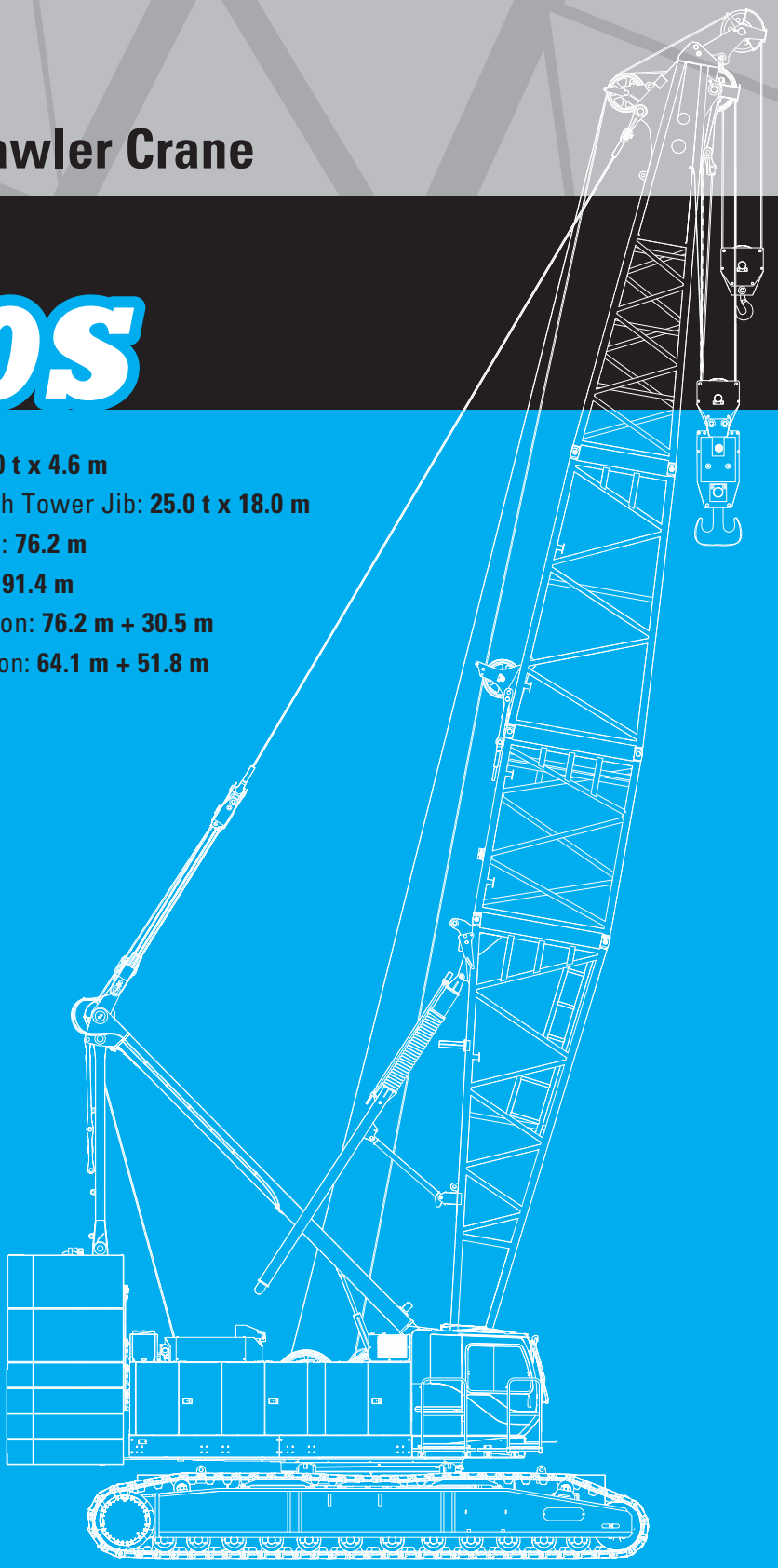
Hydraulic Crawler Crane

7250S

Model : 7250S

Max. Lifting Capacity: **250 t x 4.6 m**
Max. Lifting Capacity With Tower Jib: **25.0 t x 18.0 m**
Max. Crane Boom Length: **76.2 m**
Max. Long Boom Length: **91.4 m**
Max. Fixed Jib Combination: **76.2 m + 30.5 m**
Max. Tower Jib Combination: **64.1 m + 51.8 m**



KOBELCO

7250S
CONTENTS

SPECIFICATIONS

Power Plant

Model: HINO P11C-VH
Type: 4 cycle, water-cooled, vertical in-line 6, direct injection, turbo-charger, intercooler
Displacement: 10,520 liters
Rated power: 271 kW/1,850 min^{-1}
Max. Torque: 1,469 N·m/1,400 min^{-1}
Cooling System: Water-cooled
Starter: 24 V-6 kW
Radiator: Corrugated type core, thermostatically controlled
Air cleaner: Dry type with replaceable paper element
Throttle: Twist grip type hand throttle, electrically actuated
Fuel filter: Replaceable paper element
Batteries: Two 12 V x 136 Ah/5 HR capacity batteries, series connected
Fuel tank capacity: 400 liters

Hydraulic System

Main pumps: 4 variable displacement piston pumps
Control: Full-flow hydraulic control system for infinitely variable pressure to all winches, propel and swing. 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
Max. relief valve pressure:
Load hoist, boom hoist and propel system: 31.9 MPa
Swing system: 27.5 MPa
Control system: 5.4 MPa
Hydraulic Tank Capacity: 650 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: Double drum, grooved for 22 mm dia. wire rope
Line Speed: Single line on first drum layer
Hoisting/Lowering: 26 to 2 m/min
Boom hoisting/lowering: 22 mm x 280 m
Boom guy line: 38 mm
Boom backstops: Required for all boom length

Load Hoisting System

Front and rear drums for load hoist powered by a hydraulic variable plunger motors, driven through planetary reducers.
Negative Brake: A spring-set, hydraulically released multiple-disc brake is mounted on the hoist motor and operated through a counter-balance valve. (Positive free fall brake is optional)
Drum Lock: External ratchet for locking drum
Drums:
Front Drums:
620 mm P.C.D x 841 mm wide drum, grooved for 28 mm wire rope. Rope capacity is 390 m working length and 470 m storage length.
Rear Drum: 620 mm P.C.D x 576 mm, grooved for 28 mm wire rope. Rope capacity is 220 m working length and 318 m storage length.
Diameter of wire rope
Main winch: 28 mm x 390 m
Aux. winch: 28 mm x 220 m
Line Speed*:
Hoisting/lowering: 110 to 3 m/min
Line Pull:
Max. Line Pull* : 251 kN {25.6 tf}
(Referential performance)
Rated Line Pull: 132 kN {13.5 tf}
*Single line on first drum layer

Swing System

Swing unit is powered by hydraulic motor driving spur gears through planetary reducers (2 set), 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, four position lock for transportation
Swing Speed: 2.2 min^{-1}

Upper Structure

Torsion-free precision machined upper frame. All components are located clearly and service friendly. Engine will with low noise level.
Counterweight: 97.1 ton

Cab & Control

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

Cab fittings:
Air conditioner, convenient compartment (for tool), cup holder, cigarette lighter, sun visor, roof blind, tinted glass, floor mat, footrest, and shoe tray

Lower Structure

Steel-welded carbody with axles. Crawler assemblies are designed with quick disconnect feature for individual removal as a unit from axles. Crawler belt tension is maintained by hydraulic jack force on the track adjusting bearing block.
Carbodyweight: 23.1 ton
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.
Shoe (flat): 1,070 mm wide each crawler
Max. gradeability: 30 %

Weight

Including upper and lower machine, 97.1 ton counterweight and 23.1 ton carbody weight, basic boom (or basic boom + basic jib), hook, and other accessories.
Weight: 212 ton
Ground pressure: 123 kPa

Attachment

Boom & Jib:
Welded lattice construction using tubular, high-tensile steel chords with pin connection between sections.

Boom and Jib length

	Min. Length (Min. combination)	Max. Length (Max. combination)
Crane Boom	15.2 m	76.2 m
Fixed Jib	42.7 m + 12.2 m	76.2 m + 30.5 m

Main Specifications (Model: 7250S)

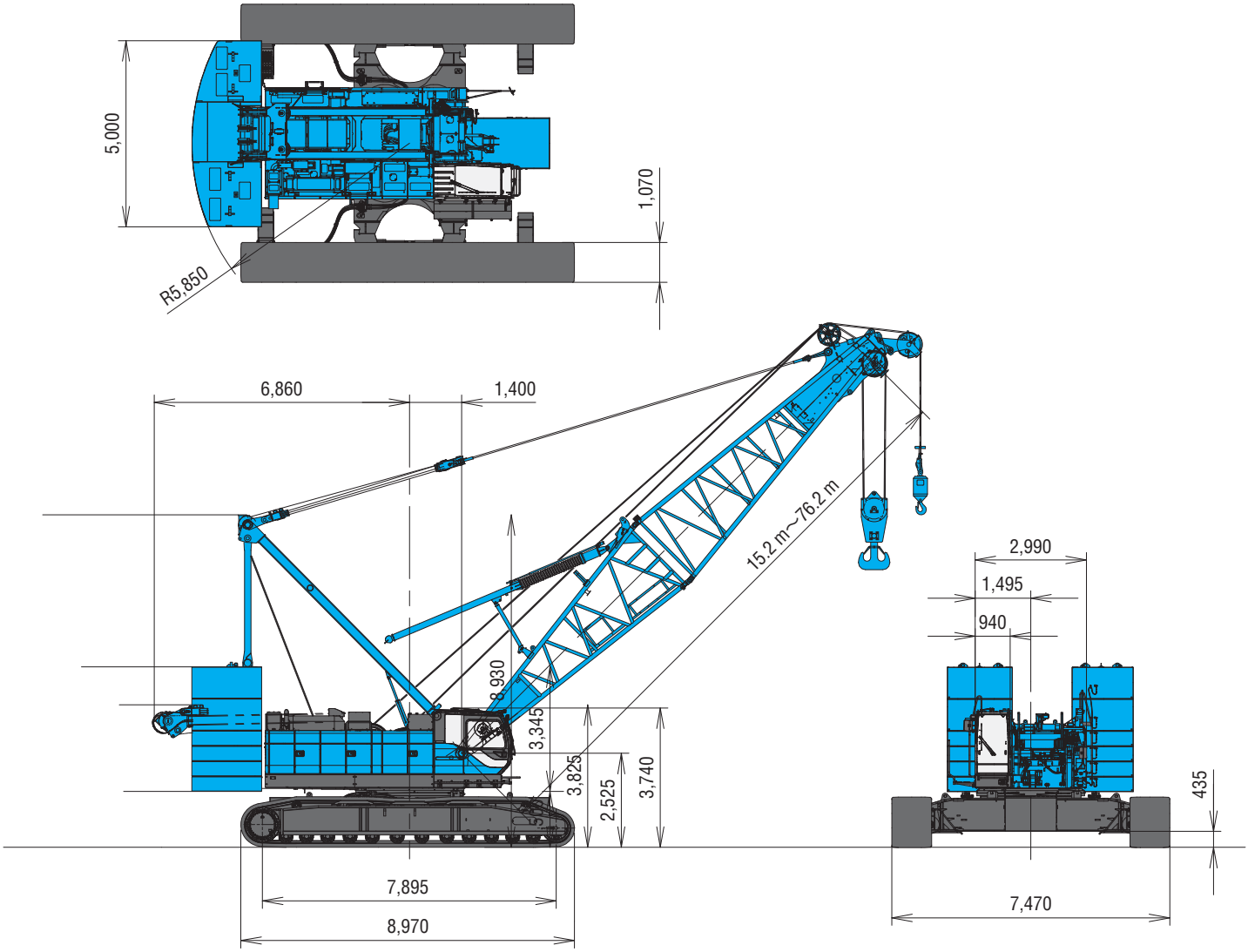
Crane Boom	
Max. Lifting Capacity	250 t x 4.6 m
Max. Length	76.2 m
Fixed Jib	
Max. Lifting Capacity	22.7 t x 15.0 m
Max. Combination	76.2 m + 30.5 m
Long Boom	
Max. Lifting Capacity	37.5 t x 14.4 m
Max. Length	91.4 m
Tower Jib	
Max. Lifting Capacity	25.0 t x 18.0 m
Max. Jib Length	51.8 m
Max. Combination	64.1 m + 51.8 m
Main & Aux. Winch	
Max. Line Speed (1st layer)	110 m/min
Rated Line Pull (Single line)	132 kN {13.5 tf}
Wire Rope Diameter	28 mm
Wire Rope Length	390 m (Main), 220 m (Aux.)
Brake Type (Free fall)	Wet-type multiple disc brake (Optional)
Working Speed	
Swing Speed	2.2 min^{-1} {rpm}
Travel Speed	1.0/0.5 km/h

Power Plant	
Model	HINO P11C-VH
Engine Output	271 kW/1,850 min^{-1}
Fuel Tank	400 liters
Hydraulic System	
Main Pumps	4 variable displacement
Max. Pressure	31.9 MPa {325 kgf/cm^2}
Hydraulic Tank Capacity	650 liters
Self-Removal Device	
	NA
Weight	
Operating Weight	212 t *1
Ground Pressure	123 kPa
Counterweight	97,100 kg
Transport Weight	45,200 kg *2

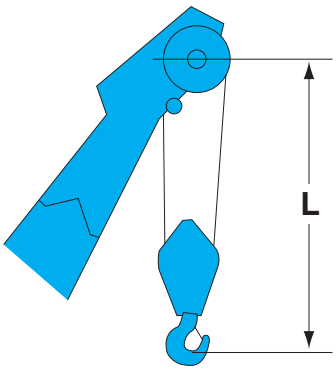
Units are SI units. { } indicates conventional units.
Line speeds in table are for light loads. Line speed varies with load.
*1 Including upper and lower machine, 97.1 ton counterweight, 23.1 ton carbody weight, basic boom, hook, and other accessories.
*2 Base Machine with boom base, gantry, wire ropes (front/boom hoist)

GENERAL DIMENSIONS

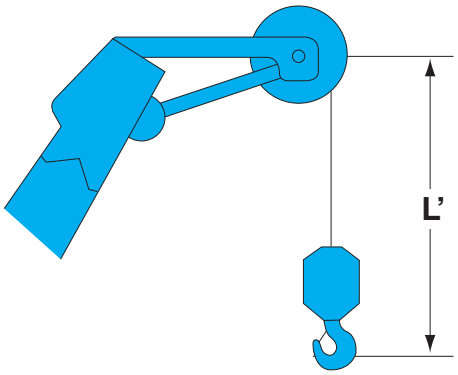
(Unit: mm)



Limit of Hook Lifting



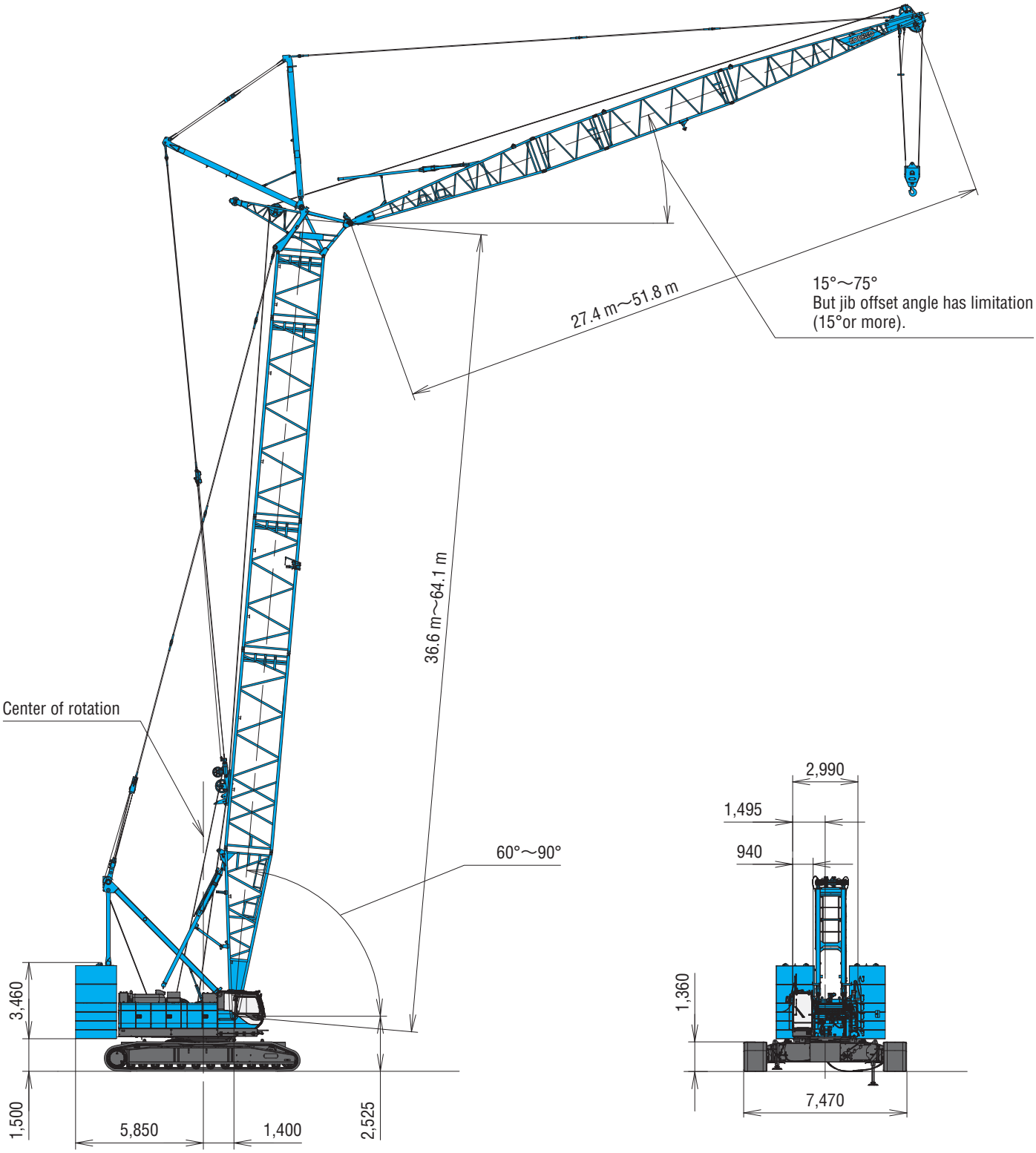
Hook	L
250 t hook	5.3 m
150 t hook	5.9 m
70 t hook	4.9 m
35 t hook	4.7 m



Hook	L'
Ball hook	3.2 m

Tower Jib

(Unit: mm)



This catalog may contain photographs of machines with specifications, attachments and optional equipment.

Crane Boom Arrangements

Boom length m (ft)	Boom arrangement
15.2 (50)	B T
18.3 (60)	B 10 T
21.3 (70)	※ B 10 10 T B 20 T
24.4 (80)	※ B 10 20 T
27.4 (90)	※ B 10 10 20 T B 40 T B 20 20 T
30.5 (100)	※ B 10 20 20 T B 10 40 T
33.5 (110)	※ B 10 10 20 20 T B 10 10 40 T B 20 40 T
36.6 (120)	※ B 10 20 40 T
39.5 (130)	※ B 10 10 20 40 T B 40 40 T B 20 20 40 T
42.7 (140)	※ B 10 20 20 40 T B 10 40 40 T
45.7 (150)	※ B 10 10 20 20 40 T B 10 10 40 40 T B 20 40 40 T

Boom length m (ft)	Boom arrangement
48.8 (160)	※ B 10 20 40 40 T
51.8 (170)	※ B 10 10 20 40 40 T B 20 20 40 40 T B 40 40 40 T
54.9 (180)	※ B 10 20 20 40 40 T B 10 40 40 40 T
57.9 (190)	※ B 10 10 20 20 40 40 T B 10 10 40 40 40 T B 20 40 40 40 T
61.0 (200)	※ B 10 20 40 40 40 T
64.0 (210)	※ B 10 10 20 40 40 40 T B 20 20 40 40 40 T B 40 40 40 40 T
67.1 (220)	※ B 10 20 20 40 40 40 T B 10 40 40 40 40 T
70.1 (230)	※ B 10 10 20 20 40 40 40 T B 10 10 40 40 40 40 T B 20 40 40 40 40 T
73.2 (240)	※ B 10 20 40 40 40 40 T
76.2 (250)	※ B 10 10 20 40 40 40 40 T

Symbol	Boom Length	Remarks
B	7.6 m	Boom Base
T	7.6 m	Boom Top
10	3.0 m	Insert Boom
20	6.1 m	Insert Boom
40	12.2 m	Insert Boom

↗ 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.

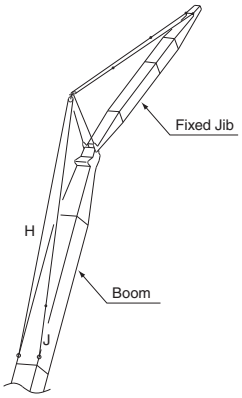
Long Boom Arrangements

Boom length m (ft)	Boom arrangement
73.2 (240)	B 40 40 40 40 TB 10A T
76.2 (250)	※ B 40 40 40 40 TB 10A 10 T
79.2 (260)	※ B 40 40 40 40 TB 10A 10 10 T B 40 40 40 40 TB 10A 20 T
82.3 (270)	※ B 40 40 40 40 TB 10A 10 20 T B 40 40 40 40 TB 10A 30 T
85.3 (280)	※ B 10 40 40 40 40 TB 10A 10 20 T B 10 40 40 40 40 TB 10A 30 T
88.4 (290)	※ B 10 40 40 40 40 TB 10A 10 10 20 T B 10 40 40 40 40 TB 10A 10 30 T
91.4 (300)	※ B 10 40 40 40 40 TB 10A 10 10 30 T B 10 40 40 40 40 TB 10A 20 30 T

Symbol	Long Boom Length	Remarks
B	7.6 m	Boom Base
T	9.1 m	Tower Jib Top
10	3.0 m	Insert Boom
40	12.2 m	Insert Boom
TB	4.6 m	Tapered Boom
10A	3.0 m	Relay Jib
10	3.0 m	Tower Insert Jib
20	6.1 m	Tower Insert Jib
30	9.1 m	Tower Insert Jib

※ Indicates the most flexible combination of insert long booms, which can be modified to form all shorter long boom arrangements.

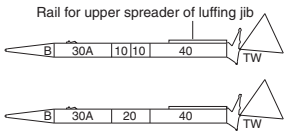
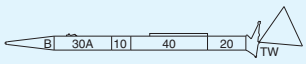
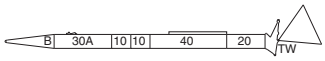
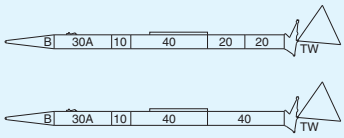
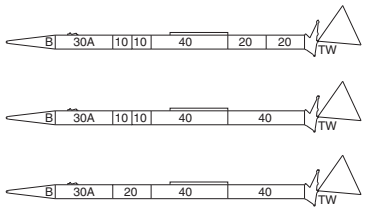
Fixed Jib Arrangements

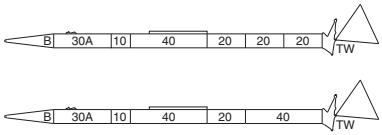
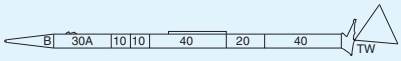
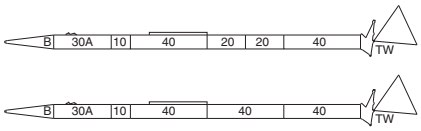
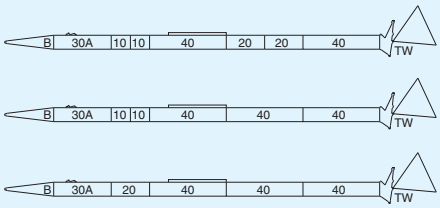
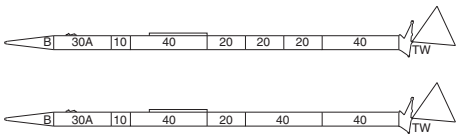


Crane boom length	Jib length m (ft)	Jib arrangement
42.7 m ～ 76.2 m	12.2 (40)	B 10 T
	18.3 (60)	B 10 20 T
	24.4 (80)	B 10 20 20 T
	30.5 (100)	B 10 20 20 20 T

Symbol	Jib Length	Remarks
B	4.6 m	Jib Base
T	4.6 m	Jib Top
10	3.0 m	Insert Jib
20	6.1 m	Insert Jib

Tower Arrangements

Tower length m (ft)	Tower arrangement
36.6 (120)	
39.7 (130)	※ 
42.7 (140)	※ 
45.8 (150)	※ 
48.8 (160)	※ 

Tower length m (ft)	Tower arrangement
51.9 (170)	※ 
54.9 (180)	※ 
58.0 (190)	※ 
61.0 (200)	※ 
64.1 (210)	※ 

Symbol	Tower Length	Remarks
B	7.6 m	Boom Base
TW	1.6 m	Tower Cap
10	3.0 m	Insert Boom
20	6.1 m	Insert Boom
30A	9.1 m	Special Insert Boom for Tower
40	12.2 m	Insert Boom

※ Indicates the most flexible combination of insert towers, which can be modified to form all shorter tower arrangements.

Tower Jib Arrangements

Jib length m (ft)	Jib arrangement
27.4 (90)	JB 10A 20 JT
30.5 (100)	※ JB 10A 10 20 JT JB 10A 30 JT
33.5 (110)	※ JB 10A 10 10 20 JT JB 10A 10 30 JT
36.6 (120	※ JB 10A 10 10 30 JT JB 10A 20 30 JT
39.6 (130)	※ JB 10A 10 20 30 JT JB 10A 30 30 JT

Jib length m (ft)	Jib arrangement
42.7 (140)	※ JB 10A 10 10 20 30 JT JB 10A 10 30 30 JT
45.7 (150)	※ JB 10A 10 10 30 30 JT JB 10A 20 30 30 JT
48.8 (160)	※ JB 10A 10 20 30 30 JT
51.8 (170)	※ JB 10A 10 10 20 30 30 JT

Symbol	Tower Jib Length	Remarks
JB	9.1 m	Tower Jib Base
JT	9.1 m	Tower Jib Top
10A	3.0 m	Relay Jib
10	3.0 m	Tower Insert Jib
20	6.1 m	Tower Insert Jib
30	9.1 m	Tower Insert Jib

※ Indicates the most flexible combination of insert tower jibs, which can be modified to form all shorter tower jib arrangements.

⌒ mark: indicates position where cable rollers attached.

Tower and Jib Combinations and Allowable Tower Angle

Tower length \ Jib length		27.4 m	30.5 m	33.5 m	36.6 m	39.6 m	42.7 m	45.7 m	48.8 m	51.8 m	Pillow plate
36.6 m		90°-60°	90°-60°	—	—	—	—	—	—	—	—
39.7 m		90°-60°	90°-60°	90°-60°	—	—	—	—	—	—	—
42.7 m		90°-60°	90°-60°	90°-60°	90°-60°	—	—	—	—	—	—
45.8 m		90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	—	—	—	—	—
48.8 m		90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	—	—	—	—
51.9 m		90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	—	—	—
54.9 m		90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	—	—
58.0 m		90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	90°-70°	—
61.0 m		90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	90°-70°	—
64.1 m		90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	90°-60°	90°-70°	90°-70°	90°-70°	Need
Hook	35 ton hook	○	○	○	○	○	○	○	○	○	
	Ball hook	×	○	○	○	○	○	○	○	○	

○ : Available
× : Not available