

Maximum Allowable Travel Specifications

Boom No. 44 With Heavy Lift 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 11,000 Lbs. (4 990 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 Heavy Lift 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 - 67	70 - 80	21.3 - 24.4	70	21.3	70	21.3	30 - 67
30 - 72	90 - 200	27.4 - 61.0	80 - 230	24.4 - 70.1	80 - 250	24.4 - 76.2	30 - 72
40 - 72	210 - 220	64.0 - 67.1	240 - 260	73.2 - 79.2	260 - 290	79.2 - 88.4	40 - 72
50 - 72	230 - 250	70.1 - 76.2	270 - 290	82.3 - 88.4	300	91.4	50 - 72
60 - 72	260 - 300	79.2 - 91.4	300	91.4	---	---	60 - 72
2 - 10% Percent Grade							
30 - 72	70 - 180	21.3 - 54.9	70 - 210	21.3 - 64.0	70 - 250	21.3 - 76.2	30 - 72
40 - 72	190 - 200	57.9 - 61.0	220 - 230	67.1 - 70.1	260	79.2	40 - 72
50 - 72	210 - 220	64.0 - 67.1	240 - 260	73.2 - 79.2	270 - 290	82.3 - 88.4	50 - 72
60 - 72	230 - 260	70.1 - 79.2	270 - 300	82.3 - 91.4	300	91.4	60 - 72
65- 72	270 - 290	82.3 - 88.4	---	---	---	---	65- 72
11 - 20% Percent Grade							
30 - 72	70 - 170	21.3 - 51.8	70 - 200	21.3 - 61.0	70 - 220	21.3 - 67.1	30 - 72
40 - 72	180	54.9	210	64.0	230 - 240	70.1 - 73.2	40 - 72
50 - 72	190 - 200	57.9 - 61.0	220 - 230	67.1 - 70.1	250 - 260	76.2 - 79.2	50 - 72
60 - 72	210 - 230	64.0 - 70.1	240 - 270	73.2 - 82.3	270 - 300	82.3 - 91.4	60 - 72
65- 72	240 - 250	73.2 - 76.2	280 - 290	85.3 - 88.4	---	---	65- 72
21 - 30% Percent Grade							
30 - 72	70 - 160	21.3 - 48.8	70 - 180	21.3 - 54.9	70 - 210	21.3 - 64.0	30 - 72
40 - 72	170	51.8	190	57.9	220	67.1	40 - 72
50 - 72	180	54.9	200 - 210	61.0 - 64.0	230	70.1	50 - 72
60 - 72	190 - 200	57.9 - 61.0	220 - 230	67.1 - 70.1	240 - 260	73.2 - 79.2	60 - 72
65- 72	210	64.0	240 - 250	73.2 - 76.2	270 - 280	82.3 - 85.3	65 - 72



Maximum Allowable Travel Specifications

Boom No. 44 With Heavy Lift 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 - 67	70 - 80	21.3 - 24.4	70	21.3	70	21.3	30 - 67
30 - 72	90 - 200	27.4 - 61.0	80 - 230	24.4 - 70.1	80 - 250	24.4 - 76.2	30 - 72
40 - 72	210 - 220	64.0 - 67.1	240 - 260	73.2 - 79.2	260 - 290	79.2 - 88.4	40 - 72
50 - 72	230 - 250	70.1 - 76.2	270 - 290	82.3 - 88.4	300	91.4	50 - 72
60 - 72	260 - 300	79.2 - 91.4	300	91.4	---	---	60 - 72
2 - 10% Percent Grade							
30 - 48	---	---	70 - 110	21.3 - 33.5	70 - 110	21.3 - 33.5	30 - 48
30 - 66	70 - 210	21.3 - 64.0	120 - 250	36.6 - 76.2	120 - 290	36.6 - 88.4	30 - 66
40 - 66	220 - 250	67.1 - 76.2	260 - 280	79.2 - 85.3	300	91.4	40 - 66
50 - 66	260 - 290	79.2 - 88.4	290 - 300	88.4 - 91.4	---	---	50 - 66
60 - 66	300	91.4	---	---	---	---	60 - 66
11 - 20% Percent Grade							
30 - 45	---	---	100 - 130	30.5 - 39.6	110 - 140	33.5 - 42.7	30 - 45
30 - 60	70 - 230	21.3 - 70.1	140 - 270	42.7 - 82.3	150 - 300	45.7 - 91.4	30 - 60
40 - 60	240 - 270	73.2 - 82.3	280 - 300	85.3 - 91.4	---	---	40 - 60
50 - 60	280 - 300	85.3 - 91.4	---	---	---	---	50 - 60
21 - 30% Percent Grade							
30 - 45	---	---	130 - 150	39.6 - 45.7	130 - 160	39.6 - 48.8	30 - 45
30 - 55	70 - 250	21.3 - 76.2	160 - 290	48.8 - 88.4	170 - 300	51.8 - 91.4	30 - 55
40 - 55	260 - 290	79.2 - 88.4	300	91.4	---	---	40 - 55
50 - 55	300	91.4	---	---	---	---	50 - 55



Maximum Allowable Travel Specifications

Boom No. 44 With Heavy Lift 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	130 - 190	39.6 - 57.9	130 - 230	39.6 - 70.1	130 - 260	39.6 - 79.2	50 - 72
55 - 72	200 - 210	61.0 - 64.0	240 - 260	73.2 - 79.2	---	---	55 - 72
60 - 72	220 - 260	67.1 - 79.2	---	---	---	---	60 - 72
2 - 10% Percent Grade							
50 - 72	130 - 170	39.6 - 51.8	130 - 200	39.6 - 61.0	130 - 230	39.6 - 70.1	50 - 72
55 - 72	180	54.9	210 - 220	64.0 - 67.1	240 - 260	73.2 - 79.2	55 - 72
60 - 72	190 - 200	57.9 - 61.0	230 - 240	70.1 - 73.2	---	---	60 - 72
65 - 72	210 - 230	64.0 - 70.1	250 - 260	76.2 - 79.2	---	---	65 - 72
11 - 20% Percent Grade							
50 - 72	130 - 150	39.6 - 45.7	130 - 180	39.6 - 54.9	130 - 210	39.6 - 64.0	50 - 72
55 - 72	160	48.8	190 - 200	57.9 - 61.0	220	67.1	55 - 72
60 - 72	170	51.8	210	64.0	230 - 240	70.1 - 73.2	60 - 72
65 - 72	180 - 190	54.9 - 57.9	220 - 230	67.1 - 70.1	250 - 260	76.2 - 79.2	65 - 72
21 - 30% Percent Grade							
50 - 72	130	39.6	130 - 160	39.6 - 48.8	130 - 190	39.6 - 57.9	50 - 72
55 - 72	140	42.7	170	51.8	200	61.0	55 - 72
60 - 72	150	45.7	180	54.9	210	64.0	60 - 72
65 - 72	160	48.8	190	57.9	220 - 240	67.1 - 73.2	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	130 - 190	39.6 - 57.9	130 - 230	39.6 - 70.1	130 - 260	39.6 - 79.2	50 - 72
55 - 72	200 - 210	61.0 - 64.0	240 - 260	73.2 - 79.2	---	---	55 - 72
60 - 72	220 - 260	67.1 - 79.2	---	---	---	---	60 - 72
2 - 10% Percent Grade							
50 - 66	130 - 220	39.6 - 67.1	130 - 260	39.6 - 79.2	130 - 260	39.6 - 79.2	50 - 66
60 - 66	230 - 260	70.1 - 79.2	---	---	---	---	60 - 66
11 - 20% Percent Grade							
50 - 60	130 - 260	39.6 - 79.2	130 - 260	39.6 - 79.2	130 - 260	39.6 - 79.2	50 - 60
21 - 30% Percent Grade							
45 - 50	---	---	---	---	130 - 140	39.6 - 42.7	45 - 50
50 - 55	130 - 260	39.6 - 79.2	130 - 260	39.6 - 79.2	150 - 260	45.7 - 79.2	50 - 55