63,400
240	58.8	368.1	42,700	62,100
245	58.0	364.8	40,400	61,000
250	57.2	361.4	38,200	59,800
255	56.4	357.9	36,100	58,700
260	55.5	354.3	34,100	57,600
270	53.9	346.7	30,200	55,300
280	52.2	338.6	26,600	51,400
290	50.4	330.1	23,300	47,700
300	48.6	321.0	20,100	44,200
310	46.8	311.3	17,200	41,000
320	44.8	300.9	14,400	38,000
330	42.9	289.8	11,800	35,200
340	40.8	277.9		32,500
350	38.6	265.0		30,000
360	36.3	251.1		27,600
365	35.1	243.6		26,500

419.9 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	94,900	94,900
150	72.6	423.2	93,200	93,200
155	71.9	421.4	91,500	91,500
160	71.2	419.5	89,500	89,500
165	70.5	417.6	87,200	87,200
170	69.8	415.6	85,000	85,000
175	69.1	413.6	83,000	83,000
180	68.4	411.5	78,900	81,000
185	67.7	409.2	74,800	79,100
190	67.0	407.0	70,900	77,200
195	66.3	404.6	67,200	75,400
200	65.5	402.2	63,700	73,600
205	64.8	399.7	60,400	72,000
210	64.1	397.1	57,300	70,300
215	63.3	394.4	54,300	68,800
220	62.6	391.7	51,400	67,300
225	61.8	388.8	48,600	65,800
230	61.1	385.9	46,000	64,400
235	60.3	382.9	43,500	63,100
240	59.6	379.8	41,100	61,800
245	58.8	376.6	38,800	60,600
250	58.0	373.3	36,600	59,400
260	56.4	366.4	32,400	57,300
270	54.8	359.1	28,500	54,100
280	53.2	351.3	24,900	50,100
290	51.5	343.1	21,600	46,400
300	49.8	334.3	18,500	43,000
310	48.0	325.0	15,500	39,800
320	46.2	315.1	12,800	36,800
330	44.3	304.6	10,200	33,900
340	42.3	293.3		31,300
350	40.3	281.1		28,800
360	38.1	268.0		26,400
370	35.9	253.8		24,100
373	35.2	249.4		23,500

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B85



474,100 lb



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	73,400	73,400
170	70.3	426.2	71,800	71,800
175	69.6	424.2	70,300	70,300
180	68.9	422.1	68,900	68,900
185	68.2	420.0	67,500	67,500
190	67.5	417.8	66,200	66,200
195	66.8	415.5	64,900	64,900
200	66.1	413.1	63,700	63,700
205	65.4	410.7	61,700	62,400
210	64.7	408.2	58,500	61,300
215	64.0	405.6	55,500	60,200
220	63.3	402.9	52,600	59,100
225	62.5	400.1	49,900	58,100
230	61.8	397.3	47,300	57,000
235	61.1	394.4	44,800	56,100
240	60.3	391.4	42,400	55,200
245	59.6	388.3	40,100	54,300
250	58.8	385.1	37,900	53,400
260	57.3	378.4	33,700	51,800
270	55.7	371.3	29,800	50,200
280	54.1	363.8	26,200	48,800
290	52.5	355.9	22,900	47,400
300	50.8	347.5	19,800	44,000
310	49.1	338.5	16,900	40,800
320	47.4	329.1	14,100	37,800
330	45.6	319.0	11,500	35,000
340	43.7	308.2		32,300
350	41.8	296.7		29,800
360	39.7	284.3		27,400
370	37.6	271.0		25,200
380	35.4	256.6		23,000
381	35.2	255.1		22,800

REFERENCE ONLY!