


# Liftcrane Boom Capacities With Luffing Jib Attached

## MLC150-1 SERIES 1

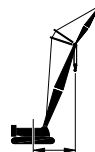
**Boom No. B20:350**  
**Luffing Jib No. 135A**  
**34 110 kg Crane Counterweight**  
**0 kg Carbody Counterweight**  
**360 Degree Rating**

 **LIFTING CAPACITIES:** Lifting capacities for various boom lengths, luffing jib lengths, boom-to-luffing jib angles, and boom 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.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom point sheaves is considered part of load. Weight of luffing jib and 1 300 kg suspended beneath luffing jib point sheaves have been included in capacity determination. 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. Supporting surface and bearing turntable are to be level within a tolerance of 13 mm in 3 m. During operation, luffing jib must be maintained at proper boom-to-luffing jib angle shown in table. Refer to Boom Rigging **No. 80117859**, Luffing Jib Rigging **No. 80117862**, Wire Rope Specifications chart **No. 9866-A**, Counterweight Arrangements chart **No. 9828-A**, Luffing Jib Raising Procedure chart **No. 9851-AM**, and Wind Conditions chart **No. 9853-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 and luffing jib must be within angle range shown in capacity chart. Refer to Maximum Allowable Travel Specifications chart **No. 9852-A**.



**OPERATING RADIUS:** Operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block.



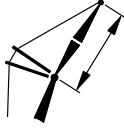

**BOOM ANGLE:** Boom angle in degrees (°) is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.



**BOOM POINT ELEVATION:** Boom point elevation is vertical distance from ground level to centerline of boom point shaft.

**MACHINE EQUIPMENT:** Machine equipped with 7 980 mm crawlers, 1 200 mm treads, 5 300 mm gantry, 10 part boom hoist reeving, boom straps, 8 part luffing jib hoist reeving, two 38 mm luffing jib pendants and backstays, 34 110 kg crane counterweight, and 0 kg carbody counterweight.

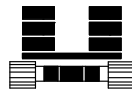
Consult chart **No. 9850-AM** for luffing jib capacities.

Luffing Jib Position During Operation	
 Luffing Jib Length Meters	 Boom-to-Luffing Jib Angle Degrees
21,3	140
24,4 - 27,4	150
30,5 - 36,6	160
39,6 - 51,8	168

## Explanation of Symbols



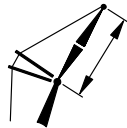
**135A** Luffing Jib No. 135A  
+  
**B20** Boom No. B20:350



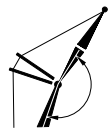
Crane Counterweight  
+  
Carbody Counterweight



360 Degree Rating



Luffing Jib Length



Boom-to-Luffing Jib Angle



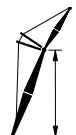
Boom Length



Operating Radius  
(see page 1)



Boom Angle  
(see page 1)



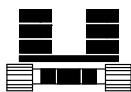
Boom Point Elevation  
(see page 1)



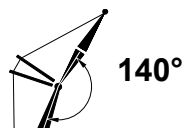
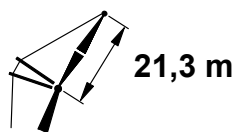
Lifting Capacities  
(see page 1)

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



21,0 m			
m	°	m	kg
6,1	79,7	22,6	80 500
6,5	78,6	22,5	75 000
7,0	77,1	22,4	66 600
8,0	74,3	22,0	50 900
9,0	71,4	21,7	40 500
9,1	71,0	21,6	39 200

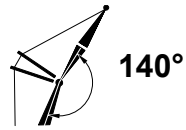
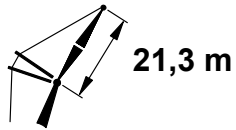
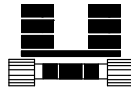
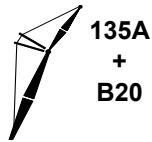
24,0 m			
m	°	m	kg
6,4	80,3	25,6	80 000
6,5	80,0	25,6	77 600
7,0	78,8	25,4	67 000
8,0	76,3	25,2	51 300
9,0	73,8	24,9	40 800
10,0	71,3	24,5	33 200
10,1	71,1	24,5	32 800

27,0 m			
m	°	m	kg
7,0	80,0	28,5	66 700
8,0	77,9	28,3	51 500
9,0	75,7	28,0	41 000
10,0	73,4	27,7	33 400
11,0	71,2	27,3	27 600
11,3	70,6	27,2	26 300

REFERENCE

# MLC150-1 S-1

ASME B30.5



30,0 m			
m	o	m	kg
7,3	80,4	31,5	61 500
8,0	79,1	31,4	51 700
9,0	77,1	31,1	41 200
10,0	75,2	30,8	33 600
11,0	73,1	30,5	27 800
12,0	71,1	30,1	23 300
12,2	70,7	30,1	22 500

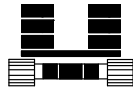
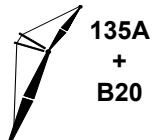
33,0 m			
m	o	m	kg
7,9	80,3	34,5	52 700
8,0	80,1	34,5	51 800
9,0	78,3	34,2	41 300
10,0	76,6	34,0	33 700
11,0	74,7	33,7	27 800
12,0	72,9	33,4	23 400
13,0	71,1	33,0	19 700
13,1	70,9	32,9	19 400

36,0 m			
m	o	m	kg
8,5	80,1	37,4	45 800
9,0	79,3	37,3	41 400
10,0	77,7	37,1	33 700
11,0	76,0	36,8	27 900
12,0	74,4	36,5	23 400
13,0	72,7	36,2	19 800
14,0	71,0	35,8	16 700

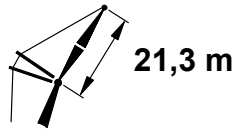
REFERENCE ONLY

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg

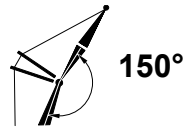
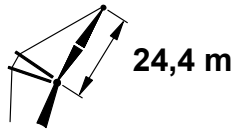
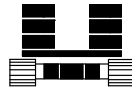
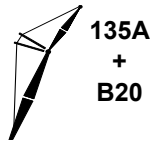


<p>39,0 m</p>			
<b>m</b>	<b>°</b>	<b>m</b>	<b>kg</b>
8,8	80,4	40,4	42 800
9,0	80,2	40,4	41 400
10,0	78,7	40,2	33 800
11,0	77,2	39,9	27 900
12,0	75,6	39,6	23 400
13,0	74,1	39,3	19 800
14,0	72,6	39,0	16 700
15,0	71,0	38,6	14 300
15,2	70,6	38,6	13 700

REFERENCE ONLY!

# MLC150-1 S-1

ASME B30.5



21,0 m			
m	o	m	kg
6,1	79,7	22,6	80 500
6,5	78,6	22,5	74 900
7,0	77,1	22,4	66 300
8,0	74,3	22,0	50 500
9,0	71,4	21,7	40 000
10,0	68,4	21,2	32 400
11,0	65,4	20,8	26 500
12,0	62,3	20,2	22 100
12,5	60,7	19,9	20 200

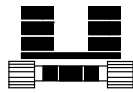
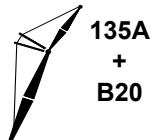
24,0 m			
m	o	m	kg
6,4	80,3	25,6	79 900
6,5	80,0	25,6	77 500
7,0	78,8	25,4	66 900
8,0	76,3	25,2	50 900
9,0	73,8	24,9	40 400
10,0	71,3	24,5	32 700
11,0	68,7	24,1	26 900
12,0	66,0	23,6	22 400
13,0	63,3	23,1	18 800
14,0	60,6	22,5	15 800

27,0 m			
m	o	m	kg
7,0	80,0	28,5	66 600
8,0	77,9	28,3	51 300
9,0	75,7	28,0	40 700
10,0	73,4	27,7	33 000
11,0	71,2	27,3	27 200
12,0	68,9	26,9	22 700
13,0	66,6	26,5	19 000
14,0	64,2	25,9	16 000
15,0	61,8	25,4	13 500
15,2	61,2	25,2	13 000

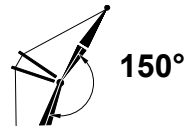
REFERENCIA

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



30,0 m			
m	o	m	kg
7,3	80,4	31,5	61 400
8,0	79,1	31,4	51 500
9,0	77,1	31,1	40 900
10,0	75,2	30,8	33 200
11,0	73,1	30,5	27 400
12,0	71,1	30,1	22 800
13,0	69,1	29,7	19 200
14,0	67,0	29,3	16 100
15,0	64,8	28,8	13 600
16,0	62,7	28,3	11 500
16,8	61,0	27,8	10 000

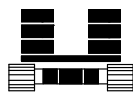
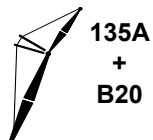
33,0 m			
m	o	m	kg
7,9	80,3	34,5	52 600
8,0	80,1	34,5	51 700
9,0	78,3	34,2	41 100
10,0	76,6	34,0	33 400
11,0	74,7	33,7	27 500
12,0	72,9	33,4	23 000
13,0	71,1	33,0	19 300
14,0	69,2	32,6	16 300
15,0	67,3	32,1	13 800
16,0	65,4	31,7	11 600
17,0	63,4	31,1	9 600
18,0	61,4	30,6	7 800
18,3	60,9	30,4	7 300

36,0 m			
m	o	m	kg
8,5	80,1	37,4	45 600
9,0	79,3	37,3	41 200
10,0	77,7	37,1	33 500
11,0	76,0	36,8	27 600
12,0	74,4	36,5	23 000
13,0	72,7	36,2	19 400
14,0	71,0	35,8	16 300
15,0	69,3	35,4	13 800
16,0	67,6	35,0	11 600
17,0	65,8	34,5	9 600
18,0	64,0	34,0	7 800
19,0	62,2	33,5	6 200
19,8	60,7	33,0	5 000

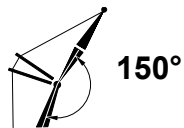
REFERENCED

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



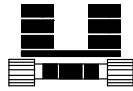
<p>39,0 m</p>			
m	°	m	kg
8,8	80,4	40,4	42 700
9,0	80,2	40,4	41 200
10,0	78,7	40,2	33 600
11,0	77,2	39,9	27 600
12,0	75,6	39,6	23 100
13,0	74,1	39,3	19 400
14,0	72,6	39,0	16 400
15,0	71,0	38,6	13 800
16,0	69,4	38,3	11 600
17,0	67,8	37,8	9 500
18,0	66,2	37,4	7 700
19,0	64,6	36,9	6 100
20,0	62,9	36,3	4 700
21,3	60,6	35,6	3 000

REFERENCE ONLY!

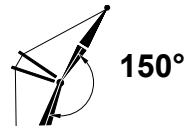
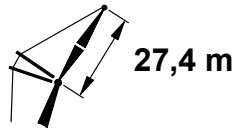


# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



<p>21,0 m</p>			
m	o	m	kg
6,1	79,7	22,6	80 500
6,5	78,6	22,5	73 500
7,0	77,1	22,4	64 300
8,0	74,3	22,0	48 800
9,0	71,4	21,7	38 400
10,0	68,4	21,2	31 000
11,0	65,4	20,8	25 200
12,0	62,3	20,2	20 900
12,5	60,7	19,9	19 000

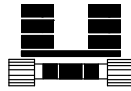
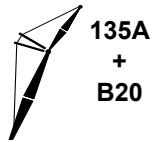
<p>24,0 m</p>			
m	o	m	kg
6,4	80,3	25,6	77 700
6,5	80,0	25,6	75 400
7,0	78,8	25,4	64 900
8,0	76,3	25,2	49 300
9,0	73,8	24,9	38 900
10,0	71,3	24,5	31 400
11,0	68,7	24,1	25 600
12,0	66,0	23,6	21 200
13,0	63,3	23,1	17 700
14,0	60,6	22,5	14 700

<p>27,0 m</p>			
m	o	m	kg
7,0	80,0	28,5	64 700
8,0	77,9	28,3	49 600
9,0	75,7	28,0	39 200
10,0	73,4	27,7	31 700
11,0	71,2	27,3	26 000
12,0	68,9	26,9	21 500
13,0	66,6	26,5	17 900
14,0	64,2	25,9	15 000
15,0	61,8	25,4	12 500
15,2	61,2	25,2	12 000

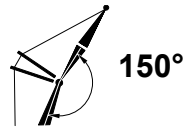
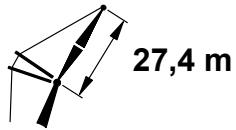
REFERENCIA

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



30,0 m			
m	o	m	kg
7,3	80,4	31,5	59 700
8,0	79,1	31,4	49 900
9,0	77,1	31,1	39 500
10,0	75,2	30,8	31 900
11,0	73,1	30,5	26 200
12,0	71,1	30,1	21 700
13,0	69,1	29,7	18 100
14,0	67,0	29,3	15 200
15,0	64,8	28,8	12 700
16,0	62,7	28,3	10 500
16,8	61,0	27,8	8 900

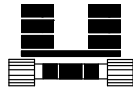
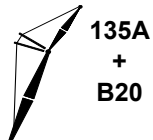
33,0 m			
m	o	m	kg
7,9	80,3	34,5	51 000
8,0	80,1	34,5	50 100
9,0	78,3	34,2	39 700
10,0	76,6	34,0	32 100
11,0	74,7	33,7	26 300
12,0	72,9	33,4	21 900
13,0	71,1	33,0	18 300
14,0	69,2	32,6	15 300
15,0	67,3	32,1	12 800
16,0	65,4	31,7	10 600
17,0	63,4	31,1	8 500
18,0	61,4	30,6	6 800
18,3	60,9	30,4	6 300

36,0 m			
m	o	m	kg
8,5	80,1	37,4	44 200
9,0	79,3	37,3	39 900
10,0	77,7	37,1	32 300
11,0	76,0	36,8	26 500
12,0	74,4	36,5	22 000
13,0	72,7	36,2	18 400
14,0	71,0	35,8	15 400
15,0	69,3	35,4	12 800
16,0	67,6	35,0	10 600
17,0	65,8	34,5	8 500
18,0	64,0	34,0	6 700
19,0	62,2	33,5	5 200
19,8	60,7	33,0	4 000

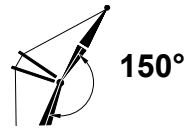
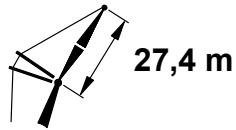
REFERENCED

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg

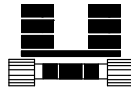
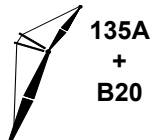


<p>39,0 m</p>			
m	°	m	kg
8,8	80,4	40,4	41 300
9,0	80,2	40,4	39 900
10,0	78,7	40,2	32 400
11,0	77,2	39,9	26 500
12,0	75,6	39,6	22 100
13,0	74,1	39,3	18 400
14,0	72,6	39,0	15 400
15,0	71,0	38,6	12 700
16,0	69,4	38,3	10 500
17,0	67,8	37,8	8 500
18,0	66,2	37,4	6 700
19,0	64,6	36,9	5 200
20,0	62,9	36,3	3 800
21,3	60,6	35,6	2 100

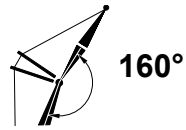
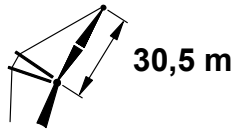
REFERENCE ONLY!

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



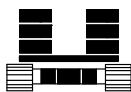
m	o	m	kg
6,1	79,7	22,6	80 500
6,5	78,6	22,5	74 200
7,0	77,1	22,4	65 300
8,0	74,3	22,0	49 300
9,0	71,4	21,7	38 700
10,0	68,4	21,2	31 000
11,0	65,4	20,8	25 100
12,0	62,3	20,2	20 600
13,0	59,0	19,6	16 900
14,0	55,7	18,8	13 900
15,0	52,2	18,0	11 400
15,5	50,2	17,5	10 100

m	o	m	kg
6,4	80,3	25,6	79 100
6,5	80,0	25,6	76 700
7,0	78,8	25,4	66 000
8,0	76,3	25,2	49 900
9,0	73,8	24,9	39 300
10,0	71,3	24,5	31 500
11,0	68,7	24,1	25 600
12,0	66,0	23,6	21 100
13,0	63,3	23,1	17 400
14,0	60,6	22,5	14 400
15,0	57,7	21,8	11 900
16,0	54,7	21,1	9 600
17,0	51,6	20,2	7 400
17,4	50,4	19,9	6 700

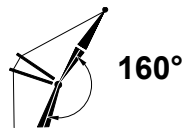
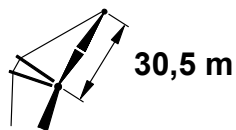
m	o	m	kg
7,0	80,0	28,5	65 900
8,0	77,9	28,3	50 400
9,0	75,7	28,0	39 700
10,0	73,4	27,7	32 000
11,0	71,2	27,3	26 100
12,0	68,9	26,9	21 500
13,0	66,6	26,5	17 800
14,0	64,2	25,9	14 800
15,0	61,8	25,4	12 300
16,0	59,3	24,8	10 000
17,0	56,7	24,1	7 800
18,0	54,0	23,3	6 000
19,0	51,3	22,5	4 400
19,2	50,7	22,3	4 100

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



30,0 m			
m	o	m	kg
7,3	80,4	31,5	60 800
8,0	79,1	31,4	50 800
9,0	77,1	31,1	40 100
10,0	75,2	30,8	32 300
11,0	73,1	30,5	26 300
12,0	71,1	30,1	21 800
13,0	69,1	29,7	18 100
14,0	67,0	29,3	15 000
15,0	64,8	28,8	12 500
16,0	62,7	28,3	10 200
17,0	60,4	27,7	8 000
18,0	58,2	27,0	6 200
19,0	55,8	26,3	4 600
20,0	53,4	25,5	3 100
21,3	50,1	24,4	1 400

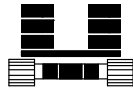
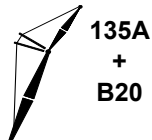
33,0 m			
m	o	m	kg
7,9	80,3	34,5	51 900
8,0	80,1	34,5	51 000
9,0	78,3	34,2	40 300
10,0	76,6	34,0	32 500
11,0	74,7	33,7	26 600
12,0	72,9	33,4	22 000
13,0	71,1	33,0	18 300
14,0	69,2	32,6	15 200
15,0	67,3	32,1	12 600
16,0	65,4	31,7	10 300
17,0	63,4	31,1	8 200
18,0	61,4	30,6	6 400
19,0	59,4	30,0	4 800
20,0	57,3	29,3	3 300
21,3	54,4	28,3	1 600

36,0 m			
m	o	m	kg
8,5	80,1	37,4	45 000
9,0	79,3	37,3	40 500
10,0	77,7	37,1	32 700
11,0	76,0	36,8	26 700
12,0	74,4	36,5	22 200
13,0	72,7	36,2	18 400
14,0	71,0	35,8	15 400
15,0	69,3	35,4	12 600
16,0	67,6	35,0	10 300
17,0	65,8	34,5	8 200
18,0	64,0	34,0	6 400
19,0	62,2	33,5	4 800
20,0	60,4	32,9	3 300
21,3	57,8	32,0	1 700

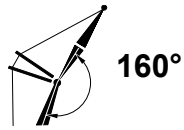
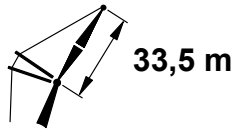
REFERENCED

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



m	°	m	kg
6,1	79,7	22,6	80 500
6,5	78,6	22,5	73 200
7,0	77,1	22,4	63 800
8,0	74,3	22,0	48 000
9,0	71,4	21,7	37 500
10,0	68,4	21,2	29 900
11,0	65,4	20,8	24 100
12,0	62,3	20,2	19 700
13,0	59,0	19,6	16 100
14,0	55,7	18,8	13 100
15,0	52,2	18,0	10 500
15,5	50,2	17,5	9 100

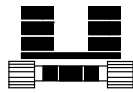
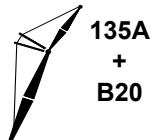
m	°	m	kg
6,4	80,3	25,6	77 500
6,5	80,0	25,6	75 100
7,0	78,8	25,4	64 500
8,0	76,3	25,2	48 700
9,0	73,8	24,9	38 200
10,0	71,3	24,5	30 500
11,0	68,7	24,1	24 700
12,0	66,0	23,6	20 200
13,0	63,3	23,1	16 600
14,0	60,6	22,5	13 600
15,0	57,7	21,8	11 000
16,0	54,7	21,1	8 700
17,0	51,6	20,2	6 600
17,4	50,4	19,9	5 800

m	°	m	kg
7,0	80,0	28,5	64 500
8,0	77,9	28,3	49 200
9,0	75,7	28,0	38 700
10,0	73,4	27,7	31 000
11,0	71,2	27,3	25 200
12,0	68,9	26,9	20 700
13,0	66,6	26,5	17 000
14,0	64,2	25,9	14 000
15,0	61,8	25,4	11 400
16,0	59,3	24,8	9 100
17,0	56,7	24,1	7 000
18,0	54,0	23,3	5 200
19,0	51,3	22,5	3 600
19,2	50,7	22,3	3 300

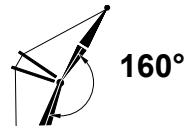
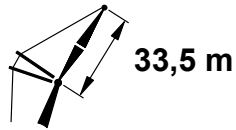
REFERENCED TO ASME B30.5

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



30,0 m			
m	o	m	kg
7,3	80,4	31,5	59 500
8,0	79,1	31,4	49 600
9,0	77,1	31,1	39 000
10,0	75,2	30,8	31 400
11,0	73,1	30,5	25 500
12,0	71,1	30,1	21 000
13,0	69,1	29,7	17 300
14,0	67,0	29,3	14 300
15,0	64,8	28,8	11 600
16,0	62,7	28,3	9 300
17,0	60,4	27,7	7 200
18,0	58,2	27,0	5 400
19,0	55,8	26,3	3 800
19,8	53,9	25,7	2 600

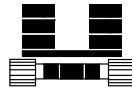
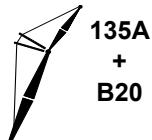
33,0 m			
m	o	m	kg
7,9	80,3	34,5	50 800
8,0	80,1	34,5	49 900
9,0	78,3	34,2	39 300
10,0	76,6	34,0	31 600
11,0	74,7	33,7	25 800
12,0	72,9	33,4	21 200
13,0	71,1	33,0	17 600
14,0	69,2	32,6	14 500
15,0	67,3	32,1	11 800
16,0	65,4	31,7	9 500
17,0	63,4	31,1	7 400
18,0	61,4	30,6	5 600
19,0	59,4	30,0	4 100
19,8	57,7	29,4	2 900

36,0 m			
m	o	m	kg
8,5	80,1	37,4	44 000
9,0	79,3	37,3	39 600
10,0	77,7	37,1	31 800
11,0	76,0	36,8	26 000
12,0	74,4	36,5	21 400
13,0	72,7	36,2	17 800
14,0	71,0	35,8	14 600
15,0	69,3	35,4	11 800
16,0	67,6	35,0	9 600
17,0	65,8	34,5	7 500
18,0	64,0	34,0	5 700
19,0	62,2	33,5	4 100
19,8	60,7	33,0	2 900

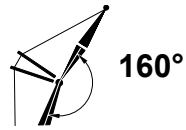
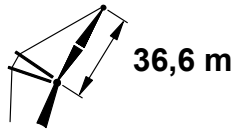
REFERENCED

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



 21,0 m			
m	o	m	kg
6,1	79,7	22,6	80 500
6,5	78,6	22,5	71 700
7,0	77,1	22,4	61 700
8,0	74,3	22,0	46 100
9,0	71,4	21,7	35 800
10,0	68,4	21,2	28 300
11,0	65,4	20,8	22 600
12,0	62,3	20,2	18 200
13,0	59,0	19,6	14 700
14,0	55,7	18,8	11 600
15,0	52,2	18,0	8 800
15,5	50,2	17,5	7 500

 24,0 m			
m	o	m	kg
6,4	80,3	25,6	75 400
6,5	80,0	25,6	73 000
7,0	78,8	25,4	62 500
8,0	76,3	25,2	46 900
9,0	73,8	24,9	36 500
10,0	71,3	24,5	29 000
11,0	68,7	24,1	23 300
12,0	66,0	23,6	18 900
13,0	63,3	23,1	15 300
14,0	60,6	22,5	12 200
15,0	57,7	21,8	9 400
16,0	54,7	21,1	7 200
17,0	51,6	20,2	5 000
17,4	50,4	19,9	4 300

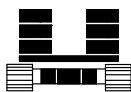
 27,0 m			
m	o	m	kg
7,0	80,0	28,5	62 500
8,0	77,9	28,3	47 500
9,0	75,7	28,0	37 100
10,0	73,4	27,7	29 600
11,0	71,2	27,3	23 800
12,0	68,9	26,9	19 400
13,0	66,6	26,5	15 800
14,0	64,2	25,9	12 600
15,0	61,8	25,4	9 900
16,0	59,3	24,8	7 600
17,0	56,7	24,1	5 600
18,0	54,0	23,3	3 800
19,0	51,3	22,5	2 200
19,2	50,7	22,3	1 900

REFERENCED

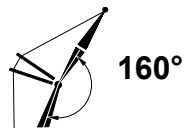
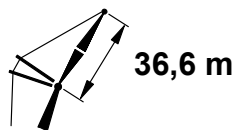


# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



30,0 m			
m	o	m	kg
7,3	80,4	31,5	57 700
8,0	79,1	31,4	48 000
9,0	77,1	31,1	37 500
10,0	75,2	30,8	30 000
11,0	73,1	30,5	24 200
12,0	71,1	30,1	19 700
13,0	69,1	29,7	16 100
14,0	67,0	29,3	12 900
15,0	64,8	28,8	10 200
16,0	62,7	28,3	7 900
17,0	60,4	27,7	5 800
18,0	58,2	27,0	4 000
18,3	57,5	26,8	3 500

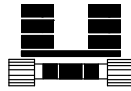
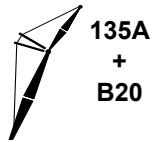
33,0 m			
m	o	m	kg
7,9	80,3	34,5	49 100
8,0	80,1	34,5	48 300
9,0	78,3	34,2	37 800
10,0	76,6	34,0	30 300
11,0	74,7	33,7	24 500
12,0	72,9	33,4	20 000
13,0	71,1	33,0	16 300
14,0	69,2	32,6	13 100
15,0	67,3	32,1	10 400
16,0	65,4	31,7	8 100
17,0	63,4	31,1	6 100
18,0	61,4	30,6	4 300
19,0	59,4	30,0	2 800
19,8	57,7	29,4	1 600

36,0 m			
m	o	m	kg
8,5	80,1	37,4	42 500
9,0	79,3	37,3	38 100
10,0	77,7	37,1	30 500
11,0	76,0	36,8	24 700
12,0	74,4	36,5	20 200
13,0	72,7	36,2	16 400
14,0	71,0	35,8	13 200
15,0	69,3	35,4	10 500
16,0	67,6	35,0	8 200
17,0	65,8	34,5	6 200
18,0	64,0	34,0	4 400
19,0	62,2	33,5	2 900
19,8	60,7	33,0	1 700

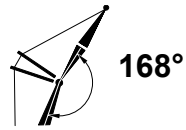
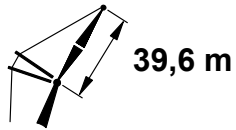
REFERENCED TO

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



<p>21,0 m</p>			
m	o	m	kg
6,1	79,7	22,6	80 500
6,5	78,6	22,5	73 200
7,0	77,1	22,4	63 800
8,0	74,3	22,0	47 600
9,0	71,4	21,7	36 800
10,0	68,4	21,2	29 000
11,0	65,4	20,8	23 100
12,0	62,3	20,2	18 500
13,0	59,0	19,6	14 800
14,0	55,7	18,8	11 500
15,0	52,2	18,0	8 600
15,5	50,2	17,5	7 200

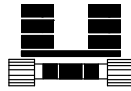
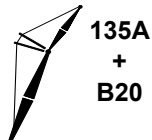
<p>24,0 m</p>			
m	o	m	kg
6,4	80,3	25,6	78 100
6,5	80,0	25,6	75 600
7,0	78,8	25,4	64 700
8,0	76,3	25,2	48 500
9,0	73,8	24,9	37 700
10,0	71,3	24,5	29 900
11,0	68,7	24,1	23 900
12,0	66,0	23,6	19 300
13,0	63,3	23,1	15 600
14,0	60,6	22,5	12 300
15,0	57,7	21,8	9 400
16,0	54,7	21,1	7 000
17,0	51,6	20,2	4 800
17,4	50,4	19,9	4 000

<p>27,0 m</p>			
m	o	m	kg
7,0	80,0	28,5	64 800
8,0	77,9	28,3	49 200
9,0	75,7	28,0	38 400
10,0	73,4	27,7	30 500
11,0	71,2	27,3	24 500
12,0	68,9	26,9	19 900
13,0	66,6	26,5	16 200
14,0	64,2	25,9	12 900
15,0	61,8	25,4	10 000
16,0	59,3	24,8	7 700
17,0	56,7	24,1	5 500
18,0	54,0	23,3	3 600
19,0	51,3	22,5	1 900
19,2	50,7	22,3	1 600

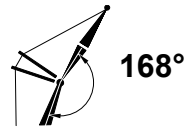
REFERENCED

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



30,0 m			
m	o	m	kg
7,3	80,4	31,5	59 800
8,0	79,1	31,4	49 700
9,0	77,1	31,1	38 900
10,0	75,2	30,8	31 000
11,0	73,1	30,5	25 000
12,0	71,1	30,1	20 400
13,0	69,1	29,7	16 600
14,0	67,0	29,3	13 200
15,0	64,8	28,8	10 400
16,0	62,7	28,3	8 000
17,0	60,4	27,7	5 900
18,0	58,2	27,0	4 000
18,3	57,5	26,8	3 500

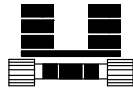
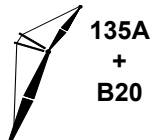
33,0 m			
m	o	m	kg
7,9	80,3	34,5	51 000
8,0	80,1	34,5	50 100
9,0	78,3	34,2	39 200
10,0	76,6	34,0	31 400
11,0	74,7	33,7	25 400
12,0	72,9	33,4	20 700
13,0	71,1	33,0	16 900
14,0	69,2	32,6	13 500
15,0	67,3	32,1	10 700
16,0	65,4	31,7	8 400
17,0	63,4	31,1	6 200
18,0	61,4	30,6	4 400
19,0	59,4	30,0	2 700
19,8	57,7	29,4	1 500

36,0 m			
m	o	m	kg
8,5	80,1	37,4	44 100
9,0	79,3	37,3	39 600
10,0	77,7	37,1	31 700
11,0	76,0	36,8	25 600
12,0	74,4	36,5	21 000
13,0	72,7	36,2	17 000
14,0	71,0	35,8	13 700
15,0	69,3	35,4	10 900
16,0	67,6	35,0	8 500
17,0	65,8	34,5	6 400
18,0	64,0	34,0	4 500
19,0	62,2	33,5	2 900
19,8	60,7	33,0	1 700

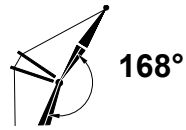
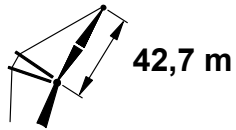
REFER

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



 21,0 m			
m	o	m	kg
6,1	79,7	22,6	80 500
6,5	78,6	22,5	72 000
7,0	77,1	22,4	61 900
8,0	74,3	22,0	45 900
9,0	71,4	21,7	35 300
10,0	68,4	21,2	27 500
11,0	65,4	20,8	21 700
12,0	62,3	20,2	17 100
13,0	59,0	19,6	13 200
14,0	55,7	18,8	9 800
15,0	52,2	18,0	6 900
15,5	50,2	17,5	5 500

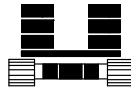
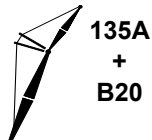
 24,0 m			
m	o	m	kg
6,4	80,3	25,6	76 200
6,5	80,0	25,6	73 800
7,0	78,8	25,4	63 000
8,0	76,3	25,2	46 900
9,0	73,8	24,9	36 200
10,0	71,3	24,5	28 500
11,0	68,7	24,1	22 600
12,0	66,0	23,6	18 000
13,0	63,3	23,1	14 100
14,0	60,6	22,5	10 700
15,0	57,7	21,8	7 800
16,0	54,7	21,1	5 500
17,0	51,6	20,2	3 300
17,4	50,4	19,9	2 500

 27,0 m			
m	o	m	kg
7,0	80,0	28,5	63 200
8,0	77,9	28,3	47 700
9,0	75,7	28,0	37 000
10,0	73,4	27,7	29 200
11,0	71,2	27,3	23 300
12,0	68,9	26,9	18 700
13,0	66,6	26,5	14 800
14,0	64,2	25,9	11 400
15,0	61,8	25,4	8 600
16,0	59,3	24,8	6 200
17,0	56,7	24,1	4 000
18,0	54,0	23,3	2 200
18,3	53,2	23,1	1 700

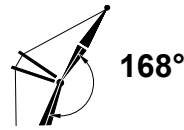
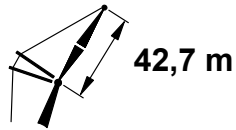
REFER TO

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



30,0 m			
m	o	m	kg
7,3	80,4	31,5	58 300
8,0	79,1	31,4	48 300
9,0	77,1	31,1	37 600
10,0	75,2	30,8	29 700
11,0	73,1	30,5	23 800
12,0	71,1	30,1	19 200
13,0	69,1	29,7	15 200
14,0	67,0	29,3	11 800
15,0	64,8	28,8	9 000
16,0	62,7	28,3	6 600
17,0	60,4	27,7	4 500
18,0	58,2	27,0	2 700
18,3	57,5	26,8	2 100

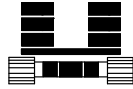
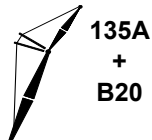
33,0 m			
m	o	m	kg
7,9	80,3	34,5	49 600
8,0	80,1	34,5	48 700
9,0	78,3	34,2	38 000
10,0	76,6	34,0	30 200
11,0	74,7	33,7	24 200
12,0	72,9	33,4	19 500
13,0	71,1	33,0	15 500
14,0	69,2	32,6	12 200
15,0	67,3	32,1	9 400
16,0	65,4	31,7	7 000
17,0	63,4	31,1	4 900
18,0	61,4	30,6	3 100
18,3	60,9	30,4	2 600

36,0 m			
m	o	m	kg
8,5	80,1	37,4	42 700
9,0	79,3	37,3	38 300
10,0	77,7	37,1	30 500
11,0	76,0	36,8	24 500
12,0	74,4	36,5	19 600
13,0	72,7	36,2	15 700
14,0	71,0	35,8	12 300
15,0	69,3	35,4	9 600
16,0	67,6	35,0	7 200
17,0	65,8	34,5	5 100
18,0	64,0	34,0	3 300
18,3	63,5	33,8	2 800

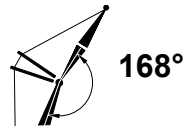
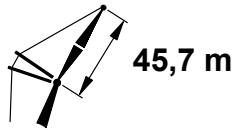
REFERENCED

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



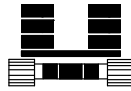
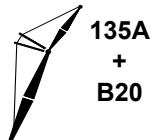
<p>21,0 m</p>			
m	o	m	kg
6,1	79,7	22,6	80 500
6,5	78,6	22,5	71 000
7,0	77,1	22,4	60 500
8,0	74,3	22,0	44 600
9,0	71,4	21,7	34 100
10,0	68,4	21,2	26 500
11,0	65,4	20,8	20 600
12,0	62,3	20,2	16 000
13,0	59,0	19,6	11 900
14,0	55,7	18,8	8 600
15,0	52,2	18,0	5 700
15,5	50,2	17,5	4 400

<p>24,0 m</p>			
m	o	m	kg
6,4	80,3	25,6	74 400
6,5	80,0	25,6	72 100
7,0	78,8	25,4	61 700
8,0	76,3	25,2	45 700
9,0	73,8	24,9	35 100
10,0	71,3	24,5	27 500
11,0	68,7	24,1	21 600
12,0	66,0	23,6	17 000
13,0	63,3	23,1	12 900
14,0	60,6	22,5	9 600
15,0	57,7	21,8	6 800
16,0	54,7	21,1	4 400
17,0	51,6	20,2	2 200
17,4	50,4	19,9	1 500

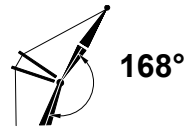
<p>27,0 m</p>			
m	o	m	kg
7,0	80,0	28,5	61 900
8,0	77,9	28,3	46 600
9,0	75,7	28,0	35 900
10,0	73,4	27,7	28 200
11,0	71,2	27,3	22 400
12,0	68,9	26,9	17 700
13,0	66,6	26,5	13 700
14,0	64,2	25,9	10 400
15,0	61,8	25,4	7 600
16,0	59,3	24,8	5 200
16,8	57,3	24,2	3 500

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



30,0 m			
m	o	m	kg
7,3	80,4	31,5	56 900
8,0	79,1	31,4	47 200
9,0	77,1	31,1	36 600
10,0	75,2	30,8	28 800
11,0	73,1	30,5	22 900
12,0	71,1	30,1	18 100
13,0	69,1	29,7	14 200
14,0	67,0	29,3	10 800
15,0	64,8	28,8	8 100
16,0	62,7	28,3	5 700
16,8	61,0	27,8	4 000

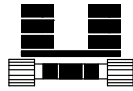
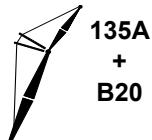
33,0 m			
m	o	m	kg
7,9	80,3	34,5	48 400
8,0	80,1	34,5	47 500
9,0	78,3	34,2	37 000
10,0	76,6	34,0	29 300
11,0	74,7	33,7	23 300
12,0	72,9	33,4	18 500
13,0	71,1	33,0	14 500
14,0	69,2	32,6	11 200
15,0	67,3	32,1	8 500
16,0	65,4	31,7	6 200
17,0	63,4	31,1	4 100
18,0	61,4	30,6	2 300
18,3	60,9	30,4	1 700

36,0 m			
m	o	m	kg
8,5	80,1	37,4	41 500
9,0	79,3	37,3	37 200
10,0	77,7	37,1	29 500
11,0	76,0	36,8	23 500
12,0	74,4	36,5	18 700
13,0	72,7	36,2	14 800
14,0	71,0	35,8	11 500
15,0	69,3	35,4	8 700
16,0	67,6	35,0	6 400
17,0	65,8	34,5	4 300
18,0	64,0	34,0	2 500
18,3	63,5	33,8	2 000

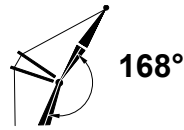
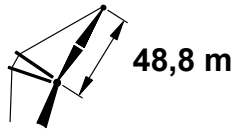
REFERENCED

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



21,0 m			
m	o	m	kg
6,1	79,7	22,6	79 400
6,5	78,6	22,5	69 300
7,0	77,1	22,4	58 600
8,0	74,3	22,0	42 900
9,0	71,4	21,7	32 500
10,0	68,4	21,2	24 900
11,0	65,4	20,8	19 000
12,0	62,3	20,2	14 100
13,0	59,0	19,6	10 100
14,0	55,7	18,8	6 700
15,0	52,2	18,0	4 000
15,5	50,2	17,5	2 600

24,0 m			
m	o	m	kg
6,4	80,3	25,6	72 000
6,5	80,0	25,6	69 900
7,0	78,8	25,4	59 800
8,0	76,3	25,2	44 100
9,0	73,8	24,9	33 600
10,0	71,3	24,5	26 000
11,0	68,7	24,1	20 000
12,0	66,0	23,6	15 200
13,0	63,3	23,1	11 200
14,0	60,6	22,5	7 900
15,0	57,7	21,8	5 100
15,2	57,0	21,6	4 500

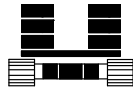
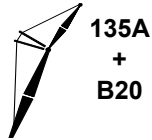
27,0 m			
m	o	m	kg
7,0	80,0	28,5	59 800
8,0	77,9	28,3	45 000
9,0	75,7	28,0	34 500
10,0	73,4	27,7	26 900
11,0	71,2	27,3	20 800
12,0	68,9	26,9	16 000
13,0	66,6	26,5	12 100
14,0	64,2	25,9	8 800
15,0	61,8	25,4	6 000
16,0	59,3	24,8	3 700
16,8	57,3	24,2	2 000

REFERENCED

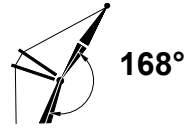
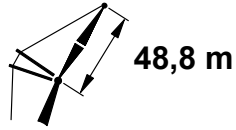


# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



30,0 m			
m	o	m	kg
7,3	80,4	31,5	54 900
8,0	79,1	31,4	45 600
9,0	77,1	31,1	35 200
10,0	75,2	30,8	27 400
11,0	73,1	30,5	21 300
12,0	71,1	30,1	16 600
13,0	69,1	29,7	12 600
14,0	67,0	29,3	9 300
15,0	64,8	28,8	6 600
16,0	62,7	28,3	4 300
16,8	61,0	27,8	2 600

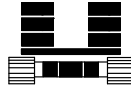
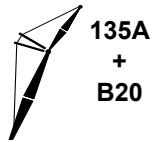
33,0 m			
m	o	m	kg
7,9	80,3	34,5	46 500
8,0	80,1	34,5	45 700
9,0	78,3	34,2	35 500
10,0	76,6	34,0	27 800
11,0	74,7	33,7	21 700
12,0	72,9	33,4	17 000
13,0	71,1	33,0	13 100
14,0	69,2	32,6	9 800
15,0	67,3	32,1	7 100
16,0	65,4	31,7	4 800
16,8	63,9	31,3	3 100

36,0 m			
m	o	m	kg
8,5	80,1	37,4	39 800
9,0	79,3	37,3	35 600
10,0	77,7	37,1	27 900
11,0	76,0	36,8	21 900
12,0	74,4	36,5	17 200
13,0	72,7	36,2	13 300
14,0	71,0	35,8	10 100
15,0	69,3	35,4	7 400
16,0	67,6	35,0	5 100
16,8	66,2	34,6	3 400

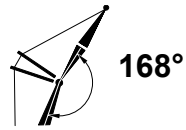
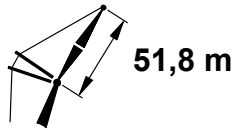
REFERENCIA

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



 21,0 m			
m	o	m	kg
6,1	79,7	22,6	76 900
6,5	78,6	22,5	67 200
7,0	77,1	22,4	56 800
8,0	74,3	22,0	41 200
9,0	71,4	21,7	30 900
10,0	68,4	21,2	23 300
11,0	65,4	20,8	17 200
12,0	62,3	20,2	12 400
13,0	59,0	19,6	8 400
14,0	55,7	18,8	5 100
15,0	52,2	18,0	2 400
15,2	51,3	17,8	1 700

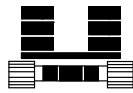
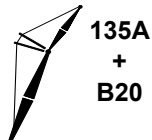
 24,0 m			
m	o	m	kg
6,4	80,3	25,6	69 800
6,5	80,0	25,6	67 600
7,0	78,8	25,4	57 800
8,0	76,3	25,2	42 500
9,0	73,8	24,9	32 200
10,0	71,3	24,5	24 500
11,0	68,7	24,1	18 400
12,0	66,0	23,6	13 600
13,0	63,3	23,1	9 700
14,0	60,6	22,5	6 400
15,0	57,7	21,8	3 600
15,2	57,0	21,6	3 000

 27,0 m			
m	o	m	kg
7,0	80,0	28,5	57 800
8,0	77,9	28,3	43 400
9,0	75,7	28,0	33 100
10,0	73,4	27,7	25 300
11,0	71,2	27,3	19 300
12,0	68,9	26,9	14 500
13,0	66,6	26,5	10 600
14,0	64,2	25,9	7 300
15,0	61,8	25,4	4 600
15,2	61,2	25,2	4 000

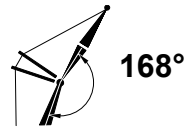
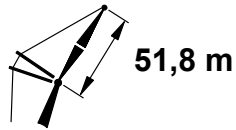
REFERENCED

# MLC150-1 S-1

ASME B30.5



34 110 kg  
+  
0 kg



30,0 m			
m	o	m	kg
7,3	80,4	31,5	53 000
8,0	79,1	31,4	43 800
9,0	77,1	31,1	33 600
10,0	75,2	30,8	25 900
11,0	73,1	30,5	19 900
12,0	71,1	30,1	15 100
13,0	69,1	29,7	11 200
14,0	67,0	29,3	8 000
15,0	64,8	28,8	5 300
16,0	62,7	28,3	3 000
16,8	61,0	27,8	1 300

33,0 m			
m	o	m	kg
7,9	80,3	34,5	44 800
8,0	80,1	34,5	44 000
9,0	78,3	34,2	33 900
10,0	76,6	34,0	26 300
11,0	74,7	33,7	20 300
12,0	72,9	33,4	15 600
13,0	71,1	33,0	11 700
14,0	69,2	32,6	8 500
15,0	67,3	32,1	5 800
16,0	65,4	31,7	3 600
16,8	63,9	31,3	1 900

36,0 m			
m	o	m	kg
8,5	80,1	37,4	38 200
9,0	79,3	37,3	34 000
10,0	77,7	37,1	26 500
11,0	76,0	36,8	20 600
12,0	74,4	36,5	15 900
13,0	72,7	36,2	12 100
14,0	71,0	35,8	8 800
15,0	69,3	35,4	6 200
16,0	67,6	35,0	3 900
16,8	66,2	34,6	2 300

REFERENCIA