



# Hydraulic Crawler Crane

# 7055 Specifications

Max. lifting capacity: **55** metric tons at **3.7** meters

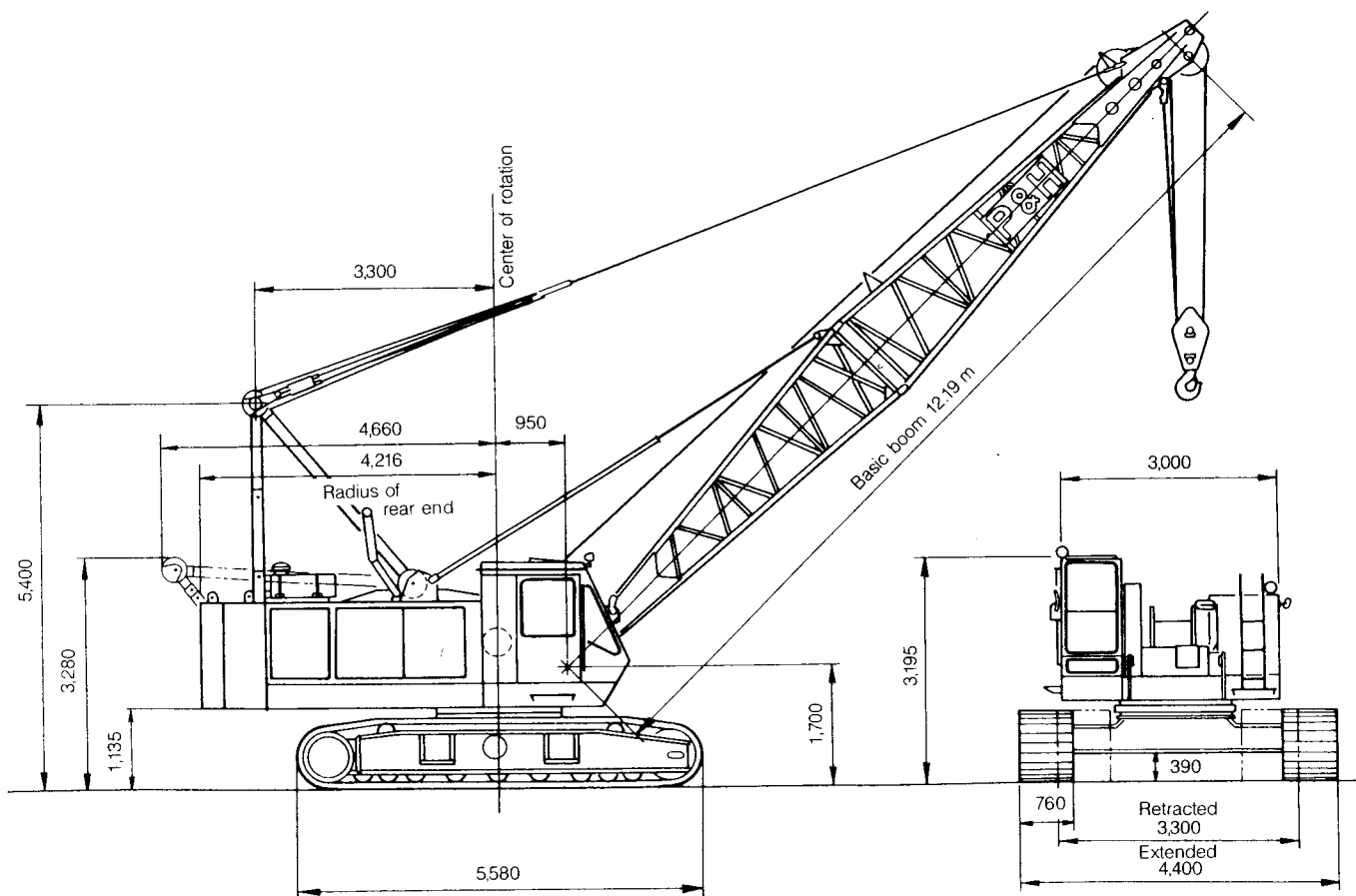
Max. boom length: **51.82** meters

Max. total length (boom + jib): **57.91** meters

- Tough winch that delivers extra lifting power
- Precise speed control for delicate inching operations
- Unrivalled fuel economy through a variable displacement hydraulic system
- Rationalized control layout for greater comfort and efficiency
- Lifetime floating seals and pre-lubricated bearings for maintenance-free operation

## General Dimensions

Unit: mm



**Gantry**

Two-position, telescopic gantry, raised and lowered by boom hoist rope.

**Counterweight**

Two-piece stack, mounted behind the machinery compartment.

Total weight..... 15,700 kg

**Tools**

Tool set and accessories for routine machine maintenance.

**Lower machinery**

**Carbody:** Steel-welded carbody with axles.

**Crawler:** Side frames can be hydraulically extended for wide-track operation or retracted for transportation. Extension cylinders operated with a valve in the upper control system. Crawler belt tension adjusted with hydraulic jack and maintained by shims between idler block and frame.

**Crawler drive:** Independent hydraulic propel drive built into each side frame, each with a piston motor propelling a driving wheel through a planetary gear box.

**Crawler brakes:** Brake valves and spring-set, hydraulically released multiple-disc parking brakes.

**Steering mechanism:** Differential speed steering (driving one track faster than the other), counter-rotating steering (driving tracks in opposite directions) and skid steering (driving one track only) with lever control.

**Track rollers:** 9 lower rollers and 2 upper rollers in each side frame, with life-time lubrication for maintenance-free operation.

**Shoes:**

Number..... 59 each side

Standard flat shoe width..... 760 mm

**Max. travel speed:**

High..... 1.6 km/h

Low..... 1.1 km/h

**Max. gradeability:** 40%

**Crane attachments****Boom:**

Welded lattice construction using tubular, high tensile steel chords with pin connections between sections. Mid-point suspension (center-hitch) is required for boom lengths longer than 39.62 m.

Max. lifting capacity	55 tons
Basic boom length	12.19 m
Max. boom length	51.82 m

**Jib (optional)**

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

	Fixed jib	Lifting jib
Max. lifting capacity (ton)	5.5	11.0
Max. jib length (m)	15.24	28.96
Max. total length (m) (Boom length + jib length)	42.67 + 15.24	38.71 + 28.96

**Hook blocks**

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

Lifting capacity	55 tons	32 tons	19 tons	6.5 tons
No. of sheaves	4	2	1	0
Weight (kg)	650	500	400	160

**Diameter of wire ropes**

**Standard:**

Hook hoist..... 22 mm (dia.)

Boom hoist (12-part line)..... 16 mm (dia.)

Boom pendants (2-part line)..... 30 mm (dia.)

**Optional:**

Jib hook hoist..... 22 mm (dia.)

Jib back stay pendants..... 16 and 18 mm (dia.)

Boom midpoint suspension..... 16 mm (dia.)

Boom backstops recommended for all boom lengths.

**Weight**

**Working weight:** Approx. 50,700 kg (including 12.19 m boom, 55 ton hook block and standard counter-weights)

**Ground pressure:** 0.66 kg/cm<sup>2</sup>

**Line speed and line pull**

		Line speed		Line pull	
		1.6 km/h	1.1 km/h	14.5 ton	15.8 ton
Standard winches	Main hoist drum	H 90/45	H 90/45	14.5 ton	15.8 ton
		L 60/30	L 60/30		
	Aux. hoist drum	H 90/45	H 90/45	14.5 ton	15.8 ton
		L 60/30	L 60/30		

**NOTE:** All tonnage figures listed in these specifications are in metric tons.

# Lifting Capacities

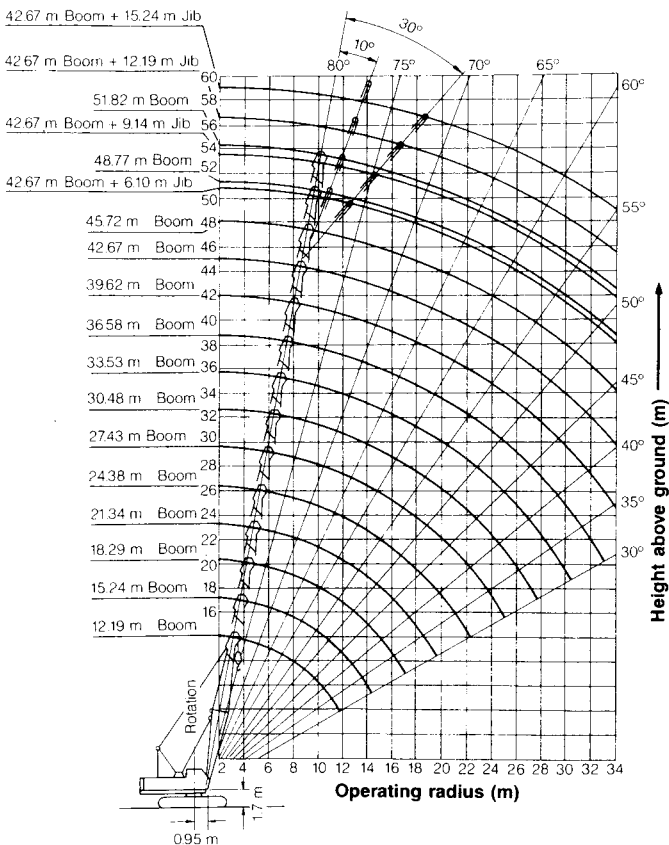
The following points should be kept in mind when interpreting the ratings given below.

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 a freely suspended load, and have been determined for ideal operating conditions. The user must limit or derate lifted 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 boom point with jib or auxiliary sheave, rated loads for the boom must be deducted as shown below.

Jib length	Aux. sheave	6.10m	9.14m	12.19m	15.24m
Deduct-kg	300	900	1,100	1,300	1,500

10. The total load that can be lifted with the jib at any radius is limited by the lower of the following two ratings: 1) the rated jib load, or 2) the rated load at that radius for the boom on which the jib is mounted.
11. 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.
12. Boom lengths for jib mounting are 30.48m to 42.67m.
13. An auxiliary sheave cannot be used on a 51.82m boom.
14. The boom should be erected over the front of the crawlers, not laterally.

## Working Ranges (with fixed jib)



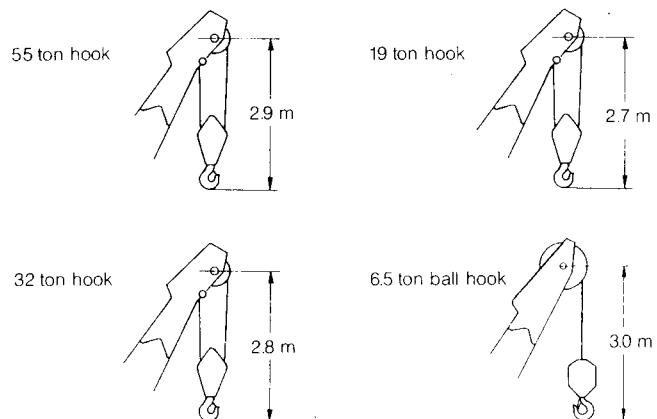
## Boom Component Chart

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

Base = 6.10 m (20'), Tip = 6.10 m (20')

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

## Min. Distance between the Hook and the Point Sheave



**NOTE:** These lengths are recommended for boom and jib angles of 75° or less.

