



# Duty Cycle Capacities

**Boom No. 83A**  
**24 040 kg Counterweight**  
**7 163 mm Crawlers Extended**  
**360 Degree Rating - Limited Duty**

**LIFTING CAPACITIES:** Capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 67.5% of a static tipping load. Capacities are based on tipping, structural competence(\*), operating speeds and other factors.

Duty cycle capacities shown are intended for limited duration applications. Continuous operation at these capacities may reduce component life.

Weight of bucket is considered part of load. Where no capacity is shown, operation is not intended or approved.

**OPERATING CONDITIONS:** Machine to operate in a level position on a firm uniformly supporting surface with gantry up. Refer to boom rigging **No. A14196** and Wire Rope Specification chart **No. 8697-C**. Crane operator judgment must be used to allow for adverse operating conditions and physical machine depreciation. Refer to Operator's Manual for operating guidelines.

**OPERATING RADIUS:** Operating radius is horizontal distance from axis of rotation to center of gravity of freely suspended load. Boom angle is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius.

**MACHINE EQUIPMENT:** Machine equipped with 7 163 mm extendible crawlers, 1 000 mm treads, 2 921 mm gantry, 7 620 mm live mast, 12 part boom hoist reeving, two 38 mm pendants and 24 040 kg counterweight.

**Upper Boom Point Deduct**

Deduct 590 kg from capacities when upper boom point is attached.

**Auxiliary Drum Deduct**

Deduct 910 kg from boom capacities when boom butt is equipped with auxiliary drum.

**Wire Rope Guard Deduct**

Deduct 455 kg from boom capacities when boom top is equipped with wire rope guard **No. A13283**.

Maximum Boom Lengths Lifted Unassisted			
Over Front of Blocked Crawlers	Over Rear of Blocked Crawlers	Over Side of Extended Crawlers	Over Side of Retracted Crawlers
51,8m	51,8m	42,7m	39,6m

Oper. Rad. Meters	Boom Ang. Deg.	Boom Capacity Kilograms
<b>15,2m (50 Ft.) Boom</b>		
9,1	64,1	29 900 *
10,0	60,4	29 700
12,0	51,0	25 400
14,0	39,8	20 000

Oper. Rad. Meters	Boom Ang. Deg.	Boom Capacity Kilograms
<b>18,3m (60 Ft.) Boom</b>		
9,1	68,8	29 900 *
10,0	65,8	29 800
12,0	58,6	25 500
14,0	50,6	20 100
16,0	41,5	16 500
18,0	30,2	13 900

Oper. Rad. Meters	Boom Ang. Deg.	Boom Capacity Kilograms
<b>21,3m (70 Ft.) Boom</b>		
9,1	72,0	29 900 *
10,0	69,5	29 800
12,0	63,5	25 500
14,0	57,2	20 200
16,0	50,4	16 600
18,0	42,7	13 900
20,0	33,6	11 800

Oper. Rad. Meters	Boom Ang. Deg.	Boom Capacity Kilograms
<b>24,4m (80 Ft.) Boom</b>		
7,6	78,0	29 900 *
8,0	77,1	29 900 *
10,0	72,2	29 600
12,0	67,1	25 200
14,0	61,8	19 900
16,0	56,2	16 400
18,0	50,2	13 800
20,0	43,6	11 700
22,0	35,9	10 000
24,0	26,3	8 600



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**24 040 kg Counterweight**  
**7 163 mm Crawlers Extended**  
**360 Degree Rating - Limited Duty**

Oper. Rad. Meters	Boom Ang. Deg.	Boom Capacity Kilograms
<b>27,4m (90 Ft.)</b>		
<b>Boom</b>		
7,6	79,4	29 400 *
8,0	78,6	29 200 *
10,0	74,2	28 100 *
12,0	69,8	24 800
14,0	65,2	19 800
16,0	60,5	16 300
18,0	55,4	13 700
20,0	50,1	11 600
22,0	44,2	10 000
24,0	37,6	8 600
26,0	29,7	7 500
<b>30,5m (100 Ft.)</b>		
<b>Boom</b>		
7,6	80,4	27 500 *
8,0	79,7	27 300 *
10,0	75,9	26 400 *
12,0	71,9	24 400
14,0	67,9	19 800
16,0	63,7	16 200
18,0	59,4	13 600
20,0	54,8	11 500
22,0	50,0	9 800
24,0	44,7	8 500
26,0	38,9	7 300
28,0	32,2	6 400
30,0	23,8	5 500
<b>33,5m (110 Ft.)</b>		
<b>Boom</b>		
7,6	81,3	24 400 *
8,0	80,7	24 200 *
10,0	77,2	23 400 *
12,0	73,6	22 700 *
14,0	70,0	19 800
16,0	66,3	16 200
18,0	62,4	13 500
20,0	58,5	11 500
22,0	54,3	9 800
24,0	49,9	8 500
26,0	45,1	7 300
28,0	39,9	6 400
30,0	34,1	5 500
32,0	27,1	4 800

Oper. Rad. Meters	Boom Ang. Deg.	Boom Capacity Kilograms
<b>36,6m (120 Ft.)</b>		
<b>Boom</b>		
7,6	82,1	22 800 *
8,0	81,5	22 700 *
10,0	78,3	22 000 *
12,0	75,0	21 200 *
14,0	71,7	19 800
16,0	68,4	16 000
18,0	64,9	13 400
20,0	61,4	11 300
22,0	57,7	9 700
24,0	53,8	8 300
26,0	49,8	7 200
28,0	45,5	6 200
30,0	40,8	5 400
32,0	35,6	4 700
34,0	29,5	4 000
36,0	22,0	3 500
<b>39,6m (130 Ft.)</b>		
<b>Boom</b>		
7,6	82,7	20 100 *
8,0	82,1	20 000 *
10,0	79,2	19 400 *
12,0	76,2	18 800 *
14,0	73,2	18 200
16,0	70,1	16 100
18,0	67,0	13 200
20,0	63,8	11 200
22,0	60,5	9 500
24,0	57,0	8 200
26,0	53,5	7 000
28,0	49,7	6 100
30,0	45,8	5 300
32,0	41,5	4 500
34,0	36,8	3 900
36,0	31,5	3 300
38,0	25,1	2 800

Oper. Rad. Meters	Boom Ang. Deg.	Boom Capacity Kilograms
<b>42,7m (140 Ft.)</b>		
<b>Boom</b>		
9,1	81,1	18 900 *
10,0	80,0	18 600 *
12,0	77,2	18 100 *
14,0	74,4	17 400
16,0	71,6	16 000
18,0	68,7	13 100
20,0	65,8	11 000
22,0	62,8	9 400
24,0	59,7	8 000
26,0	56,5	6 900
28,0	53,2	5 900
30,0	49,7	5 100
32,0	46,0	4 400
34,0	42,1	3 800
36,0	37,8	3 200
38,0	33,0	2 700
40,0	27,5	2 200
<b>45,7m (150 Ft.)</b>		
<b>Boom</b>		
9,1	81,7	17 100 *
10,0	80,6	16 900 *
12,0	78,1	16 400 *
14,0	75,5	15 900 *
16,0	72,9	15 200
18,0	70,2	13 100
20,0	67,5	10 900
22,0	64,8	9 200
24,0	61,9	7 900
26,0	59,0	6 800
28,0	56,0	5 800
30,0	52,9	5 000
32,0	49,6	4 300
34,0	46,2	3 700
36,0	42,6	3 100
38,0	38,6	2 600
40,0	34,3	2 100

Oper. Rad. Meters	Boom Ang. Deg.	Boom Capacity Kilograms
<b>48,8m (160 Ft.)</b>		
<b>Boom</b>		
9,1	82,2	16 100 *
10,0	81,2	16 000 *
12,0	78,8	15 600 *
14,0	76,4	15 200 *
16,0	74,0	14 600
18,0	71,5	12 900
20,0	69,0	10 800
22,0	66,4	9 100
24,0	63,8	7 700
26,0	61,2	6 600
28,0	58,4	5 600
30,0	55,6	4 800
32,0	52,7	4 100
34,0	49,6	3 500
36,0	46,4	2 900
38,0	43,0	2 400
<b>51,8m (170 Ft.)</b>		
<b>Boom</b>		
9,1	82,7	14 100 *
10,0	81,7	14 100 *
12,0	79,5	14 000 *
14,0	77,2	13 600 *
16,0	75,0	13 200 *
18,0	72,6	12 500
20,0	70,3	10 600
22,0	67,9	8 900
24,0	65,5	7 600
26,0	63,0	6 400
28,0	60,5	5 500
30,0	57,9	4 700
32,0	55,2	3 900
34,0	52,4	3 300
36,0	49,6	2 700
38,0	46,5	2 200