

# Clamshell/Grapple Capacities

## 222HD

**Boom No. 222HD With Open Throat Top**  
**53,300 Lb. Counterweight**  
**22 Ft. 4 in. Crawlers Extended**  
**Crawler Machine on a Barge**  
**0 Degree thru 3 Degree Machine List**  
**No Travel - 360 Degree Rating**

**LIFTING CAPACITIES:** Capacities are for a crawler machine with crawlers extended 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 in a level position on a firm uniformly supporting surface with crawlers fully extended, gantry up and machine list not to exceed degrees noted. Refer to boom rigging **No. 911764** and Wire Rope Specification chart **No. 9064-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 at barge deck to 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 22 Ft. 4 in. extendible crawlers, 36 in. treads, 15 Ft. 6 in. retractable gantry, 10 part boom hoist reeving, two 1-1/4 in. boom pendants, 1st counterweight = 28,500 Lb. and 2nd counterweight = 24,800 Lb.

Maximum Boom Length Lifted Unassisted	
List	Boom Length
0 Degree	100 Ft.
1 Degree	100 Ft.
2 Degree	90 Ft.
3 Degree	80 Ft.
Load block, hook and weight ball on barge deck at start.	

# Clamshell/Grapple Capacities

**222HD**

Boom No. 222HD With Open Throat Top  
53,300 Lb. Counterweight  
22 Ft. 4 in. Crawlers Extended  
Crawler Machine on a Barge  
0 Degree thru 3 Degree Machine List  
No Travel - 360 Degree Rating

Oper. Radius Feet	Boom Angle Deg.	0 Degree List Boom Capacity Pounds	1 Degree List Boom Capacity Pounds	2 Degree List Boom Capacity Pounds	3 Degree List Boom Capacity Pounds	Oper. Radius Feet
<b>40 Ft. BOOM</b>						
22	65.4	30,000 *	30,000 *	30,000 *	30,000 *	22
24	62.1	30,000 *	30,000 *	30,000 *	29,600 *	24
26	58.8	30,000 *	28,700 *	27,800 *	27,100 *	26
28	55.3	30,000 *	26,600 *	25,700 *	25,000 *	28
30	51.7	30,000 *	24,800 *	23,900 *	23,100 *	30
32	47.9	30,000 *	23,200 *	22,200 *	21,500 *	32
34	43.8	28,800 *	21,700 *	20,800 *	20,100 *	34
36	39.4	24,700 *	20,500 *	19,600 *	18,800 *	36
38	34.4	20,700 *	19,300 *	18,400 *	17,700 *	38
40	28.8	17,000 *	16,600 *	16,300 *	16,100 *	40
<b>50 Ft. BOOM</b>						
26	65.6	30,000 *	28,700 *	27,700 *	27,000 *	26
28	63.0	30,000 *	26,600 *	25,600 *	24,800 *	28
30	60.4	30,000 *	24,700 *	23,800 *	23,000 *	30
32	57.7	30,000 *	23,100 *	22,200 *	21,400 *	32
34	54.9	29,400 *	21,700 *	20,700 *	20,000 *	34
36	52.0	26,500 *	20,400 *	19,500 *	18,700 *	36
38	49.0	23,900 *	19,300 *	18,300 *	17,600 *	38
40	45.8	21,800 *	18,200 *	17,300 *	16,600 *	40
45	37.0	17,200 *	15,900 *	15,200 *	14,400 *	45
50	25.5	11,100 *	10,200 *	10,000 *	9,900 *	50
<b>60 Ft. BOOM</b>						
30	65.7	30,000 *	24,700 *	23,700 *	22,900 *	30
32	63.6	30,000 *	23,000 *	22,100 *	21,300 *	32
34	61.4	29,500 *	21,600 *	20,600 *	19,800 *	34
36	59.2	26,600 *	20,400 *	19,400 *	18,600 *	36
38	56.9	24,000 *	19,200 *	18,200 *	17,400 *	38
40	54.6	21,800 *	18,200 *	17,200 *	16,400 *	40
45	48.4	17,300 *	15,900 *	15,100 *	14,300 *	45
50	41.6	14,000 *	12,500 *	12,100 *	11,800 *	50
55	33.6	11,300 *	9,800 *	9,600 *	9,300 *	55
60	23.2	7,200 *	5,900 *	5,800 *	5,700 *	60
<b>70 Ft. BOOM</b>						
34	65.8	29,800 *	21,600 *	20,600 *	19,700 *	34
36	64.0	26,800 *	20,300 *	19,300 *	18,500 *	36
38	62.2	24,200 *	19,200 *	18,200 *	17,400 *	38
40	60.3	21,900 *	18,200 *	17,200 *	16,300 *	40
45	55.4	17,400 *	15,800 *	15,000 *	14,200 *	45
50	50.2	14,000 *	12,400 *	11,900 *	11,500 *	50
55	44.6	11,400 *	9,800 *	9,400 *	9,100 *	55
60	38.3	9,300 *	7,600 *	7,400 *	7,100 *	60
65	30.9	7,500 *	5,900 *	5,700 *	5,500 *	65

# Clamshell/Grapple Capacities

## 222HD

Boom No. 222HD With Open Throat Top

53,300 Lb. Counterweight

22 Ft. 4 in. Crawlers Extended

Crawler Machine on a Barge

0 Degree thru 3 Degree Machine List

No Travel - 360 Degree Rating

Oper. Radius Feet	Boom Angle Deg.	0 Degree List Boom Capacity Pounds	1 Degree List Boom Capacity Pounds	2 Degree List Boom Capacity Pounds	3 Degree List Boom Capacity Pounds	Oper. Radius Feet
<b>80 Ft. BOOM</b>						
38	65.9	23,900 *	19,100 *	18,100 *	17,200 *	38
40	64.3	21,700 *	18,100 *	17,100 *	16,200 *	40
45	60.2	17,100 *	15,500 *	14,700 *	13,900 *	45
50	56.0	13,700 *	12,100 *	11,500 *	10,900 *	50
55	51.5	11,000 *	9,500 *	9,000 *	8,600 *	55
60	46.7	8,900 *	7,300 *	7,000 *	6,700 *	60
65	41.5	7,200 *	5,600 *	5,300 *	5,100 *	65
70	35.7	5,800 *				70

Oper. Radius Feet	Boom Angle Deg.	0 Degree List Boom Capacity Pounds	1 Degree List Boom Capacity Pounds	2 Degree List Boom Capacity Pounds	Oper. Radius Feet
<b>90 Ft. BOOM</b>					
40	67.4	18,600 *	18,100 *	17,000 *	40
45	63.8	17,000 *	15,300 *	14,300 *	45
50	60.2	13,500 *	11,900 *	11,200 *	50
55	56.5	10,800 *	9,200 *	8,700 *	55
60	52.5	8,700 *	7,100 *	6,700 *	60
65	48.3	6,900 *	5,300 *	5,000 *	65
70	43.9	5,500 *			70

Oper. Radius Feet	Boom Angle Deg.	0 Degree List Boom Capacity Pounds	1 Degree List Boom Capacity Pounds
<b>100 Ft. BOOM</b>			
45	66.6	15,200 *	14,900 *
50	63.5	13,200 *	12,300 *
55	60.2	10,500 *	9,600 *
60	56.8	8,300 *	7,500 *
65	53.3	6,600 *	5,700 *
70	49.6	5,100 *	