KOBELCO

HYDRAULIC CRAWLER CRANE

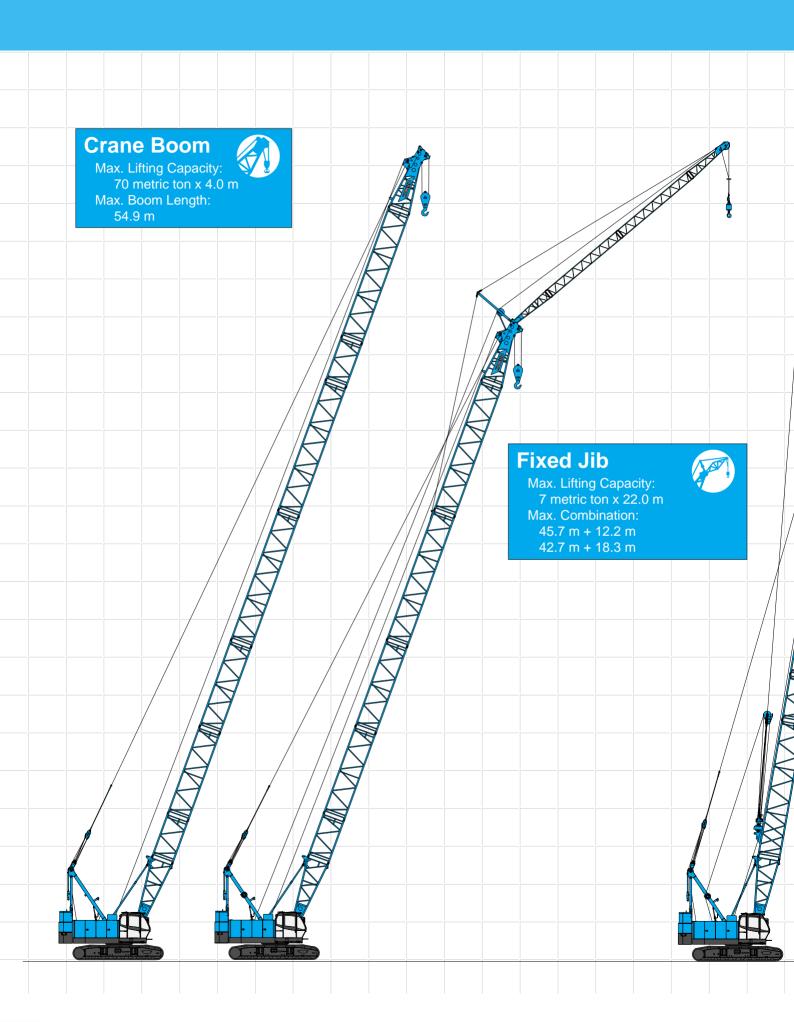


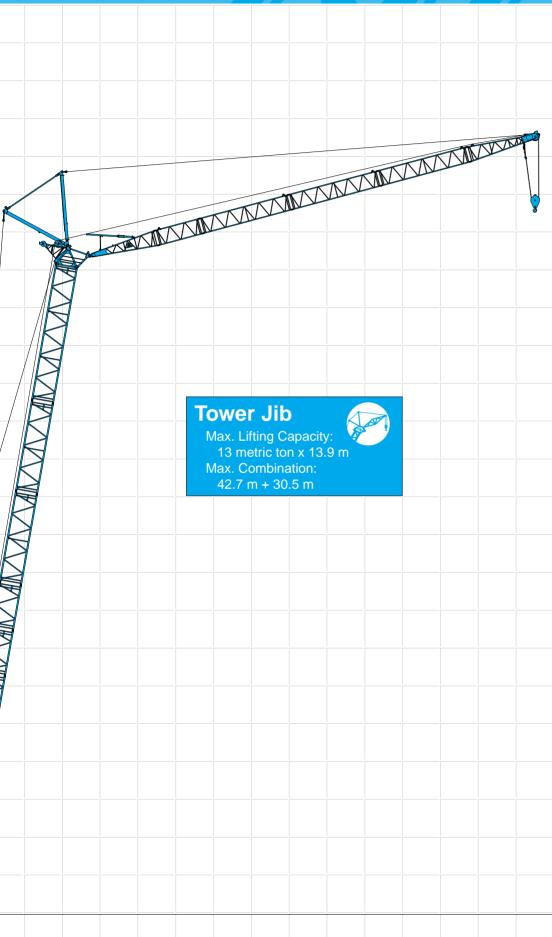
Model: 7070-1F



Max. Lifting Capacity: 70 t x 4.0 m Max. Crane Boom Length: 54.9 m Max. Fixed Jib Combination: 45.7 + 12.2 m 42.7 + 18.3 m Max. Tower Jib Combination: 42.7 + 30.5 m

CONFIGURATION





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SPECIFICATIONS



Power Plant

Model: Hino diesel engine J08E-TM

Type:Water-cooled, direct fuel injection, with turbocharger Complies with NRMM (Europe) Stage IIIA and US EPA Tier III.

Displacement: 7.684 liters

Rated Power: 159 kW at 2,000 min⁻¹ {rpm} (ISO)

Max. torque: 797 N·m/1,600 min-1

Cooling system: Liquid, recirculating bypass

Starter: 24 V/5.0 kW

Radiator: Corrugated type core, thermostatically controlled
Air cleaner: Dry type with replaceable paper element
Throttle: Electric throttle control, twist grip type

Fuel filter: Replaceable paper element

Batteries: Two 12 V,136Ah/5HR capacity batteries, series con-

nected.

Fuel tank capacity: 400 liters



Hydraulic System

Three variable displacement piston pumps are driven by heavyduty pump drive. Two of variable displacement pumps are used in the main hook hoist circuit, boom hoist circuit, auxiliary hook hoist circuit, third hoist circuit and each propel circuit. The other is used in the swing circuit.

Control: Full-flow hydraulic control system for infinitely variable pressure to front and rear drums, boom hoist brakes and clutches. Controls respond instantly to the touch, delivering smooth function operation.

Cooling: Oil-to-air heat exchanger (plate-fin type)

Filtration: Full-flow and bypass type with replaceable element **Electrical system:** All wiring corded for easy servicing, individ-

ual fused branch circuits.

Max. relief valve pressure:

Load hoist, boom hoist and propel system:

31.9 MPa {325 kgf/cm²}

Swing system: 27.5 MPa {280 kgf/cm²} Control system: 7.0 MPa {71 kgf/cm²}

Reservoir capacity: 440 liters



Boom Hoisting System

Powered by a hydraulic motor through a planetary reducer. **Brake:** A spring-set, hydraulically released multiple-disc brake is mounted on the boom hoist motor and operated through a counter-balance valve.

Drum lock: External ratchet for locking drum.

Drum: Single drum, grooved for 16 mm dia. wire rope.

Line speed: Single line on first drum layer **Hoisting/Lowering:** 70 to 2 m/min

Diameter of wire ropes

Boom guy line: 30 mm

Boom hoist reeving: 12 parts of 16 mm dia.high strength

wire rope

Boom backstops: Telescopic type with spring bumper
Required for all boom lengths



Load Hoist System

Front and rear drums for load hoist powered by a hydraulic variable plunger motors, driven through planetary reducers. **Brake:** A spring-set, hydraulically released multiple-disc brake is mounted on the hoist motor and operated through a counterbalance valve. Both positive and negative brake systems are available.

Drum lock: External ratchet for locking drum.

Drums:

Front drum:

 $550 \ \text{mm} \ \text{P.C.D.} \ \text{x} \ 545 \ \text{mm} \ \text{Lg.}$ wide drum, grooved for 22 mm wire rope. Rope capacity is 215 m working length and 335 m storage length.

Rear drum:

550 mm P.C.D. x 545 mm Lg. wide drum, grooved for 22 mm wire rope. Rope capacity is 125 m working length and 335 m storage length.

Note: Rope lengths listed above denote drum capacity and may differ from actual rope lengths supplied when machinery is shipped.

Line speed: Single line on the first drum layer

Hoisting/Lowering: 120 to 3 m/min

Tower Jib Hoisting/Lowering: 90 to 3 m/min(Rear drum)

Line Pull:

Rated line pull (Single-line): 68.6 kN {7.0 tf}



Swing System

Swing unit is powered by hydraulic motor driving spur gear through planetary reducer, the swing system provides 360° rotation.

Swing parking brakes: A spring-set, hydraulically released multiple-disc brake is mounted on swing motor.

Swing circle: Single-row ball bearing with an integral internally cut swing gear.

Swing lock: Manually, two position lock for transportation

Swing speed: 4.0 min⁻¹ {rpm}



Upper Structure

Torsion-free precision machined upper frame. All components are located clearly and service friendly. Engine with low noise level.

Counterweight: 24.6 ton

Note: Substitute weight for (optional) third winch : 1.9 ton



Cab & Control

Totally enclosed, full vision cab with safety glass, fully adjustable, high backed seat with a head-rest and armrests, and intermittent wiper and window washer (skylight and front window).

Cab fittings:

Air conditioner, convenient compartment (for tool), cup holder, ashtray, cigarette lighter, sun visor, roof blind, tinted glass, floor mat, foot-rest, shoe tray

Controls:

Four adjustable levers for front drum, rear drum, boom drum and swing controls



Lower Structure

Steel-welded carbody with axles. Crawler assemblies can be hydraulically extended for wide-track operation or retracted for transportation. Crawler belt tension is maintained by hydraulic jack force on the track-adjusting bearing block.

Crawler drive: Independent hydraulic propel drive is built into each crawler side frame. Each drive consists of a hydraulic motor propelling a driving tumbler through a planetary gear box. Hydraulic motor and gear box are built into the crawler side frame within the shoe width.

Crawler brakes: Spring-set, hydraulically released parking brakes are built into each propel drive.

Steering mechanism: A hydraulic propel system provides both skid steering (driving one track only) and counter-rotating steering (driving each track in opposite directions).

Track rollers: Sealed track rollers for maintenance-free operation.

Shoes (flat): 63 shoes, 800 mm wide each crawler

Max. travel speed: 1.9/1.2 km/h Max. gradeability: 40%



Weight

Including upper and lower machine, 24.6 ton counterweight, basic boom (or basic tower + basic tower jib), hook, and other accessories.

 Specification
 Weight
 Ground pressure

 Crane boom
 Approx. 72.3 ton, Approx. 76.8 ton, Approx. 76.8 ton, 86.0 kPa {0.87 kgf/cm²}



Attachment

Boom and Jib:

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

Boom and Jib Length

	Min. Length	Max. Length
	(Min. Combination)	(Max. Combination)
Crane Boom	9.1 m	54.9 m
Fixed Jib	30.5 m + 6.1 m	45.7 m + 12.2 m 42.7 m + 18.3 m
Tower Jib	21.3 m + 18.3 m	42.7 m + 30.5 m

Main Specifications (Model: 7070-1F)

Crane Boom			
Max. Lifting Capacity	70 t/4.0 m		
Max. Length		54.9 m	
Fixed Jib			
Max. Lifting Capacity		7 t/22.0 m	
Max. Combination	45.7 m	+ 12.2 m, 42.7 m + 18.3 m	
Tower Jib			
Max. Lifting Capacity		13 t/13.9 m	
Max. Combination		42.7 m + 30.5 m	
Tower Angle	60° ~ 90°		
Main & Aux. Winch			
Max. Line Speed		120 m/min (1st layer)	
Rated Line Pull (Single Line)		68.6 kN {7.0 tf}	
Wire Rope Diameter	Ø22 mm		
Wire Bone Length	Crane	215 m (Main) 125 m (Aux.)	
Wire Rope Length	Tower	225 m (Main) 120 m (Aux.)	
Brake Type	Spring-set hydraulically released multiple disc brake		
Working Speed			
Swing Speed		4.0 min ⁻¹ {rpm}	
Travel Speed	1.9/1.2 km/h		

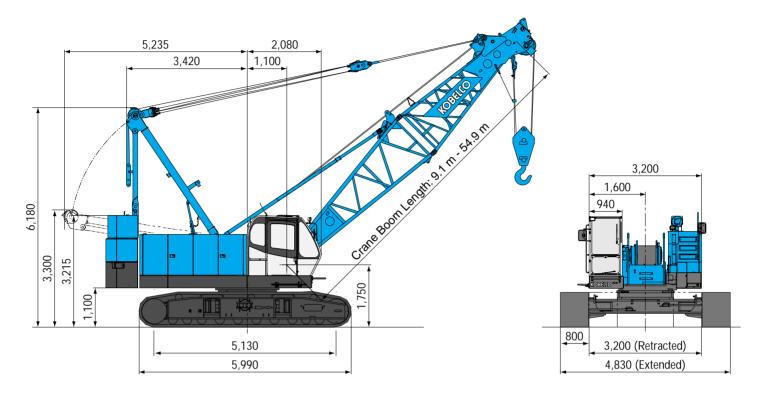
Power Plant	
Model	Hino J08E-TM
Engine Output	159 kW/2,000 min-1 {rpm}
Fuel Tank Capacity	400 liters
Hydraulic System	
Main Pumps	3 variable displacement
Max. Pressure	31.9 MPa {325 kgf/cm²}
Hydraulic Tank Capacity	440 liters
Weight	
Operating Weight*	Approx. 72.3 t
Ground Pressure*	81.0 kPa {0.82 kgf/cm²}
Counterweight	24.6 t
Transport Weight**	45.9 t

Units are SI units. {} indicates conventional units.

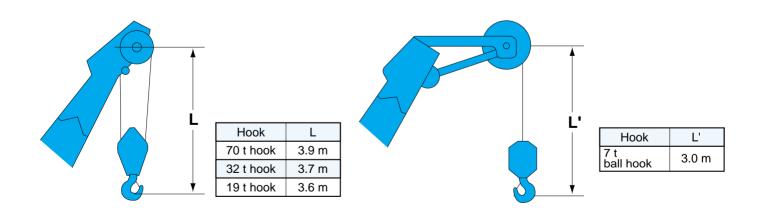
- * Including upper and lower machine, 24.6 ton counterweight, basic boom, hook, and other accessories.
- ** Base machine with boom base, crawlers, gantry, lower spreader, upper spreader, wire ropes for main and boom hoist winches.

GENERAL DIMENSIONS

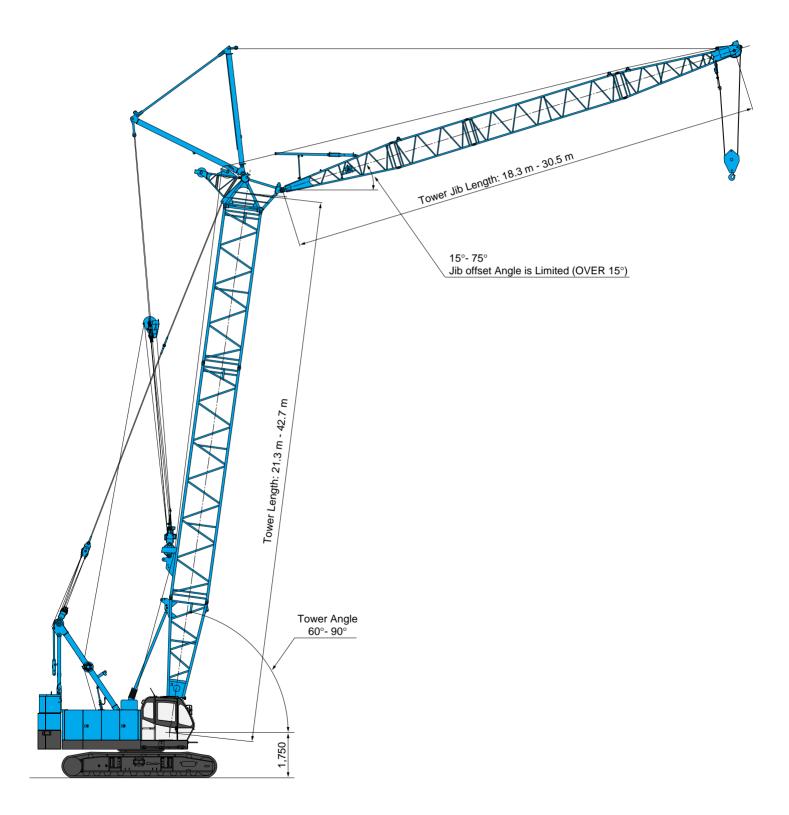
Crane Boom (Unit: mm)



Limit of Hook Lifting



Tower Jib (Unit: mm)



BOOM AND JIB ARRANGEMENTS

Crane Boom Arrangements

	J
Boom length m (ft)	Boom arrangement
9.1 (30)	52 39
12.2 (40)	B 10 T
15.2 (50)	B 20 T >>> B 10 10 T >>>
18.3 (60)	B 30 T
21.3 (70)	B 10 10 20 T B 20 20 T B 10 30 T
24.4 (80)	B 20 30 T B 10 10 30 T
27.4 (90)	B 10 10 20 20 T B 30 30 T
30.5 (100)	B 20 20A 30 IT B 10 10 20A 30 IT B 10 30A 3
33.5 (110)	B 20 30A 30 T >> B 10 20 20A 30 T >> B 10 10 30A 30 T >>

Boom length m (ft)	Boom arrangement
36.6 (120)	B 10 20 30A 30 T
39.6 (130)	B 10 20 20 20A 30 T >> B 20 20 30A 30 T >> B 10 10 20 30A 30 T >> B 10 30 30A 30 T >>
42.7 (140)	B 10 20 20 30A 30 T B 10 10 20 20 20 20A 30 T B 20 30 30A 30 T B 10 10 30 30A 30 T
45.7 (150)	B 10 20 30 30A 30 T
48.8 (160)	B 10 10 20 30 30A 30 T B 20 20 30 30A 30 T B 20 20 30 30A 30 T B 20 20 30 30A 30 T B
51.8 (170)	B 10 20 20 30 30A 30 T
54.9 (180)	B 10 20 20 30 30A 10 30 T S B 10 10 20 20 30 30A 30A 30 T

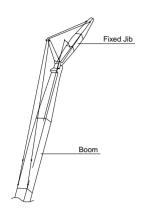
Symbol	Boom Length	Remarks
В	5.2 m	Boom Base
	3.9 m	Boom Top
10	3.0 m	Insert Boom
20	6.1 m	Insert Boom
20A	6.1 m	Insert Boom with Lug
30	9.1 m	Insert Boom
30A	9.1 m	Insert Boom with Lug

- $\ensuremath{\measuredangle}$ mark shows the guy line installing position when the fixed jib is used.
- ※ indicates the most flexible combination of insert booms, which can be modified to form all shorter boom arrangements.

Note: In the following cases a 6.1 m or 9.1 m insert boom with lug is required:

- 1. With a fixed jib fitted
- 2. When assembling a boom length of 39.6 m or over without using an auxiliary crane

Fixed Jib Arrangements



Crane boom length	Jib length m (ft)	Jib arrangement
30.5 m	6.1(20)	3.0 / 3.0
45.7 m	12.2 (40)	© 8 20 T
30.5 m 42.7 m	18.3 (60)	□ B 20 20 T □

Symbol	Jib Length	Remarks
В	3.0 m	Jib Base
T	3.0 m	Jib Top
20	6.1 m	Insert Jib



Hook Blocks

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

Hasks Weight (kg) No. of		No. of lines and max. rated loads (tons)								
Hooks	Weight (kg)	sheaves	1	2	3	4	5	6	7	8
70-ton	800	5	-	-	21.0	28.0	35.0	42.0	49.0	56.0
32-ton	500	2	-	-	21.0	28.0	32.0	-	-	-
19-ton	400	1	-	14.0	19.0	-	-	-	-	-
7-ton ball hook	160	0	7.0	-	-	-	-	-	-	-

Hooks	Maight (kg)	No. of			
Hooks	Weight (kg)	sheaves	9	10	
70-ton	800	5	63.0	70.0	
32-ton	500	2	-	-	
19-ton	400	1	-	-	
7-ton ball hook	160	0	-	-	

Symbols for Attachments:



Tower Arrangements

Tower length m (ft)	Tower arrangement
21.3 (70)	B 30B 20 T 5.2 0.9
24.4 (80)	B 30B 10 20 T
27.4 (90)	B 30B 10 10 20 T
30.5 (100)	B 30B 10 20 20 T
33.5 (110)	B 30B 10 10 20 20 T
36.6 (120)	B 30B 10 10 20 30 T B 30B 20 20 30 T
39.6 (130)	B 30B 10 20 20 30 T
42.7 (140)	B 30B 10 10 20 20 30 T

Symbol	Tower Length	Remarks
В	5.2 m	Boom Base
Т	0.9 m	Tower Cap
10	3.0 m	Insert Boom
20	6.1 m	Insert Boom
30	9.1 m	Insert Boom
30B	9.1 m	Special Insert Boom for Tower

[%] mark shows the standard tower arrangement which enables each tower length of less than that tower length to be configured.

Tower Jib Arrangements

Jib length m (ft)	Jib arrangement
18.3 (60)	B 10 20 T 4.6
21.3 (70)	B 10 10 20 T
24.4 (80)	B 10 20 20 T
27.4 (90)	B 20 20 20 T
30.5 (100)	B 10 20 20 20 T

Symbol	Tower Length	Remarks
В	4.6 m	Tower Jib Base
	4.6 m	Tower Jib Top
10	3.0 m	Tower Insert Boom
20	6.1 m	Tower Insert Boom

Tower and Jib Combinations and Allowable Tower Angle

Jib Leng Tower Length	th	18.3 m	21.3 m	24.4 m	27.4 m	30.5 m	Pillow plate
21.3 m		90 <u>°</u> 60 °	_	-	_	_	_
24.4 m		90 <u>°</u> 60 °	90 º60 °	_	_	_	_
27.4 m		90 <u>°</u> 60 °	90 <u>°</u> 60 °	90 <u>°</u> 60 °	_	_	_
30.5 m		90 <u>°</u> 60 °	_	_			
33.5 m		90 <u>°</u> 60 °	_				
36.6 m		90 <u>°</u> 60 °	90 <u>°</u> 60 °	90 <u>°</u> 60 °	90 º60 °	90 º60 °	_
39.6 m		90 <u>°</u> 60 °	90 º70 °	Need			
42.7 m		90 <u>°</u> 60 °	90 <u>°</u> 60 °	90 <u>°</u> 70 °	90 º70 °	90 º70 °	Need
19 ton ho	ok						
Duil 1100	(×					
型型 19 ton hoo Ball hoo	ok	Need	×	×	×	×	
ৰঙ Ball hoo	(×	Need	×	×	×	

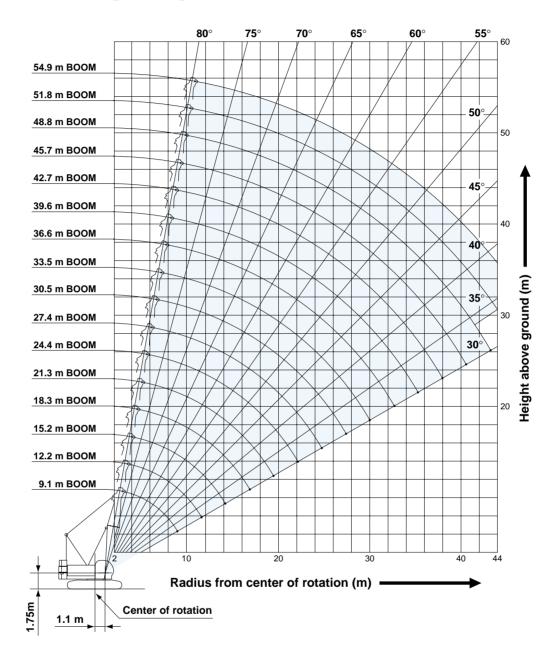
: Available

x : Not available

amark indicates cable roller install position.

WORKING RANGES AND LIFTING CAPACITIES

Crane Boom Working Ranges



NOTES:

- Ratings according to Japanese Construction Codes for Mobile Cranes and Japanese Safety Ordinance on Cranes, etc.
- 2. Ratings in metric tons for 360° working area.
- 3. Operating radius is the horizontal distance from center of rotation to a vertical line through the center of gravity of the load.
- 4. Weight of hook block(s), slings and other load handling accessories is included in rated load. Their total weight must be subtracted from rated load to obtain weight that can be lifted.
- 5. Ratings shown are based on freely suspended loads and make no allowance for such factors as wind effect on lifted load, ground conditions out-of-level, operating speeds or any other condition that could be detrimental to the safe operation of this equipment. Operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speeds accordingly.
- 6. Ratings are for operation on a firm and level surface.
- At radii and boom lengths where no ratings are shown on chart, operation is not intended nor approved.

- 8. Boom inserts and guy lines must be arranged as shown in the "Operator's Manual".
- 9. Boom hoist reeving is 12 part line.
- 10. Gantry must be in raised position for all conditions.
- 11. Boom backstops are required for all boom lengths.
- 12. Crawler frames must be fully extended for all crane operations.
- 13. Ratings shown in _____ are determined by the strength of the boom or other structural component.
- 14. Instruction in the "Operator's Manual" must be strictly observed when operating the machine.
- 15. Crane boom ratings: Deduct weight of main hook block, slings, and all other load handling accessories from crane boom ratings shown.
- 16. Auxiliary sheave ratings for crane boom: Deduct weight of ball hook, slings, and all other load handling accessories from auxiliary sheave ratings for crane boom shown.
- 17. Crane boom lengths for auxiliary sheave mounting are 9.1 m to 51.8 m.
- 18. Crane boom ratings with auxiliary sheave: Deduct 0.5 ton from crane boom ratings shown. Minimum rated loads must exceed 1.1 ton.



Crane Boom Lifting Capacity

Unit: metric ton

Counterw	/eight: 24.6 t

Boom length Working (m) radius (m)	9.1	12.2	15.2	18.3	21.3	24.4	27.4	30.5	33.5	36.6	39.6	42.7	45.7	48.8	51.8		Boom length (m) Working radius (m)
3.0	3.2 m/70.0	3.6 m/70.0															3.0
4.0	70.0	70.0	4.2 m/66.9	4.7 m/59.9													4.0
5.0	56.7	56.6	56.4			5.7 m/48.0											5.0
6.0	45.2	45.0	44.9	44.8	44.7	44.7	6.3 m/41.7	6.8 m/35.0									6.0
7.0	35.8	35.7	35.5	35.4	35.3	35.3	35.2	35.0	7.3 m/32.7	7.9 m/28.0							7.0
8.0	29.6	29.4	29.3	29.2	29.1	29.0	29.0	28.9	28.8	28.0	8.4 m/26.8						8.0
9.0	23.1	25.0	24.9	24.8	24.7	24.6	24.5	24.4	24.3	24.3	24.2	21.0	9.5 m/21.0				9.0
10.0	9.2 m/21.8	21.6	21.6	21.5	21.3	21.3	21.2	21.1	21.0	21.0	20.8	20.8	20.7	19.4	10.5 m/17.3	11.0 m/14.0	10.0
12.0		11.8 m/17.3	16.9	16.8	16.7	16.6	16.5	16.4	16.3	16.2	16.1	16.1	16.0	15.8	15.8	14.0	12.0
14.0			13.8	13.7	13.6	13.5	13.4	13.3	13.2	13.1	13.0	12.9	12.8	12.6	12.5	12.3	14.0
16.0			14.5 m/13.2	11.5	11.3	11.2	11.2	11.0	10.9	10.8	10.7	10.7	10.6	10.4	10.4	10.1	16.0
18.0				17.1 m/10.6	9.7	9.6	9.5	9.3	9.2	9.2	9.0	9.0	8.9	8.8	8.7	8.5	18.0
20.0					19.8 m/8.5	8.4	8.2	8.1	7.9	7.9	7.8	7.7	7.6	7.5	7.3	7.1	20.0
22.0						7.4	7.2	7.1	6.9	6.9	6.7	6.7	6.5	6.4	6.3	6.2	22.0
24.0						22.4 m/7.2	6.4	6.2	6.1	6.0	5.9	5.8	5.7	5.5	5.4	5.3	24.0
26.0							25.0 m/6.0	5.5	5.4	5.3	5.2	5.1	5.0	4.8	4.7	4.6	26.0
28.0								27.7 m/5.0	4.7	4.7	4.6	4.5	4.4	4.2	4.1	4.0	28.0
30.0									4.3	4.2	4.1	4.0	3.8	3.7	3.6	3.5	30.0
32.0									30.3 m/4.2	3.7	3.6	3.5	3.4	3.2	3.1	3.0	32.0
34.0										32.9 m/3.5	3.2	3.1	3.0	2.8	2.6	2.5	34.0
36.0											35.6 m/3.0	2.8	2.6	2.4	2.3	2.2	36.0
38.0												2.5	2.3	2.1	1.9	1.8	38.0
40.0													2.0	1.8	1.6	1.5	40.0
42.0													40.9 m/1.9	1.5	1.3	1.2	42.0
44.0												-		43.5 m/1.3	1.2	1.1	44.0
Reeves	10	10	10	9	8	7	6	5	5	4	4	3	3	3	3	2	Reeves

Ratings according to Japanese Construction Codes for Mobile Cranes and Japanese Safety Ordinance on Cranes, etc.

are determined by the strength of the boom or other structural components.

Refer to notes P10.

Auxiliary Sheave Lifting Capacity for Crane Boom

Unit: metric ton

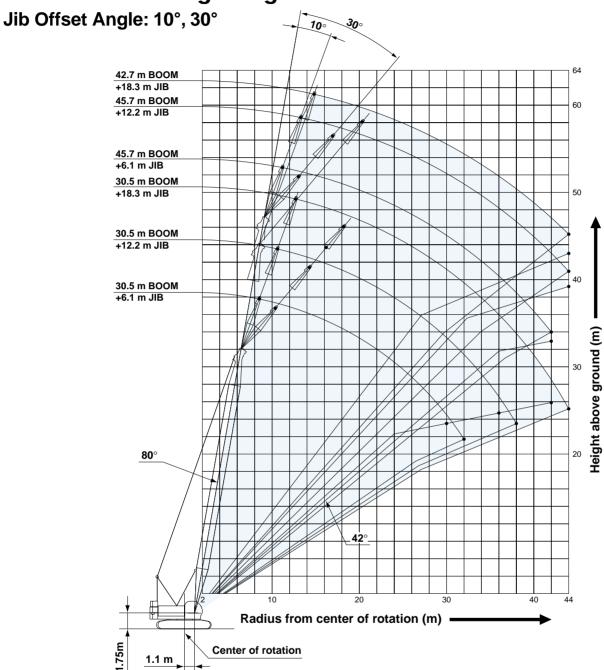
(With	า 19	t N	/lair) Ho	ok)	•								Coun	terweig	ht: 24.6 t
Boom length Working (m) radius (m)	9.1	12.2	15.2	18.3	21.3	24.4	27.4	30.5	33.5	36.6	39.6	42.7	45.7	48.8	51.8	Boom length (m) Working radius (m)
3.0	3.8 m/7.0															3.0
4.0	7.0	4.3 m/7.0	4.9 m/7.0													4.0
5.0	7.0	7.0	7.0	5.4 m/7.0	5.9 m/7.0											5.0
6.0	7.0	7.0	7.0	7.0	7.0	6.4 m/7.0										6.0
7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.5 m/7.0								7.0
8.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	8.6 m/7.0						8.0
9.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	9.1 m/7.0	9.6m/7.0				9.0
10.0	9.2 m/7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.1 m/7.0	10.7 m/7.0	11.2 m/7.0	10.0
12.0		11.8 m/7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	12.0
14.0			7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	14.0
16.0			14.5 m/7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	16.0
18.0				17.1 m/7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	18.0
20.0					19.8 m/7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.9	6.8	6.6	20.0
22.0						6.7	6.5	6.4	6.2	6.2	6.0	6.0	5.8	5.7	5.6	22.0
24.0						22.4 m/6.5	5.7	5.5	5.4	5.3	5.2	5.1	5.0	4.8	4.7	24.0
26.0							25.0 m/5.3	4.8	4.7	4.6	4.5	4.4	4.3	4.1	4.0	26.0
28.0								27.7 m/4.3	4.0	4.0	3.9	3.8	3.7	3.5	3.4	28.0
30.0									3.6	3.5	3.4	3.3	3.1	3.0	2.9	30.0
32.0									30.3 m/3.5	3.0	2.9	2.8	2.7	2.5	2.4	32.0
34.0										32.9 m/2.8	2.5	2.4	2.3	2.1	1.9	34.0
36.0											35.6 m/2.3	2.1	1.9	1.7	1.6	36.0
38.0												1.8	1.6	1.4	1.2	38.0
40.0													1.3	1.1		40.0
42.0													40.9 m/1.2			42.0
Reeves	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1	1	Reeves

Ratings according to Japanese Construction Codes for Mobile Cranes and Japanese Safety Ordinance on Cranes, etc.

Ratings shown in are determined by the strength of the boom or other structural components.

Refer to notes P10.

Fixed Jib Working Ranges



NOTES:

- Ratings according to Japanese Construction Codes for Mobile Cranes and Japanese Safety Ordinance on Cranes, etc.
- 2. Ratings in metric tons for 360° working area.
- Operating radius is the horizontal distance from center of rotation to a vertical line through the center of gravity of the load.
- Weight of hook block(s), slings and other load handling accessories is included in rated load. Their total weight must be subtracted from rated load to obtain weight that can be lifted.
- 5. Ratings shown are based on freely suspended loads and make no allowance for such factors as wind effect on lifted load, ground conditions out-of-level, operating speeds or any other condition that could be detrimental to the safe operation of this equipment. Operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speeds accordingly.
- 6. Ratings are for operation on a firm and level surface.

- At radii and boom lengths where no ratings are shown on chart, operation is not intended nor approved.
- Boom/ jib inserts and guy lines must be arranged as shown in the "Operator's Manual".
- 9. Gantry must be in raised position for all conditions.
- 10. Boom backstops are required for all boom lengths.
- 11. Crawler frames must be fully extended for all crane operations.
- 12. The boom should be erected over the front of crawlers, not laterally.
- Ratings shown in _____ are determined by the strength of the boom or other structural component.
- 14. Instruction in the "Operator's Manual" must be strictly observed when operating the machine.
- 15. Fixed jib ratings: Deduct weight of jib hook block, slings, and all other load handling accessories from fixed jib ratings shown.
- 16. Crane boom lengths for fixed jib mounting are 30.5 m to 45.7 m.



Jib Offset Angle: 10°

Fixed Jib Lifting Capacities (Without Main Hook)

Unit: metric ton

Ji	b O	ffse	t An	gle:	10°											(Counter	weigh	t: 24.6 t
Boon	n length (m)		30.5			33.5			36.6			39.6			42.7		45	5.7	Boom length (
Jib	length (m)	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	Jib length (m
	9.0	7.0																	9.0
	10.0	7.0			7.0			7.0											10.0
	12.0	7.0	7.0		7.0	7.0		7.0			7.0			7.0			7.0		12.0
	14.0	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0		7.0	7.0		7.0	7.0	14.0
	16.0	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0	16.0
	18.0	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0	18.0
Ē	20.0	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0	4.5	7.0	7.0	20.0
radius	22.0	6.8	7.0	4.5	6.6	7.0	4.5	6.5	6.9	4.5	6.4	6.7	4.5	6.3	6.6	4.5	6.2	6.5	22.0
ng re	24.0	5.9	6.2	4.5	5.8	6.1	4.5	5.7	6.0	4.5	5.6	5.9	4.5	5.4	5.8	4.5	5.3	5.7	24.0
Working	26.0	5.2	5.5	4.5	5.1	5.4	4.5	5.0	5.3	4.5	4.9	5.2	4.5	4.7	5.1	4.5	4.6	5.0	24.0
š	28.0	4.6	4.9	4.5	4.5	4.8	4.5	4.4	4.7	4.5	4.3	4.6	4.5	4.2	4.5	4.5	4.0	4.3	28.0
	30.0	4.1	4.4	4.4	4.0	4.3	4.4	3.9	4.2	4.3	3.8	4.0	4.2	3.6	3.9	4.1	3.5	3.8	30.0

3.9

3.5

3.1

2.8

2.6

2.3

2.1

3.3

2.9

2.6

2.2

1.9

3.6

3.2

2.9

2.5

2.2

1.9

1.7

3.7

3.4

3.0

2.7

2.4

2.1

1.9

3.2

2.8

2.4

2.1

1.8

1.5

1.2

1

3.5

3.1

2.7

2.4

2.1

1.8

1.5

3.6

3.2

2.9

2.6

2.3

2.0

1.7

1

3.1

2.7

2.3

1.9

1.6

1.3

1.1

3.4

3.0

2.6

2.2

1.9

1.6

1.4

32.0

34.0

36.0

38.0

40.0

42.0

44.0

Reeves

Note:

32.0

34.0

36.0

38.0

40.0

42.0

44.0

Reeves

Ratings according to Japanese Construction Codes for Mobile Cranes and Japanese Safety Ordinance on Cranes, etc.

4.0

3.6

3.2

2.9

2.7

2.4

2.2

3.5

3.1

2.7

2.4

3.7

3.3

3.0

2.7

2.4

2.1

1.9

1

are determined by the strength of the boom or other structural components.

3.8

3.4

3.1

2.8

2.5

2.3

Refer to notes P12.

Unit: metric ton

Jib Offset Angle: 30°

4.0

3.6

3.2

2.9

4.1

3.7

3.4

3.1

2.8

2.6

2.3

1

3.6

3.2

Ji	b O	ffse	t An	gle:	30°											C	ounter	weigh	t: 24.6	t
Boor	m length (m)		30.5			33.5			36.6			39.6			42.7		45	5.7	Boom lengt	n (m)
Jib	length (m)	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	18.3	6.1	12.2	Jib length	(m)
	12.0	7.0			7.0			7.0											12.0	
	14.0	7.0			7.0			7.0			7.0			7.0			7.0		14.0	
	16.0	7.0	5.0		7.0	5.0		7.0	5.0		7.0			7.0			7.0		16.0	
	18.0	7.0	5.0		7.0	5.0		7.0	5.0		7.0	5.0		7.0	5.0		7.0	5.0	18.0	
	20.0	7.0	5.0	3.2	7.0	5.0	3.2	7.0	5.0	3.2	7.0	5.0	3.2	7.0	5.0	3.2	7.0	5.0	20.0	
	22.0	6.9	5.0	3.2	6.8	5.0	3.2	6.7	5.0	3.2	6.6	5.0	3.2	6.5	5.0	3.2	6.4	5.0	22.0	_
s (m)	24.0	6.0	5.0	3.2	5.9	5.0	3.2	5.8	5.0	3.2	5.7	5.0	3.2	5.6	5.0	3.2	5.5	5.0	24.0	Working
radius	26.0	5.3	4.9	3.2	5.2	5.0	3.2	5.1	5.0	3.2	5.0	5.0	3.2	4.9	5.0	3.2	4.8	4.9	26.0	gi
g	28.0	4.7	4.7	3.2	4.6	4.9	3.2	4.5	4.9	3.2	4.4	4.8	3.2	4.3	4.7	3.2	4.2	4.7	28.0	radius (m)
Working	30.0	4.2	4.6	3.1	4.1	4.5	3.2	4.0	4.4	3.2	3.9	4.3	3.2	3.8	4.2	3.2	3.7	4.1	30.0	s (r
Š	32.0	3.7	4.1	3.0	3.6	4.0	3.1	3.5	3.9	3.1	3.4	3.8	3.2	3.3	3.7	3.2	3.2	3.6	32.0	크
	34.0		3.7	2.9	3.2	3.6	2.9	3.1	3.5	3.0	3.0	3.4	3.1	2.9	3.3	3.2	2.8	3.2	34.0	
	36.0		3.3	2.8	2.9	3.2	2.8	2.8	3.1	2.9	2.6	3.0	3.0	2.5	2.9	3.1	2.4	2.8	36.0	
	38.0		3.0	2.7		2.9	2.7	2.4	2.8	2.8	2.3	2.7	2.9	2.1	2.6	2.9	2.0	2.5	38.0	
	40.0		2.7	2.6		2.6	2.7		2.5	2.7	1.9	2.4	2.6	1.8	2.3	2.5	1.7	2.1	40.0	
	42.0			2.5		2.3	2.6		2.2	2.5		2.1	2.4	1.5	1.9	2.3	1.4	1.8	42.0	
	44.0			2.4			2.3		1.9	2.2		1.8	2.1	1.2	1.6	2.0	1.1	1.5	44.0	
R	eeves	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Reeve	s

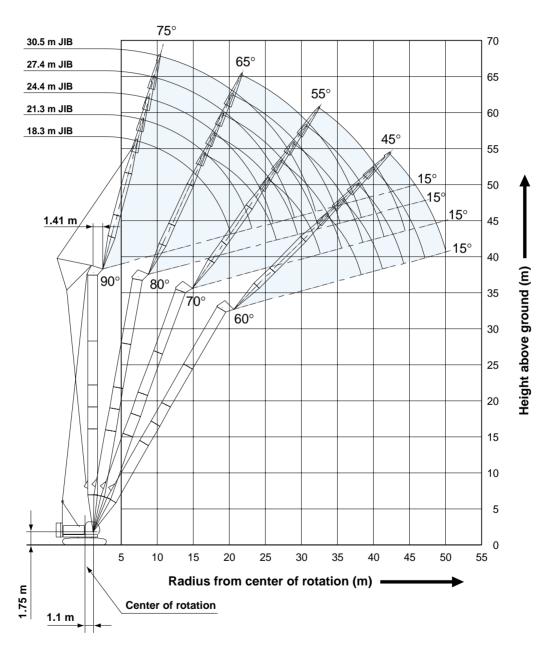
Ratings according to Japanese Construction Codes for Mobile Cranes and Japanese Safety Ordinance on Cranes, etc.

Ratings shown in are determined by the strength of the boom or other structural components.

Refer to notes P12.

Tower Jib Working Ranges

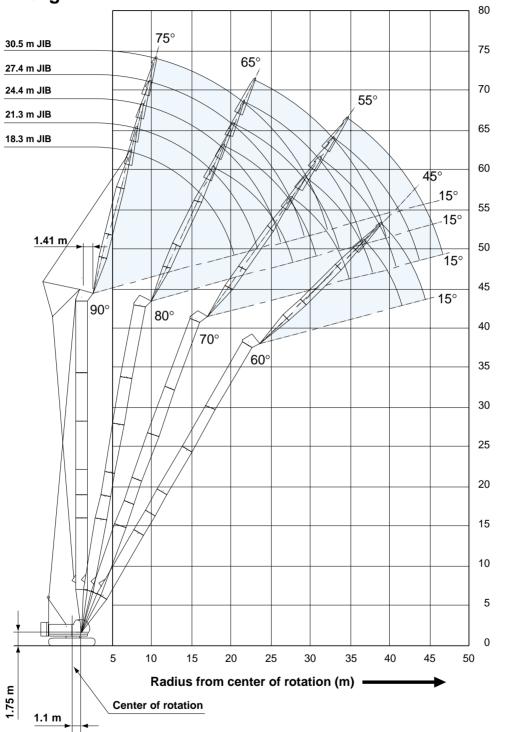
Tower Length: 36.3 m



NOTES:

- Ratings according to Japanese Construction Codes for Mobile Cranes and Japanese Safety Ordinance on Cranes, etc.
- 2. Ratings in metric tons for 360° working area.
- 3. Operating radius is the horizontal distance from center of rotation to a vertical line through the center of gravity of the load.
- 4. Weight of hook block(s), slings and other load handling accessories is included in rated load. Their total weight must be subtracted from rated load to obtain weight that can be lifted.
- Ratings shown are based on freely suspended loads and make no allowance for such factors as wind effect on lifted load, ground conditions out-of-level, operating speeds or any other condition that could be detri-
- mental to the safe operation of this equipment. Operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speeds accordingly.
- 6. Ratings are for operation on a firm and level surface.
- At radii and boom lengths where no ratings are shown on chart, operation is not intended nor approved.
- Tower/tower jib inserts and guy lines must be arranged as shown in the "Operator's Manual".
- 9. Tower jib hoist reeving is 8 part line.
- 10. Gantry must be in raised position for all conditions.
- 11. Crawlers must be fully extended for all crane operations.

Tower Length: 42.4 m



- 12. Tower and tower jib backstops are required for all tower and tower jib combinations.
- 13. Ratings shown in _____ are determined by the strength of the tower or other structural component.
- 14. With a 18.3 m tower jib, a 7-ton ball hook cannot be used.
- 15. Tower jib ratings: Deduct weight of hook block, slings, and all other load handling accessories from tower jib ratings shown.
- 16. When erecting and lowering the tower length of 39.6 m or over, the pillow plate for erection must be placed at the end of crawlers.
- 17. When using a 19-ton hook with a 18.3 m tower jib, or a 7-ton ball hook with a 21.3 m tower jib, attach a tower jib point weight (420 kg).

Height above ground (m)



Tower Jib Lifting Capacities

Unit: metric ton

Counterweight: 24.6 t

Ń	Tow	er length (m)		21	.3		Tower length (m		
21.3	Ji	b length (m)		18	.3		Jib length (ı	m)	
m Tower Length	T	ower angle	90°	80°	60°	Tower angle			
Š		7.0	7.2 m/13.0				7.0		
er		8.0	13.0				8.0		
Ler		9.0	13.0				9.0		
1gr		10.0	13.0				10.0		
-	٦	12.0	13.0	13.9 m/13.0			12.0	S	
	s (n	14.0	12.5	12.5			14.0	Working	
	Working Radius (m)	16.0	10.7	10.6			16.0		
	y Ra	18.0	9.1	9.1			18.0	Rac	
	king	20.0	8.0	8.0	20.2 m/7.8		20.0	Radius	
	Wor	22.0	20.2 m/7.9	7.3	7.1		22.0	Ξ	
	_	24.0		23.9 m/6.7	6.4	25.9 m/5.4	24.0		
		26.0			5.8	5.4	26.0		
		28.0			27.4 m/5.4	4.9	28.0		
		30.0				4.5	30.0		
		32.0	32.0			30.7 m/4.4	32.0		
		Reeves		2		Reeves			

2	Tow	er length (m)				24	1.4				Tower length (m)	
24.4	Jil	b length (m)		18	3.3			21	.3		Jib length (r	m)
3	T	ower angle	90°	80°	70°	60°	90°	80°	70 °	60°	Tower angl	e
Į,		7.0	7.2 m/13.0								7.0	
er		8.0	13.0				13.0				8.0	
Lei		9.0	13.0				13.0				9.0	
m Tower Length		10.0	13.0				13.0				10.0	
2		12.0	13.0				13.0				12.0	
		14.0	12.5	14.4 m/12.0			12.5	15.7 m/10.8			14.0	
	Œ	16.0	10.7	10.5			10.6	10.5			16.0	Working
		18.0	9.1	9.1			9.1	9.1			18.0	흜
	Radius	20.0	8.0	8.0	21.2 m/7.2		8.0	8.0			20.0	يج
	Working	22.0	20.2 m/7.9	7.4	6.9		7.1	7.1	23.0 m/6.4		22.0	Radius
	ş	24.0		6.6	6.2		23.1 m/6.7	6.6	6.1		24.0	s (m)
		26.0		24.4 m/6.4	5.6	27.4 m/4.8		6.0	5.5		26.0	=
		28.0			5.1	4.7		27.3 m/5.7	5.0	29.6 m/4.2	28.0	
		30.0			28.4 m/5.0	4.3			4.6	4.2	30.0	
		32.0				4.0			31.4 m/4.3	3.8	32.0	
		34.0				32.2 m/3.9				3.5	34.0	
		36.0								35.1 m/3.4	36.0	
		Reeves		2	2			2	2		Reeves	



Ratings according to Japanese Construction Codes for Mobile Cranes and Japanese Safety Ordinance on Cranes, etc. Ratings shown in ______ are determined by the strength of the tower or other structural components. Refer to notes P15 and P16.

Unit: metric ton

Counterweight: 24.6 t

Ŋ	Tow	er length (m)						27	. 4						Tower length	(m)
27.4	Jil	b length (m)		18	3.3			21	.3			24	.4		Jib length (r	m)
m Tower Length	T	ower angle	90°	80°	70°	60°	90°	80°	70°	60°	90°	80°	70°	60°	Tower angl	le
og'		7.0	7.2 m/13.0												7.0	
er		8.0	13.0				13.0				8.8 m/13.0				8.0	
Ler		9.0	13.0				13.0				13.0				9.0	
ŋgt		10.0	13.0				13.0				13.0				10.0	
-		12.0	13.0				13.0				13.0				12.0	
		14.0	12.5	15.0 m/11.8			12.5				12.1				14.0	
		16.0	10.7	10.5			10.6	16.2 m/10.3			10.4	17.6 m/9.3			16.0	
	Ē	18.0	9.1	9.1			9.1	9.1			9.0	9.0			18.0	۶
	sn (20.0	8.0	8.0			8.0	8.0			8.0	8.0			20.0	Working
	adi	22.0	20.2 m/7.9	7.3	22.3 m/6.6		7.1	7.1			7.1	7.1			22.0	g Z
	J P	24.0		6.5	6.0		23.1 m/6.7	6.5	5.8		6.4	6.4	25.8 m/5.3		24.0	Radius
	Working Radius (m)	26.0		24.9 m/6.2	5.4			5.9	5.3		5.8	5.8	5.2		26.0	l s
	š	28.0			5.0	29.0 m/4.2		27.9 m/5.4	4.8		26.1 m/5.6	5.3	4.7		28.0	3
		30.0			29.5 m/4.7	4.0			4.4	31.1 m/3.7		4.9	4.3		30.0	
		32.0				3.7			4.1	3.6		30.8 m/4.7	4.0	33.3 m/3.3	32.0	
		34.0				33.7 m/3.5			32.4 m/4.0	3.3			3.7	3.2	34.0	
		36.0								3.1			34.5 m/3.5	3.0	36.0	
		38.0								36.6 m/3.0				2.8	38.0	
		40.0												39.6 m/2.5	40.0	
		Reeves		- 2	2			2	2			2	2		Reeves	

ω	Tow	er length (m)								30).5								Tower length	h (m)
30.5	Jil	b length (m)		18	3.3			21	1.3			24	.4			27	7.4		Jib length	(m)
3	T	ower angle	90°	80°	70°	60°	90°	80°	70°	60°	90°	80°	70°	60°	90°	80°	70°	60°	Tower and	gle
QV		7.0	7.2 m/13.0																7.0	
er l		8.0	13.0				13.0				8.8 m/13.0								8.0	
m Tower Length		9.0	13.0				13.0				13.0				9.6 m/13.0				9.0	
)gt		10.0	13.0				13.0				13.0				13.0				10.0	
2	Ī	12.0	13.0				13.0				13.0				13.0				12.0	
		14.0	12.5	15.5 m/10.9			12.5				12.1				12.1				14.0	
		16.0	10.7	10.5			10.6	16.8 m/9.9			10.5				10.2				16.0	
	Ē	18.0	9.1	9.1			9.1	9.1			9.1	18.1 m/9.1			8.8	19.4 m/8.1			18.0	×
	Working Radius (m)	20.0	8.0	8.0			8.0	8.0			8.0	8.0			8.0	7.8			20.0	Working Radius (m)
	adi	22.0	20.2 m/7.9	7.2	23.3 m/6.0		7.2	7.2			7.1	7.1			7.2	7.0			22.0	J GF
	P B	24.0		6.4	5.8		23.1 m/6.7	6.4	25.1 m/5.3		6.4	6.3			6.4	6.2			24.0	adi
	훈	26.0		25.4 m/6.0	5.2			5.8	5.1		5.8	5.7	26.8 m/4.8		5.8	5.6			26.0	us (
	ĕ	28.0			4.8			5.3	4.7		26.1 m/5.6	5.2	4.5		5.3	5.1	28.6 m/4.3		28.0	⋾
	Ī	30.0			4.4	30.5 m/3.7		28.4 m/5.2	4.3			4.8	4.2		29.0 m/4.9	4.7	4.1		30.0	
		32.0			30.5 m/4.3	3.5			3.9	32.7 m/3.2		31.3 m/4.6	3.8			4.3	3.7		32.0	
		34.0				3.2			33.5 m/3.7	3.1			3.5	34.8 m/2.7		4.0	3.4		34.0	
		36.0				35.2 m/3.0				2.9			3.3	2.7		34.2 m/3.9	3.2	37.0 m/2.4	36.0	
	ĺ	38.0								2.7			36.4 m/3.2	2.5			2.9	2.4	38.0	
		40.0								38.2 m/2.5				2.3			39.3 m/2.8	2.2	40.0	
		42.0												41.1 m/2.1				2.0	42.0	
	Ī	44.0																1.9	44.0	
	Ī	46.0																44.1 m/1.8	46.0	
	Ī	Reeves			2				2				2			- 2	2		Reeves	



Note:
Ratings according to Japanese Construction Codes for Mobile Cranes and Japanese Safety Ordinance on Cranes, etc.
Ratings shown in ______ are determined by the strength of the tower or other structural components.
Refer to notes P15 and P16.

Unit: metric ton

Counterweight: 24.6 t

ည္ To	ower length (m)										33	3.5										Tower length	(m)
≅	Jib length (m)		18	3.3			21	.3			24	1.4			27	7.4			30	.5		Jib length	(m)
В	Tower angle	90°	80°	70°	60°	90°	80°	70°	60°	90°	80°	70°	60°	90°	80°	70°	60°	90°	80°	70°	60°	Tower and	gle
٥ آ	7.0	7.2 m/13.0																				7.0	
er er	8.0	13.0				13.0				8.8 m/13.0												8.0	
Ler	9.0	13.0				13.0				13.0				9.6 m/13.0								9.0	
)gt	10.0	13.0				13.0				13.0				13.0				10.4m/11.6				10.0	
>	12.0	13.0				13.0				13.0				13.0				11.6				12.0	
	14.0	12.5				12.5				12.2				12.1				10.6				14.0	
	16.0	10.7	10.3			10.5	17.3 m/9.4			10.5				10.2				9.6				16.0	
	18.0	9.1	9.0			9.1	9.0			9.1	18.6 m/8.5			8.8	19.9 m/7.8			8.7				18.0	
	20.0	8.0	7.9			8.0	7.9			8.0	7.8			7.9	7.7			7.6	21.2 m/7.1			20.0	
í E	22.0	20.2 m/7.9	7.0			7.2	7.0			7.1	7.0			7.0	6.8			6.9	6.8			22.0	≤
Working Radius (m)	24.0		6.3	24.4 m/5.4		23.1 m/6.7	6.3			6.4	6.2			6.3	6.1			6.1	6.0			24.0	Working Radius
adi	26.0		5.7	5.0			5.7	26.1 m/4.8		5.8	5.6	27.8 m/4.3		5.7	5.5			5.6	5.5			26.0	J g
	28.0			4.5			5.2	4.4		26.1 m/5.6	5.1	4.3		5.2	5.0	29.7 m/3.9		5.1	5.0			28.0	adi
į	30.0			4.2			28.9 m/4.9	4.1			4.7	3.9		29.0 m/4.9	4.6	3.8		4.7	4.5	31.4 m/3.5		30.0	su (
×	32.0			31.6 m/3.9	3.0			3.7			31.9 m/4.4	3.6			4.2	3.5		4.2	4.1	3.4		32.0	3
	34.0				2.9			3.5	34.2 m/2.6			3.3			3.9	3.3			3.8	3.1		34.0	
	36.0				2.7			34.5 m/3.4	2.5			3.0	36.3 m/2.2		34.8 m/3.8	3.0			3.6	2.9		36.0	
	38.0				36.8 m/2.5				2.3			37.4 m/2.9	2.2			2.8	38.5 m/1.9		37.8 m/3.4	2.7		38.0	
	40.0								39.7 m/2.1				2.0			2.6	1.9			2.5	40.6 m/1.6	40.0	
	42.0												1.9			40.4 m/2.5	1.8			2.3	1.6	42.0	
	44.0												42.6 m/1.7				1.6			43.3 m/2.1	1.5	44.0	
	46.0																45.6 m/1.4				1.3	46.0	
	48.0																				1.1	48.0	
	Reeves			2				2				2			:	2				2		Reeves	

ယ္	Tow	er length (m)										36	6.6										Tower length	(m)
36.6	Jik	length (m)		18	3.3			21	.3			24	1.4			27	7.4			30).5		Jib length	(m)
3	To	ower angle	90°	80°	70°	60°	90°	80°	70°	60°	90°	80°	70°	60°	90°	80°	70°	60°	90°	80°	70°	60°	Tower and	jle
ο̈́		7.0	7.2 m/13.0																				7.0	
è		8.0	13.0				13.0				8.8 m/13.0												8.0	1
E		9.0	13.0				13.0				13.0				9.6 m/13.0								9.0	1
m Tower Length		10.0	13.0				13.0				13.0				13.0				10.4m/11.6				10.0	1
5		12.0	13.0				13.0				13.0				12.6				11.6				12.0	1
		14.0	12.5				12.4				12.2				12.1				10.6				14.0	1
		16.0	10.7	16.6 m/9.9			10.6	17.4 m/9.0			10.5				10.2				9.6				16.0	1
		18.0	9.1	8.9			9.1	8.9			9.1	19.1 m/8.1			8.8				8.7				18.0	1
		20.0	8.0	7.8			8.0	7.8			8.0	7.7			7.8	20.4 m/7.4			7.7	21.7 m/6.7			20.0	1
	Ξ	22.0	20.2 m/7.9	6.9			7.1	6.9			7.1	6.8			7.0	6.7			6.9	6.6			22.0	§
) sr	24.0		6.2	25.4 m/4.9		23.1 m/6.7	6.2			6.4	6.1			6.2	6.0			6.3	5.9			24.0	Working Radius (m)
	adji	26.0		5.6	4.7			5.6	27.2 m/4.4		5.8	5.5			5.6	5.4			5.6	5.3			26.0	릴
	g R	28.0		26.5 m/5.4	4.3			5.1	4.2		26.1 m/5.6	5.0	28.9 m/3.9		5.1	4.9			5.1	4.9			28.0	adi
	Working Radius	30.0			4.0			29.5 m/4.8	3.8			4.6	3.7		29.0 m/4.9	4.5	30.7 m/3.5		4.6	4.4			30.0	l s
	8	32.0			3.6	33.5 m/2.6			3.5			4.3	3.4			4.2	3.3		4.2	4.1	32.4 m/3.0		32.0	3
		34.0			32.6 m/3.5	2.6			3.3	35.7 m/2.2		32.4 m/4.2	3.1			3.8	3.1			3.7	2.9		34.0	1
		36.0				2.4			35.5 m/3.0	2.2			2.9	37.9 m/1.8		35.3 m/3.7	2.8			3.4	2.7		36.0	1
		38.0				2.2				2.0			2.7	1.8			2.6			3.1	2.5		38.0	
		40.0				38.3 m/2.0				1.9			38.5 m/2.6	1.7			2.4	1.5		38.3 m/3.2	2.3		40.0	1
		42.0								41.2 m/1.7				1.6			41.4 m/2.2	1.4			2.1	42.2 m/1.2	42.0	
		44.0												1.4				1.3			2.0	1.2	44.0	1
		46.0												44.2 m/1.3				1.2			44.4 m/1.8	1.1	46.0	1
		48.0																47.1 m/1.1					48.0	1
		Reeves			2				2	•			2	•		:	2				2		Reeves	



Note:
Ratings according to Japanese Construction Codes for Mobile Cranes and Japanese Safety Ordinance on Cranes, etc.
Ratings shown in ______ are determined by the strength of the tower or other structural components.
Refer to notes P15 and P16.

Unit: metric ton

Counterweight: 24.6 t

Tov	ver length (m)										39).6									Tower length	ı (m)
Ji T	b length (m)		18	3.3			21	.3			24	1.4			27	'.4			30.5		Jib length	(m)
Т	ower angle	90°	80°	70°	60°	90°	80°	70°	60°	90°	80°	70°	60°	90°	80°	70°	60°	90°	80°	70°	Tower and	gle
2	7.0	7.2 m/13.0																			7.0	
3	8.0	13.0				13.0				8.8 m/13.0											8.0	
	9.0	13.0				13.0				13.0				9.6 m/11.8							9.0	
	10.0	13.0				13.0				12.8				11.6				10.4m/10.4			10.0	
,	12.0	13.0				13.0				12.0				10.9				10.0			12.0	
	14.0	12.5				12.5				11.5				10.5				9.5			14.0	
	16.0	10.7	17.1 m/9.2			10.7				10.4				9.9				9.2			16.0	
	18.0	9.1	8.7			9.1	18.4 m/8.5			9.0	19.7 m/7.7			8.8				8.8			18.0	
	20.0	8.0	7.6			8.0	7.6			7.9	7.5			7.8	21.0 m/7.0			7.7			20.0	
Ξ	22.0	20.2 m/7.9	6.8			7.2	6.8			7.1	6.6			7.0	6.6			6.8	22.3 m/6.4		22.0	or
ins	24.0		6.1			23.1 m/6.7	6.1			6.3	6.0			6.2	5.9			6.2	5.8		24.0	Working
Rac	26.0		5.5	26.5 m/4.4			5.5			5.7	5.3			5.6	5.3			5.5	5.2		26.0	Ra
ing	28.0		27.0 m/5.2	4.1			5.0	28.2 m/3.8		26.1 m/5.6	4.9			5.1	4.8			5.1	4.7		28.0	Ē
Working Radius (m)	30.0			3.7			4.6	3.6			4.4	3.5		29.0 m/4.9	4.4	31.7 m/3.1		4.7	4.3		30.0	Radius (m)
>	32.0			3.4	35.1 m/2.0			3.3			4.1	3.2			4.0	3.1		4.2	3.9	33.5 m/2.6	32.0	_ =
	34.0			33.6 m/3.1	2.0			3.0			32.9 m/4.0	2.9			3.7	2.8			3.6	2.7	34.0	
	36.0				1.8			2.8	37.2 m/1.6			2.7			35.9 m/3.5	2.6			3.3	2.4	36.0	
	38.0				39.8 m/1.5			36.6 m/2.7	1.6			2.5	39.4 m/1.3			2.4			3.1	2.2	38.0	
	40.0								1.5			39.5 m/2.2	1.3			2.2			38.8 m/3.0	2.0	40.0	
	42.0								1.4				1.2			2.0	1.1			1.9	42.0	
	44.0								42.7 m/1.2				1.1			42.5 m/1.9	1.0			1.7	44.0	
	46.0																			45.4 m/1.5	46.0	
	Reeves		- :	2				2				2			2)			2	1	Reeves	

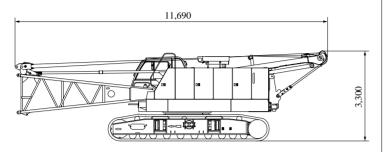
4.	Tov	ver length (m)									42.7									Tower length	(m)
42.7	Jil	b length (m)		18	.3			21	.3			24.4			27.4			30.5		Jib length	(m)
m Tower Length	T	ower angle	90°	80°	70°	60°	90°	80°	70°	60°	90°	80°	70°	90°	80°	70°	90°	80°	70°	Tower and	gle
O _M		7.0	7.2 m/13.0																	7.0	
er		8.0	13.0				13.0				8.8 m/12.2									8.0	
Ler		9.0	13.0				13.0				12.0			9.6 m/10.6						9.0	
ıgt		10.0	13.0				13.0				11.5			10.3			10.4 m/9.2			10.0	
<u> </u>		12.0	13.0				12.8				11.0			9.9			9.1			12.0	
		14.0	12.4				12.1				10.3			9.4			8.7			14.0	
		16.0	10.6	17.6 m/8.7			10.5				9.8			8.9			8.2			16.0	
		18.0	9.1	8.5			9.1	18.9 m/7.9			9.1			8.6			7.6			18.0	
		20.0	8.0	7.5			8.0	7.4			8.0	20.2 m/7.2		7.9	21.5 m/6.5		7.4			20.0	
	Ē	22.0	20.2 m/7.9	6.7			7.1	6.5			7.1	6.5		7.0	6.3		6.8	22.8 m/6.0		22.0	إ
) sn	24.0		6.0			23.1 m/6.7	5.9			6.4	5.8		6.3	5.7		6.3	5.6		24.0	<u> </u> ₹
	adi	26.0		5.4	27.5 m/3.9			5.3			5.8	5.2		5.7	5.1		5.5	5.0		26.0	Jg F
	P.	28.0		27.6 m/5.0	3.9			4.8	29.3 m/3.4		26.1 m/5.6	4.7		5.2	4.6		5.1	4.5		28.0	adi
	Working Radius (m)	30.0			3.5			4.4	3.4			4.3	31.0 m/2.9	29.0 m/4.9	4.2		4.5	4.1		30.0	Working Radius (m)
	ĕ∣	32.0			3.2			30.5 m/4.3	3.1			4.0	2.9		3.9	32.8 m/2.5	4.2	3.8		32.0	੩
		34.0			3.0				2.8			33.4 m/3.8	2.7		3.6	2.5		3.5	34.5 m/2.2	34.0	
		36.0			34.7 m/2.8	36.6 m/1.5			2.6				2.4		3.3	2.3		3.2	2.2	36.0	
		38.0				1.5			37.6 m/2.3	38.7 m/1.2			2.2		36.4 m/3.2	2.1		3.0	2.0	38.0	
		40.0				1.3				1.2			2.1			2.0		39.3 m/2.9	1.8	40.0	
		42.0				41.3 m/1.1				1.0			40.6 m/1.9			1.8			1.6	42.0	
		44.0														43.5 m/1.6			1.5	44.0	
		46.0																	1.4	46.0	
		48.0																	46.5 m/1.3	48.0	
		Reeves		2	2				2			2			2			2	Ċ	Reeves	

Note:
Ratings according to Japanese Construction Codes for Mobile Cranes and Japanese Safety Ordinance on Cranes, etc.
Ratings shown in ______ are determined by the strength of the tower or other structural components.
Refer to notes P15 and P16.

PARTS AND ATTACHMENTS

Base Machine

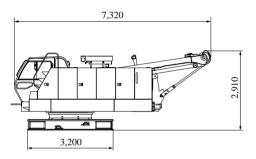
With boom base, crawlers, gantry, lower spreader, upper spreader, wire rope for main and boom hoist winches Weight: 45,900 kg Width: 3,200 mm



Base Machine

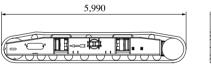
With carbody, gantry, lower spreader, wire rope for main and boom hoist winches

Weight: 30,400 kg Width: 3,200 mm



Crawler

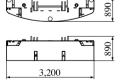
Weight: 7,000 kg





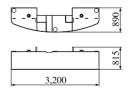
Counterweight A

Weight: 9,100 kg



Counterweight B

Weight: 9,000 kg



Counterweight C

Weight: 3,300 kg

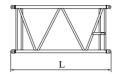


Counterweight D

Weight: 3,200 kg



Insert Boom



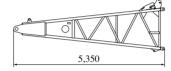


	L (mm)	Weight (kg)*
3.0m	3,160	310
6.1m	6,210	525
9.1m	9,260	745

^{*}with boom guy cables

Boom Base

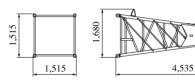
Weight: 1,130 kg





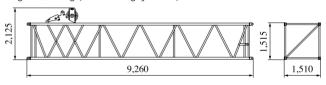
Boom Top

Weight: 1,110 kg (with boom guy cables)



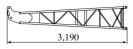
9.1 m Special Insert Boom for Tower

Weight: 1,240 kg (with boom guy cables)



Dimensions: mm Weight: kg

Jib Base (For Crane) Weight: 125 kg



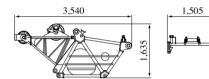


Jib Top (For Crane) Weight: 145 kg

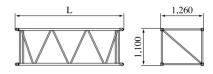




Tower Cap Weight: 725 kg



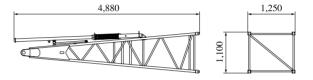
Insert Tower Jib



	L (mm)	Weight (kg)
3.0 m	3,120	140
6.1 m	6,160	245

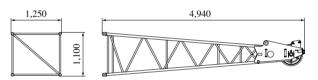
Tower Jib Base

Weight: 450 kg



Tower Jib Top

Weight: 310 kg



Other Attachments

Attachments	Weight	Dimensions (L x W x H)
6.1 m insert boom with lug (for crane)	545 kg (with guy cables)	6,210 mm x 1,510 mm x 1,645 mm
9.1 m insert boom with lug (for crane)	765 kg (with guy cables)	9,260 mm x 1,510 mm x 1,645 mm
6.1 m insert jib (for crane)	140 kg	6,160 mm x 675 mm x 625 mm
Jib strut (for crane)	190 kg	3,700 mm x 500 mm x 670 mm
Tower jib strut	790 kg	4,990 mm x 1,590 mm x 840 mm
Auxiliary sheave	140 kg	1,325 mm x 540 mm x 1,285 mm
Upper spreader for boom hoist	280 kg	1,580 mm x 680 mm x 300 mm
Upper spreader for tower jib	225 kg	640 mm x 995 mm x 620 mm
Lower spreader for tower jib	335 kg	1,480 mm x 1,380 mm x 455 mm
70-ton hook	800 kg	535 mm x 1,770 mm x 600 mm
32-ton hook	500 kg	330 mm x 1,530 mm x 590 mm
19-ton hook	400 kg	385 mm x 1,270 mm x 590 mm
7-ton ball hook	160 kg	ø 300 mm x 815 mm

Note: Estimated weights may vary \pm 2%.



Standard Equipment

Upper structure/Lower structure

Counterweight: 24.6 ton (total weight)

800 mm shoe crawlers

Batteries (2-12V,136 Ah/5 HR)

Gantry raising/lowering cylinder

Electric hand throttle grip

Variable boom hoist speed controller

Variable main/aux. hoist speed controller

Swing neutral-free/brake select switch

Side deck for cab

Steps (crawlers)

Two front working lights

Two rear view mirrors

Tools (for routine maintenance)

Cable roller (for boom)

Upper spreader storage guide

Cab Control

Air conditioner

Luggage box

Cup holder

Ashtray

Cigar lighter

Intermittent wiper & window washer (skylight and front window)

Sun visor

Roof blind

Floor mat (cloth)

Foot rest

Shoe tray

Safety Device

Load Moment Indicator (with boom lowering slow stop function)

LMI release key (for hook over-hoist prevention device and

boom over-hoist prevention device)

LCD multi display

Ultimate stop function for boom over-hoist

Function lock lever

Propel lever lock

Mechanical drum lock pawl (main, aux. and boom hoist)

Signal horn

Swing parking brake

Mechanical swing lock pin (two positions)

Swing flashers/warning buzzer

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