

Maximum Allowable Travel Specifications

MLC165

Boom No. 74
Jib No. 134 with 3 810 mm (12 ft 6 in.) Strut

Jobsite Travel

MLC165 SERIES 1 must be equipped with 45 130 kg (99,500 lb) crane counterweight and 0 kg (0 lb) carbody counterweight; MLC165 SERIES 2 must be equipped with 55 110 kg (121,500 lb) crane counterweight and 16 010 kg (35,300 lb) carbody counterweight. Refer to Wind Conditions chart for maximum wind speed for various boom and jib lengths. Refer to capacity charts for maximum boom and jib lengths lifted unassisted.

1. Machine Travel With Load

- A. Machine can swing and travel with 360 degree rating.
- B. Grade in any direction must not exceed 1 percent (0.5 degrees).
- C. Travel surface must be firm, level, and uniformly supporting. Capacity charts are based on static conditions; therefore judgment must be used to allow for dynamic effects of traveling with load. Carry load as close to ground as possible. Stabilize load with taglines. Travel slowly and smoothly to avoid shock loading boom and rigging.

2. Machine Travel Without Load

- A. Load blocks and/or hook and weight balls may be suspended beneath lower and upper boom point, jib point, or tied off to machine. Total combined suspended weight beneath lower and upper boom points must not exceed 4 400 kg (9,700 lb). Total suspended weight beneath jib point must not exceed 910 kg (2,000 lb).
- B. Machine to travel on a firm and uniformly supporting surface. Travel allowed with 360 degree swing up to 1 percent (0.5 degrees) grade; crane upperworks must be in-line with crawlers and grade when grade exceeds 1 percent. Grade in direction of travel should not exceed 30 percent (16.7 degrees); side-to-side grade must not exceed 2 percent (1.1 degrees) measured at boom hinge pins.
- C. Refer to Tables 1 thru 4 for boom angle and boom length for various grades. Adjust boom within boom angle range shown in table with machine in a level position before traveling onto grade. Do not change boom angle after crane has been traveled onto grade. Boom angle is angle between horizontal and centerline of boom butt and inserts. Refer to table below for grade vs. angle when traveling.
- D. Do not exceed 2 percent (1.1 degrees) side-to-side grade at boom hinge pins when cutting (turning on grade).
- E. Boom lengths shown in Table 1 and 2 do not include jib. Boom lengths shown in Table 3 and 4 include all jib lengths and offset angles.
- F. **Warning:** Travel prohibited for boom angle range not shown in tables 1 thru 4. *Crane could tip.*

Percent Grade Vs. Angle In Degrees	
Percent Grade	Angle
5	2.9
10	5.7
15	8.5
20	11.3
25	14.0
30	16.7

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Table 1: Boom No. 74, SERIES 1

MACHINE TRAVEL WITHOUT LOAD							
Boom Length (not including jib)		Boom Angle Range in Degrees					
		Maximum Percent Grade					
Meters	Feet	5%	10%	15%	20%	25%	30%
BOOM FACING DOWNHILL OR UPHILL							
15,0	49.2	30 - 60	30 - 50	30 - 35	30 - 33	—	—
18,0	59.1	30 - 65	30 - 55	30 - 45	30 - 35	—	—
21,0	68.9	30 - 69	30 - 60	30 - 50	30 - 45	—	—
24,0	78.7	30 - 69	30 - 65	30 - 55	30 - 50	30 - 40	—
27,0	88.6	30 - 69	30 - 66	30 - 60	30 - 55	30 - 40	30 - 35
30,0	98.4	30 - 69	30 - 66	30 - 63	30 - 55	30 - 45	30 - 40
33,0	108.3	30 - 69	30 - 66	30 - 63	30 - 60	30 - 50	30 - 45
36,0	118.1	30 - 69	30 - 66	30 - 63	40 - 60	30 - 50	40 - 50
39,0	128.0	30 - 69	30 - 66	30 - 63	45 - 60	45 - 57	50 - 52
42,0	137.8	30 - 69	35 - 66	40 - 63	50 - 60	50 - 57	—
45,0	147.6	35 - 69	40 - 66	45 - 63	55 - 60	55 - 57	—
48,0	157.5	40 - 69	45 - 66	50 - 63	59 - 60	—	—
51,0	167.3	45 - 69	50 - 66	55 - 63	—	—	—
54,0	177.2	50 - 69	55 - 66	60 - 63	—	—	—
57,0	187.0	55 - 69	60 - 66	60 - 63	—	—	—
60,0	196.9	55 - 69	60 - 66	—	—	—	—
63,0	206.7	60 - 69	65 - 66	—	—	—	—
66,0	216.5	60 - 69	65 - 66	—	—	—	—
69,0	226.4	65 - 69	—	—	—	—	—
72,0	236.2	65 - 69	—	—	—	—	—

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Table 2: Boom No. 74, SERIES 2

MACHINE TRAVEL WITHOUT LOAD							
Boom Length (not including jib)		Boom Angle Range in Degrees					
		Maximum Percent Grade					
Meters	Feet	5%	10%	15%	20%	25%	30%
BOOM FACING DOWNHILL OR UPHILL							
15,0	49.2	30 - 60	30 - 50	30 - 35	—	—	—
18,0	59.1	30 - 65	30 - 55	30 - 45	—	—	—
21,0	68.9	30 - 69	30 - 60	30 - 50	30 - 35	—	—
24,0	78.7	30 - 69	30 - 65	30 - 50	30 - 45	30 - 35	—
27,0	88.6	30 - 69	30 - 66	30 - 55	30 - 45	30 - 35	30 - 33
30,0	98.4	30 - 69	30 - 66	30 - 60	30 - 50	30 - 45	30 - 35
33,0	108.3	30 - 69	30 - 66	30 - 63	30 - 55	30 - 50	30 - 40
36,0	118.1	30 - 69	30 - 66	30 - 63	30 - 60	30 - 50	30 - 40
39,0	128.0	30 - 69	30 - 66	30 - 63	30 - 60	30 - 50	30 - 45
42,0	137.8	30 - 69	30 - 66	30 - 63	30 - 60	35 - 57	40 - 50
45,0	147.6	30 - 69	30 - 66	30 - 63	30 - 60	40 - 57	46 - 50
48,0	157.5	30 - 69	30 - 66	35 - 63	45 - 60	50 - 57	52 - 55
51,0	167.3	35 - 69	35 - 66	40 - 63	50 - 60	55 - 57	—
54,0	177.2	40 - 69	45 - 66	50 - 63	55 - 60	—	—
57,0	187.0	45 - 69	50 - 66	55 - 63	57 - 60	—	—
60,0	196.9	50 - 69	55 - 66	55 - 63	—	—	—
63,0	206.7	50 - 69	55 - 66	60 - 63	—	—	—
66,0	216.5	55 - 69	60 - 66	62 - 63	—	—	—
69,0	226.4	60 - 69	60 - 66	—	—	—	—
72,0	236.2	60 - 69	65 - 66	—	—	—	—
75,0	246.1	60 - 69	65 - 66	—	—	—	—
78,0	255.9	65 - 69	—	—	—	—	—
81,0	265.7	65 - 69	—	—	—	—	—
84,0	275.6	66 - 69	—	—	—	—	—

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Table 3: Boom No. 74, Jib No. 134, SERIES 1

MACHINE TRAVEL WITHOUT LOAD							
Boom Length (including all jib lengths and offsets)		Boom Angle Range in Degrees					
		Maximum Percent Grade					
Meters	Feet	5%	10%	15%	20%	25%	30%
BOOM FACING DOWNHILL OR UPHILL							
27,0	88.6	50 - 69	50 - 66	50 - 63	50 - 55	50 - 54	—
30,0	98.4	50 - 69	50 - 66	50 - 63	50 - 60	50 - 55	—
33,0	108.3	50 - 69	50 - 66	50 - 63	55 - 60	—	—
36,0	118.1	50 - 69	50 - 66	55 - 63	57 - 60	—	—
39,0	128.0	50 - 69	55 - 66	60 - 63	—	—	—
42,0	137.8	55 - 69	60 - 66	61 - 63	—	—	—
45,0	147.6	60 - 69	60 - 66	—	—	—	—
48,0	157.5	60 - 69	65 - 66	—	—	—	—
51,0	167.3	65 - 69	65 - 66	—	—	—	—
54,0	177.2	65 - 69	—	—	—	—	—
57,0	187.0	66 - 69	—	—	—	—	—
60,0	196.9	66 - 69	—	—	—	—	—
63,0	206.7	66 - 69	—	—	—	—	—

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Table 4: Boom No. 74, Jib No. 134, SERIES 2

MACHINE TRAVEL WITHOUT LOAD							
Boom Length (including all jib lengths and offsets)		Boom Angle Range in Degrees					
		Maximum Percent Grade					
Meters	Feet	5%	10%	15%	20%	25%	30%
BOOM FACING DOWNHILL OR UPHILL							
27,0	88.6	50 - 69	50 - 66	50 - 63	50 - 58	46 - 50	—
30,0	98.4	50 - 69	50 - 66	50 - 63	50 - 60	50 - 54	47 - 48
33,0	108.3	50 - 69	50 - 66	50 - 63	50 - 60	50 - 57	47 - 52
36,0	118.1	50 - 69	50 - 66	50 - 63	50 - 60	50 - 57	—
39,0	128.0	50 - 69	50 - 66	50 - 63	55 - 60	55 - 57	—
42,0	137.8	50 - 69	50 - 66	55 - 63	55 - 60	—	—
45,0	147.6	50 - 69	50 - 66	55 - 63	59 - 60	—	—
48,0	157.5	50 - 69	55 - 66	60 - 63	—	—	—
51,0	167.3	55 - 69	60 - 66	62 - 63	—	—	—
54,0	177.2	60 - 69	60 - 66	—	—	—	—
57,0	187.0	60 - 69	63 - 66	—	—	—	—
60,0	196.9	65 - 69	—	—	—	—	—
63,0	206.7	65 - 69	—	—	—	—	—
66,0	216.5	65 - 69	—	—	—	—	—
69,0	226.4	66 - 69	—	—	—	—	—
72,0	236.2	66 - 69	—	—	—	—	—
75,0	246.1	67 - 69	—	—	—	—	—