Maximum Allowable Travel Specifications

—— *Manıtowoc* 16000 SERIES 4

Boom No. 58WA with Heavy Lift Top

Jobsite Travel

16000 SERIES 4 must be equipped with 368,000 lb (166 920 kg) crane counterweight and 120,000 lb (54 430 kg) carbody counterweight. Refer to capacity charts for maximum wind speed for various boom lengths and maximum boom length 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). *Travel with 100 percent of rated load prohibited.* Travel restricted to 90 percent of rated capacity with speed not to exceed 0,4 m/s.
- 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 upper boom points or tied off to machine. Total combined suspended weight beneath lower and upper boom points must not exceed 25,000 lb (11 340 kg).
- 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 Vs. Angle In Degrees				
Percent Grade	Angle			
1	0,5			
10	5,7			
20	11,3			
30	16,7			

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Manıtowoc **16000 SERIES 4**

MACHINE TRAVEL WITHOUT LOAD						
Boom	Length	E	Boom Angle Range in Degrees			
Boom	Length	Percent Grade				
Feet	Meters	0 - 1%	2 - 10%	11 - 20%	21 - 30%	
BOOM FACING DOWNHILL OR UPHILL						
98.4	30,0	30 - 72	30 - 60	30 - 45	—	
108.3	33,0	30 - 72	30 - 60	30 - 50 🦱	30 - 35	
118.1	36,0	30 - 72	30 - 66	30 - 50	30 - 40	
128.0	39,0	30 - 72	30 - 66	30 - 55	30 - 40	
137.8	42,0	30 - 72	30 - 66	30 - 55	30 - 45	
147.6	45,0	30 - 72	30 - 66	30 - 60	30 - 45	
157.5	48,0	30 - 72	30 - 66	30 - 60	30 - 50	
167.3	51,0	30 - 72	30 - 66	30 - 60	30 - 50	
177.2	54,0	30 - 72	30 - 66	30 - 60	40 - 50	
187.0	57,0	30 - 72	30 - 66	35 - 60	50 - 55	
196.9	60,0	30 - 72	30 - 66	45 - 60	_	
206.7	63,0	30 - 72	40 - 66	50 - 60	—	
216.5	66,0	35 - 72	45 - 66	55 - 60	—	
226.4	69,0	40 - 72	50 - 66	55 - 60	—	
236.2	72,0	45 - 72	50 - 66	—	—	
246.1	75,0	50 - 72	55 - 66	—	—	
255.9	78,0	50 - 72	55 - 66	—	—	
265.7	81,0	55 - 72	60 - 66	—	—	
275.6	84,0	55 - 72	—	—	—	
285.4	87,0	60 - 72	—	—	—	
295.3	90,0	60 - 72	—	—	_	

Table 1: Boom No. 58WA with Heavy Lift Top