

35 - Ton

KOBELCO Hydraulic Crawler Crane

7035 Specifications

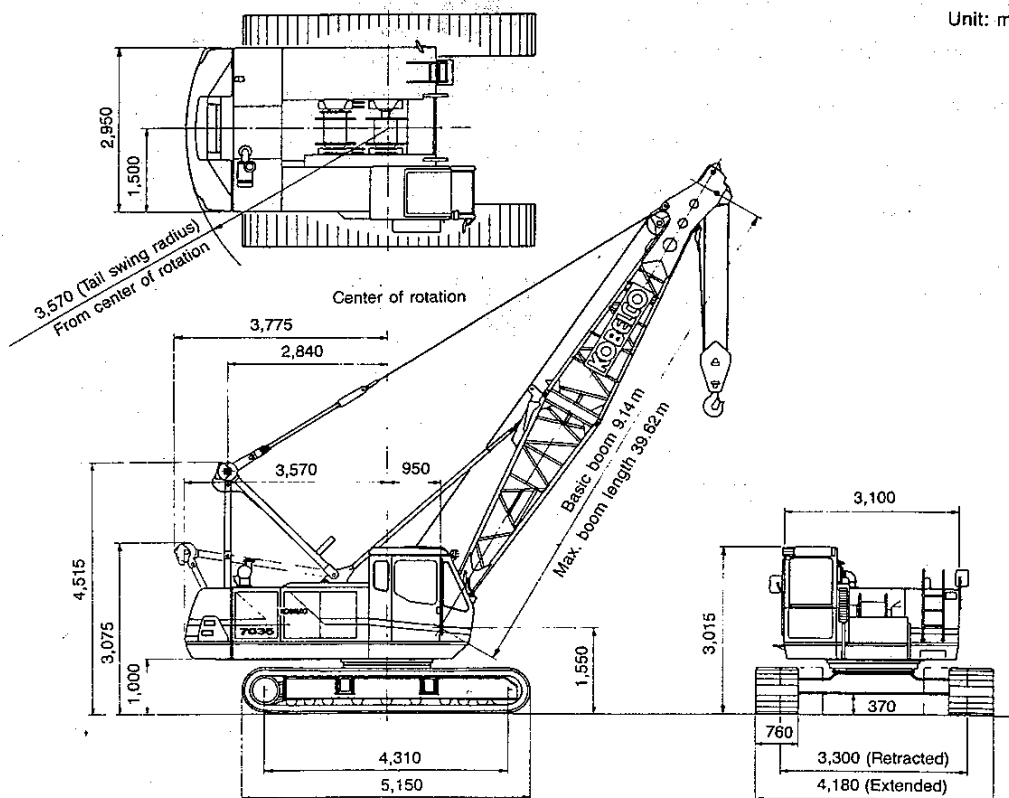
Max. lifting capacity: **35** metric tons at **3.7** m

Max. boom length: **39.62** m

Max. total length (boom + jib): **45.72** m

- Fast lifting and hoisting speeds ensure reduced cycle times on construction projects.
- Large-capacity drum permits clamshell work as deep as four floors down on the first cable layer.
- Heavy-duty hoisting capacity provided by high-output engine and 60-ton class winch.
- Power and stability to accommodate large vibrohammer attachments.
- Line pull of 16 tons makes sheet pile removal easy and quick
- Large-capacity brake drum with heat-radiating fin ensures safe seizure-free performance during continuous operation.

General Dimensions



Lifting Capacities

CRANE ATTACHMENT



Boom

Welded lattice construction using tubular, high tensile steel chords with pin connections between sections.

Max. lifting capacity	35 tons
Basic boom length	9.14 m
Max. boom length	39.62 m



Jib (optional)

Welded lattice construction using tubular, high tensile steel chords with pin connections between sections.

Max. lifting capacity	5.5 tons
Max. jib length	12.19 m
Max. total length (Boom length + jib length)	33.53 m + 12.19 m



Hook Blocks

Arrangement of hook blocks can be specified, each with a safety latch.

Lifting capacity	35 tons	25 tons	15 tons	5.7 tons
No. of sheaves	3	2	1	0
Weight (kg)	320	300	300	120

Diameter of wire ropes

Standard:

Hook hoist..... 20 mm
 Boom hoist (12-part line)..... 14 mm
 Boom pendants (2-part line)..... 28 mm

Optional:

Jib hook hoist..... 20 mm
 Jib back stay pendants..... 18 mm
 Boom backstops recommended for all boom lengths.

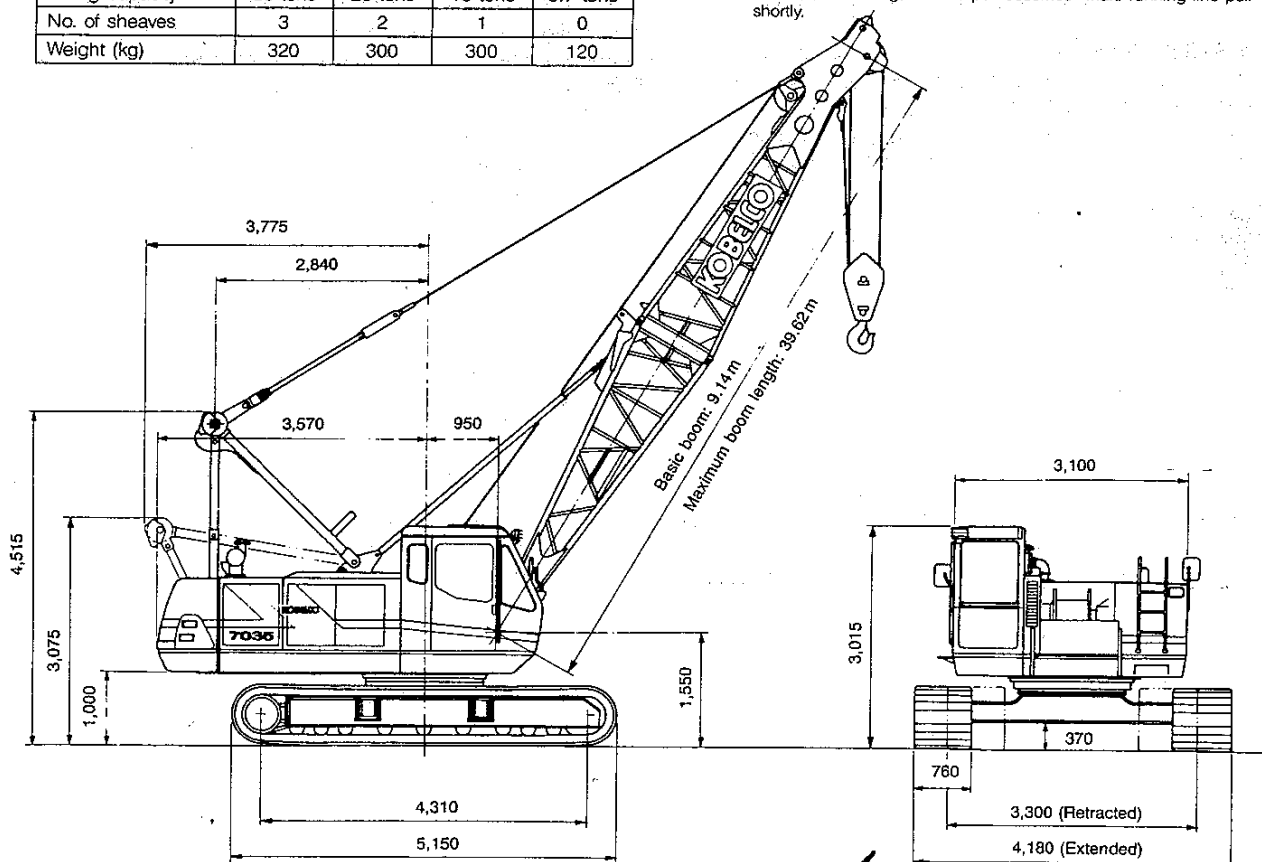
Weight

Working weight: Approx. 45,000 kg (including 9.14 m boom, 45 ton hook block and standard counterweights)
 Ground pressure 0.61 kg/cm²

Line speed and line pull

		Max. line speed m/min		Max. running line pull
		Hoisting	Lowering	
Standard winches	Main hoist drum	H 70	H 70	16.0 tons
		L 35	L 35	
	Aux. hoist drum	H 70	H 70	16.0 tons
		L 35	L 35	

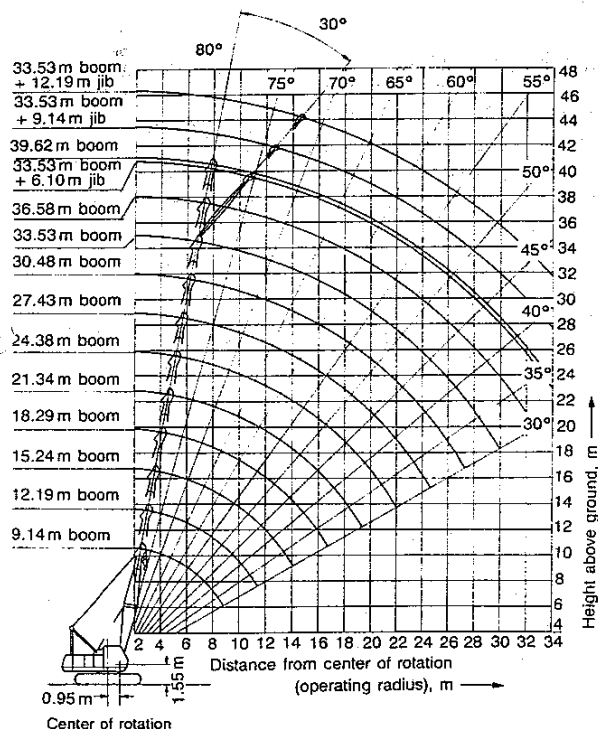
NOTE: 1. Line speed and line pull are based on the first layer of winding at rated engine rpm.
 2. Hoisting line speed varies with load.
 3. Line pull is based on a single line pull in high speed range.
 4. After motor rotating, the line pull becomes "Max. running line pull" shortly.



The following points should be kept in mind when interpreting the ratings given below.

1. Operating radius is the horizontal distance from center of rotation to the hoist load line or tackle with load applied.
2. Rated loads do not exceed 75% of tipping loads, and include weights of the load, hook blocks, slings and other lifting devices.
3. Rated loads are for stationary and level cranes lifting freely suspended loads, and have been determined for ideal operating conditions. The user must limit or de-rate rated loads to allow for adverse conditions (such as soft or uneven ground, out-of-level conditions, winds, side loads, pendulum action, jerking or sudden stopping of loads, inexperience of personnel, multiple machine lifts and traveling with a load.)
4. Rated loads apply only to upper, lower, boom, jib, auxiliary sheave, and 15,700 kg counterweight manufactured by Kobe Steel, Ltd.
5. Boom backstops are required for all boom lengths.
6. Gantry must be in fully raised position for all operations.
7. Crawlers must be fully extended and be locked in position.
8. The crane must be leveled to within 1% on a firm supporting surface.
9. When lifting over the boom point with a jib or auxiliary sheave, the combined weight of boom hook block, jib hook block, slings and other lifting devices is part of the total load. Their total weight must therefore be subtracted from the rated load to obtain the weight that can be lifted.
10. Boom lengths for jib mounting are 24.38m to 33.53m.
11. An auxiliary sheave cannot be used on a 39.62m boom.
12. The boom should be erected over the front of the crawlers, not laterally.

Working Ranges (with fixed jib)



Boom Make-up Arrangement

Boom length (meters, ft)	Boom insert arrangement
9.14 (30)	Base-Tip
12.19 (40)	Base-A-Tip
15.24 (50)	Base-B-Tip
18.29 (60)	Base-A-B-Tip, Base-C-Tip
21.34 (70)	Base-B-B-Tip, Base-A-C-Tip
24.38 (80)	Base-A-B-B-Tip, Base-B-C-Tip
27.43 (90)	Base-B-B-B-Tip, Base-A-B-C-Tip
30.48 (100)	Base-B-B-A-B-Tip, Base-B-B-C-Tip
33.53 (110)	Base-A-B-B-C-Tip
36.58 (120)	Base-B-B-B-C-Tip
39.62 (130)	Base-A-B-B-B-C-Tip
42.67 (140)	Base-A-B-B-C-C-Tip
45.72 (150)	Base-B-B-B-C-C-Tip
48.77 (160)	Base-B-B-B-A-C-C-Tip

Base=4.57 m (15'), Tip=4.57 m (15')
 Inserts: A=3.05 m (10'), B=6.10 m (20'), C=9.14 m (30')

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Boom Lifting Capacities

Jib Rated Loads in Metric Tons for 360° Working Area (for Light Duty)

Unit: ton

Operating radius (m)	Boom length m (ft)											Operating radius (m)
	9.14 (30)	12.19 (40)	15.24 (50)	18.29 (60)	21.34 (70)	24.38 (80)	27.43 (90)	30.48 (100)	33.53 (110)	36.58 (120)	39.62 (130)	
3	35.00	3.3m x 35.00										3
3.5	35.00	35.00										3.5
3.7	35.00	35.00										3.7
4	33.10	33.05	32.95	4.3m x 28.25								4
4.5	27.05	26.95	26.90	26.85	4.9m x 23.35							4.5
5	22.80	22.75	22.65	22.60	22.55	5.4m x 19.85						5
5.5	19.70	19.60	19.55	19.50	19.45	19.40	5.9m x 17.15					5.5
6	17.35	17.25	17.15	17.10	17.05	17.00	16.95	6.4m x 14.60				6
7	13.95	13.80	13.75	13.70	13.60	13.55	13.50	13.45	12.60	7.5m x 10.60		7
8	11.60	11.50	11.40	11.35	11.30	11.20	11.20	11.10	11.05	10.40	9.10	8
9	9.9m x 9.95	9.80	9.75	9.65	9.60	9.50	9.45	9.40	9.35	9.30	8.70	9
10		8.55	8.45	8.40	8.30	8.25	8.20	8.10	8.05	8.00	7.95	10
12		11.6m x 7.00	6.65	6.55	6.50	6.40	6.35	6.30	6.20	6.20	6.10	12
14			5.45	5.35	5.25	5.20	5.15	5.05	5.00	4.95	4.85	14
16			14.2m x 5.30	4.50	4.40	4.30	4.25	4.15	4.10	4.05	4.00	16
18				16.9m x 4.15	3.75	3.65	3.60	3.50	3.45	3.40	3.30	18
20					19.5m x 3.35	3.15	3.10	3.00	2.95	2.90	2.80	20
22						2.75	2.65	2.60	2.50	2.45	2.35	22
24						22.1m x 2.70	2.35	2.25	2.20	2.10	2.05	24
26							24.8m x 2.20	1.95	1.90	1.85	1.75	26
28								27.4m x 1.80	1.65	1.60	1.50	28
30									1.45	1.40	1.25	30
32									30.1m x 1.45	1.15	1.05	32
34										32.7m x 1.10	0.85	34

Ratings inside the heavy lines are governed by the strength of the boom or other structural components.

Jib Rated Loads in Metric Tons for 360° Working Area (for Heavy Duty)

Unit: ton

Operating radius (m)	Boom length m (ft)											Operating radius (m)
	9.14 (30)	12.19 (40)	15.24 (50)	18.29 (60)	21.34 (70)	24.38 (80)	27.43 (90)	30.48 (100)	33.53 (110)	36.58 (120)	39.62 (130)	
3	35.00	3.3m x 35.00										3
3.5	35.00	35.00										3.5
3.7	35.00	35.00										3.7
4	33.10	33.00	32.95	4.3m x 28.20								4
4.5	27.05	26.95	26.90	26.85	4.9m x 23.30							4.5
5	22.80	22.70	22.65	22.60	22.50	5.4m x 19.75						5
5.5	19.70	19.60	19.55	19.50	19.40	19.35	5.9m x 17.10					5.5
6	17.35	17.25	17.15	17.10	17.00	16.95	16.90	6.4m x 14.95				6
7	13.95	13.80	13.75	13.65	13.60	13.50	13.45	13.35	7.5m x 11.90	7.5m x 11.90		7
8	11.60	11.50	11.40	11.35	11.25	11.15	11.10	11.05	10.95	10.90	10.70	8
9	8.9m x 9.95	9.80	9.70	9.65	9.55	9.50	9.45	9.35	9.25	9.20	9.15	9
10		8.55	8.45	8.35	8.25	8.20	8.15	8.05	7.95	7.90	7.85	10
12		11.6m x 7.00	6.65	6.55	6.45	6.35	6.30	6.20	6.15	6.05	6.00	12
14			5.40	5.30	5.25	5.15	5.10	5.00	4.90	4.85	4.80	14
16			14.2m x 5.30	4.45	4.35	4.25	4.20	4.10	4.05	3.95	3.90	16
18				16.9m x 4.15	3.70	3.60	3.55	3.45	3.35	3.25	3.20	18
20					19.5m x 3.35	3.10	3.00	2.90	2.85	2.75	2.70	20
22						2.70	2.60	2.50	2.45	2.35	2.30	22
24						21.1m x 2.65	2.30	2.15	2.10	2.00	1.95	24
26							24.8m x 2.15	1.90	1.80	1.70	1.65	26
28								27.4m x 1.70	1.55	1.45	1.35	28
30									1.35	1.20	1.10	30
32									30.1m x 1.35	1.05	0.90	32
34										32.7m x 0.95	0.75	34

Ratings inside the heavy lines are governed by the strength of the boom or other structural components.

Fixed Jib Lifting Capacities

Jib Rated Loads in Metric Tons for 360° Working Area (for Light Duty)

Unit: ton

Offset/ Angle: 30°													
Operating radius (m)	Boom length: m (ft)												Operating radius (m)
	24.38 (80)			27.43 (90)			30.48 (100)			33.53 (110)			
	Jib length: m (ft)			Jib length: m (ft)			Jib length: m (ft)			Jib length: m (ft)			
	6.10 (20)	9.14 (30)	12.19 (40)	6.10 (20)	9.14 (30)	12.19 (40)	6.10 (20)	9.14 (30)	12.19 (40)	6.10 (20)	9.14 (30)	12.19 (40)	
11	4.50			4.50			4.50						11
12	4.50	4.10		4.50	4.10		4.50			4.50			12
14	4.50	4.10	3.20	4.50	4.10	3.20	4.50	4.10		4.50	4.10		14
16	4.45	4.10	3.20	4.40	4.10	3.20	4.35	4.10	3.20	4.30	4.10	3.20	16
18	3.70	3.90	3.20	3.65	3.80	3.20	3.60	3.75	3.20	3.55	3.70	3.20	18
20	3.15	3.30	3.20	3.05	3.20	3.20	3.00	3.15	3.20	2.95	3.10	3.20	20
22	2.65	2.80	2.90	2.60	2.75	2.85	2.55	2.65	2.80	2.50	2.60	2.75	22
24	2.25	2.40	2.50	2.20	2.35	2.45	2.15	2.25	2.40	2.05	2.20	2.35	24
26	1.95	2.05	2.15	1.85	2.00	2.10	1.75	1.90	2.05	1.70	1.85	2.00	26
28	1.60	1.75	1.85	1.50	1.65	1.80	1.45	1.60	1.70	1.35	1.50	1.65	28
30		1.45	1.60	1.25	1.40	1.50	1.15	1.30	1.40	1.10	1.25	1.35	30
32			1.30		1.15	1.25	0.90	1.05	1.15	0.85	1.00	1.10	32

Ratings inside the heavy lines are governed by the strength of the boom or other structural components.

Jib Rated Loads in Metric Tons for 360° Working Area (for Heavy Duty)

Unit: ton

Offset Angle: 30°													
Operating radius (m)	Boom length m (ft)												Operating radius (m)
	24.38 (80)			27.43 (90)			30.48 (100)			33.53 (110)			
	Jib length m (ft)			Jib length m (ft)			Jib length m (ft)			Jib length m (ft)			
	6.10 (20)	9.14 (30)	12.19 (40)	6.10 (20)	9.14 (30)	12.19 (40)	6.10 (20)	9.14 (30)	12.19 (40)	6.10 (20)	9.14 (30)	12.19 (40)	
11	4.50			4.50			4.50						11
12	4.50	4.10		4.50	4.10		4.50			4.50			12
14	4.50	4.10	3.20	4.50	4.10	3.20	4.50	4.10		4.50	4.10		14
16	4.45	4.10	3.20	4.35	4.10	3.20	4.30	4.10	3.20	4.25	4.10	3.20	16
18	3.70	3.85	3.20	3.60	3.80	3.20	3.55	3.75	3.20	3.50	3.70	3.20	18
20	3.10	3.25	3.20	3.05	3.20	3.20	2.95	3.10	3.20	2.90	3.05	3.20	20
22	2.60	2.75	2.90	2.55	2.70	2.80	2.50	2.65	2.75	2.45	2.60	2.70	22
24	2.25	2.35	2.45	2.15	2.30	2.40	2.05	2.25	2.35	2.00	2.15	2.30	24
26	1.85	2.05	2.15	1.80	1.95	2.05	1.70	1.85	2.00	1.60	1.80	1.90	26
28	1.55	1.70	1.85	1.45	1.60	1.75	1.35	1.50	1.65	1.30	1.45	1.60	28
30		1.40	1.55	1.20	1.35	1.45	1.10	1.25	1.35	1.00	1.15	1.30	30
32			1.30		1.10	1.20	0.85	1.00	1.10	0.75	0.90	1.05	32

Ratings inside the heavy lines are governed by the strength of the boom or other structural components.

Auxiliary Sheave Lifting Capacities

Rated Loads in Metric Tons for 360° Working Area (for Light Duty)

Unit: ton

Operating radius (m)	Boom length m (ft)										Operating radius (m)
	9.14 (30)	12.19 (40)	15.24 (50)	18.29 (60)	21.34 (70)	24.38 (80)	27.43 (90)	30.48 (100)	33.53 (110)	36.58 (120)	
3.5	5.70										3.5
3.7	5.70										3.7
4.0	5.70	5.70	5.70								4.0
4.5	5.70	5.70	5.70								4.5
5.0	5.70	5.70	5.70	5.70							5.0
5.5	5.70	5.70	5.70	5.70	5.70						5.5
6.0	5.70	5.70	5.70	5.70	5.70	5.70	6.5m x 5.70				6.0
7.0	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	7.5m x 5.70		7.0
8.0	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	8.0
9.0	8.9m x 5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	9.0
10.0		5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	10.0
12.0		11.6m x 5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	12.0
14.0			5.30	5.20	5.10	5.05	5.00	4.90	4.85	4.80	14.0
16.0			14.2m x 5.15	4.35	4.25	4.15	4.10	4.00	3.95	3.90	16.0
18.0				16.9m x 4.00	3.60	3.50	3.45	3.35	3.30	3.25	18.0
20.0					19.5m x 3.20	3.00	2.95	2.85	2.80	2.75	20.0
22.0						2.60	2.50	2.45	2.35	2.30	22.0
24.0						22.1m x 2.55	2.20	2.10	2.05	1.95	24.0
26.0							24.8m x 2.05	1.80	1.75	1.70	26.0
28.0								27.4m x 1.65	1.50	1.45	28.0
30.0									1.30	1.25	30.0
32.0									30.1m x 1.30	1.00	32.0
34.0										32.7m x 0.95	34.0

Ratings inside the heavy lines are governed by the strength of the boom or other structural components.

Rated Loads in Metric Tons for 360° Working Area (for Heavy Duty)

Unit: ton

Operating radius (m)	Boom length m (ft)										Operating radius (m)
	9.14 (30)	12.19 (40)	15.24 (50)	18.29 (60)	21.34 (70)	24.38 (80)	27.43 (90)	30.48 (100)	33.53 (110)	36.58 (120)	
3.5	5.70										3.5
3.7	5.70										3.7
4.0	5.70	5.70	5.70								4.0
4.5	5.70	5.70	5.70								4.5
5.0	5.70	5.70	5.70	5.70							5.0
5.5	5.70	5.70	5.70	5.70	5.70						5.5
6.0	5.70	5.70	5.70	5.70	5.70	5.70	6.5m x 5.70				6.0
7.0	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	7.5m x 5.70		7.0
8.0	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	8.0
9.0	8.9m x 5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	9.0
10.0		5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	10.0
12.0		11.6m x 5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	12.0
14.0			5.25	5.15	5.10	5.00	4.95	4.85	4.75	4.70	14.0
16.0			14.2m x 5.15	4.30	4.20	4.10	4.05	3.95	3.90	3.80	16.0
18.0				16.9m x 4.00	3.55	3.45	3.40	3.30	3.20	3.10	18.0
20.0					19.5m x 3.15	2.95	2.85	2.75	2.70	2.60	20.0
22.0						2.55	2.45	2.35	2.30	2.20	22.0
24.0						22.1m x 2.50	2.15	2.00	1.95	1.85	24.0
26.0							24.8m x 2.00	1.75	1.65	1.55	26.0
28.0								27.4m x 1.55	1.40	1.30	28.0
30.0									1.20	1.05	30.0
32.0									30.1m x 1.20	0.90	32.0
34.0										32.7m x 0.80	34.0

Ratings inside the heavy lines are governed by the strength of the boom or other structural components.

Boom Lifting Capacities with Jib

Rated Loads in Metric Tons for 360° Working Area (for Light Duty)

Unit: ton

Operating radius (m)	Boom length: m (ft)												Operating radius (m)
	24.38 (80)			27.43 (90)			30.48 (100)			33.53 (110)			
	Jib length: m (ft)			Jib length: m (ft)			Jib length: m (ft)			Jib length: m (ft)			
	6.10 (20)	9.14 (30)	12.19 (40)	6.10 (20)	9.14 (30)	12.19 (40)	6.10 (20)	9.14 (30)	12.19 (40)	6.10 (20)	9.14 (30)	12.19 (40)	
5.0	5.4 m x 19.05	5.4 m x 18.95	5.4 m x 18.85										5.0
5.5	18.60	18.50	18.40	5.9 m x 16.35	5.9 m x 16.25	5.9 m x 16.15							5.5
6.0	16.20	16.10	16.00	16.15	16.05	15.95	6.4 m x 13.80	6.4 m x 13.70	6.4 m x 13.60				6.0
7.0	12.75	12.65	12.55	12.70	12.60	12.50	12.65	12.55	12.45	11.80	11.70	11.60	7.0
8.0	10.40	10.30	10.20	10.40	10.30	10.20	10.30	10.20	10.10	10.25	10.15	10.05	8.0
9.0	8.70	8.60	8.50	8.65	8.55	8.45	8.60	8.50	8.40	8.55	8.44	8.35	9.0
10.0	7.45	7.35	7.25	7.40	7.30	7.20	7.30	7.20	7.10	7.25	7.15	7.05	10.0
12.0	5.60	5.50	5.40	5.55	5.45	5.35	5.50	5.40	5.30	5.40	5.30	5.20	12.0
14.0	4.40	4.30	4.20	4.35	4.25	4.15	4.25	4.15	4.05	4.20	4.10	4.00	14.0
16.0	3.50	3.40	3.30	3.45	3.35	3.25	3.35	3.25	3.15	3.30	3.20	3.10	16.0
18.0	2.85	2.75	2.65	2.80	2.70	2.60	2.70	2.65	2.55	2.65	2.55	2.45	18.0
20.0	2.35	2.25	2.15	2.30	2.20	2.10	2.20	2.10	2.00	2.15	2.05	1.95	20.0
22.0	1.95	1.85	1.75	1.85	1.75	1.65	1.80	1.70	1.60	1.70	1.60	1.50	22.0
24.0	22.1 m x 1.90	22.1 m x 1.80	22.1 m x 1.70	1.55	1.45	1.35	1.45	1.35	1.25	1.40	1.30	1.20	24.0

Ratings inside the heavy lines are governed by the strength of the boom or other structural components.

Rated Loads in Metric Tons for 360° Working Area (for Heavy Duty)

Unit: ton

Operating radius (m)	Boom length m (ft)												Operating radius (m)
	24:38 (80)			27:43 (90)			30:48 (100)			33:53 (110)			
	Jib length m (ft)			Jib length m (ft)			Jib length m (ft)			Jib length m (ft)			
	6:10 (20)	9:14 (30)	12:19 (40)	6:10 (20)	9:14 (30)	12:19 (40)	6:10 (20)	9:14 (30)	12:19 (40)	6:10 (20)	9:14 (30)	12:19 (40)	
5.0	5.4 m × 18.95	5.4 m × 18.85	5.4 m × 18.75										5.0
5.5	18.55	18.45	18.35	5.9 m × 16.30	5.9 m × 16.20	5.9 m × 16.10							5.5
6.0	16.15	16.05	15.95	16.10	16.00	15.90	6.4 m × 14.15	6.4 m × 14.05	6.4 m × 13.95				6.0
7.0	12.70	12.60	12.50	12.65	12.55	12.45	12.55	12.45	12.35	12.45	12.35	12.25	7.0
8.0	10.35	10.25	10.15	10.30	10.20	10.10	10.25	10.15	10.05	10.15	10.05	9.95	8.0
9.0	8.70	8.60	8.50	8.65	8.55	8.45	8.55	8.45	8.35	8.45	8.35	8.25	9.0
10.0	7.40	7.30	7.20	7.35	7.25	7.15	7.25	7.15	7.05	7.15	7.05	6.95	10.0
12.0	5.55	5.45	5.35	5.50	5.40	5.30	5.40	5.30	5.20	5.35	5.25	5.15	12.0
14.0	4.35	4.25	4.15	4.30	4.20	4.10	4.20	4.10	4.00	4.10	4.00	3.90	14.0
16.0	3.45	3.35	3.25	3.40	3.30	3.20	3.30	3.20	3.10	3.25	3.15	3.05	16.0
18.0	2.80	2.70	2.60	2.75	2.65	2.55	2.65	2.55	2.45	2.55	2.45	2.35	18.0
20.0	2.30	2.20	2.10	2.20	2.10	2.00	2.10	2.00	1.90	2.05	1.95	1.85	20.0
22.0	1.90	1.80	1.70	1.80	1.70	1.60	1.70	1.60	1.50	1.65	1.55	1.45	22.0
24.0	22.1 m × 1.85	22.1 m × 1.75	22.1 m × 1.65	1.50	1.40	1.30	1.35	1.25	1.15	1.30	1.20	1.10	24.0

Ratings inside the heavy lines are governed by the strength of the boom or other structural components.

Boom Lifting Capacities with Auxiliary Sheave

Rated Loads in Metric Tons for 360° Working Area (for Light Duty)

Unit: ton

Operating radius (m)	Boom length (m) (ft)										Operating radius (m)
	9:14 (30)	12:19 (40)	15:24 (50)	18:29 (60)	21:34 (70)	24:38 (80)	27:43 (90)	30:48 (100)	33:53 (110)	36:58 (120)	
3.0	34.85	3.3m x 34.85									3.0
3.5	34.85	34.85									3.5
3.7	34.85	34.85									3.7
4.0	32.95	32.90	32.80	4.3m x 28.10							4.0
4.5	26.90	26.80	26.75	26.70	4.9m x 23.20						4.5
5.0	22.65	22.60	22.50	22.45	22.40	5.4m x 19.70					5.0
5.5	19.55	19.45	19.40	19.35	19.30	19.25	5.9m x 17.00				5.5
6.0	17.20	17.10	17.00	16.95	16.90	16.85	16.80	6.4m x 14.45			6.0
7.0	13.80	13.65	13.60	13.55	13.45	13.40	13.35	13.30	12.45	7.5m x 10.45	7.0
8.0	11.45	11.35	11.25	11.20	11.15	11.05	11.05	10.95	10.90	10.25	8.0
9.0	8.9m x 9.80	9.65	9.60	9.50	9.45	9.35	9.30	9.25	9.20	9.15	9.0
10.0		8.40	8.30	8.25	8.15	8.10	8.05	7.95	7.90	7.85	10.0
12.0		11.6m x 6.85	6.50	6.40	6.35	6.25	6.20	6.15	6.05	6.05	12.0
14.0			5.30	5.20	5.10	5.05	5.00	4.90	4.85	4.80	14.0
16.0			14.2m x 5.15	4.35	4.25	4.15	4.10	4.00	3.95	3.90	16.0
18.0				16.9m x 4.00	3.60	3.50	3.45	3.35	3.30	3.25	18.0
20.0					19.5m x 3.20	3.00	2.95	2.85	2.80	2.75	20.0
22.0						2.60	2.50	2.45	2.35	2.30	22.0
24.0						22.1m x 2.55	2.20	2.10	2.05	1.95	24.0
26.0							24.8m x 2.05	1.80	1.75	1.70	26.0
28.0								27.4m x 1.65	1.50	1.45	28.0
30.0									1.30	1.25	30.0
32.0									30.1m x 1.30	1.00	32.0
34.0										32.7m x 0.95	34.0

Ratings inside the heavy lines are governed by the strength of the boom or other structural components.

Rated Loads in Metric Tons for 360° Working Area (for Heavy Duty)

Unit: ton

Operating radius (m)	Boom length (m) (ft)										Operating radius (m)
	9:14 (30)	12:19 (40)	15:24 (50)	18:29 (60)	21:34 (70)	24:38 (80)	27:43 (90)	30:48 (100)	33:53 (110)	36:58 (120)	
3.0	34.85	3.3m x 34.85									3.0
3.5	34.85	34.85									3.5
3.7	34.85	34.85									3.7
4.0	32.95	32.85	32.80	4.3m x 28.05							4.0
4.5	26.90	26.80	26.75	26.70	4.9m x 23.15						4.5
5.0	22.65	22.55	22.50	22.45	22.35	5.4m x 19.60					5.0
5.5	19.55	19.45	19.40	19.35	19.25	19.20	5.9m x 16.95				5.5
6.0	17.20	17.10	17.00	16.95	16.85	16.80	16.75	6.4m x 14.80			6.0
7.0	13.80	13.65	13.60	13.50	13.45	13.35	13.30	13.20	13.10	7.5m x 11.75	7.0
8.0	11.45	11.35	11.25	11.20	11.10	11.00	10.95	10.90	10.80	10.75	8.0
9.0	8.9m x 9.80	9.65	9.55	9.50	9.40	9.35	9.30	9.20	9.10	9.05	9.0
10.0		8.40	8.30	8.20	8.10	8.05	8.00	7.90	7.80	7.75	10.0
12.0		11.6m x 6.85	6.50	6.40	6.30	6.20	6.15	6.05	6.00	5.90	12.0
14.0			5.25	5.15	5.10	5.00	4.95	4.85	4.75	4.70	14.0
16.0			14.2m x 5.15	4.30	4.20	4.10	4.05	3.95	3.90	3.80	16.0
18.0				16.9m x 4.00	3.55	3.45	3.40	3.30	3.20	3.10	18.0
20.0					19.5m x 3.15	2.95	2.85	2.75	2.70	2.60	20.0
22.0						2.55	2.45	2.35	2.30	2.20	22.0
24.0						22.1m x 2.50	2.15	2.00	1.75	1.85	24.0
26.0							24.8m x 2.00	1.75	1.65	1.55	26.0
28.0								27.4m x 1.55	1.40	1.30	28.0
30.0									1.20	1.05	30.0

Ratings inside the heavy lines are governed by the strength of the boom or other structural components.

Clamshell



Boom

Welded lattice construction using tubular, high tensile steel chords with pin connections between sections. Two types of boom are available: one for all-purpose operation and one for clamshell operation only.

Basic boom length 9.14 m

Max. boom length 18.29 m

Open throat with offset boom point sheaves on anti-friction bearing, bottom diameter 0.4 m

Std. boom hoist reeving 12-part line

Tagline: Hydraulic operated type

(optional spring type)

Boom Make-up Arrangement

Boom length (m)	Boom insert arrangement
12.19	Base-A-Tip
15.24	Base-B-Tip
18.29	Base-A-B-Tip

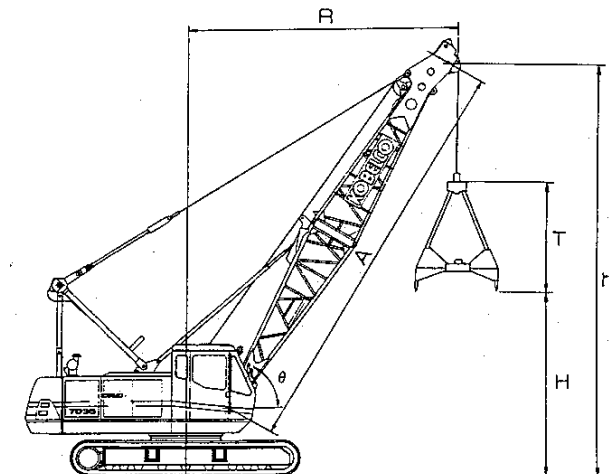
Base = 4.57 m Tip = 4.57 m Inserts: A = 3.05 m, B = 6.10 m

Clamshell Buckets

Capacity (m³)	Approximate weight (kg)	Bucket clearance (m)
0.6	1,600	3.0
0.8	2,100	3.3
1.0	2,100	3.3
1.2	2,100	3.7

Notes:

- 1) Bucket weight must not exceed 2.1 tons only.
- 2) The 1.2 m³ bucket is for loading operations.
- 3) Clamshell ratings also apply to grapple and all other material-handling buckets except dragline.
- 4) For clamshell operations, bucket weight is considered part of the load and the total bucket weight plus contents must not exceed the corresponding ratings shown.
- 5) Ratings assume the use of a KOBELCO boom.
- 6) Limit on clamshell rating: 5 tons.



Clamshell Ratings and Working Ranges

A: Boom length (m)	9.14				12.19				15.24				18.29			
	35°	45°	55°	65°	35°	45°	55°	65°	35°	45°	55°	65°	35°	45°	55°	65°
B: Working radius (m)	8.8	7.8	6.6	5.2	11.3	9.9	8.3	6.5	14.0	12.1	10.1	7.8	16.0	14.0	11.8	9.1
Height above opening (m)	0.6 m				0.6 m				0.6 m				0.6 m			
	0.8 m				0.8 m				0.8 m				0.8 m			
	1.0 m				1.0 m				1.0 m				1.0 m			
	1.2 m				1.2 m				1.2 m				1.2 m			
C: Rated load (ton)	6.6	7.8	8.9	9.7	8.3	10.0	11.4	12.5	10.1	12.1	13.9	15.2	11.8	14.3	16.4	18.0
D: Rated load (ton)	5.0				5.0				4.6	5.0				3.8	4.5	5.0

Vibrohammer

■ Load limitations

1. The total weight of the hook, pile, and vibrohammer must not exceed the crane's rated load capacity.
2. The total weight of the hook, pile, and vibrohammer, plus 25% of the centrifugal force of the vibrohammer, must not exceed the crane's rated load capacity.

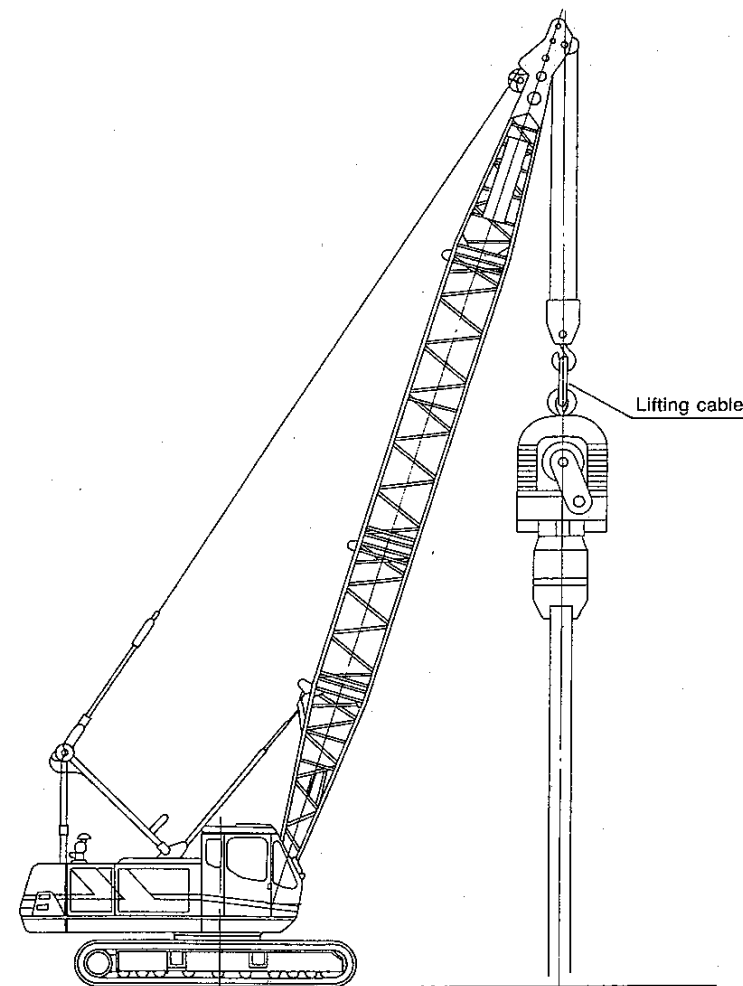
■ The following points should be kept in mind when interpreting the ratings given below.

1. Maximum boom length is 24.38m (80 ft).
2. Boom angle should be kept between 60 and 70 degrees during operation.

3. Hook must be large enough to accommodate the centrifugal force of the vibrohammer.
4. Do not connect the vibrohammer directly to the hook. Always use a cable that has a safety factor of 6 or more.
5. Do not attempt to extract piles solely by means of the crane hoist. Always engage the vibrohammer.
6. Adjust extraction force according to the condition of the buffer spring. The more compressed the spring, the less force should be applied.
7. Maximum horsepower for different types of vibrohammers should be set as follows:
Standard or noise-reduction and vibration-isolation types: 60 HP
Variable high-frequency types: 40 HP

Recommended Hook and Cable Specifications

Centrifugal force of vibrohammer (tons)	Hook blocks (ton)	Lifting cable (mm)
To 15	15	Two or more parts; 20mm diameter
16-25	25	Four or more parts; 20mm diameter
26-35	35	Four or more parts; 20mm diameter
36-45	45	Six or more parts; 20mm diameter



Lifting Magnet



Boom

Welded lattice construction using tubular, high tensile steel chords with pin connections between sections.

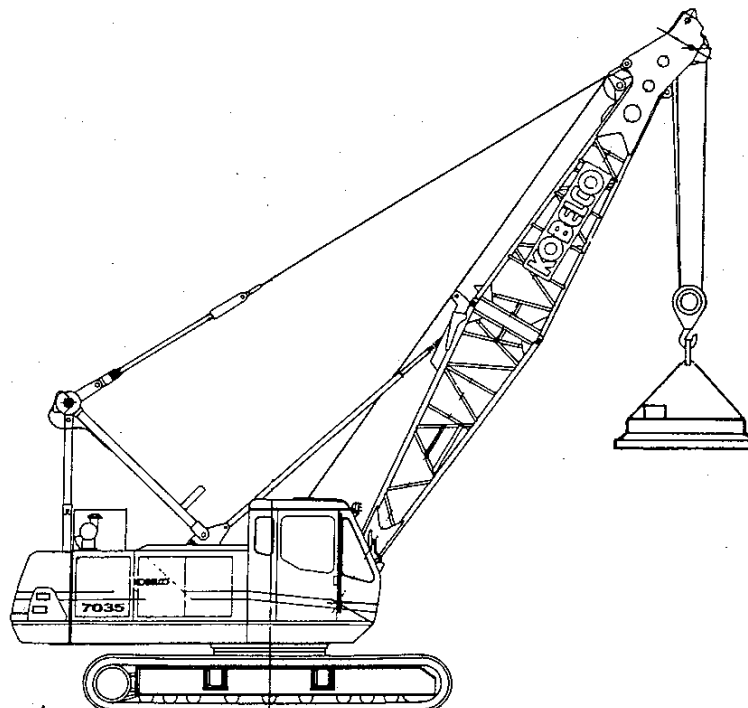
Basic boom length 9.14 m
 Max. boom length 18.29 m
 Open throat with offset boom point sheaves on anti-friction bearing, bottom diameter 0.4 m
 Std. boom hoist reeving 12-part line

Lifting Magnet

Model		LMCH30 HA-6	LMCH150 HA-6
Diameter	mm	1,300	1,500
Weight	kg	2,100	2,750
Voltage	V	DC 220	
Generator capacity	kW	15	20
Boom length	m (ft)	9.14 (30)-18.29 (60)	
Operating radius	m	6.0-18.0	
Operating weight with 9.14 m boom	ton	40.0	40.6
Ground pressure	kg/cm ²	0.57	0.58

Notes:

1. Ratings do not exceed 90% of crane ratings.
2. All specifications are based on the machine's internal power source.



Pile Driver

Working Capacities with Standard Counterweight

Leader model		FL45W																																			
Diesel pile hammer	Model	K35				K25				K35				K25				K35																			
	Hammer weight (ton)	7.5				5.2				7.5				5.2				7.5																			
	Cap weight (ton)	1.0				0.5				1.0				0.5				1.0																			
Earth auger	Model	D50H				D40H				D50H				D40H				D50H				D40H															
	Earth auger weight (ton)	3.9				3.3				3.9				3.3				3.9				3.3															
	Screw length (m)/weight (ton)	10.5/1.9				10.5/1.4				13.5/2.3				13.5/1.8				17.5/2.8				17.5/2.4															
A: Boom length (m)		9.14								12.19								15.24																			
B: Leader length (m)		15								18								21																			
C: Pile length (m)		8.0		9.0		9.0		11.0		12.0		12.0		14.5		15.5		15.5																			
R: Working radius (m)		R	W	R	W	R	W	R	W	R	W	R	W	R	W	R	W	R	W																		
W: Rated load (ton)																																					
Boom angle (°)	82	—	—	—	—	—	—	—	—	—	—	—	—	5.0	8.0	5.0	8.0	4.9	6.5																		
	81	—	—	—	—	—	—	—	—	—	—	—	—	5.3	8.0	5.2	8.0	5.2	5.0																		
	80	—	—	—	—	—	—	5.0	8.0	5.0	8.0	4.9	6.5	5.5	6.5	5.5	8.0	5.5	3.5																		
	79	—	—	—	—	—	—	5.2	8.0	5.2	8.0	5.1	6.5	5.8	5.5	5.8	8.0	5.7	2.5																		
	78	—	—	—	—	—	—	5.4	8.0	5.4	8.0	5.3	6.5	6.0	4.0	6.0	8.0	—	—																		
	77	4.9	8.0	4.9	8.0	5.9	6.5	5.8	7.5	5.6	8.0	5.5	5.0	6.3	3.0	6.3	8.0	—	—																		
	76	5.1	8.0	5.1	8.0	5.0	6.5	5.8	6.0	5.8	8.0	5.8	4.0	6.6	2.5	6.5	7.0	—	—																		
	75	5.2	8.0	5.2	8.0	5.2	6.5	6.0	5.0	6.0	8.0	6.0	3.0	6.8	1.5	6.8	6.0	—	—																		
Working weight (kg)		52.04				49.44				53.94				52.94				50.64				55.02				53.73				51.94				56.03			
Ground pressure (kg/cm²)		0.79				0.75				0.82				0.81				0.77				0.84				0.82				0.79				0.86			

Leader model		FL45W			
Diesel pile hammer	Model	K35			
	Hammer weight (ton)	7.5			
	Cap weight (ton)	1.0			
Earth auger	Model	D50H			
	Earth auger weight (ton)	3.9			
	Screw length (m)/weight (ton)	20.5/3.3			
A: Boom length (m)		18.29			
B: Leader length (m)		24			
C: Pile length (m)		17.5		18.5	
R: Working radius (m)		R	W	R	W
W: Rated load (ton)					
Boom angle (°)	82	5.4	5.5	5.4	8.0
	81	5.7	4.0	5.7	8.0
	80	6.0	2.5	6.0	8.0
	79	6.4	1.5	6.3	7.0
	78	—	—	6.6	6.0
	77	—	—	7.0	5.0
	76	—	—	—	—
	75	—	—	—	—
Working weight (kg)		54.63		53.33	
Ground pressure (kg/cm²)		0.83		0.81	

Note:

- 1) Crawler frames must be fully extended and locked.
- 2) Driving angle must be kept within 10° of the leader angle.