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

# **999 SERIES 3**

## Maximum Allowable **Travel Specifications**

Boom No. 82 Luffing Jib No. 149 Assemble-In-Air/Outside Assist

#### A. Jobsite Travel

#### 1. MACHINE TRAVEL WITH LOAD

- a. Machine to travel on firm, level, and uniformly supporting surface with boom and luffing jib within angle range shown in capacity chart. Grade in any direction must not exceed 1/2 in. in 10 Ft. (13mm in 3m).
- 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, and rigging.
- c. Refer to operators manual for maximum wind speed for various boom and luffing jib combinations.

### 2. MACHINE TRAVEL WITHOUT LOAD

- a. Set boom to approximately 86 degree boom angle ( $\pm 1$  degree) and set luffing jib at 40 to 50 degrees above horizontal.
- b. Machine to travel on a firm and uniformly supporting surface. Grade in direction of travel should not exceed 3 percent (1.7 degrees). 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).
- c. Load block and/or hook and weight ball suspended below luffing jib point or tied off to machine rotating bed.
- d. Travel with crane upperworks in-line with crawlers. Maintain 1 percent grade (0.5 degrees) at boom hinge pins when cutting (steering on grade). Return to in-line position for continuation of travel.
- e. Refer to operators manual for maximum wind speed for various boom and luffing jib combinations.

Percent Grade Vs. Angle In Degrees and Boom Angle Setting			
Percent Grade	Angle	Uphill Boom Angle	Downhill Boom Angle
1	0.5°	85.5°	86.5°
3	1.7°	84.3°	87.7°