

# Maximum Allowable Travel Specifications

## MLC165

Clamshell/Grapple  
Boom No. 74

### Jobsite Travel

MLC165 must be equipped with 35 110 kg (77,400 lb) crane counterweight and 0 kg (0 lb) carbody counterweight. Refer to capacity charts for maximum wind speed and for maximum boom 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. Bucket and/or hook and weight ball may be suspended beneath lower and upper boom point, or tied off to machine. Total combined suspended weight beneath lower and upper boom points must not exceed 4 540 kg (10,000 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 Table 1 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. **Warning:** Travel prohibited for boom angle range not shown in Table 1. *Crane could tip.*

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

MACHINE TRAVEL WITHOUT LOAD							
Boom Length		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	40 - 67	40 - 64	40 - 61	40 - 45	—	—
18,0	59.1	40 - 67	40 - 64	40 - 61	40 - 55	40 - 50	—
21,0	68.9	40 - 67	40 - 64	40 - 61	40 - 58	40 - 50	40 - 45
24,0	78.7	40 - 67	40 - 64	40 - 61	40 - 58	40 - 56	40 - 45
27,0	88.6	40 - 67	40 - 64	40 - 61	40 - 58	40 - 56	40 - 53
30,0	98.4	40 - 67	40 - 64	40 - 61	40 - 58	40 - 56	40 - 53
33,0	108.3	40 - 67	40 - 64	40 - 61	40 - 58	45 - 56	50 - 53
36,0	118.1	40 - 67	40 - 64	40 - 61	50 - 58	55 - 56	—
39,0	128.0	40 - 67	45 - 64	50 - 61	55 - 58	—	—
42,0	137.8	45 - 67	50 - 64	55 - 61	—	—	—