

Crane

■ Specifications

Maximum lifting load×working radius		50 tons×3.7m
Maximum lift above ground		48.4m (52m boom)
Rope speed	Boom hoisting and lowering	60m/min (1st layer on drum)
	Load hoisting and lowering	High speed 80m/min, Low speed 40m/min
	Jib load hoisting and lowering	High speed 80m/min, Low speed 40m/min
Part lines	Boom hoisting	12-part lines
	50-ton hook	10-part lines
	5-ton hook	1-part line
Counterweight		15.5 tons (5.6 + 5.9 + 4.0)
Crane total weight (with 13m boom and 50-ton hook block)		47.5 tons
Average ground bearing pressure		0.62 kgf/cm ²

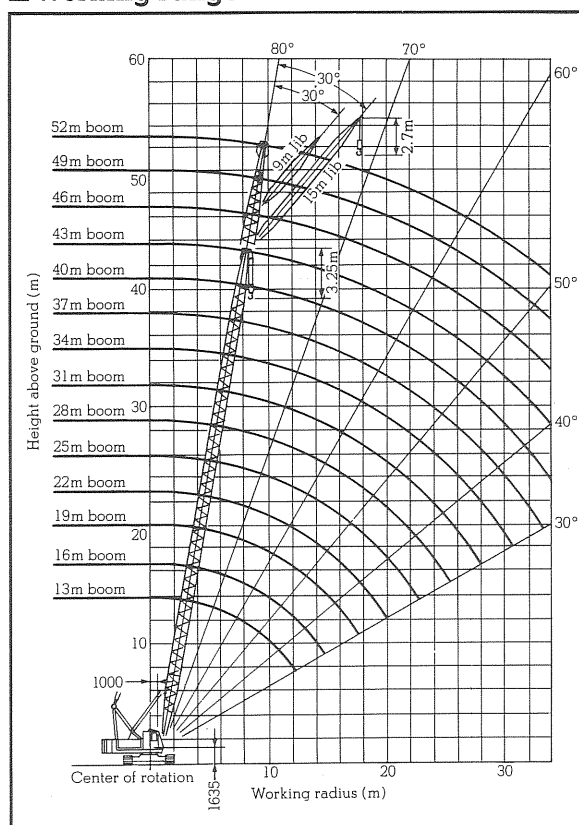
■ Boom composition/Jib composition

(Unit: m)

Boom length	Boom composition	43	6.5+3+6+⑨+3+9+6.5
13	6.5 (inner)+6.5 (outer)	46	6.5+3+6+⑨+6+9+6.5
16	6.5+3+6.5	49	6.5+3+6+⑨+9+9+6.5
19	6.5+3+3+6.5	52	6.5+3+6+⑨+3+9+9+6.5
22	6.5+3+6+6.5	Jib length Jib composition	
25	6.5+3+3+6+6.5	1	1 (auxiliary jib)
28	6.5+3+6+6+6.5	6	3 (inner)+3 (outer)
31	6.5+3+6+9+6.5	9	3+3+3
34	6.5+3+3+6+9+6.5	12	3+6+3
37	6.5+3+6+6+9+6.5	15	3+3+6+3
40	6.5+3+6+9+9+6.5		

⑨ denotes 9m insert boom w/lug; which is required for boom length over 43m.

■ Working range



■ Combination of boom and jib

(● available combination)

Jib length (m)	Boom length (m)													
	13	16	19	22	25	28	31	34	37	40	43	46	49	52
1	●	●	●	●	●	●	●	●	●	●	●	●	●	●
6					●	●	●	●	●	●	●	●	●	●
9					●	●	●	●	●	●	●	●	●	●
12					●	●	●	●	●	●	●	●	●	●
15					●	●	●	●	●	●	●	●	●	●

■ Wire rope

Place of use	Rope diameter (mm)× overall length (m)	Guaranteed strength (ton)
Load hoisting	φ20×210	30.0
Boom hoisting	φ16×145	19.2
Boom suspension	φ31.5	74.9
Jib load hoisting	φ20×120	30.0
Jib boom suspension	φ22.4	37.6
Jib strut suspension	φ22.4	37.6

Rope type is 6×Fi (29) IWRC Preformed Regular Z Lay for all purposes

■ Rated lifting loads

(360° through out; within 78% of tipping load; forward stability factor over 1.15)

(Unit: ton)

Working Radius (m)	Boom Length													
	13	16	19	22	25	28	31	34	37	40	43	46	49	52
3.7	50.0													
4.0	46.0	45.9												
4.5	39.6	39.5	39.4											
5.0	33.3	33.2	33.1	33.0										
5.5	28.7	28.6	28.5	28.4	28.3									
6.0	25.2	25.1	25.0	24.9	24.8	24.7								
7.0	20.2	20.1	20.0	19.9	19.8	19.7	19.6	19.5						
8.0	16.8	16.7	16.6	16.5	16.4	16.3	16.2	16.1	16.1	16.0				
9.0	14.3	14.2	14.1	14.0	13.9	13.8	13.7	13.6	13.6	13.5	13.4			
10.0	12.5	12.4	12.3	12.2	12.1	12.0	11.9	11.8	11.8	11.7	11.6	11.5	11.4	
12.0	9.8	9.7	9.6	9.5	9.4	9.3	9.2	9.1	9.1	9.0	8.9	8.8	8.7	13m×8.0
14.0		8.0	7.9	7.8	7.7	7.6	7.5	7.4	7.4	7.3	7.2	7.1	7.0	6.9
16.0			6.6	6.5	6.4	6.3	6.2	6.1	6.1	6.0	5.9	5.8	5.7	5.6
18.0				5.6	5.5	5.4	5.3	5.2	5.2	5.1	5.0	4.9	4.8	4.7
20.0				4.8	4.7	4.6	4.5	4.4	4.4	4.3	4.2	4.1	4.0	3.9
22.0					4.1	4.0	3.9	3.8	3.8	3.7	3.6	3.5	3.4	3.3
24.0						3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.8
26.0							3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.4
28.0								2.6	2.5	2.4	2.3	2.2	2.1	2.0
30.0								2.3	2.3	2.2	2.1	2.0	1.8	1.7
32.0										1.8	1.7	1.6	1.5	1.4
34.0										1.6	1.5	1.3	1.2	1.1

● All loads are based on a firm level, uniformly supporting surface without traveling.

● The weight of the slings, hook block(s) and auxiliary lifting devices are considered to be part of the load.

Main hook block (50 ton capacity) 0.49 tons
Jib hook block (5 ton capacity) 0.12 tons

● Depending on the number of part lines, rated lifting load is limited as follows.

1-part line... up to 5 tons
2-part line... up to 10 tons
3-part line... up to 15 tons
4-part line... up to 20 tons
5-part line... up to 25 tons
6-part line... up to 30 tons
7-part line... up to 35 tons
8-part line... up to 40 tons
9-part line... up to 45 tons
10-part line... up to 50 tons

● When boom is equipped with Jib, main hook ratings must be reduced by the following weight.

Jib length	1m	6m	9m	12m	15m
Weight to be reduced	0.5t	0.75t	0.95t	1.2t	1.45t

● The rated loads for Jib when the main hook is installed must be reduced by the total weight of the main hook and the Jib hook.

● The maximum boom length to which Jib boom can be installed is as follows:
With the crawler frame extended, up to 43m + 15m or 49m + 1m.

● Bucket and lifting magnet operations cannot be performed by Jibs.

● The rated load for Jib should not exceed the value in the table below.

Jib angle	Jib boom length				
	1m	6m	9m	12m	15m
15°	5.0-tons	4.6 tons	3.7 tons	2.8 tons	2.3 tons
30°		4.1 tons	3.2 tons	2.3 tons	

● The angle formed by the extension line of the main boom and the center line of the Jib boom should not exceed 30° under load conditions.