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

## **Maximum Allowable Travel** Specifications

**777 SERIES 2** 

Boom No. 78 Luffing Jib No. 139 Fixed Jib No. 138

## **Jobsite Travel**

777 SERIES 2 must be equipped with 142,000 lb (64 410 kg) crane counterweight and 44,000 lb (19 960 kg) carbody counterweight. Refer to Operator's Manual for maximum wind speed for various boom, luffing jib and fixed jib lengths. Refer to luffing jib raising procedure for maximum boom and luffing jib lengths lifted unassisted.

## Machine Travel With Load 1.

- A. Machine can swing and travel with 360 degree rating.
- B. Grade in any direction must not exceed <sup>1</sup>/<sub>2</sub> in. in 10 Ft. (13 mm in 3 m).
- 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, luffing jib, fixed jib and rigging.

## **Machine Travel Without Load** 2.

- A. Position boom to 80 degree boom angle (plus or minus 1 degree) and position luffing jib at 35 to 50 degrees above horizontal. Grade in direction of travel should not exceed 9 percent (5.1 degrees).
- B. Load blocks and/or hook and weight balls may be suspended beneath luffing jib and fixed jib points or tied off to machine. Total suspended weight beneath luffing jib point must not exceed 3,000 lb (1 360 kg). Total suspended weight beneath fixed jib point must not exceed 1,250 lb (570 kg).
- C. 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. Side-toside grade must not exceed 1 percent (0.5 degrees) measured at boom hinge pins.
- D. Refer to 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.
- E. Do not exceed 1 percent (0.5 degrees) side-to-side grade at boom hinge pins when cutting (turning on grade).

Percent Grade Vs. Angle In Degrees and Boom Angle Setting			
Percent Grade	Angle	Uphill Boom Angle	Downhill Boom Angle
1	0.5°	79.5°	80.5°
3	1.7°	78.3°	81.7°
6	3.4°	76.6°	83.4°
9	5.1°	74.9°	85.1°