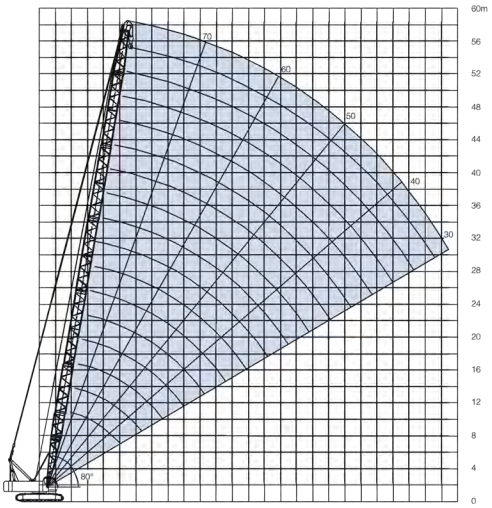
Ⅳ. Lifting capacity

10. Lifting performance on S boom

Lifting height on S boom



Lifting capacity on S boom(1)

Length of S(m) / Reeving / Radius (m)	12	15	18	21	24	27	30	33
3.8	70							
4	65	65	58.2/4.1	51.2/4.6				
5	53.6	52.3	51	49.8	44.2/5.2	37/5.7		
6	40.5	40.1	39.3	38.5	37.7	36.9	34/6.2	30.4/6.7
7	32.1	32	31.8	31.2	30.6	30.1	29.5	28.9
8	26.6	26.5	26.4	26.2	25.8	25.3	24.8	24.3
9	22.6	22.5	22.4	22.3	22.2	21.8	21.4	21
10	19.7	19.5	19.4	19.3	19.2	19.1	18.7	18.4
12		15.4	15.3	15.1	15	14.9	14.8	14.6
14		12.6	12.5	12.4	12.2	12.1	12	11.9
16			10.5	10.4	10.2	10.1	10	9.9
19				8.3	8.1	8	7.9	7.8
20					7.6	7.5	7.3	7.2
22					6.7	6.5	6.4	6.3
24						5.8	5.7	5.5
26							5	4.9
28								4.4
29								4.1

11. Lifting performance on SF boom

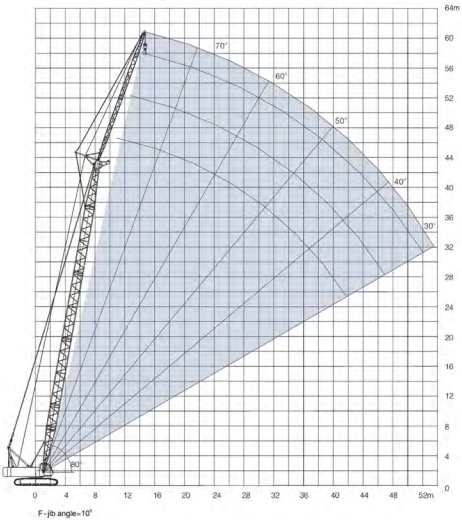
Lifting capacity on S boom(2)

Length of S(m) / Radius(m)	36	39	42	45	48	51	54	57
Reeving	4	4	4	3	3	3	3	3
7	27.1/7.3	24.3/7.8						
8	23.9	23.4	21.9/8.3	19.9/8.8				
9	20.6	20.2	19.8	19.4	18.1/9.3	14.6/9.9		
10	18	17.7	17.3	17	16.6	14.6	14.6/10.4	13.7/10.9
12	14.3	14	13.7	13.5	13.2	13.3	13.1	12.8
14	11.7	11.5	11.3	11	10.8	10.9	10.7	10.5
16	9.8	9.6	9.5	9.2	9	9.1	8.9	8.7
19	7.6	7.5	7.4	7.3	7.7	7	6.9	6.8
20	7.1	7	6.8	6.7	7.1	6.5	6.3	6.2
22	6.2	6	5.9	5.8	6.6	5.5	5.4	5.3
24	5.4	5.3	5.1	5	5.7	4.8	4.6	4.5
26	4.8	4.6	4.5	4.4	4.9	4.1	4	3.9
28	4.2	4.1	4	3.9	4.3	3.6	3.5	3.3
29	4	3.9	3.7	3.6	3.7	3.4	3.2	3.1
30	3.8	3.6	3.5	3.4	3.5	3.1	3	2.9
32	3.4	3.2	3.1	3	3.3	2.7	2.6	2.5
34		2.9	2.8	2.6	2.9	2.4	2.3	2.1
36			2.5	2.3	2.5	2.1	1.9	1.8
37			2.3	2.2	2.2	1.9	1.8	1.7
38				2.1	2.1	1.8	1.7	1.5
39				1.9	1.9	1.7	1.5	1.4
40					1.8	1.6	1.4	1.3
42					1.7	1.3	1.2	1.1

Note:

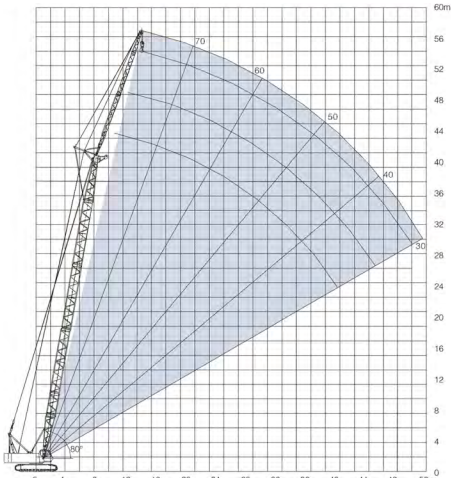
1. The lifting capacity given in the above chart contains the weight of load hook and weight of wire rope between boom head and load hook.
2. When tip boom is used to lift the load, the lifting capacity on tip boom is the same as that on main boom of same length in the same working radius.

Lifting height on SF boom(1)



F-jib angle=10°

Lifting height on SF boom (2)



Lifting capacity on SF boom(1)

Length of S (m)	30						33					
Length of F (m)	6		12		18		6		12		18	
F-jib angle / Radius (m)	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°
8	6.4/8.3						6.4/8.8					
10	6.4	6.4/10.1	6.4/10.3				6.4	6.4/10.6	6.4/10.8			
12	6.4	6.4	6.4	6.4/13.9	5.0/12.4		6.4	6.4	6.4		4.9/12.9	
14	6.4	6.4	6.4	6.4	4.8		6.4	6.4	6.4	6.4/14.4	4.9	
16	6.4	6.4	6.4	6.4	4.8	4.5/17.8	6.4	6.4	6.4	6.4	4.8	
18	6.4	6.4	6.4	6.4	4.7	4.5	6.4	6.4	6.4	6.4	4.8	4.4/18.3
20	6.4	6.4	6.4	6.4	4.6	4.3	6.4	6.4	6.4	6.4	4.6	4.3
22	6.4	6.4	6.4	6.4	4.5	4.3	6.3	6.3	6.4	6.4	4.5	4.3
24	5.6	5.6	5.9	5.9	4.5	4.3	5.5	5.5	5.6	5.8	4.5	4.3
26	4.9	4.9	5.2	5.2	4.4	4.2	4.8	4.8	5	5.1	4.5	4.2
28	4.4	4.4	4.6	4.6	4.4	4.2	4.3	4.3	4.4	4.5	4.4	4.2
30	3.9	3.9	4.1	4.1	4.2	4.2	3.8	3.8	3.9	4.0	4	4.2
32	3.5	3.5	3.7	3.7	3.6	3.9	3.4	3.4	3.5	3.6	3.6	3.8
34			3.3	3.3	3.4	3.5	3.0	3.0	3.2	3.2	3.3	3.4
36			3	3	3.1	3.1	2.6	2.6	2.9	2.9	2.9	3.0
38			2.6	2.6	2.8	2.8			2.5	2.5	2.6	2.7
40					2.5	2.5			2.3	2.3	2.4	2.4
42					2.3	2.3			2.0	2.0	2.2	2.2
44					2.0	2.0					1.9	1.9

F--jib angle=30°

Lifting capacity on SF boom(2)

Length of S (m)	36						39					
Length of F (m)	6		12		18		6		12		18	
F-Range Radius (m)	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°
8	6.4/9.3						6.4/9.8		6.4/11.9			
10	6.4	6.4/11.1	6.4/11.4				6.4	6.4/11.6	6.4			
12	6.4	6.4	6.4		4.9/13.4		6.4	6.4	6.4		4.9/13.9	
14	6.4	6.4	6.4	6.4/15	4.9		6.4	6.4	6.4	6.4/15.5	4.9	
16	6.4	6.4	6.4	6.4	4.8		6.4	6.4	6.4	6.4	4.8	
18	6.4	6.4	6.4	6.4	4.8	4.5/18.8	6.4	6.4	6.4	6.4	4.8	4.5/19.3
20	6.4	6.4	6.4	6.4	4.7	4.4	6.4	6.4	6.4	6.4	4.7	4.5
22	6.1	6.2	6.3	6.4	4.5	4.3	6	6.1	6.2	6.4	4.6	4.3
24	5.3	5.4	5.5	5.7	4.5	4.3	5.2	5.3	5.4	5.6	4.6	4.3
26	4.7	4.7	4.9	5.0	4.5	4.3	4.6	4.6	4.7	4.9	4.5	4.3
28	4.1	4.1	4.3	4.4	4.3	4.2	4	4.0	4.2	4.3	4.2	4.2
30	3.7	3.7	3.8	3.9	3.9	4.1	3.5	3.5	3.7	3.8	3.8	4.0
32	3.2	3.2	3.4	3.5	3.5	3.7	3.1	3.1	3.3	3.4	3.4	3.6
34	2.9	2.9	3	3.1	3.1	3.3	2.8	2.8	2.9	3.0	3	3.2
36	2.5	2.5	2.7	2.8	2.8	2.9	2.4	2.4	2.6	2.6	2.7	2.8
38	2.2	2.2	2.4	2.4	2.5	2.6	2.1	2.1	2.3	2.3	2.4	2.5
40			2.2	2.2	2.3	2.3	1.9	1.9	2.1	2.1	2.1	2.2
42			2	2	2	2.1	1.6	1.6	1.8	1.8	1.9	2.0
44			1.7	1.7	1.8	1.8			1.6	1.6	1.7	1.8
46					1.6	1.6			1.4	1.4	1.5	1.5
48					1.4	1.4					1.3	1.3
50					1.2	1.2					1.2	1.2
52											1	1.0

Lifting capacity on SF boom(3)

Length of S (m)	42					
Length of F (m)	8		12		18	
F-Range Radius (m)	10°	30°	10°	30°	10°	30°
10	6.4/10.3					
12	6.4	6.4/12.2	6.4/12.4			
14	6.4	6.4	6.4		4.9/14.4	
16	6.4	6.4	6.4	6.4	4.9	
18	6.4	6.4	6.4	6.4	4.8	4.5/19.9
20	6.4	6.4	6.4	6.4	4.7	4.5
22	5.9	6.1	6.1	6.3	4.7	4.3
24	5.1	5.2	5.3	5.5	4.6	4.3
26	4.4	4.5	4.6	4.8	4.6	4.3
28	3.9	4	4.1	4.2	4.2	4.3
30	3.4	3.4	3.6	3.7	3.7	3.9
32	3	3.0	3.2	3.3	3.3	3.3
34	2.6	2.6	2.8	2.9	2.9	3.1
36	2.3	2.3	2.5	2.5	2.6	2.7
38	2.1	2.0	2.2	2.2	2.3	2.4
40	1.8	1.8	1.9	2.0	2	2.1
42	1.5	1.5	1.7	1.7	1.8	1.9
44	1.3	1.3	1.5	1.5	1.6	1.7
46			1.3	1.3	1.4	1.4
48			1.1	1.1	1.2	1.2
50					1.1	1.1
52					0.9	0.9
54					0.8	0.8