## MANITOWOC ENGINEERING CO.

Division of the Manitowoc Company, Inc. Manitowoc, Wisconsin 54220

## MAXIMUM ALLOWABLE WIND CONDITIONS

\_\_\_\_\_ M-250 M-250 SERIES 2

BOOM NO. 44 WITH 5' (1524 mm) TOP AND FOLD UNDER LUFFING JIB NO. 133A

SUPPLEMENTS WIND CONDITIONS ON CAPACITY CHARTS

IN ALL CASES WIND CONDITIONS STATED ON CAPACITY CHARTS TAKE PRIORITY

WIND VELOCITY MEASURED AT 100' (30.5m) ELEVATION

- A. WIND LIMITS DURING RAISING OR LOWERING
  - 1. MACHINE MUST BE ASSEMBLED AS SHOWN ON APPROPRIATE RIGGING DRAWING.
  - 2. MACHINE MUST BE ON A FIRM, LEVEL, AND UNIFORMLY SUPPORTING SURFACE.
  - 3. RAISING OR LOWERING MUST BE DONE OVER FRONT OF BLOCKED CRAWLERS.
  - 4. WIND LIMITS DURING ERECTION
    - a. WINDS FROM ANY DIRECTION SHOULD NOT EXCEED 30 MPH (13 m/s) FOR BOOM AND FOLD UNDER LUFFING JIB LENGTHS OF 255' (77.7m) OR LESS.
    - b. WINDS FROM ANY DIRECTION SHOULD NOT EXCEED 25 MPH (11 m/s) FOR BOOM AND FOLD UNDER LUFFING JIB LENGTHS OVER 255' (77.7m).
- B. WIND LIMITS DURING NORMAL LIFTING OPERATION

ALL BOOM AND FOLD UNDER LUFFING JIB LENGTHS MAY REMAIN IN OPERATING POSITION UNDER FOLLOWING CONDITIONS.

- 1. MACHINE MUST BE ON A FIRM, LEVEL, AND UNIFORMLY SUPPORTING SURFACE.
- 2. MACHINE MAY BE OPERATED IN WINDS PER NOTES ON APPROPRIATE CAPACITY CHART PROVIDED AN ALLOWANCE FOR EFFECT OF WIND ON LIFTED LOAD BE CONSIDERED. WIND WILL HAVE A CONSIDERABLE EFFECT ON A LOAD WITH A LARGE 'SAIL AREA' AND MUST BE COMPENSATED FOR ACCORDINGLY BY REDUCING LOAD RATINGS, REDUCING OPERATING SPEEDS, OR A COMBINATION OF BOTH.
- 3. AT ALL TIMES DURING A LIFT OPERATION, THE LOAD MUST REMAIN CONTROLLABLE THROUGHOUT ENTIRE LIFT RANGE SUCH THAT IT CAN BE LOCATED IN ITS FINAL POSITION.
- 4. AS A GUIDE, ALLOWABLE SIDE LOAD ON LIFTED LOAD SHALL NOT EXCEED 1 PERCENT OF CAPACITY OF CRANE CORRESPONDING TO LOAD-RADIUS CONFIGURATION.
- C. WIND LIMITS DURING NON-OPERATION
  - 1. WEATHER VANE MACHINE WITH WINDS UP TO 50 MPH (22 m/s) FOR BOOM AND FOLD UNDER LUFFING JIB LENGTHS UP TO 305' (93.0m), 40 MPH (18 m/s) FOR BOOM AND FOLD UNDER LUFFING JIB LENGTHS FROM 305' (93.0m) TO 335' (102.1m), AND 30 MPH (13 m/s) FOR BOOM AND FOLD UNDER LUFFING JIB LENGTHS ABOVE 335' (102.1m). CHECK FOR SITE INTERFERENCE TO FREE SWING BOOM AND FOLD UNDER LUFFING JIB.
    - a. BOOM AND FOLD UNDER LUFFING JIB CAN REMAIN ERECTED AND IN OPERATING POSITION.
    - b. POSITION BOOM AT 75 DEGREE BOOM ANGLE (PLUS OR MINUS 1 DEGREE) AND FOLD UNDER LUFFING JIB AT 45 DEGREES ABOVE HORIZONTAL. LOAD BLOCK MUST BE TIED OFF TO MACHINE ROTATING BED.
    - C. SWING LOCK AND SWING BRAKE MUST BE DISENGAGED (SEE OPERATOR'S MANUAL).
  - LOWER BOOM AND FOLD UNDER LUFFING JIB TO GROUND AND SECURE FOR WINDS ANTICIPATED ABOVE THOSE LISTED IN SECTION C. 1.