A Division of The Manitowoc Company, Inc. Manitowoc, Wisconsin 54220

# TOWER CRANE INTERMEDIATE FALL CAPACITIES \_\_\_\_\_

### 174' TO 194' NO. 9A TOWER WITH NO. 18 BOOM 61,200 LB. CRANE COUNTERWEIGHT RATING OVER SIDE, REAR OR FRONT ON EXTENDED OUTRIGGERS

LIFTING CAPACITIES: Capacities for various tower lengths, boom lengths and operating radii are for freely suspended loads and do not exceed 75% of a static tipping load. CAPACITIES BASED ON STRUCTURAL COMPETENCE ARE SHOWN BY SHADED AREAS.

Capacities are shown in pounds. Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom, jib and intermediate fall point sheaves, is considered part of the intermediate fall load. When jib is attached, a deduction for jib weight is not required for this chart only. Boom is not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved.

A maximum of two hoist lines may be used with one over the intermediate fall and one over the boom point or jib point. Simultaneous handling of loads with hoist lines over the intermediate fall and boom point or jib point is not permitted.

**OPERATING CONDITIONS:** Machine to operate on a firm surface with outriggers fully extended and roller path level within a tolerance of ¼" in 10 ft. and properly supported. Refer to rigging No. 65136 and No. 66015, load line specification chart No. 5327, operating range diagram chart No. 6423-A and chart No. 6631-A for recommended procedure for operating under various wind conditions and chart No. 6484 for tower and boom raising procedure.

Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, wind conditions, as well as adverse operating conditions and physical machine depreciation.



**3900T** SERIES-2 TRUCK CRANE

**OPERATING RADIUS:** Operating radius is the horizontal distance from the axis of rotation to the center of vertical hoist line. Boom angle is the angle between horizontal and centerline of boom butt and inserts and is an indication of operating radius. In all cases, operating radius shall govern capacity.

**INTERMEDIATE FALL POINT ELEVATION:** Intermediate fall point elevation, in feet, is the vertical distance from ground level to centerline of intermediate fall point shaft. Distances are given for 194' tower. Deduct 10' for each 10' reduction in tower height.

**MACHINE EQUIPMENT:** Machine equipped with Manitowoc-Hendrickson 12 × 6 carrier, 226" wheelbase, 10,500 lb. front bumper ctwt., 112" outriggers or Manitowoc-Pierce 10 × 6 carrier, 258.5" wheelbase, 5,300 lb. front bumper ctwt., 112" outriggers or Consolidated Dynamics 12 × 6 carrier, model 12615, 235" wheelbase, 5,500 lb. front bumper ctwt., 115" outriggers. Machine also equipped with 15' retractable gantry, 10 part boom hoist reeving, four 1¼" tower pendants, two 1¼" boom pendants, two %" intermediate suspension pendants, and 61,200 lb. 2 piece crane ctwt.

#### LOAD LINE SPECIFICATIONS

INTERMEDIATE FALL: 1" — 6×25 Filler Wire, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 44.9 Ton. Maximum Load on Intermediate Fall — 15,000 lbs. (Approx. Weight Per Ft. in lbs. 1.85)

Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Int. Fall Point: Elev.	Capacity:
120 AND 130 AND	25 30 35 40 45	72.5 67.7 62.7 57.5 51.9	262.4 260.4 258.0 255.0 251.3	15,000 15,000 15,000 12,700 11,200
140 <sup>AND</sup> 1 <u>50</u>	50 55 60 65	45.8 39.0 31.0 20.1	246.7 241.0 233.5 222.4	10,000 8,900 8,100 7,500

Combined From Charts: No. 6769-B1 11-28-84 No. 5327 3-21-80

**Operating Range Diagram** continued on reverse side.

OPERATING RANGE DIAGRAM.

## RATING OVER SIDE OR REAR AND FRONT ON EXTENDED OUTRIGGERS

Approved working area is shown in the following diagram for boom chart capacities and jib chart capacities over side or rear and boom over front.

Lifting is approved only in this area for which ratings are

shown on the capacity charts.

Operating outside the working area is not intended or approved.

#### DIAGRAM OF BOOM AND JIB OPERATING RANGE OVER SIDE AND REAR AND BOOM OVER FRONT

(Ref. Drwg. No. 6423-A)

INTER. FALL CAPACITIES --- 3900T/2 --- 174' TO 194' NO. 9A TOWER W/ 18 BOOM





TRUCK CRANE