

# Clamshell/Grapple Capacities

## 999 SERIES 1

**Boom No. 22E With Open Throat Top**  
**51 980 kg Counterweight**  
**360 Degree Rating**

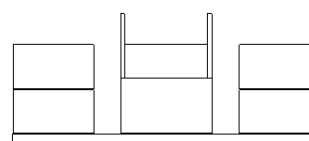
**LIFTING CAPACITIES:** Capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 67.5% of a static tipping load. Capacities are based on tipping, structural competence (\*), operating speeds and other factors.

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 with gantry up. Refer to boom rigging **No. 196151** and Wire Rope Specification chart **No. 8223-B**. 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 the center of gravity of the 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 8 585 mm crawlers, 1 219 mm treads, 3 124 mm retractable gantry, 9 144 mm live mast, 20 part boom hoist reeving, four 35 mm boom pendants and 51 980 kg counterweight.



51 980 kg Crane Counterweight  
4 Side Boxes - 1 Center Box

### Auxiliary Drum Deduct

Deduct 1 810 kg From Boom Capacities  
When Boom Butt Is Equipped  
With Auxiliary Drum.

Oper. Radius Meters	Boom Angle Deg.	Boom Capacity Kilograms
<b>21.3m (70 Ft.) BOOM</b>		
10.7	67.1	13 600 *
11.0	66.2	13 600 *
12.0	63.4	13 600 *
13.0	60.5	13 600 *
14.0	57.5	13 600 *
16.0	51.3	13 600 *
18.0	44.4	13 600 *
20.0	36.5	13 600 *
<b>24.4m (80 Ft.) BOOM</b>		
12.2	66.3	13 600 *
13.0	64.3	13 600 *
14.0	61.8	13 600 *
16.0	56.6	13 600 *
18.0	51.0	13 600 *
20.0	44.9	13 600 *
22.0	38.2	13 600 *
24.0	30.2	13 600 *

Oper. Radius Meters	Boom Angle Deg.	Boom Capacity Kilograms
<b>27.4m (90 Ft.) BOOM</b>		
13.7	65.7	13 600 *
14.0	65.0	13 600 *
16.0	60.5	13 600 *
18.0	55.8	13 600 *
20.0	50.8	13 600 *
22.0	45.4	13 600 *
24.0	39.4	13 600 *
26.0	32.6	13 500
<b>30.5m (100 Ft.) BOOM</b>		
13.7	68.1	13 600 *
14.0	67.6	13 600 *
16.0	63.6	13 600 *
18.0	59.5	13 600 *
20.0	55.2	13 600 *
22.0	50.6	13 600 *
24.0	45.7	13 600 *
26.0	40.4	13 500
28.0	34.5	12 500
30.0	27.4	11 100

Oper. Radius Meters	Boom Angle Deg.	Boom Capacity Kilograms
<b>33.5m (110 Ft.) BOOM</b>		
15.2	67.4	13 600 *
16.0	66.1	13 600 *
18.0	62.4	13 600 *
20.0	58.6	13 600 *
22.0	54.6	13 600 *
24.0	50.5	13 600 *
26.0	46.0	13 500
28.0	41.2	12 300
30.0	35.9	10 900
32.0	29.9	9 800

Oper. Radius Meters	Boom Angle Deg.	Boom Capacity Kilograms
<b>36.6m (120 Ft.) BOOM</b>		
16.8	66.9	13 600 *
18.0	64.8	13 600 *
20.0	61.4	13 600 *
22.0	57.9	13 600 *
24.0	54.2	13 600 *
26.0	50.4	13 500
28.0	46.3	12 200
30.0	41.9	10 800
32.0	37.1	9 700
34.0	31.8	8 700