

# RATED LIFTING CAPACITY

Based on BS 1757 : 1986  
DIN 15019-2  
75% of tipping loads

Note: Front jack is optional.

Outriggers fully extended with front jack Outriggers fully extended without front jack								Outriggers intermediately extended without front jack Outriggers fully extended without front jack							
- 360° full range - over side and over rear								- 360° full range - over front							
Working radius (m)	10.5 m Boom	14.2 m Boom	18 m Boom	21.7 m Boom	25.5 m Boom	29.2 m Boom	33 m Boom	Working radius (m)	10.5 m Boom	14.2 m Boom	18 m Boom	21.7 m Boom	25.5 m Boom	29.2 m Boom	33m Boom
2.5	30.00	20.00	16.00					2.5	25.00	20.00	16.00				
3.0	30.00	20.00	16.00					3.0	25.00	20.00	16.00				
3.5	25.40	20.00	16.00	12.00				3.5	25.00	20.00	16.00	12.00			
4.0	22.90	20.00	16.00	12.00	11.50			4.0	22.90	20.00	16.00	12.00	11.50		
4.5	21.00	20.00	16.00	12.00	11.50			4.5	17.35	16.20	16.00	12.00	11.50		
5.0	19.40	18.40	16.00	12.00	11.50	9.00		5.0	14.00	13.60	13.45	12.00	11.50	9.00	
6.0	16.20	15.30	13.70	12.00	11.50	9.00	7.00	5.5	11.60	11.40	11.20	12.00	11.50	9.00	
7.0	13.70	12.65	11.95	11.00	10.00	9.00	7.00	6.0	10.00	9.80	9.60	10.20	10.10	9.00	7.00
8.0	11.15	10.65	10.55	10.20	8.90	8.20	7.00	6.5	8.50	8.50	8.15	8.95	9.10	9.00	7.00
8.5	10.25	9.70	9.65	9.65	8.45	7.80	6.60	7.0	7.55	7.25	7.15	7.80	8.10	8.30	7.00
9.0		8.80	8.80	9.20	8.05	7.45	6.25	7.5	6.50	6.40	6.20	6.85	7.25	7.35	7.00
10.0		7.30	7.15	7.65	7.30	6.75	5.70	8.5	5.00	4.95	4.85	5.40	5.75	5.85	5.80
12.0		5.10	4.95	5.40	5.65	5.65	4.80	9.0		4.35	4.30	4.80	5.10	5.25	5.30
12.5		4.70	4.55	5.05	5.25	5.45	4.55	10.0		3.45	3.35	3.85	4.10	4.30	4.40
13.0			4.20	4.65	4.90	5.05	4.45	12.0		2.10	1.95	2.45	2.70	2.90	3.05
14.0			3.55	4.00	4.25	4.40	4.10	12.5		1.70	1.70	2.15	2.40	2.65	2.80
16.0			2.55	2.95	3.20	3.40	3.50	13.0			1.40	1.90	2.15	2.40	2.55
18.0				2.20	2.45	2.65	2.80	14.0			0.95	1.40	1.70	1.95	2.10
20.0				1.65	1.85	2.05	2.20	15.0			0.55	1.05	1.30	1.55	1.75
22.0					1.40	1.60	1.70	16.0				0.70	1.00	1.20	1.40
24.0							1.20	1.35	17.0			0.40	0.70	0.95	1.10
26.0							0.90	1.00	18.0				0.45	0.70	0.85
27.5							0.70	0.85	19.0					0.45	0.60
29.0								0.65	20.0						0.40
31.0								0.45							
Standard hook	for 30 ton							Standard hook	for 30 ton						
Hook weight	300 kg							Hook weight	300 kg						
Parts line	10	8	4				Parts line	10	8	4					
Critical boom angle	-	-	-	-	-	-	-	Critical boom angle	-	-	-	25°	35°	42°	47°

(Unit: Metric ton)

(Unit: Metric ton)

Outriggers fully extended with front jack - 360° full range Outriggers fully extended without front jack - over side and over rear						
Boom angle (°)	33 m Boom + 8.7 m Jib					
	Offset 5°		Offset 17°		Offset 30°	
	Working radius (m)	Load (t)	Working radius (m)	Load (t)	Working radius (m)	Load (t)
80.0	8.0	3.00	9.6	2.20	11.3	1.60
76.0	11.0	3.00	12.5	2.20	14.0	1.60
74.0	12.5	2.72	14.0	2.05	15.3	1.54
70.0	15.3	2.26	16.6	1.78	18.0	1.45
66.0	18.0	1.92	19.2	1.57	20.4	1.30
62.0	20.5	1.68	21.8	1.38	22.8	1.17
58.0	23.0	1.48	24.1	1.24	25.0	1.06
56.0	24.0	1.28	25.2	1.18	26.0	1.02
54.0	25.1	1.08	26.3	1.00	27.1	0.98
50.0	27.2	0.74	28.2	0.70	29.0	0.67
46.0	29.2	0.47	30.1	0.44	30.7	0.43
43.0	30.6	0.30	31.5	0.30	32.0	0.30
Standard hook	for 3 ton					
Hook weight	60 kg					
Parts line	1					
Critical boom angle	40°					

(Unit: Metric ton)

Outriggers fully extended with front jack - 360° full range Outriggers fully extended without front jack - over side and over rear						
Boom angle (°)	33 m Boom + 14.5 m Jib					
	Offset 5°		Offset 17°		Offset 30°	
	Working radius (m)	Load (t)	Working radius (m)	Load (t)	Working radius (m)	Load (t)
80.0	9.9	2.00	12.5	1.30	15.1	0.90
77.7	12.0	2.00	14.5	1.30	16.9	0.90
76.3	13.2	1.85	15.7	1.24	18.0	0.90
72.0	16.4	1.50	19.0	1.06	21.2	0.81
68.0	19.5	1.25	22.0	0.91	24.0	0.74
64.0	22.6	1.06	24.8	0.79	26.6	0.67
60.0	25.4	0.90	27.4	0.70	29.1	0.60
56.0	28.0	0.77	29.9	0.64	31.5	0.55
52.0	30.7	0.66	32.4	0.57	33.7	0.52
51.0	31.2	0.61	33.0	0.55	34.2	0.51
50.4	31.6	0.57	33.3	0.52	34.5	0.50
48.0	32.9	0.45	34.5	0.40	35.6	0.38
46.0	33.9	0.35	35.2	0.33	36.5	0.30
Standard hook	for 3 ton					
Hook weight	60 kg					
Parts line	1					
Critical boom angle	42°					

(Unit: Metric ton)

Outriggers intermediately extended without front jack – 360° full range Outriggers fully extended without front jack – over front						
Boom angle (°)	33 m Boom + 8.7 m Jib					
	Offset 5°		Offset 17°		Offset 30°	
	Working radius (m)	Load (t)	Working radius (m)	Load (t)	Working radius (m)	Load (t)
80.0	8.0	3.00	9.6	2.20	11.3	1.60
76.0	11.0	3.00	12.5	2.20	14.0	1.60
72.5	13.5	2.56	15.0	1.94	16.2	1.50
71.0	14.5	2.14	16.0	1.84	17.3	1.47
70.0	15.1	1.90	16.6	1.65	18.0	1.45
68.0	16.3	1.48	17.8	1.28	19.0	1.18
65.0	18.1	0.97	19.5	0.86	20.7	0.78
60.0	21.0	0.37	22.4	0.30	23.3	0.30
Standard hook	for 3 ton					
Hook weight	60 kg					
Parts line	1					
Critical boom angle	58°					

(Unit: Metric ton)

Outriggers intermediately extended without front jack – 360° full range Outriggers fully extended without front jack – over front						
Boom angle (°)	33 m Boom + 14.5 m Jib					
	Offset 5°		Offset 17°		Offset 30°	
	Working radius (m)	Load (t)	Working radius (m)	Load (t)	Working radius (m)	Load (t)
80.0	9.9	2.00	12.5	1.30	15.1	0.90
77.7	12.0	2.00	14.5	1.30	16.9	0.90
76.3	13.2	1.85	15.7	1.24	18.0	0.90
73.0	15.6	1.57	18.2	1.10	20.4	0.84
69.0	18.7	1.31	21.2	0.95	23.3	0.76
68.4	19.1	1.18	21.7	0.92	23.8	0.75
67.8	19.5	1.08	22.0	0.88	24.2	0.73
64.0	22.0	0.60	24.4	0.49	26.4	0.43
62.0	23.4	0.39	25.6	0.33	27.5	0.30
Standard hook	for 3 ton					
Hook weight	60 kg					
Parts line	1					
Critical boom angle	60°					

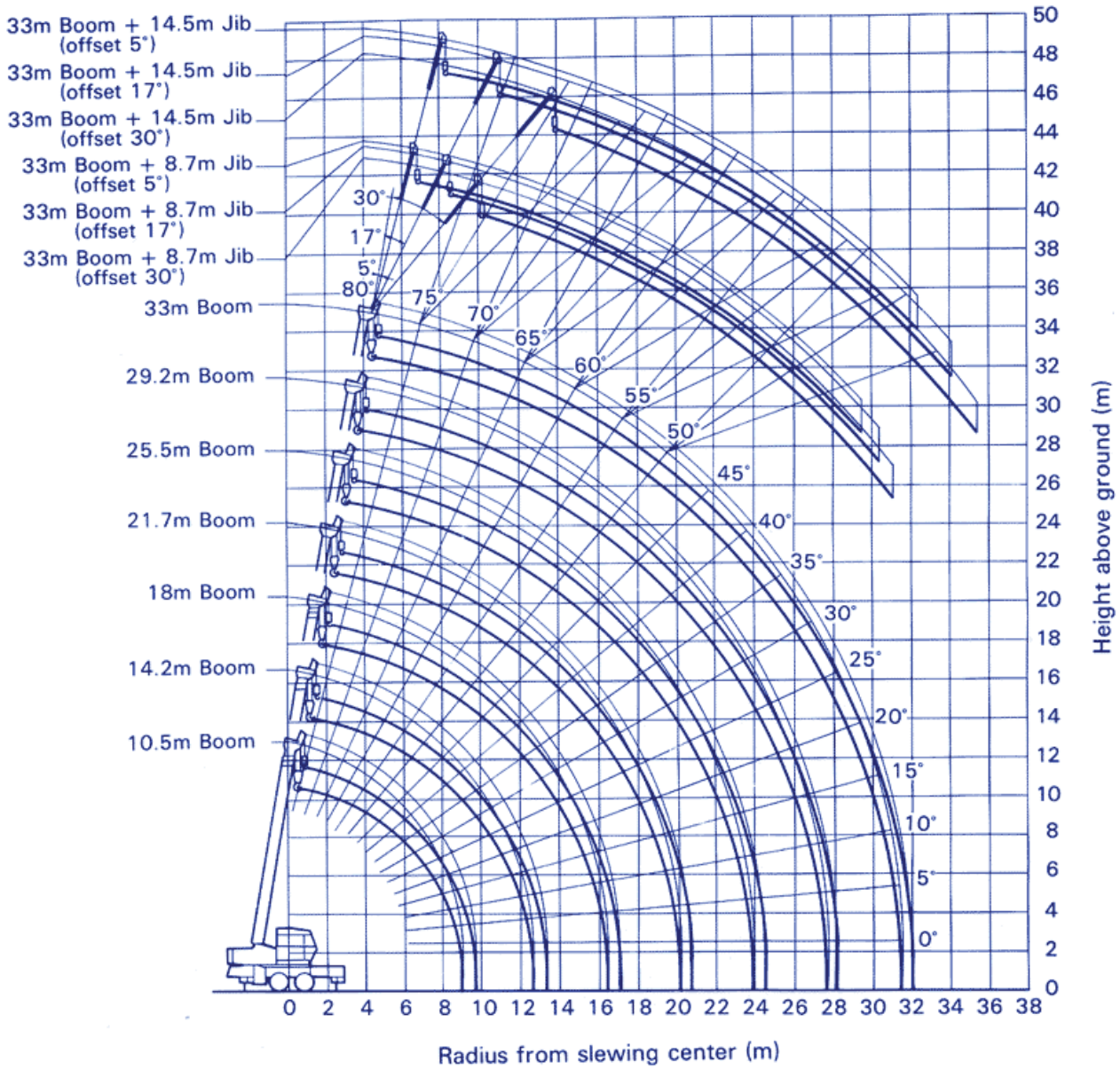
(Unit: Metric ton)

**NOTES:**

- (1) The rated lifting capacities are the maximum loads guaranteed on a firm level ground and include the weight of hook block and other lifting equipment. The capacities enclosed with bold lines are based on the structural strength of machine and the others are based on the stability of machine.
- (2) The working radii as given in the table are the actual values including the deflection of the boom. Therefore, operate the machine based on the working radius. However, the working radii shown for jib operations are based on the values obtained when the boom is fully extended (33 m). Jib operations should be performed on the basis of boom angle only, regardless of boom length when the boom is not fully extended.
- (3) The rated lifting capacities for the rooster sheave are equivalent to the rated lifting capacities for the main boom to a maximum of 3000 kg. At all times the weight of all lifting equipment in use (including main hook block suspended from boom head) forms part of load and must be subtracted from the rated lifting capacity.
- (4) If the boom length exceeds the specified value, the rated lifting capacities for the boom length above and below the present boom length should be referred to, and the crane should be operated within the smaller lifting capacity.
- (5) When using the main boom with the jib installed, 1800 kg plus the weight of hook block and other lifting equipment, etc., should be subtracted from the rated lifting capacities. When performing the above operation, do not use the rooster sheave.
- (6) The standard number of parts of line is shown in the rated lifting capacity table. When the standard number of parts of line is not used, the minimum number of parts of line is determined so that weight per part will not exceed 3000 kg.
- (7) Without front jack, over front lifting performance is inferior to over side and over rear lifting performance. Great care should be taken when transferring from over side to over front since there is a danger of overloading.
- (8) Critical boom angles for each boom length are shown on bottommost line of lifting capacity table. If the boom angle is lowered to less than the critical boom angle, the machine will tip over without load. Therefore, never lower the boom below these angles.
- (9) Free fall is adopted in principle to lower the hook only. If it is necessary to lower a load by free fall, its weight should be less than 20% of the rated lifting capacity and abrupt braking should not be allowed.
- (10) The machine will tip over or be damaged if operated with a load exceeding that specified in the rated lifting capacity table or not conforming to correct handling. If such trouble occurs, the machine will not be warranted.



## WORKING RANGE



NOTE: Deflection of boom and jib excluded.