

# Clamshell/Grapple Capacities

# 999 SERIES 1

**Boom No. 82 or 22EL**  
**51 980 kg Counterweight**  
**Crawler Machine on a Barge**  
**0 Degree thru 1 Degree and**  
**1 Degree thru 3 Degree Machine List**  
**360 Degree Rating**

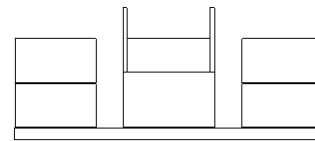
**LIFTING CAPACITIES:** Capacities are for a crawler machine when operating on a barge. Machine shall be positively secured to prevent shifting. Capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 67.5% of a static tipping load. Capacities are based 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 on a firm uniformly supporting surface with gantry up and machine list not to exceed degrees noted. Refer to boom rigging **No. 195459** (No. 82) or **No. 195890** (No. 22EL) 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 at barge deck to center of gravity of freely suspended load. Boom angle is angle above true horizontal and a line drawn through boom hinge pin and boom point shaft centerline.

**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, boom support straps or four 35 mm boom pendants and 51 980 kg counterweight.



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

Oper. Radius Meters	Boom Angle Deg.	0 Degree Thru 1 Degree Machine List Boom Capacity Kilograms	1 Degree Thru 3 Degree Machine List Boom Capacity Kilograms
<b>21.3m (70 Ft.) BOOM</b>			
10.7	67.5	13 600 *	13 600 *
11.0	66.5	13 600 *	13 600 *
12.0	63.5	13 600 *	13 600 *
13.0	60.4	13 600 *	13 600 *
14.0	57.2	13 600 *	13 600 *
15.0	53.9	13 600 *	13 600 *
16.0	50.4	13 600 *	13 600 *
18.0	42.8	13 600 *	13 600 *
20.0	33.8	13 600 *	13 600 *
<b>24.4m (80 Ft.) BOOM</b>			
12.2	66.6	13 600 *	13 600 *
13.0	64.5	13 600 *	13 600 *
14.0	61.8	13 600 *	13 600 *
15.0	59.1	13 600 *	13 600 *
16.0	56.2	13 600 *	13 600 *
18.0	50.2	13 600 *	13 600 *
20.0	43.6	13 600 *	13 600 *
22.0	36.0	13 600 *	13 600 *

Oper. Radius Meters	Boom Angle Deg.	0 Degree Thru 1 Degree Machine List Boom Capacity Kilograms	1 Degree Thru 3 Degree Machine List Boom Capacity Kilograms
<b>27.4m (90 Ft.) BOOM</b>			
13.7	65.9	13 600 *	13 600 *
14.0	65.2	13 600 *	13 600 *
15.0	62.9	13 600 *	13 600 *
16.0	60.5	13 600 *	13 600 *
18.0	55.5	13 600 *	13 600 *
20.0	50.1	13 600 *	13 600 *
22.0	44.3	13 600 *	13 600 *
24.0	37.7	13 600 *	12 900 *



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Oper. Radius Meters	Boom Angle Deg.	0 Degree Thru 1 Degree Machine List Boom Capacity Kilograms	1 Degree Thru 3 Degree Machine List Boom Capacity Kilograms
<b>30.5m (100 Ft.) BOOM</b>			
13.7	68.4	13 600 *	13 600 *
14.0	67.9	13 600 *	13 600 *
15.0	65.8	13 600 *	13 600 *
16.0	63.7	13 600 *	13 600 *
18.0	59.4	13 600 *	13 600 *
20.0	54.8	13 600 *	13 600 *
22.0	50.0	13 600 *	13 600 *
24.0	44.8	13 600 *	12 900 *
26.0	39.0	12 800	11 800
28.0	32.3	11 200	10 500
<b>33.5m (110 Ft.) BOOM</b>			
15.2	67.7	13 600 *	13 600 *
16.0	66.3	13 600 *	13 600 *
18.0	62.4	13 600 *	13 600 *
20.0	58.5	13 600 *	13 600 *
22.0	54.3	13 600 *	13 600 *
24.0	49.9	13 600 *	12 900 *
26.0	45.2	12 600	11 600
28.0	40.0	11 100	10 300
30.0	34.2	9 800	9 100
32.0	27.3	8 700	8 100

Oper. Radius Meters	Boom Angle Deg.	0 Degree Thru 1 Degree Machine List Boom Capacity Kilograms	1 Degree Thru 3 Degree Machine List Boom Capacity Kilograms
<b>36.6m (120 Ft.) BOOM</b>			
16.8	67.1	13 600 *	13 600 *
18.0	64.9	13 600 *	13 600 *
20.0	61.4	13 600 *	13 600 *
22.0	57.7	13 600 *	13 600 *
24.0	53.9	13 600 *	12 800
26.0	49.8	12 500	11 400
28.0	45.5	11 000	10 100
30.0	40.8	9 700	9 000
32.0	35.7	8 600	7 900
34.0	29.7	7 600	7 100