

KOBELCO Hydraulic Crawler Crane

7045 Specifications

Max. lifting capacity: **45** metric tons at **3.7 m**

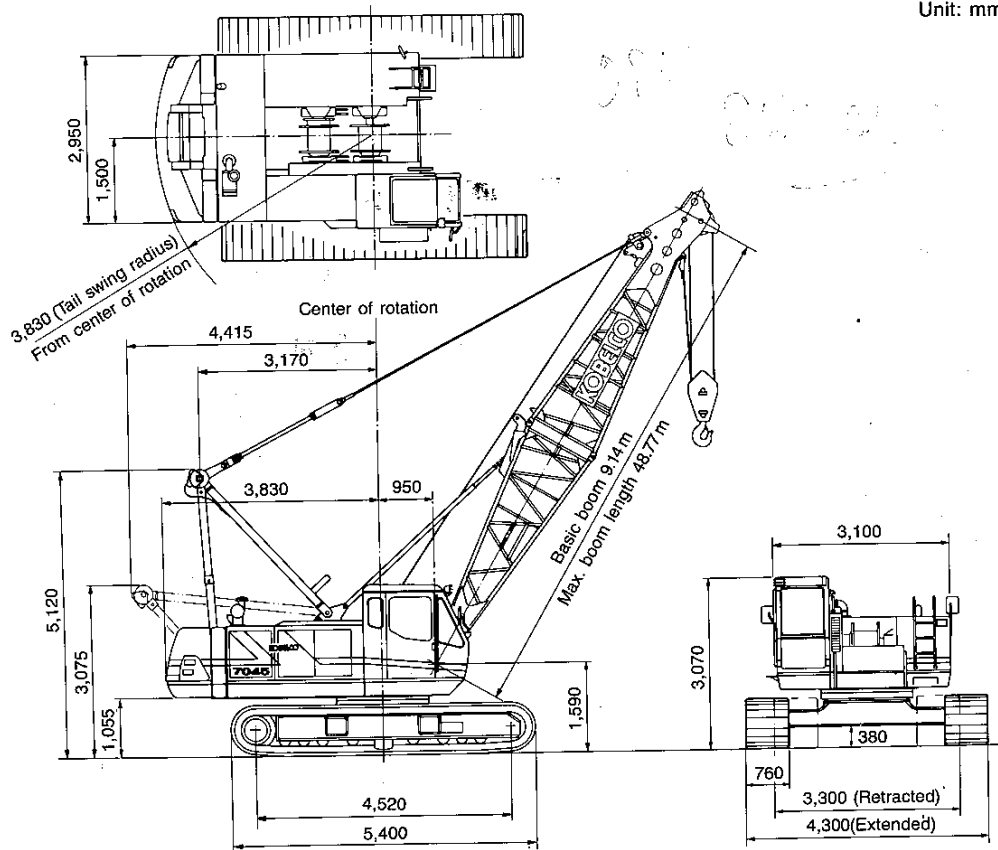
Max. boom length: **48.77 m**

Max. total length (boom + jib): **54.86 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

Unit: mm



Lifting Capacities

CRANE ATTACHMENT



Boom

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

Max. lifting capacity	45 tons
Basic boom length	9.14m
Max. boom length	48.77m



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	12.19m
Max. total length (Boom length+jib length)	39.62m + 15.24m



Hook Blocks

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

Lifting capacity	45 tons	35 tons	25 tons	15 tons	5.7 tons
No. of sheaves	4	3	2	1	0
Weight (kg)	500	320	300	300	120

Diameter of wire ropes

Standard:

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

Optional:

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

Weight

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

Ground pressure 0.61 kg/cm²

Line speed and line pull

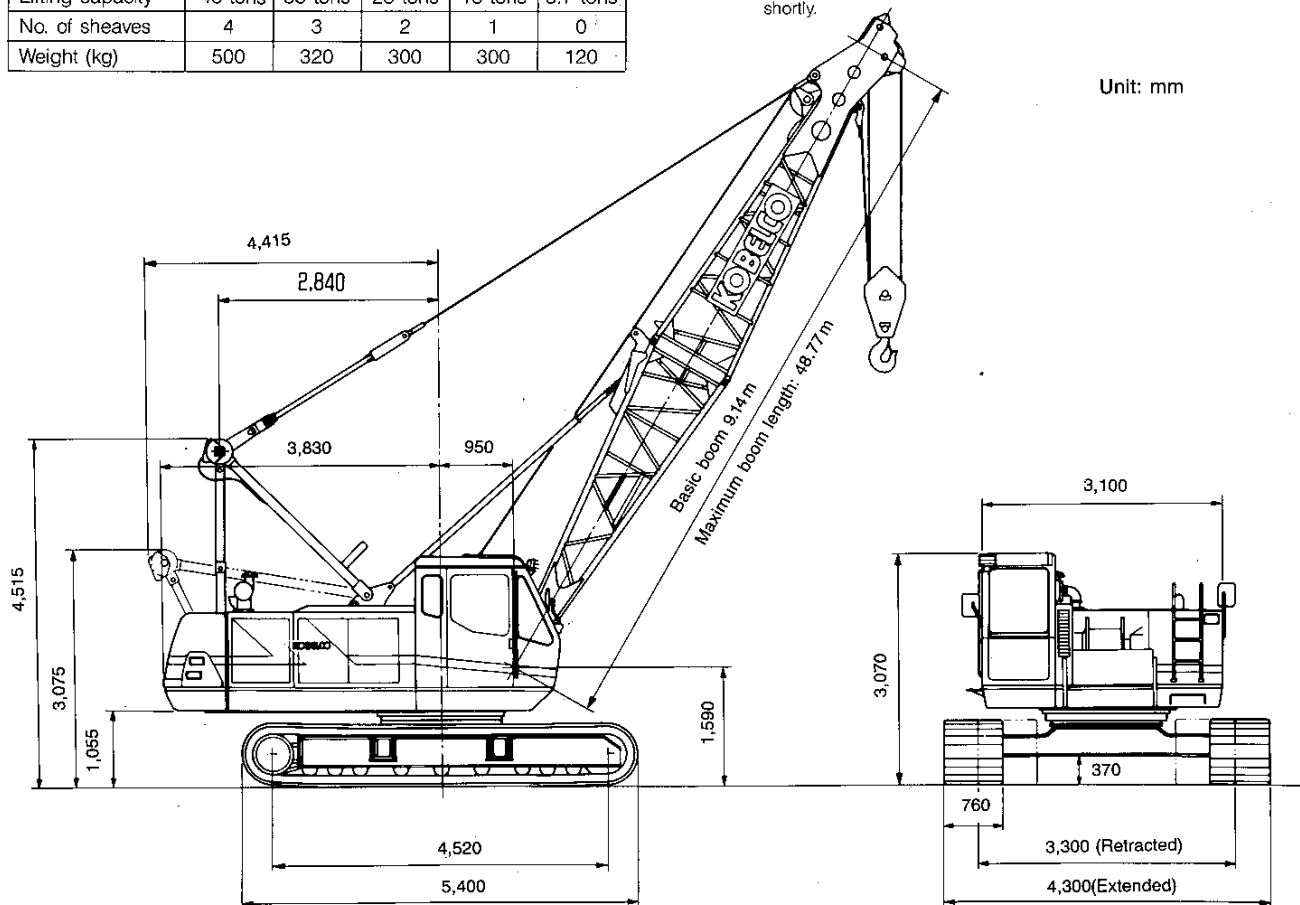
		Max. line speed m/min		Max. running line pull
		Hoisting	Lowering	
Standard winches	Main hoist drum	H 70	H 70	16.0 tons
		L 35	L 35	
	Aux. hoist drum	H 70	H 70	16.0 tons
		L 35	L 35	

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.

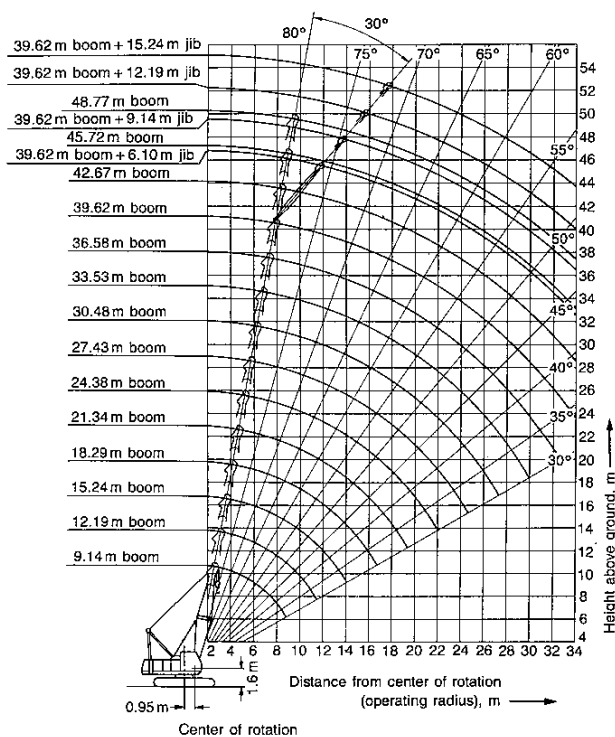
4. After motor rotating, the line pull becomes "Max. running line pull" shortly.



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 15,700kg 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 27.43m to 39.62m.
11. An auxiliary sheave cannot be used on a 48.77m 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')

Boom Lifting Capacities

Rated Loads in Metric Tons for 360° Working Area (1)

Unit: ton

Operating radius (m)	Boom length (m)							Operating radius (m)
	9.14 (30)	12.19 (40)	15.24 (50)	18.29 (60)	21.34 (70)	24.38 (80)	27.43 (90)	
3.5	45.00	45.00						3.5
3.7	45.00	45.00						3.7
4	41.50	41.40	41.30	4.30m × 35.70				4
4.5	35.70	35.60	35.55	35.50	4.90m × 30.55			4.5
5	30.05	29.95	29.90	29.80	29.75	5.40m × 25.90		5
5.5	25.90	25.80	25.75	25.65	25.60	25.50	5.90m × 22.40	5.5
6	22.75	22.65	22.55	22.45	22.40	22.35	22.30	6
7	18.25	18.10	18.05	17.95	17.90	17.80	17.75	7
8	15.20	15.05	14.95	14.90	14.80	14.75	14.70	8
9	13.00	12.85	12.75	12.65	12.60	12.50	12.45	9
10		11.20	11.10	11.00	10.90	10.85	10.75	10
12		11.60m × 9.20	8.70	8.60	8.55	8.45	8.40	5.80
14			7.15	7.05	6.95	6.85	6.80	14
16			14.20m × 6.95	5.90	5.85	5.70	5.65	16
18				16.90m × 5.50	4.95	4.85	4.80	18
20					19.50m × 4.45	4.20	4.10	20
22						3.65	3.60	22
24						22.20m × 3.60	3.15	24
26							24.80m × 3.00	26
28								28
30								30
32								32
34								34

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 (2)

Unit: ton

Operating radius (m)	Boom length (m)							Operating radius (m)
	30.48 (100)	33.53 (110)	36.58 (120)	39.62 (130)	42.67 (140)	45.72 (150)	48.77 (160)	
3.5								3.5
3.7								3.7
4								4
4.5								4.5
5								5
5.5								5.5
6	6.50m × 19.70							6
7	17.65	17.10	7.50m × 15.10					7
8	14.60	14.50	14.50	8.10m × 13.30	8.60m × 11.40			8
9	12.35	12.30	12.25	12.15	11.40	9.10m × 10.70	9.60m × 9.50	9
10	10.65	10.60	10.55	10.45	10.40	10.35	9.40	10
12	8.30	8.20	8.15	8.10	8.00	7.95	7.85	12
14	6.70	6.60	6.55	6.45	6.40	6.35	6.25	14
16	5.55	5.45	5.40	5.30	5.25	5.20	5.10	16
18	4.65	4.60	4.55	4.45	4.35	4.35	4.20	18
20	4.00	3.95	3.85	3.75	3.70	3.65	3.55	20
22	3.45	3.40	3.35	3.25	3.15	3.10	3.00	22
24	3.05	2.95	2.90	2.80	2.70	2.65	2.55	24
26	2.65	2.60	2.55	2.40	2.35	2.30	2.20	26
28	27.40m × 2.45	2.30	2.20	2.10	2.05	1.95	1.80	28
30		2.05	1.95	1.85	1.75	1.65	1.50	30
32		30.10m × 2.00	1.75	1.60	1.45	1.40	1.25	32
34			32.70m × 1.65	1.35	1.25	1.15	1.00	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 (1)

Unit: ton

Operating radius (m)	Offset Angle 90°												Operating radius (m)
	Boom length m (ft)												
	36.58 (120)				39.62 (130)				39.62 (130)				
	Jib length m (ft)				Jib length m (ft)				Jib length m (ft)				
	6.10 (20)	9.14 (30)	12.19 (40)	15.24 (50)	6.10 (20)	9.14 (30)	12.19 (40)	15.24 (50)	6.10 (20)	9.14 (30)	12.19 (40)	15.24 (50)	
11	4.50				4.50				4.50				11
12	4.50				4.50				4.50				12
14	4.50	4.10			4.50	4.10			4.50	4.10			14
16	4.50	4.10	3.20	2.27	4.50	4.10	3.20		4.50	4.10	3.20		16
18	4.50	4.10	3.20	2.27	4.50	4.10	3.20	2.27	4.50	4.10	3.20	2.27	18
20	4.10	4.10	3.20	2.27	4.00	4.10	3.20	2.27	3.95	4.10	3.20	2.27	20
22	3.50	3.65	3.20	2.27	3.40	3.60	3.20	2.27	3.35	3.55	3.20	2.27	22
24	3.00	3.15	3.20	2.27	2.90	3.10	3.20	2.27	2.85	3.05	3.20	2.27	24
26	2.60	2.75	2.85	2.27	2.45	2.65	2.80	2.27	2.40	2.60	2.75	2.27	26
28	2.20	2.35	2.50	2.27	2.05	2.25	2.40	2.27	2.00	2.20	2.35	2.27	28
30	1.80	2.00	2.15	2.27	1.70	1.90	2.05	2.20	1.65	1.85	2.00	2.15	30
32		1.70	1.85	2.00	1.40	1.60	1.75	1.85	1.35	1.50	1.65	1.80	32
34			1.55	1.70		1.30	1.45	1.60	1.05	1.25	1.40	1.50	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 (2)

Unit: ton

Offset Angle 90°									
Operating radius (m)	Boom length m (ft)								Operating radius (m)
	36.58 (120)				39.62 (130)				
	Jib length m (ft)				Jib length m (ft)				
	6.10 (20)	9.14 (30)	12.19 (40)	15.24 (50)	6.10 (20)	9.14 (30)	12.19 (40)	15.24 (50)	
11									11
12	4.50								12
14	4.50	4.10			4.50				14
16	4.50	4.10	3.20		4.50	4.10			16
18	4.50	4.10	3.20	2.27	4.50	4.10	3.20	2.27	18
20	3.90	4.10	3.20	2.27	3.80	4.05	3.20	2.27	20
22	3.30	3.50	3.20	2.27	3.20	3.40	3.20	2.27	22
24	2.80	2.95	3.10	2.27	2.65	2.90	3.05	2.27	24
26	2.30	2.50	2.65	2.27	2.20	2.40	2.60	2.27	26
28	1.90	2.10	2.25	2.27	1.80	2.00	2.15	2.27	28
30	1.55	1.75	1.90	2.05	1.40	1.60	1.80	1.95	30
32	1.25	1.40	1.55	1.70	1.10	1.30	1.45	1.60	32
34	0.95	1.15	1.30	1.40	0.85	1.00	1.15	1.30	34

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