

# Liftcrane Boom Capacities

**Boom No. 49A**  
**No Crane Counterweight**  
**181 440 kg Wheeled Counterweight**  
**360 Degree Rating**

Meets  
ANSI B30.5  
Requirements

**MAX-ER 400**  
**On 2250 or**  
**M-250**

**LIFTING CAPACITIES:** Lifting capacities for various 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 denoted by an asterisk (\*).

Wheeled counterweight must be attached to support beam and MAX-ER mode must be selected to operate. Swing and travel (forward or side crawl) requires proper position of counterweight wheels when contacting ground. Lower boom to ground before removing wheeled counterweight.

Upper boom point capacity for liftcrane service with single part whip line is 13 610 kg or 27 220 kg with two part whip line. In all cases, upper boom point capacities cannot exceed those listed for main boom capacity.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom point sheaves, is considered part of main boom load. 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.

**OPERATING CONDITIONS:** Machine to operate on a firm uniformly supporting surface with gantry and mast up. Refer to boom rigging **No. 176112** or **No. 192708**, Wire Rope Specification chart **No. 7581-G** and Counterweight Arrangement chart **No. 7692-A** or **No. 8026-A**. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, wind conditions, as well as adverse operating conditions and physical machine

depreciation. Refer to operators manual for operating guidelines.

**MACHINE TRAVEL:** Machine to travel on a firm, level and uniformly supporting surface with boom within boom angle range shown in capacity chart. Travel may be limited depending upon ground conditions. Counter-rotation or cutting lowerworks while traveling capacities above 272 100 kg may require travel surface to be either wetted timber matting or greased steel plates. Refer to Maximum Allowable Travel Specification chart **No. 7748-A** when operating without load.

**OPERATING RADIUS:** Operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block. Boom angle is 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.

**BOOM POINT ELEVATION:** Boom point elevation is vertical distance from ground level to centerline of boom point shaft.

**MACHINE EQUIPMENT:** Machine equipped with MAX-ER 400, 9 373 mm crawlers, 1 219 mm treads, 8 534 mm retractable gantry, 24.4m mast, 12 part boom hoist reeving, four 38 mm boom pendants or boom support straps, no crane counterweight and 181 440 kg wheeled counterweight.

Maximum boom length lifted unassisted  
over side or end = 49.4m

Load block, hook and weight ball on  
ground at start.



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| Oper.<br>Rad.<br>Meters     | Boom<br>Ang.<br>Deg. | Boom<br>Point<br>Elev.<br>Meters | Boom<br>Capacity<br>Kilograms |
|-----------------------------|----------------------|----------------------------------|-------------------------------|
| <b>25.0m (82 Ft.) BOOM</b>  |                      |                                  |                               |
| 5.5                         | 83.0                 | 27.8                             | 453 500 *                     |
| 6.0                         | 81.8                 | 27.7                             | 386 900 *                     |
| 6.5                         | 80.7                 | 27.6                             | 387 100 *                     |
| 7.0                         | 79.5                 | 27.5                             | 362 600 *                     |
| 7.5                         | 78.3                 | 27.4                             | 339 400 *                     |
| 8.0                         | 77.1                 | 27.2                             | 318 900 *                     |
| 8.5                         | 76.0                 | 27.1                             | 300 600 *                     |
| 9.0                         | 74.8                 | 26.9                             | 284 200 *                     |
| 10.0                        | 72.3                 | 26.6                             | 256 100 *                     |
| 11.0                        | 69.9                 | 26.2                             | 232 900 *                     |
| 12.0                        | 67.4                 | 25.8                             | 213 300 *                     |
| 13.0                        | 64.9                 | 25.3                             | 196 500 *                     |
| 14.0                        | 62.3                 | 24.8                             | 182 100 *                     |
| 15.0                        | 59.6                 | 24.2                             | 169 500 *                     |
| 16.0                        | 56.8                 | 23.5                             | 158 400 *                     |
| 18.0                        | 51.0                 | 22.0                             | 139 800 *                     |
| 20.0                        | 44.6                 | 20.0                             | 116 500 *                     |
| 22.0                        | 37.4                 | 17.6                             | 105 400 *                     |
| 24.0                        | 28.5                 | 14.3                             | 95 600 *                      |
| <b>31.1m (102 Ft.) BOOM</b> |                      |                                  |                               |
| 6.4                         | 82.7                 | 33.8                             | 346 900 *                     |
| 6.5                         | 82.5                 | 33.8                             | 346 200 *                     |
| 7.0                         | 81.6                 | 33.7                             | 342 500 *                     |
| 7.5                         | 80.6                 | 33.6                             | 336 400 *                     |
| 8.0                         | 79.7                 | 33.5                             | 317 600 *                     |
| 8.5                         | 78.8                 | 33.4                             | 299 400 *                     |
| 9.0                         | 77.8                 | 33.3                             | 283 000 *                     |
| 10.0                        | 75.9                 | 33.0                             | 255 000 *                     |
| 11.0                        | 74.0                 | 32.7                             | 231 700 *                     |
| 12.0                        | 72.0                 | 32.4                             | 212 100 *                     |
| 13.0                        | 70.1                 | 32.0                             | 195 500 *                     |
| 14.0                        | 68.1                 | 31.6                             | 181 000 *                     |
| 15.0                        | 66.1                 | 31.1                             | 168 500 *                     |
| 16.0                        | 64.0                 | 30.6                             | 157 400 *                     |
| 18.0                        | 59.8                 | 29.5                             | 138 800 *                     |
| 20.0                        | 55.3                 | 28.2                             | 115 600 *                     |
| 22.0                        | 50.6                 | 26.6                             | 104 500 *                     |
| 24.0                        | 45.5                 | 24.7                             | 94 800 *                      |
| 26.0                        | 40.0                 | 22.4                             | 85 700 *                      |
| 28.0                        | 33.6                 | 19.6                             | 77 400 *                      |

| Oper.<br>Rad.<br>Meters     | Boom<br>Ang.<br>Deg. | Boom<br>Point<br>Elev.<br>Meters | Boom<br>Capacity<br>Kilograms |
|-----------------------------|----------------------|----------------------------------|-------------------------------|
| <b>37.2m (122 Ft.) BOOM</b> |                      |                                  |                               |
| 7.0                         | 83.0                 | 39.9                             | 308 400 *                     |
| 7.5                         | 82.2                 | 39.8                             | 304 700 *                     |
| 8.0                         | 81.4                 | 39.7                             | 301 000 *                     |
| 8.5                         | 80.6                 | 39.6                             | 297 500 *                     |
| 9.0                         | 79.8                 | 39.5                             | 283 700 *                     |
| 10.0                        | 78.3                 | 39.3                             | 254 100 *                     |
| 11.0                        | 76.7                 | 39.0                             | 230 800 *                     |
| 12.0                        | 75.1                 | 38.8                             | 211 300 *                     |
| 13.0                        | 73.5                 | 38.5                             | 194 500 *                     |
| 14.0                        | 71.9                 | 38.1                             | 180 100 *                     |
| 15.0                        | 70.2                 | 37.8                             | 167 600 *                     |
| 16.0                        | 68.5                 | 37.4                             | 156 500 *                     |
| 18.0                        | 65.2                 | 36.5                             | 137 900 *                     |
| 20.0                        | 61.7                 | 35.4                             | 114 800 *                     |
| 22.0                        | 58.1                 | 34.2                             | 103 600 *                     |
| 24.0                        | 54.3                 | 32.8                             | 94 000 *                      |
| 26.0                        | 50.3                 | 31.2                             | 85 100 *                      |
| 28.0                        | 46.1                 | 29.3                             | 76 800 *                      |
| 30.0                        | 41.6                 | 27.1                             | 69 900 *                      |
| 32.0                        | 36.6                 | 24.5                             | 63 800 *                      |
| 34.0                        | 30.8                 | 21.4                             | 58 600 *                      |
| <b>43.3m (142 Ft.) BOOM</b> |                      |                                  |                               |
| 7.9                         | 82.7                 | 45.9                             | 272 100 *                     |
| 8.0                         | 82.6                 | 45.9                             | 272 100 *                     |
| 8.5                         | 82.0                 | 45.8                             | 272 100 *                     |
| 9.0                         | 81.3                 | 45.7                             | 272 100 *                     |
| 10.0                        | 79.9                 | 45.5                             | 254 000 *                     |
| 11.0                        | 78.6                 | 45.3                             | 230 200 *                     |
| 12.0                        | 77.2                 | 45.1                             | 210 600 *                     |
| 13.0                        | 75.9                 | 44.8                             | 194 000 *                     |
| 14.0                        | 74.5                 | 44.5                             | 179 500 *                     |
| 15.0                        | 73.1                 | 44.2                             | 167 000 *                     |
| 16.0                        | 71.7                 | 43.9                             | 155 900 *                     |
| 18.0                        | 68.9                 | 43.1                             | 137 300 *                     |
| 20.0                        | 66.0                 | 42.3                             | 114 200 *                     |
| 22.0                        | 63.0                 | 41.3                             | 103 100 *                     |
| 24.0                        | 60.0                 | 40.1                             | 93 400 *                      |
| 26.0                        | 56.8                 | 38.8                             | 84 800 *                      |
| 28.0                        | 53.6                 | 37.4                             | 76 600 *                      |
| 30.0                        | 50.2                 | 35.8                             | 69 500 *                      |
| 32.0                        | 46.6                 | 33.9                             | 63 500 *                      |
| 34.0                        | 42.7                 | 31.8                             | 58 300 *                      |
| 36.0                        | 38.6                 | 29.4                             | 53 600 *                      |
| 38.0                        | 34.0                 | 26.5                             | 49 500 *                      |
| 40.0                        | 28.7                 | 23.1                             | 45 900 *                      |

| Oper.<br>Rad.<br>Meters     | Boom<br>Ang.<br>Deg. | Boom<br>Point<br>Elev.<br>Meters | Boom<br>Capacity<br>Kilograms |
|-----------------------------|----------------------|----------------------------------|-------------------------------|
| <b>49.4m (162 Ft.) BOOM</b> |                      |                                  |                               |
| 8.5                         | 82.9                 | 52.0                             | 249 400 *                     |
| 9.0                         | 82.4                 | 51.9                             | 247 700 *                     |
| 10.0                        | 81.2                 | 51.7                             | 244 200 *                     |
| 11.0                        | 80.0                 | 51.5                             | 229 100 *                     |
| 12.0                        | 78.8                 | 51.3                             | 209 500 *                     |
| 13.0                        | 77.6                 | 51.1                             | 192 800 *                     |
| 14.0                        | 76.5                 | 50.9                             | 178 400 *                     |
| 15.0                        | 75.3                 | 50.6                             | 165 900 *                     |
| 16.0                        | 74.0                 | 50.3                             | 154 800 *                     |
| 18.0                        | 71.6                 | 49.6                             | 136 200 *                     |
| 20.0                        | 69.1                 | 48.9                             | 113 200 *                     |
| 22.0                        | 66.6                 | 48.0                             | 102 200 *                     |
| 24.0                        | 64.0                 | 47.1                             | 92 400 *                      |
| 26.0                        | 61.4                 | 46.0                             | 84 100 *                      |
| 28.0                        | 58.7                 | 44.8                             | 75 800 *                      |
| 30.0                        | 55.9                 | 43.5                             | 68 800 *                      |
| 32.0                        | 53.0                 | 42.0                             | 62 700 *                      |
| 34.0                        | 50.0                 | 40.4                             | 57 500 *                      |
| 36.0                        | 46.9                 | 38.5                             | 52 900 *                      |
| 38.0                        | 43.5                 | 36.5                             | 48 800 *                      |
| 40.0                        | 40.0                 | 34.2                             | 45 100 *                      |
| 42.0                        | 36.1                 | 31.5                             | 41 900 *                      |
| 44.0                        | 31.9                 | 28.4                             | 38 900 *                      |