



# Maximum Allowable Travel Specifications

Boom No. 44 With Long Reach Top  
Jib No. 132 With 20 Ft. (6 096 mm) Strut

## M-250 M-250 SERIES 2, 3

### Jobsite Travel

M-250 must be equipped with 167,000 Lb. (75 750 kg) counterweight, M-250 SERIES 2 must be equipped with 207,000 Lb. (93 890 kg) crane counterweight and 60,000 Lb. (27 220 kg) carbody counterweight and M-250 SERIES 3 must be equipped with 248,700 Lb. (112 810 kg) crane counterweight and 120,000 Lb. (54 430 kg) carbody counterweight.

### 1. Machine Travel With Load

- A. Travel with crane upperworks in-line with crawlers. Grade in any direction must not exceed 1 percent (0.5 degrees).
- B. 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, jib and rigging.

### 2. Machine Travel Without Load

- A. Load blocks and/or hook and weight balls may be suspended beneath lower boom point, upper boom point and jib point. Total combined suspended weight beneath lower and upper boom points must not exceed 7,000 Lbs. (3 180 kg). Total suspended weight beneath jib point must not exceed 2,000 Lbs. (910 kg).
- B. Machine to travel on a firm and uniformly supporting surface with crane upperworks in-line with crawlers and travel drive to rear. 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. See tables on pages 2-4 for boom angle, boom length and direction for various grades. Adjust boom within boom angle range shown in tables on pages 2-4 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. See 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). Travel with crane upperworks in-line with grade at all times.
- E. Boom lengths shown in tables on page 2 and 3 do not include jib. Boom lengths shown in tables on page 4 include all jib lengths and offset angles.
- F. **Warning:** Travel prohibited for boom lengths not shown in tables on pages 2, 3 and 4. *Crane could tip.*

Refer to capacity charts for maximum boom and jib length raising.

Percent Grade Vs. Angle In Degrees	
Percent Grade	Angle
10	5.7
20	11.3
30	16.7



# Maximum Allowable Travel Specifications

Boom No. 44 With Long Reach Top

**M-250**  
**M-250 SERIES 2, 3**

Machine Travel Without Load - Boom Facing Downhill							
0 - 1% Percent Grade							
Boom Angle Range in Degrees	Boom Length (not including jib)						Boom Angle Range in Degrees
	M-250		M-250 Series 2		M-250 Series 3		
	Feet	Meters	Feet	Meters	Feet	Meters	
30 - 72	190 - 240	57.9 - 73.2	190 - 280	57.9 - 85.3	190 - 300	57.9 - 91.4	30 - 72
40 - 72	250 - 270	76.2 - 82.3	290 - 300	88.4 - 91.4	310 - 330	94.5 - 100.6	40 - 72
50 - 72	280 - 300	85.3 - 91.4	310 - 330	94.5 - 100.6	---	---	50 - 72
60 - 72	310 - 330	94.5 - 100.6	---	---	---	---	60 - 72
2 - 10% Percent Grade							
30 - 72	190 - 230	57.9 - 70.1	190 - 260	57.9 - 79.2	190 - 290	57.9 - 88.4	30 - 72
40 - 72	240 - 250	73.2 - 76.2	270 - 280	82.3 - 85.3	300 - 310	91.4 - 94.5	40 - 72
50 - 72	260 - 270	79.2 - 82.3	290 - 300	88.4 - 91.4	320 - 330	97.5 - 100.6	50 - 72
60 - 72	280 - 310	85.3 - 94.5	310 - 330	94.5 - 100.6	---	---	60 - 72
65- 72	320 - 330	97.5 - 100.6	---	---	---	---	65- 72
11 - 20% Percent Grade							
30 - 72	190 - 220	57.9 - 67.1	190 - 250	57.9 - 76.2	190 - 270	57.9 - 82.3	30 - 72
40 - 72	230	70.1	260	79.2	280 - 290	85.3 - 88.4	40 - 72
50 - 72	240 - 250	73.2 - 76.2	270 - 280	82.3 - 85.3	300 - 310	91.4 - 94.5	50 - 72
60 - 72	260 - 270	79.2 - 82.3	290 - 310	88.4 - 94.5	320 - 330	97.5 - 100.6	60 - 72
65- 72	280 - 290	85.3 - 88.4	320 - 330	97.5 - 100.6	---	---	65- 72
21 - 30% Percent Grade							
30 - 72	190 - 200	57.9 - 61.0	190 - 230	57.9 - 70.1	190 - 260	57.9 - 79.2	30 - 72
40 - 72	210	64.0	240	73.2	270	82.3	40 - 72
50 - 72	220	67.1	250 - 260	76.2 - 79.2	280	85.3	50 - 72
60 - 72	230 - 250	70.1 - 76.2	270 - 280	82.3 - 85.3	290 - 310	88.4 - 94.5	60 - 72
65- 72	260	79.2	290 - 300	88.4 - 91.4	320	97.5	65 - 72



# Maximum Allowable Travel Specifications

Boom No. 44 With Long Reach Top

**M-250**  
**M-250 SERIES 2, 3**

Machine Travel Without Load - Boom Facing Uphill							
0 - 1% Percent Grade							
Boom Angle Range in Degrees	Boom Length (not including jib)						Boom Angle Range in Degrees
	M-250		M-250 Series 2		M-250 Series 3		
	Feet	Meters	Feet	Meters	Feet	Meters	
30 - 72	190 - 240	57.9 - 73.2	190 - 280	57.9 - 85.3	190 - 300	57.9 - 91.4	30 - 72
40 - 72	250 - 270	76.2 - 82.3	290 - 300	88.4 - 91.4	310 - 330	94.5 - 100.6	40 - 72
50 - 72	280 - 300	85.3 - 91.4	310 - 330	94.5 - 100.6	---	---	50 - 72
60 - 72	310 - 330	94.5 - 100.6	---	---	---	---	60 - 72
2 - 10% Percent Grade							
30 - 66	190 - 260	57.9 - 79.2	190 - 290	57.9 - 88.4	190 - 320	57.9 - 97.5	30 - 66
40 - 66	270 - 290	82.3 - 88.4	300 - 330	91.4 - 100.6	330	100.6	40 - 66
50 - 66	300 - 330	91.4 - 100.6	---	---	---	---	50 - 66
11 - 20% Percent Grade							
30 - 60	190 - 280	57.9 - 85.3	190 - 310	57.9 - 94.5	190 - 330	57.9 - 100.6	30 - 60
40 - 60	290 - 310	88.4 - 94.5	320 - 330	97.5 - 100.6	---	---	40 - 60
50 - 60	320 - 330	97.5 - 100.6	---	---	---	---	50 - 60
21 - 30% Percent Grade							
30 - 45	---	---	---	---	190	57.9	30 - 45
30 - 55	190 - 290	57.9 - 88.4	190 - 330	57.9 - 100.6	200 - 330	61.0 - 100.6	30 - 55
40 - 55	300 - 330	91.4 - 100.6	---	---	---	---	40 - 55



# Maximum Allowable Travel Specifications

Boom No. 44 With Long Reach Top  
Jib No. 132 With 20 Ft. (6 096 mm) Strut

## M-250 M-250 SERIES 2, 3

Machine Travel Without Load - Boom Facing Downhill							
0 - 1% Percent Grade							
Boom Angle Range in Degrees	Boom Length (including all jib lengths and offset angles)						Boom Angle Range in Degrees
	M-250		M-250 Series 2		M-250 Series 3		
	Feet	Meters	Feet	Meters	Feet	Meters	
50 - 72	190 - 230	57.9 - 70.1	190 - 270	57.9 - 82.3	190 - 280	57.9 - 85.3	50 - 72
55 - 72	240 - 250	73.2 - 76.2	280	85.3	---	---	55 - 72
60 - 72	260 - 280	79.2 - 85.3	---	---	---	---	60 - 72
2 - 10% Percent Grade							
50 - 72	190 - 200	57.9 - 61.0	190 - 240	57.9 - 73.2	190 - 270	57.9 - 82.3	50 - 72
55 - 72	210 - 220	64.0 - 67.1	250	76.2	280	85.3	55 - 72
60 - 72	230 - 240	70.1 - 73.2	260 - 270	79.2 - 82.3	---	---	60 - 72
65 - 72	250 - 260	76.2 - 79.2	280	85.3	---	---	65 - 72
11 - 20% Percent Grade							
50 - 72	---	---	190 - 210	57.9 - 64.0	190 - 240	57.9 - 73.2	50 - 72
55 - 72	190	57.9	220 - 230	67.1 - 70.1	250	76.2	55 - 72
60 - 72	200 - 210	61.0 - 64.0	240	73.2	260 - 270	79.2 - 82.3	60 - 72
65 - 72	220	67.1	250 - 260	76.2 - 79.2	280	85.3	65 - 72
21 - 30% Percent Grade							
50 - 72	---	---	190	57.9	190 - 220	57.9 - 67.1	50 - 72
55 - 72	---	---	200	61.0	230	70.1	55 - 72
60 - 72	---	---	210	64.0	240	73.2	60 - 72
65 - 72	190	57.9	220 - 230	67.1 - 70.1	250 - 260	76.2 - 79.2	65 - 72

Machine Travel Without Load - Boom Facing Uphill							
0 - 1% Percent Grade							
Boom Angle Range in Degrees	Boom Length (including all jib lengths and offset angles)						Boom Angle Range in Degrees
	M-250		M-250 Series 2		M-250 Series 3		
	Feet	Meters	Feet	Meters	Feet	Meters	
50 - 72	190 - 230	57.9 - 70.1	190 - 270	57.9 - 82.3	190 - 280	57.9 - 85.3	50 - 72
55 - 72	240 - 250	73.2 - 76.2	280	85.3	---	---	55 - 72
60 - 72	260 - 280	79.2 - 85.3	---	---	---	---	60 - 72
2 - 10% Percent Grade							
50 - 66	190 - 280	57.9 - 85.3	190 - 280	57.9 - 85.3	190 - 280	57.9 - 85.3	50 - 66
11 - 20% Percent Grade							
50 - 60	190 - 280	57.9 - 85.3	190 - 280	57.9 - 85.3	190 - 280	57.9 - 85.3	50 - 60
21 - 30% Percent Grade							
50 - 55	190 - 280	57.9 - 85.3	190 - 280	57.9 - 85.3	190 - 280	57.9 - 85.3	50 - 55