



Liftcrane Boom Capacities

Boom No. 49A
No Crane Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements

2250 or M-250 WITH MAST - 80 FT.

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 (*).

Upper boom point capacity for liftcrane service with single part whip line is 30,000 Lbs. or 60,000 Lbs. 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** and Wire Rope Specification chart **No. 7581-G**. 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. 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 30 Ft. 9 in. crawlers, 48 in. treads, 28 Ft. retractable gantry, 80 Ft. mast, 12 part boom hoist reeving, four 1-1/2 in. boom pendants or boom support straps and no crane counterweight.

Maximum Boom Lengths Lifted Unassisted	
Over End of Blocked Crawlers	Over Side of Crawlers
Boom Length	Boom Length
122 Ft.	102 Ft.
Load block, hook and weight ball on ground at start.	



Liftcrane Boom Capacities

2250 or M-250 WITH MAST - 80 FT.

Boom No. 49A
No Crane Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
82 Ft. BOOM			
18	83.0	91.1	514,800
19	82.3	90.9	443,600
20	81.6	90.7	388,900
21	80.9	90.5	345,500
22	80.2	90.3	310,300
23	79.5	90.1	281,100
24	78.8	89.9	256,600
25	78.0	89.7	235,600
26	77.3	89.4	217,500
28	75.9	88.9	187,800
30	74.4	88.3	164,400
32	72.9	87.6	145,600
34	71.5	86.9	130,100
36	70.0	86.1	117,100
38	68.4	85.3	106,100
40	66.9	84.4	96,600
42	65.4	83.4	88,300
44	63.8	82.4	81,100
46	62.2	81.3	74,600
48	60.6	80.1	68,900
50	58.9	78.9	63,800
55	54.7	75.4	53,000
60	50.1	71.2	44,400
65	45.3	66.4	37,300
70	39.9	60.6	31,500
75	33.8	53.4	26,500
80	26.5	44.1	22,200

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
102 Ft. BOOM			
21	82.7	110.8	345,500
22	82.1	110.7	310,100
23	81.6	110.5	280,800
24	81.0	110.3	256,100
25	80.4	110.1	235,000
26	79.8	109.9	216,900
28	78.7	109.5	187,000
30	77.5	109.0	163,600
32	76.4	108.5	144,700
34	75.2	107.9	129,100
36	74.0	107.3	116,100
38	72.9	106.7	105,000
40	71.7	106.0	95,500
42	70.5	105.2	87,200
44	69.3	104.5	79,900
46	68.0	103.6	73,400
48	66.8	102.7	67,700
50	65.6	101.8	62,500
55	62.4	99.2	51,700
60	59.1	96.2	43,100
65	55.8	92.8	36,000
70	52.2	89.0	30,200
75	48.5	84.6	25,200
80	44.5	79.6	21,000
85	40.2	73.8	17,300
90	35.5	67.0	14,100
95	30.1	58.8	11,200

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
122 Ft. BOOM			
23	83.0	130.8	282,800
24	82.5	130.6	257,800
25	82.0	130.4	236,500
26	81.5	130.3	218,100
28	80.6	129.9	187,900
30	79.6	129.5	164,200
32	78.7	129.1	145,100
34	77.7	128.6	129,300
36	76.7	128.1	116,100
38	75.8	127.6	104,900
40	74.8	127.0	95,200
42	73.8	126.4	86,800
44	72.8	125.8	79,400
46	71.8	125.1	72,900
48	70.8	124.4	67,100
50	69.8	123.6	61,800
55	67.3	121.5	50,900
60	64.7	119.1	42,100
65	62.0	116.5	35,000
70	59.3	113.5	29,100
75	56.5	110.2	24,100
80	53.6	106.6	19,800
85	50.5	102.5	16,100
90	47.4	97.9	12,900
95	44.0	92.8	10,000