Manitowoc Cranes, Inc. Manitowoc, Wisconsin 54220 U.S.A.

Maximum Allowable **Travel Specifications**

Boom No. 44 With Heavy Lift Top Luffing Jib No. 133 or No. 133A Fixed Jib No. 140

Jobsite Travel

1. **Machine Travel With Load**

- A. Travel with crane upperworks inline with crawlers and travel drive to rear. 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, luffing jib, fixed jib and rigging.

Machine Travel Without Load 2.

- A. For travel on uphill grade, set boom to 75 degree angle (± 1 degree) and set luffing jib at 35 to 50 degrees above horizontal. See tables on page 2 for uphill travel without load on various grades. Readjust boom angle to desired grade.
- B. For travel on downhill grade, set boom to 75 degree angle (± 1 degree) and set luffing jib at 50 to 60 degrees above horizontal. See tables on page 2 for downhill travel without load on various grades. Readjust boom angle to desired grade. Warning: Downhill travel prohibited for boom and luffing jib lengths not shown in tables on page 2.
- C. Machine to travel on a firm and uniformly supporting surface. See table below for grade vs. angle and boom angle setting. When traveling on **uphill grade**, lower boom the corresponding degrees for grade to be traveled. When traveling on downhill grade, raise boom the corresponding degrees for grade to be traveled. Side-to-side grade must not exceed 1 percent (0.5 degrees).

Percent Grade Vs. Angle In Degrees and Boom Angle Setting									
Percent Grade	Angle	Angle Uphill Boom Angle							
1	0.5°	74.5°	75.5°						
3	1.7°	73.3°	76.7°						
6	3.4°	71.6°	78.4°						
9	5.1°	69.9°	80.1°						
12	6.8°	68.2°	81.8°						
15	8.5°	66.5°	83.5°						

- D. Load blocks and/or hook and weight ball may be suspended below lower boom point, luffing jib point and fixed jib point. Total suspended weight beneath boom point must not exceed 10,000 Lbs. (4 540 kg) on 180 Ft. (54.9m) and 190 Ft. (57.9m) boom lengths or 5,000 Lbs. (2 270 kg) on 200 Ft. (61.0m) boom length. Total suspended weight beneath luffing jib point must not exceed 5,000 Lbs. (2 270 kg). Total suspended weight beneath fixed jib point must not exceed 2,000 Lbs. (910 kg).
- E. Travel with crane upperworks inline with crawlers and travel drive to rear. Maintain 1 percent grade (0.5 degrees) at boom hinge pins when cutting (steering on grade). Return to inline position for continuation of travel.
- F. Tables on page 2 include all fixed jib lengths.

M-250 SERIES 2

M-250 SERIES 3

Maximum Allowable Travel Specifications

Boom No. 44 With Heavy Lift Top Luffing Jib No. 133 or No. 133A Fixed Jib No. 140

Machine Travel Without Load M-250 Series 2 Boom Facing Uphill (including all fixed jib lengths)							
207,000 Lb. (93 890 kg) Crane Counterweight 60,000 Lb. (27 220 kg) Carbody Counterweight							
1 – 15% Grade 74.5° – 66.5° Boom Angle							
	mum Length	Maximum Luffing Jib Length					
Ft.	Meters	Ft.	Meters				
190 200	57.9 61.0	200 170	61.0 51.8				

M-250 SERIES 2 M-250 SERIES 3

Machine Travel Without Load M-250 Series 3 Boom Facing Uphill (including all fixed jib lengths) 248,700 Lb. (112 810 kg)								
Crane Counterweight 120,000 Lb. (54 430 kg) Carbody Counterweight								
74.:	1 – 15% Grade 74.5° – 66.5° Boom Angle							
Maxi Boom	mum Length	Maximum Luffing Jib Length						
Ft.	Meters	Ft.	Meters					
190 200	57.9 61.0	200 170	61.0 51.8					

Machine Travel Without Load – M-250 Series 2 **Boom Facing Downhill** (including all fixed jib lengths)

207,000 Lb. (93 890 kg) Crane Counterweight 60,000 Lb. (27 220 kg) Carbody Counterweight

	15% Grade			9 - 12% Grade				1 – 6% Grade			
	83.5° Boom Angle			80.1 - 81.8° Boom Angle				75.5°–78.4° Boom Angle			
	MaximumMaximumBoom LengthLuffing Jib Length		Maximum Boom Length		Maximum Luffing Jib Length		Maximum Boom Length		Maximum Luffing Jib Length		
Ft.	Meters	Ft.	Meters	Ft.	Meters	Ft.	Meters	Ft.	Meters	Ft.	Meters
180	54.9	160	48.8	180 190 200	54.9 57.9 61.0	170 170 160	51.8 51.8 48.8	180 190 200	54.9 57.9 61.0	180 170 170	54.9 51.8 51.8

	Machine Travel Without Load – M-250 Series 3 Boom Facing Downhill (including all fixed jib lengths)											
	248,700 Lb. (112 810 kg) Crane Counterweight 120,000 Lb. (54 430 kg) Carbody Counterweight											
	15% Grade 83.5° Boom Angle				9 - 12% Grade 80.1 - 81.8° Boom Angle				1 – 6% Grade 75.5°–78.4° Boom Angle			
	MaximumMaximumBoom LengthLuffing Jib Length		Maximum Boom Length		Maximum Luffing Jib Length		Maximum Boom Length		Maximum Luffing Jib Length			
Ft.	Meters	Ft.	Meters	Ft.	Meters	Ft.	Meters	Ft.	Meters	Ft.	Meters	
180 190 200	54.9 57.9 61.0	180 170 170	54.9 51.8 51.8	180 190 200	54.9 57.9 61.0	200 190 170	61.0 57.9 51.8	190 200	57.9 61.0	200 170	61.0 51.8	

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