

# Clamshell/Grapple Capacities

# 777 SERIES 1

**Boom No. 78**  
**30 840 kg Counterweight**  
**360 Degree Rating**

**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.

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. Refer to boom rigging **No. 178288** and Wire Rope Specification chart **No. 8156-A**. Crane operator judgment must be used to allow for adverse operating conditions and physical machine

depreciation. Refer to operators 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 7 544 mm crawlers, 965 mm or 1 219 mm treads, two 305 mm boom hoist cylinders, 7 925 mm mast, four 32 mm boom pendants and 30 840 kg counterweight.

Upper Boom Point Deduct
Deduct 450 kg from boom capacities when upper boom point is attached.

Multi-Part Rope Guard Deduct
Deduct 230 kg from boom capacities when lower boom point is equipped with multi-part rope guard (No. A02744).

Wire Rope Guide Deduct (For Third Line)
Deduct 230 kg from boom capacities when boom top wire rope guide (No. 192312) for third line is attached.

Auxiliary Drum Deduct
Deduct 770 kg from boom capacities when boom butt is equipped with auxiliary drum.

Oper. Rad. Meters	Boom Ang. Deg.	Boom Capacity Kilograms
<b>18.3m (60 Ft.) BOOM</b>		
9.1	66.5	13 300 *
10.0	63.6	13 300 *
12.0	56.2	13 300 *
14.0	48.1	13 300 *
16.0	38.7	13 300 *
18.0	26.5	13 000
<b>21.3m (70 Ft.) BOOM</b>		
10.7	65.6	13 300 *
12.0	61.6	13 300 *
14.0	55.2	13 300 *
16.0	48.2	13 300 *
18.0	40.3	13 000 *
20.0	30.8	11 300

Oper. Rad. Meters	Boom Ang. Deg.	Boom Capacity Kilograms
<b>24.4m (80 Ft.) BOOM</b>		
10.7	68.9	13 300 *
12.0	65.4	13 300 *
14.0	60.1	13 300 *
16.0	54.4	13 300 *
18.0	48.3	13 000 *
20.0	41.5	11 400
22.0	33.6	9 700
<b>27.4m (90 Ft.) BOOM</b>		
12.2	67.9	13 300 *
14.0	63.7	13 300 *
16.0	58.9	13 300 *
18.0	53.8	13 000 *
20.0	48.4	11 500
22.0	42.4	9 800
24.0	35.6	8 400
26.0	27.4	7 200

Oper. Rad. Meters	Boom Ang. Deg.	Boom Capacity Kilograms
<b>30.5m (100 Ft.) BOOM</b>		
13.7	67.1	13 300 *
14.0	66.5	13 300 *
16.0	62.3	13 300 *
18.0	58.0	13 000 *
20.0	53.4	11 400
22.0	48.5	9 800
24.0	43.1	8 400
26.0	37.2	7 200
28.0	30.2	6 300
30.0	21.3	5 400
<b>33.5m (110 Ft.) BOOM</b>		
15.2	66.5	13 300 *
16.0	65.1	13 300 *
18.0	61.2	13 000 *
20.0	57.2	11 400
22.0	53.0	9 700
24.0	48.5	8 400
26.0	43.7	7 300
28.0	38.4	6 300
30.0	32.4	5 500
32.0	25.1	4 800

Oper. Rad. Meters	Boom Ang. Deg.	Boom Capacity Kilograms
<b>36.6m (120 Ft.) BOOM</b>		
16.8	66.0	13 300 *
18.0	63.8	13 000 *
20.0	60.2	11 400
22.0	56.5	9 700
24.0	52.6	8 400
26.0	48.5	7 300
28.0	44.2	6 300
30.0	39.4	5 500
32.0	34.0	4 800
34.0	27.8	4 100