

**P&H**

**KOBELCO**



# 9170-TC

## 150-M ton Truck Crane

 **KOBE STEEL, LTD.**

Bulletin No. 9170-TC-105

# 150 metric ton capacity to handle the biggest jobs with ease.

**Max. lifting capacity: 150 metric ton × 4.0m**  
**Max. boom length: 88.39m**  
**Max. boom & jib length: 82.30m + 27.43m**

## Increased operational accuracy at all speeds

- The 9170-TC uses a combination of a torque converter with an output shaft governor (secondary governor) and a 2-speed power shift transmission to provide a wider speed control range.
- Ultra low-speed operation in the low speed range allows more precise inching for bolt fitting, heavy-load work, and long boom work. In addition, the lower speed improves engine brake efficiency for an extra measure of safety. The transmission shifting is controlled by simple snap-switch.
- The secondary governor automatically adjusts fuel supply according to the load to reduce fuel consumption.
- The secondary governor is set so that the torque converter output shaft runs at 1,200 rpm. This keeps the engine running at under its rated rpm during light-load operation to extend engine life and reduce noise.

## Magnetorque® for smoother swing

"Magnetorque" is a reliable system providing excellent operational performance. Its use provides smoother and softer swing while eliminating shocks when starting and stopping. Speed control is also easier and control feedback is precise.

## Selection of neutral braking and free-fall

Two operating methods are available for both the front and rear drums when the control lever is set in neutral. One provides automatic braking, while the other provides free-fall which is controlled by the brake pedal. The desired method can be selected according to work requirements.



## Easy operation

The control uses a reliable, full-flow hydraulic unit equipped with an accumulator. Operation is easy and stable. Response is excellent.

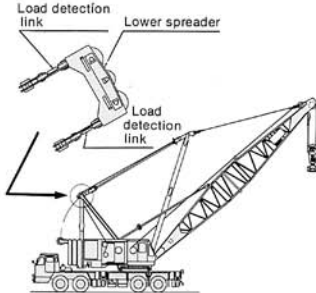
## Wide, comfortable and safe cab

- The cab is wider and specially engineered for optimum visibility. It is separated from the machinery cab to reduce noise and vibration levels for more comfortable operation.
- The main control levers are short-types and their length can be adjusted as desired. They are arranged on the control stand together with a large tachometer and the most frequently used switches.
- The high-back reclining seat, equipped with suspension for added comfort, is adjustable forwards and backwards, and up and down to make high-elevation work safer and less fatiguing.



### Computerized crane load moment limiter (Optional)

• A guy line load detection system is used to measure the tension of the boom hoist wire rope by a load cell attached to the lower spreader. This system eliminates rope wear and damage while assuring extremely accurate load detection.



• When reassembling the boom or transporting the machine, the load cell wiring need not be replaced. This saves troublesome replacement and eliminates the chance of load cell damage while preventing intrusion of water and dust.

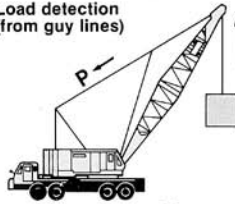
• All rated crane load data for the truck (with heavy-duty boom or light-duty boom) and tower are stored in cassettes. Safe and accurate operation is assured by using a cassette matched to the boom type and length in use.

### Complete safety devices

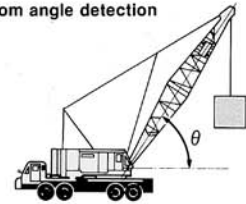
- Crane over hoist alarm bell and limit switch
- Boom over hoist limit switch
- Boom backstops
- Front and rear drum brakes with fail-safe device
- Front and rear drum locks with safety pawl
- Boom hoist drum lock
- Swing lock
- Crane load moment limiter (optional)

### Crane Load Moment Limiter (optional)

Load detection (from guy lines)

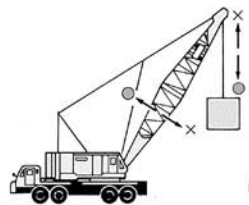


Boom angle detection



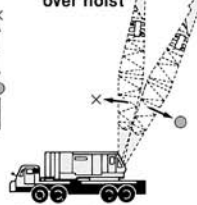
Computer (Mode cassette)

Over moment



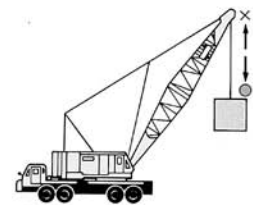
- 90% load: Pre-alarm buzzer (Intermittent). Alarm lamp flashes slowly.
- 100% load: Alarm buzzer (Continuous). Alarm lamp flashes rapidly. Automatic stop.

Boom over hoist



- Boom angle 80°: Buzzer, automatic stop.
- Tower jib angle 70°: Buzzer, automatic stop.
- Set at desired angle: Alarm buzzer.

Hook over hoist



- Hook over hoisting: Buzzer, automatic stop.

\*Even in case of overload or over hoisting, the boom can be operated in the safe directions marked with circles.

### Hydraulic outrigger set by switch control

The sturdy hydraulic out and down outriggers are of a thoroughly field-proven design, controlled via one-touch solenoid switches. Switches are provided on both the right and left sides of the carrier to allow setting from either side.

### Compatible crane boom

The crane boom is common with the tower boom and compatible with the 9125-TC tower boom. Conversion from crane to tower crane is quite easy, since only a few attachments need to be changed.

### Front auxiliary outrigger for over front lift (Optional)

When the optional fifth outrigger is attached to the carrier front, a maximum frontal lift of 65-M tons can be obtained. This greatly expands the overall working range.

### Reliable field-proven carrier

Optimum weight distribution and a low center of gravity provide extra stability and an ideal balance with the upper machine. The frame is made from high tensile steel plate which is arranged in an all-welded box construction to offer maximum strength and rigidity for heavy work. Travelling safety and comfort have also been carefully considered.

### Easy disassembly and reassembly for transport

The counterweight is a three-piece type using pin connections. A trans-lifter (optional) is used to jack up the upper machinery. Only a 20 metric ton crane is required for disassembly, reassembly and trailer loading/unloading.

# TRUCK CRANE

# Specifications

## UPPER MACHINERY



### ENGINE (Standard)

Model ..... Mitsubishi 8DC8C diesel  
Type ..... Direct injection type  
Cycle ..... 4

No. of cylinders ..... 8  
Bore and Stroke ..... 135 mm x 130 mm (5.31" x 5.12")  
Displacement ..... 14.886 liters (908 cubic inch)  
Rated Horsepower ..... 230 PS @ 2,000 rpm  
Max. Torque ..... 88 kg-m (636 ft.-lbs.) @ 1,200 rpm  
Cooling ..... Water cooled  
Starting ..... Electric 24 volt-6 kw  
Air Cleaner ..... Dry type with replaceable paper element  
Fuel Tank Capacity ..... 416 liters (110 U.S. gal.)  
(Optional)

Cummins V903C295 diesel, 250 PS @ 2,200 rpm rated engine output.

*\*The engine output (JIS) is accordance with JIS, D1005, 1976. Standard ambient condition; 760 mmHg (29.93" Hg) barometric pressure, 20° C temperature, 65% humidity. With standard accessories, fan, air cleaner, generator.*

### TORQUE CONVERTER

Niigata TACN-20-1101, single stage, rotating housing type with two speed electro hydraulic power shift transmission, actuated by electrical switch.

### SPEED CONTROL

Twist grip control on swing lever, for all operations. Hand lever output shaft governor control.



### BOOM HOIST ASSEMBLY

Independent planetary gear type with external ratchets and automatic brake provides for raising or lowering boom under power and locking boom.

Clutch: Boom hoist — 584 mm (23") dia. x 127 mm (5") wide, band type, internal expanding.

Brake: Two, 762 mm (30") dia. x 76 mm (3") wide, band type, external contracting "full wrap" design, spring set, hydraulic release. Single spring set hydraulic release safety pawl.

Planetary boom lowering — band type, external contracting, spring set hydraulically released safety pawl.

Drums: 405 mm (15.94") pitch dia. x 290 mm (11.42") long. Twin drums, cast groove.



### FRONT AND REAR DRUMS (LOAD DRUMS)

One drum on one drum shaft systems is employed for two sets, both front and rear drum shafts with torque converter drive.

Clutches: 889 mm (35") dia. x 101.6 mm (4") wide, band type, internal expanding.

Brakes: 1,016 mm (40") dia. x 127 mm (5") wide, band type, external contracting "full wrap" design, installed on the right side of drums. Both positive and negative brake system provided. Hydraulic set, with additional spring set hydraulically released brake — fail safe device, and spring set hydraulic release safety pawl (external-ratchet for locking drum).

Power lowering: 1,016 mm (40") dia. x 127 mm (5") wide, band type, external contracting "full wrap" design. Planetary gear type power lowering on the left side of drums provided.

Drums: Front — 518 mm (20.39") pitch dia. x 495 mm (19.49") long. Split type, cast groove.

Rear — 514 mm (20.24") pitch dia. x 486 mm (19.13") long. Split type, cast groove.



### SWING UNITS

Swing motion through two electro-magnetic "Magne-torque" units, bevel and spur gear drive. Powered by engine driven alternator. Frictionless, stepless control.  
Swing speed ..... 0 — 2.8 rpm

### SWING BRAKE

457 mm (18") dia. x 63.5 mm (2.5") wide, band type, external contracting, double acting. Spring set, hydraulic release.

### FASTENING TO LOWER

6 adjustable hook rollers (one double front, two double rear) welded to frame and hooked under lip of roller path on carrier.

### SWING ROLLERS

Live roller circle with 40 rollers (equally spaced) held in place by retainer.

### SWING GEAR

Internal cut teeth, 1880 mm (74") pitch dia.

### FRAME

All welded frame and power box constructed of heavy steel plate. Shaft mountings are line bored to insure precise alignment of all parts. Gearing (except swing) is sealed and splash lubricated. Involute splined shafts are used, turn in roller and ball bearings. Gears and roller chains are hardened, sealed in oil bath for long, trouble free operation.

### MACHINERY CAB

All steel construction, access panels on both sides. Removable panels for main drum brake access. Low profile, recessed center roof. Deck covered with non-skid floor plate. Deck machinery is in compact arrangement, easy to maintain and repair.

### GANTRY

High gantry folding type. Lowers toward rear into cab roof. Hydraulic lift is standard. Positions fully raised and fully lowered with linkage, locked in fully raised position.

### COUNTERWEIGHT

Three-piece, located behind rear of upper machinery cab. Pin connected, cast construction.

Total weight ..... 32,600 kg (71,900 lbs.)  
Removable with gantry and boom hoist (optional).



### CONTROLS

In front of operator are foot pedals for front and rear drum brakes, adjustable short hand levers for swing control, front and rear drum controls, boom hoist control and switches for front and rear drum pawls and brake locks, transmission shifting and positive-negative select. At operator's right is swing brake lever. At operator's left are console mounted switches, meter and gauges (see instruments). At operator's left is also located lever for output shaft governor control.

### HYDRAULIC SYSTEM

Full flow hydraulic system for infinitely variable pressure to front and rear drums, boom hoist brakes and clutches. Response is instant, positive and smooth to operator's light touch. Pumped fluid is filtered, stored accumulator under pressure, cooled in reservoir and filtered again before returning to pump.



### OPERATOR'S CAB

Totally enclosed. Full vision cab has safety glass throughout, sliding front window and door. Operator's four way adjustable high back seat (full reclining type) windshield wipers, ashtray, cigarette lighter and floor mat are standard. Cab heater (optional) available.

### LIGHTING

Two cab front flood lights, three cab inside lights and trouble light.

### INSTRUMENTS

Tachometer, hour meter, fuel gauge, engine oil pressure gauge, engine water temperature gauge, ammeter, torque converter oil pressure gauge, torque converter oil temperature gauge, glow plug indicator and hydraulic control pressure gauge.

### SAFETY DEVICES

Crane over hoist alarm bell and limit switch. Boom over hoist limit switch. Boom angle indicator. Signal horn. Boom hoist drum lock. Front and rear drum locks. Swing lock for travelling. Boom backstops. Crane load moment limiter — optional.

### TOOLS AND ACCESSORIES

The machine is furnished with a set of tools and accessories.

### TRANS-LIFTER (OPTIONAL)

Trans-lifter system allows quick and easy mounting and dismounting of upper machinery on carrier.

## CARRIER

### (8 Wheels, 4 Wheel Drive, 12 Tires)

**MODEL**  
P-KS152

#### WEIGHT

Carrier weight ..... approx. 36,700 kg (80,900 lbs.)  
Including turret, hydraulic outriggers, floats, roller circle and stand-  
ard tires. Excluding front bumper weight.



#### ENGINE (Standard)

Model ..... Mitsubishi 8DC9-1AT diesel  
Type ..... Direct injection type turbocharger  
Cycle ..... 4

No. of Cylinders ..... 8  
Bore and Stroke ..... 135 mm x 140 mm (5.31" x 5.51")  
Displacement ..... 16.031 liters (978 cubic inch)  
Rated Horsepower ..... 380 PS @ 2,200 rpm  
Max. Torque ..... 142 kg-m (1,027 ft.-lbs.) @ 1,400 rpm  
Cooling ..... Water cooled  
Starting ..... Electric 24 volt  
(Optional)

Model ..... Cummins NT855-C335 diesel  
Type ..... Direct injection type turbocharger  
Cycle ..... 4  
No. of Cylinders ..... 6  
Bore and Stroke ..... 140 mm x 152 mm (5.5" x 6")  
Displacement ..... 14.0 liters (854 cubic inch)  
Rated Horsepower ..... 335 PS @ 2,100 rpm  
Max. Torque ..... 128 kg-m (926 ft.-lbs.) @ 1,500 rpm  
Cooling ..... Water cooled  
Starting ..... Electric 24 volt

#### FUEL TANK

Capacity ..... 300 liters (79.3 U.S. gal.)

#### RADIATOR

Vertical tube and corrugate fin type core with auxiliary tank, thermo-  
statically controlled.

#### TRANSMISSION

Main transmission: Synchromesh type. Auxiliary transmission: Air  
shift, usually meshed gear type.



#### FRONT AXLE

Tandem box section, Reverse "ELIOT" steering  
knuckles.

#### REAR AXLE

Full floating, planetary drive tandem axle with interaxle  
differential.

#### STEERING

Recirculating ball screw type with hydraulic power booster.

#### SERVICE BRAKE

Dual air brake circuit with front and rear brakes on separate circuits,  
internal expanding leading and trailing shoe type. Front linings: 438  
mm (17.25") diameter by 101 mm (4") wide [3,226 cm<sup>2</sup> (500 sq. in.)  
total lining area], 155 cm<sup>2</sup> (24 sq. in.) air chambers. Rear lining: 514  
mm (20.25") diameter by 178 mm (7") wide [8,464 cm<sup>2</sup> (1,312 sq.  
in.) total rear lining area], 232 cm<sup>2</sup> (36 sq. in.) air chambers. Total  
brake lining area: 11,690 cm<sup>2</sup> (1,812 sq. in.).

#### EMERGENCY BRAKE (PARKING BRAKE)

Maxibrake: Air release, spring set maxibrake chambers on all rear  
wheels controlled from cab. Separate reservoir for emergency release  
of spring set brakes.

Center brake: Internal expanding duo-servo shoe type acting on drum  
at rear of auxiliary transmission.

#### SUSPENSION

Rear: Equalizer beam with torque rod.

Front: Alloy steel semi-elliptical leaf spring with torque rod.

#### TIRES

Twelve (12) 14.00 x 24-24PR

#### OUTRIGGER HOUSINGS

Two (2) fabricated double boxes of high tensile strength steel plate.

#### OUTRIGGER BEAMS

Four (4) fabricated reinforced box section beams of high tensile  
strength steel plate. Beams telescope to fully extended position of  
3,490 mm (137.4") from longitudinal centerline of carrier to center-  
line of jackscrew.

#### HYDRAULIC OUTRIGGER ASSEMBLY

Eight (8) double acting hydraulic cylinders provide independent  
horizontal and vertical movement of each beam. Vertical cylinders  
have lock check valves. Outriggers are controlled by electric solenoid  
actuated directional control valves.

#### FLOATS

Four (4) floats 700 mm (27.56") x 700 mm (27.56")

#### FRONT AUXILIARY OUTRIGGER (OPTIONAL)

Manually operated. One (1) float 660 mm (25.98") x 660 mm (25.98")

#### REAR AUXILIARY OUTRIGGER (OPTIONAL)

Manually operated. Two (2) floats 660 mm (25.98") x 660 mm (25.98").  
Required when boom length is 82.30 m (270') or longer.



#### CAB

One-man cab offset to left side of engine compartment,  
all windows are safety glass, electric windshield wiper,  
windshield washer, removable dash panel, air horn,  
dome light, seat assembly, three (3) large rear view

mirrors. Crank down door window and slide-by type right side  
windows. Air vent on left side.

#### LIGHTING

Dual headlights. Stop, tail, directional, clearance and rear license plate  
lights. Two weather proof sockets provided for upper lighting during  
transit.

#### INSTRUMENTS

Tachometer, speedometer, fuel gauge, engine oil pressure gauge,  
engine water temperature gauge, ammeter, low air pressure indi-  
cator, air pressure gauge, two level gauges and switches. Signal horn.

#### FRONT BUMPER WEIGHTS

Standard ..... 6,100 kg (13,450 lbs.)

Additional (optional) ..... 4,000 kg (8,800 lbs.)

## PERFORMANCE

#### (Based on Mitsubishi 8DC9-1AT Diesel Engine)

MAX. TRAVEL SPEED ..... 75 km/h (46.6 mph)  
GRADEABILITY (based on 36,700 kg (80,900 lbs.) G.V.W.) ..... 41%  
MIN. TURNING RADIUS ..... 11.9 m (39'11")

## CRANE ATTACHMENTS



#### HEAVY DUTY BOOM

Two piece, open throat lattice type tubular boom consist-  
ing of a tapered base section and a heavy duty  
tapered tip section having seven offset boom point  
sheaves 616 mm (24.25") pitch dia. with roller bear-  
ings. Sections are pin connected. High tensile steel chords all welded.  
Required for lifts in excess of 65,000 kg (143,300 lbs.). Boom ex-  
tendible to 51.82 m (170').

Basic length ..... 15.24 m (50')

Boom base section ..... 7.62 m (25')

Boom tip section ..... 7.62 m (25')

#### LIGHT DUTY BOOM

Three piece, open throat lattice type tubular boom consisting of a  
tapered base section, a boom insert and a light duty tapered tip sec-  
tion having three offset boom point sheaves 616 mm (24.25") pitch  
dia. with roller bearings. Sections are pin connected. High tensile steel  
chords all welded. Boom extendible to 88.39 m (290').

Basic length ..... 27.43 m (90')

Boom base section (standard) ..... 7.62 m (25')

Boom insert ..... 9.14 m (30')

Boom tip section ..... 10.67 m (35')

#### BOOM INSERT SECTIONS (OPTIONAL)

Boom insert available for extension, tubular lattice type, high tensile  
steel chords, all welded, pin connections.

Available in 3.05 m (10'), 6.10 m (20'), 9.14 m (30') and 12.19 m (40') long. 12.19 m (40') boom insert will be used for boom length 57.91 m (190') or longer.

**BASIC JIB (OPTIONAL)**

Three piece, open throat tubular lattice type, having single jib point sheave. Sections are pin connected. High tensile steel chords all welded. Jib extendible to 27.43 m (90'). For lifts not exceeding 14,000 kg (30,900 lbs.). Jib cannot be extended on heavy duty tip.

Basic length .....	12.19 m (40')
Jib base section .....	3.05 m (10')
Jib insert .....	6.10 m (20')
Jib tip section .....	3.05 m (10')

**JIB INSERT SECTIONS (OPTIONAL)**

Jib insert available for extension, tubular lattice type, high tensile steel chords, all welded, pin connections.

Available in 6.10 m (20') and 9.14 m (30') long.

**MAST**

9.75 m (32') long. Two legs rectangular box section cross laced high tensile steel and all welded. Required for all booms.



**HOOK BLOCKS**

25 metric ton block with single sheave, swivel hook, safety latch and three (3) parts hoist line – standard also available as optional.

65 metric ton block with three sheaves, swivel hook, safety latch and seven (7) parts hoist line – optional.

150 metric ton block with seven sheaves, swivel hook, safety latch and fourteen (14) parts hoist line – optional.

13.5 metric ton weighted ball hook with safety latch for jib – optional.

**DIAMETER OF WIRE ROPE**

Hoist wire rope .....	28 mm (1.10")
Jib hoist wire rope – optional .....	24 mm (0.94")
Boom hoist wire rope (16 parts line) .....	20 mm (0.79")
Boom suspension wire rope (4 parts line) .....	30 mm (1.18")
Jib suspension wire rope – optional .....	24 mm (0.94")
Intermediate boom suspension wire rope – optional .....	22 mm (0.87")

[Required when boom length is 57.91 m (190') or longer]

**BOOM HOIST REEVING**

Sixteen (16) parts line.

**BOOM BACKSTOPS**

Telescoping type with spring bumper. Recommended for all boom length.

**CABLE GUIDE ROLLERS (OPTIONAL)**

Use as required to eliminate wire rope interference. Recommended for all boom length.

**WORKING WEIGHT**

Working weight ..... Approx. 107,000 kg (235,900 lbs.)  
Including 15.24 m (50') heavy duty boom, 150 metric ton hook block, 32,600 kg (71,900 lbs.) counterweights and front bumper weight.

**DRUM WORKING DATA**

Function		Front Drum	Rear Drum	Boom Hoist Drum
Pitch dia.	mm (in.)	518 (20.39)	514 (20.24)	405 (15.94)
Drum length	mm (in.)	495 (19.49)	486 (19.13)	290 (11.42)
Wire rope dia.	mm (in.)	28 (1.10)	24 (0.94)	20 (0.79)
Capacity-Total	m (ft.)	275 (902)	317 (1,040)	146 x 2 (479 x 2)
* Line speed	Hoisting m/min (fpm)	52 (170.6)	52 (170.6)	21 (68.9)
	Lowering m/min (fpm)	30 (98.4)	30 (98.4)	14 (45.9)
* Line pull	kg (lbs.)	15,000 (33,000)	15,000 (33,000)	—

Line speed and line pull marked with \* are based on single line and 1st layer of rope and torque converter output shaft at 1,200 rpm. In case of low speed transmission, the line speed becomes one half of the above figures.

**TOWER CRANE ATTACHMENTS**



**TOWER BOOM**

Lattice type tubular boom consisting of a tapered base section, two inserts (or three inserts) and a cap section. Sections are pin connected. High tensile steel chords all welded. Tower boom extendible to 48.77 m (160').

Length in four sections .....	33.53 m (110')
Base section .....	7.62 m (25')
1-insert .....	9.14 m (30')
1-insert .....	9.14 m (30')
Cap section .....	7.62 m (25')

**TOWER INSERT SECTIONS (OPTIONAL)**

Tower insert available for extension. Available in 3.05 m (10'), 6.10 m and 9.14 m (30') long.

**JIB**

Four piece, open throat tubular lattice type, having single jib point sheave. Sections are pin connected. High tensile steel cords all welded. Jib extendible to 36.58 m (120').

Length in four sections .....	21.34 m (70')
Base section .....	6.10 m (20')
1-insert .....	6.10 m (20')
1-insert .....	3.05 m (10')
Tip section .....	6.10 m (20')

**JIB INSERT SECTIONS (OPTIONAL)**

Jib insert available for extension. Available in 6.10 m (20') and 9.14 m (30') long.

**HOOK BLOCK**

25 metric ton block with single sheave, swivel hook, safety latch and two (2) parts hoist line.

**DIAMETER OF WIRE ROPE**

Hoist wire rope .....	28 mm (1.10")
Tower hoist wire rope .....	20 mm (0.79")
Jib hoist wire rope .....	24 mm (0.94")
Tower suspension wire rope .....	30 mm (1.18")
Jib suspension wire rope (upper) .....	32 mm (1.26")
Jib suspension wire rope (lower) .....	36 mm (1.42")

**TOWER BOOM BACKSTOPS**

Telescoping type with spring bumper.

**WORKING WEIGHT**

Working weight ..... approx. 125,000 kg (275,600 lbs.)  
Including 48.77 m (160') tower boom, 36.58 m (120') jib, 25 metric ton hook block and 32,600 kg (71,900 lbs.) counterweights and front bumper weight.

**DRUM WORKING DATA**

Function		Front Drum	Rear Drum	Boom Hoist Drum
Pitch dia.	mm (in.)	518 (20.39)	514 (20.24)	405 (15.94)
Drum length	mm (in.)	495 (19.49)	486 (19.13)	290 (11.42)
Wire rope dia.	mm (in.)	28 (1.10)	24 (0.94)	20 (0.79)
Capacity-Total	m (ft.)	275 (902)	317 (1,040)	146 x 2 (479 x 2)
* Line Speed	Hoisting m/min (fpm)	52 (170.6)	52 (170.6)	21 (68.9)
	Lowering m/min (fpm)	30 (98.4)	30 (98.4)	14 (45.9)
* Line pull	kg (lbs.)	15,000 (33,000)	15,000 (33,000)	—

Line speed and line pull marked with \* are based on single line and 1st layer of rope and torque converter output shaft at 1,200 rpm. In case of low speed transmission, the line speed becomes one half of the above figures.

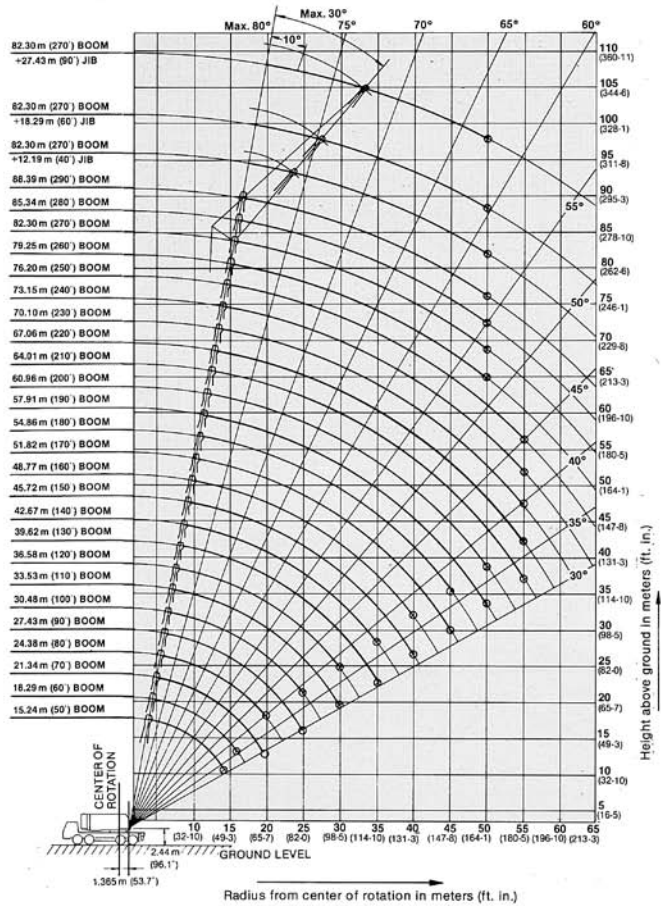
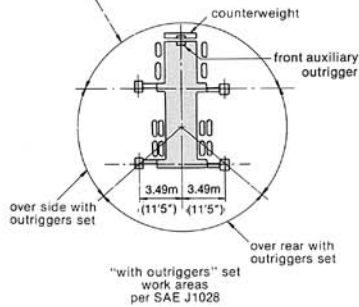
# 150-M ton Truck Crane

## Working Ranges

88.39m Boom  
82.30m Boom + 27.43m Jib

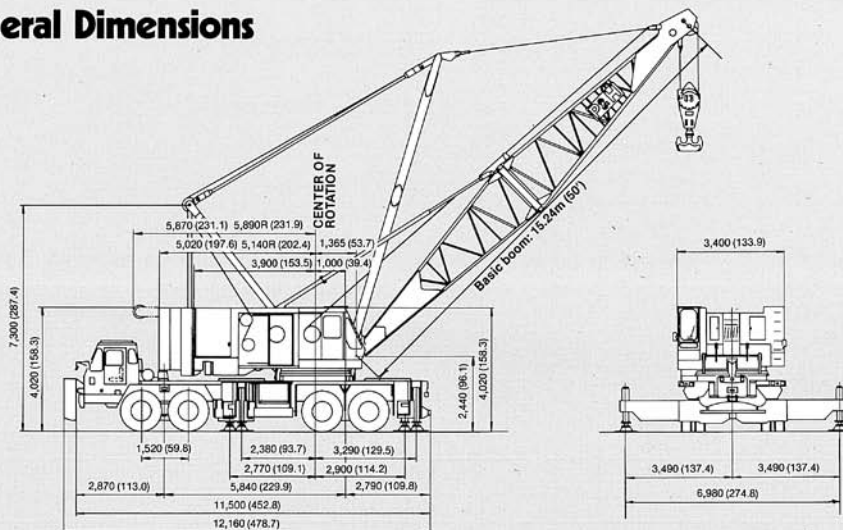
### • WORKING AREAS

Operation Within "Over Side Outriggers Set"  
Ratings in this sector are approved only when (optional) front auxiliary outrigger is set. Maximum rated load is 65 metric ton.



### General Dimensions

Unit: mm (in.)



# Lifting Capacities

## WITH LIGHT DUTY TIP

### RATED CRANE LOADS IN KGS (LBS.) — MAIN BOOM IN OVER SIDE AND REAR WORK AREAS WITH OUTRIGGERS

Operating Radius in Meters (Ft.-In.)	27.43 m (90') Boom	30.48 m (100') Boom	33.53 m (110') Boom	36.58 m (120') Boom	39.62 m (130') Boom	42.67 m (140') Boom	45.72 m (150') Boom	48.77 m (160') Boom	51.82 m (170') Boom	54.86 m (180') Boom	57.91 m (190') Boom	
7.0 (23-0)	65,000 (143,300)											
8.0 (26-3)	65,000 (143,300)	65,000 (143,300)										
9.0 (29-6)	64,000 (141,100)	63,700 (140,400)	62,500 (137,800)	61,900 (136,500)								
10.0 (32-10)	56,200 (123,900)	56,000 (123,500)	55,900 (123,200)	55,800 (123,000)	52,500 (115,700)	50,300 (110,900)						
12.0 (39-4)	42,400 (93,500)	42,300 (93,300)	42,200 (93,000)	42,100 (92,800)	42,000 (92,600)	41,900 (92,400)	41,800 (92,200)	39,700 (87,500)	36,600 (80,700)			
14.0 (45-11)	33,800 (74,500)	33,700 (74,300)	33,600 (74,100)	33,500 (73,900)	33,400 (73,600)	33,300 (73,400)	33,200 (73,200)	33,000 (72,800)	32,900 (72,500)	31,900 (70,300)	31,300 (69,000)	
16.0 (52-6)	28,000 (61,700)	27,800 (61,300)	27,700 (61,100)	27,600 (60,800)	27,500 (60,600)	27,400 (60,400)	27,300 (60,200)	27,100 (59,700)	27,000 (59,500)	26,900 (59,300)	27,000 (59,500)	
18.0 (59-1)	23,700 (52,200)	23,600 (52,000)	23,500 (51,800)	23,400 (51,600)	23,200 (51,100)	23,100 (50,900)	23,000 (50,700)	22,800 (50,300)	22,700 (50,000)	22,600 (49,800)	22,700 (50,000)	
20.0 (65-7)	20,500 (45,200)	20,400 (45,000)	20,300 (44,800)	20,200 (44,500)	20,000 (44,100)	19,900 (43,900)	19,800 (43,700)	19,500 (43,000)	19,400 (42,800)	19,300 (42,500)	19,400 (42,800)	
22.0 (72-2)	18,100 (39,900)	17,900 (39,500)	17,700 (39,000)	17,600 (38,800)	17,400 (38,400)	17,400 (38,400)	17,200 (37,900)	16,900 (37,300)	16,800 (37,000)	16,700 (36,800)	16,700 (36,800)	
24.0 (78-9)	16,100 (35,500)	15,900 (35,100)	15,700 (34,600)	15,600 (34,400)	15,400 (34,000)	15,300 (33,700)	15,200 (33,500)	14,900 (32,800)	14,800 (32,600)	14,700 (32,400)	14,700 (32,400)	
25.0 (82-0)	15,200 (33,500)	14,900 (32,800)	—	—	—	—	—	—	—	—	—	
26.0 (85-4)			14,000 (30,900)	13,900 (30,600)	13,700 (30,200)	13,600 (30,000)	13,500 (29,800)	13,200 (29,100)	13,100 (28,900)	13,000 (28,700)	13,000 (28,700)	
28.0 (91-10)			12,700 (28,000)	12,600 (27,800)	12,400 (27,300)	12,200 (26,900)	12,100 (26,700)	11,900 (26,200)	11,800 (26,000)	11,700 (25,800)	11,700 (25,800)	
30.0 (98-5)			11,500 (25,400)	11,400 (25,100)	11,100 (24,500)	11,000 (24,300)	10,900 (24,000)	10,600 (23,400)	10,500 (23,100)	10,400 (22,900)	10,500 (23,100)	
32.0 (105-0)					10,200 (22,500)	10,000 (22,000)	9,900 (21,800)	9,600 (21,200)	9,500 (20,900)	9,400 (20,700)	9,200 (20,300)	
34.0 (111-7)					9,400 (20,700)	9,200 (20,300)	9,000 (19,800)	8,700 (19,200)	8,600 (19,000)	8,500 (18,700)	8,500 (18,700)	
35.0 (114-10)					8,900 (19,600)	8,800 (19,400)	—	—	—	—	—	
36.0 (118-1)							8,200 (18,100)	7,900 (17,400)	7,800 (17,200)	7,700 (17,000)	7,700 (17,000)	
38.0 (124-8)							7,600 (16,800)	7,300 (16,100)	7,200 (15,900)	7,100 (15,700)	7,100 (15,700)	
40.0 (131-3)							7,000 (15,400)	6,700 (14,800)	6,600 (14,600)	6,500 (14,300)	6,500 (14,300)	
42.0 (137-10)									6,100 (13,400)	6,000 (13,200)	5,900 (13,000)	
44.0 (144-4)									5,600 (12,300)	5,500 (12,100)	5,400 (11,900)	
45.0 (147-8)									5,400 (11,900)	5,300 (11,700)	—	
46.0 (150-11)											5,000 (11,000)	
48.0 (157-6)											4,500 (9,900)	
50.0 (164-1)											4,100 (9,000)	
52.0 (170-7)												
54.0 (177-2)												
55.0 (180-5)												

NOTE: Ratings inside of box are limited by strength of materials.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATED LOADS AND DISREGARD OF INSTRUCTIONS VOIDS THE WARRANTY.



**WITH OUTRIGGERS FULLY EXTENDED AND SET**

57.91 m (190') Boom		60.96 m (200') Boom	64.01 m (210') Boom	67.06 m (220') Boom	70.10 m (230') Boom	73.15 m (240') Boom	76.20 m (250') Boom	79.25 m (260') Boom	82.30 m (270') Boom	85.34 m (280') Boom	88.39 m (290') Boom	Operating Radius in Meters (Ft.-In.)
												7.0 (23-0)
												8.0 (26-3)
												9.0 (29-6)
												10.0 (32-10)
												12.0 (39-4)
												14.0 (45-11)
31,300 (69,000)		28,600 (63,100)										16.0 (52-6)
27,000 (59,500)		26,800 (59,100)	25,200 (55,600)	23,200 (51,100)	21,100 (46,500)	18,900 (41,700)						18.0 (59-1)
22,700 (50,000)		22,500 (49,600)	22,300 (49,200)	22,100 (48,700)	20,100 (44,300)	18,200 (40,100)	16,600 (36,600)	14,800 (32,600)	13,100 (28,900)			20.0 (65-7)
19,400 (42,800)		19,200 (42,300)	19,100 (42,100)	19,000 (41,900)	18,900 (41,700)	17,300 (38,100)	15,700 (34,600)	14,100 (31,100)	12,600 (27,800)	11,500 (25,400)	10,500 (23,100)	22.0 (72-2)
16,700 (36,800)		16,700 (36,800)	16,500 (36,400)	16,500 (36,400)	16,500 (36,400)	15,900 (35,100)	14,700 (32,400)	13,400 (29,500)	11,800 (26,000)	10,800 (23,800)	9,900 (21,800)	24.0 (78-9)
14,700 (32,400)		14,600 (32,200)	14,500 (32,000)	14,400 (31,700)	14,400 (31,700)	14,200 (31,300)	13,700 (30,200)	12,400 (27,300)	11,100 (24,500)	10,100 (22,300)	9,300 (20,500)	25.0 (82-0)
13,000 (28,700)		12,900 (28,400)	12,800 (28,200)	12,700 (28,000)	12,600 (27,800)	12,300 (27,100)	12,300 (27,100)	11,400 (25,100)	10,300 (22,700)	9,500 (20,900)	8,700 (19,200)	26.0 (85-4)
11,700 (25,800)		11,400 (25,100)	11,400 (25,100)	11,300 (24,900)	11,100 (24,500)	10,800 (23,800)	10,800 (23,800)	10,300 (22,700)	9,600 (21,200)	8,800 (19,400)	8,100 (17,900)	28.0 (91-10)
10,500 (23,100)		10,200 (22,500)	10,100 (22,300)	10,000 (22,000)	9,900 (21,800)	9,800 (21,600)	9,700 (21,400)	9,200 (20,300)	8,800 (19,400)	8,100 (17,900)	7,500 (16,500)	30.0 (98-5)
9,200 (20,300)		9,200 (20,300)	9,100 (20,100)	9,000 (19,800)	8,900 (19,600)	8,800 (19,400)	8,700 (19,200)	8,300 (18,300)	7,900 (17,400)	7,400 (16,300)	6,900 (15,200)	32.0 (105-0)
8,500 (18,700)		8,300 (18,300)	8,200 (18,100)	8,100 (17,900)	8,000 (17,600)	7,900 (17,400)	7,700 (17,000)	7,500 (16,500)	7,200 (15,900)	6,700 (14,800)	6,400 (14,100)	34.0 (111-7)
7,700 (17,000)		7,500 (16,500)	7,400 (16,300)	7,300 (16,100)	7,200 (15,900)	7,100 (15,700)	6,900 (15,200)	6,700 (14,800)	6,600 (14,600)	6,100 (13,400)	5,800 (12,800)	35.0 (114-10)
7,100 (15,700)		6,800 (15,000)	6,700 (14,800)	6,600 (14,600)	6,500 (14,300)	6,400 (14,100)	6,200 (13,700)	6,000 (13,200)	5,900 (13,000)	5,500 (12,100)	5,300 (11,700)	36.0 (118-1)
6,500 (14,300)		6,200 (13,700)	6,100 (13,400)	6,000 (13,200)	5,900 (13,000)	5,700 (12,600)	5,500 (12,100)	5,300 (11,700)	5,200 (11,500)	4,900 (10,800)	4,700 (10,400)	38.0 (124-8)
5,900 (13,000)		5,600 (12,300)	5,500 (12,100)	5,400 (11,900)	5,300 (11,700)	5,000 (11,000)	4,900 (10,800)	4,700 (10,400)	4,600 (10,100)	4,300 (9,500)	4,100 (9,000)	40.0 (131-3)
5,400 (11,900)		5,100 (11,200)	5,000 (11,000)	4,900 (10,800)	4,800 (10,600)	4,500 (9,900)	4,400 (9,700)	4,100 (9,000)	4,000 (8,800)	3,700 (8,200)	3,500 (7,700)	42.0 (137-10)
5,000 (11,000)		4,700 (10,400)	4,500 (9,900)	4,300 (9,500)	4,200 (9,300)	4,000 (8,800)	3,800 (8,400)	3,500 (7,700)	3,400 (7,500)	3,100 (6,800)	2,900 (6,400)	44.0 (144-4)
4,500 (9,900)		4,200 (9,300)	4,000 (8,800)	3,800 (8,400)	3,700 (8,200)	3,500 (7,700)	3,300 (7,300)	3,100 (6,800)	3,000 (6,600)	2,700 (6,000)	2,500 (5,500)	45.0 (147-8)
4,100 (9,000)		3,800 (8,400)	3,600 (7,900)	3,400 (7,500)	3,300 (7,300)	3,100 (6,800)	2,900 (6,400)	2,700 (6,000)	2,600 (5,700)	2,300 (5,100)	2,100 (4,600)	46.0 (150-11)
			3,200 (7,100)	3,000 (6,600)	2,900 (6,400)	2,700 (6,000)	2,500 (5,500)					48.0 (157-6)
			2,900 (6,400)	2,700 (6,000)	2,600 (5,700)	2,400 (5,300)	2,200 (4,900)					50.0 (164-1)
			2,700 (6,000)	2,500 (5,500)	2,400 (5,300)	2,200 (4,900)	2,000 (4,400)					52.0 (170-7)
												54.0 (177-2)
												55.0 (180-5)

**MS VOIDS THE WARRANTY.**

# Lifting Capacities

## WITH HEAVY DUTY TIP

### RATED CRANE LOADS IN KGS (LBS.) — MAIN BOOM IN OVER SIDE AND REAR WORK AREAS WITH OUTRIGGERS FULL

Operating Radius in Meters (Ft.-In.)	15.24 m (50') Boom	18.29 m (60') Boom	21.34 m (70') Boom	24.38 m (80') Boom	27.43 m (90') Boom	30.48 m (100') Boom	33.53 m (110') Boom	36.58 m (120') Boom	39.62 m (130') Boom	42.67 m (140') Boom	45.72 m (150') Boom							48. (160) Boom		
4.0 (13-1)	150,000 (330,700)																			
5.0 (16-5)	120,000 (264,600)	118,000 (260,100)																		
6.0 (19-8)	100,000 (220,500)	99,000 (218,300)	98,000 (216,100)																	
7.0 (23-0)	85,700 (188,900)	85,300 (188,100)	84,900 (187,200)	84,500 (186,300)	84,000 (185,200)															
8.0 (26-3)	73,900 (162,900)	73,600 (162,300)	73,300 (161,600)	73,000 (160,900)	72,700 (160,300)	72,400 (159,600)														
9.0 (29-6)	64,300 (141,800)	64,100 (141,300)	63,900 (140,900)	63,700 (140,400)	63,500 (140,000)	63,200 (139,300)	62,000 (136,700)	61,400 (135,400)												
10.0 (32-10)	56,200 (123,900)	56,000 (123,500)	55,900 (123,200)	55,800 (123,000)	55,700 (122,800)	55,500 (122,400)	55,400 (122,100)	55,300 (121,900)	52,000 (114,600)	49,800 (109,800)										
12.0 (39-4)	42,500 (93,700)	42,300 (93,300)	42,200 (93,000)	42,000 (92,600)	41,900 (92,400)	41,800 (92,200)	41,700 (91,900)	41,600 (91,700)	41,500 (91,500)	41,400 (91,300)	41,300 (91,100)							39 (86)		
14.0 (45-11)	33,900 (74,700)	33,800 (74,500)	33,700 (74,300)	33,500 (73,900)	33,300 (73,400)	33,200 (73,200)	33,100 (73,000)	33,000 (72,800)	32,900 (72,500)	32,800 (72,300)	32,700 (72,100)							32 (71)		
16.0 (52-6)		28,000 (61,700)	27,800 (61,300)	27,600 (60,800)	27,500 (60,600)	27,300 (60,200)	27,200 (60,000)	27,100 (59,700)	27,000 (59,500)	26,900 (59,300)	26,800 (59,100)							26 (58)		
18.0 (59-1)			23,600 (52,000)	23,400 (51,600)	23,200 (51,100)	23,100 (50,900)	23,000 (50,700)	22,900 (50,500)	22,700 (50,000)	22,600 (49,800)	22,500 (49,600)							22 (49)		
20.0 (65-7)			20,400 (45,000)	20,200 (44,500)	20,000 (44,100)	19,900 (43,900)	19,800 (43,700)	19,700 (43,400)	19,500 (43,000)	19,400 (42,800)	19,300 (42,500)							19 (41)		
22.0 (72-2)					17,600 (38,800)	17,400 (38,400)	17,200 (37,900)	17,100 (37,700)	17,000 (37,500)	16,900 (37,300)	16,800 (37,000)							16 (36)		
24.0 (78-9)					15,600 (34,400)	15,400 (34,000)	15,200 (33,500)	15,100 (33,300)	14,900 (32,800)	14,800 (32,600)	14,700 (32,400)							14 (31)		
25.0 (82-0)					14,700 (32,400)	14,400 (31,700)													—	
26.0 (85-4)							13,500 (29,800)	13,400 (29,500)	13,200 (29,100)	13,100 (28,900)	13,000 (28,700)							12 (28)		
28.0 (91-10)							12,200 (26,900)	12,100 (26,700)	11,800 (26,000)	11,700 (25,800)	11,600 (25,600)							11 (24)		
30.0 (98-5)							11,000 (24,300)	10,900 (24,000)	10,600 (23,400)	10,500 (23,100)	10,400 (22,900)							10 (22)		
32.0 (105-0)									9,600 (21,200)	9,500 (20,900)	9,400 (20,700)							9 (20)		
34.0 (111-7)									8,800 (19,400)	8,700 (19,200)	8,600 (19,000)							8 (18)		
35.0 (114-10)									8,400 (18,500)	8,300 (18,300)								—		
36.0 (118-1)											7,900 (17,400)							7 (16)		
38.0 (124-8)											7,200 (15,900)							6 (15)		
40.0 (131-3)											6,500 (14,300)							6 (13)		
42.0 (137-10)																				
44.0 (144-4)																				
45.0 (147-8)																				

NOTE: Ratings inside of box are limited by strength of materials.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATED LOADS AND DISREGARD OF INSTRUCTIONS VOIDS THE WARRANTY

**ERS FULLY EXTENDED AND SET**

**RATED CRANE LOADS IN KGS (LBS.)—MAIN BOOM WITH JIB**

48.77 m (160') Boom	51.82 m (170') Boom	Operating Radius in Meters (Ft.-In.)
		4.0 (13-1)
		5.0 (16-5)
		6.0 (19-8)
		7.0 (23-0)
		8.0 (26-3)
		9.0 (29-6)
		10.0 (32-10)
39,200 (86,400)	36,100 (79,600)	12.0 (39-4)
32,500 (71,700)	32,400 (71,400)	14.0 (45-11)
26,600 (58,600)	26,500 (58,400)	16.0 (52-6)
22,300 (49,200)	22,200 (48,900)	18.0 (59-1)
19,000 (41,900)	18,900 (41,700)	20.0 (65-7)
16,500 (36,400)	16,300 (35,900)	22.0 (72-2)
14,400 (31,700)	14,300 (31,500)	24.0 (78-9)
—	—	25.0 (82-0)
12,700 (28,000)	12,600 (27,800)	26.0 (85-4)
11,300 (24,900)	11,300 (24,900)	28.0 (91-10)
10,100 (22,300)	10,000 (22,000)	30.0 (98-5)
9,100 (20,100)	9,000 (19,800)	32.0 (105-0)
8,300 (18,300)	8,100 (17,900)	34.0 (111-7)
—	—	35.0 (114-10)
7,600 (16,800)	7,300 (16,100)	36.0 (118-1)
6,900 (15,200)	6,700 (14,800)	38.0 (124-8)
6,200 (13,700)	6,100 (13,400)	40.0 (131-3)
	5,600 (12,300)	42.0 (137-10)
	5,100 (11,200)	44.0 (144-4)
	4,900 (10,800)	45.0 (147-8)

Operating radius in Meters (Ft.-In.)	12.19 m (40') Jib (equipped with 25 metric ton hook block)									
	57.91 m (190') Boom	60.96 m (200') Boom	64.01 m (210') Boom	67.06 m (220') Boom	70.10 m (230') Boom	73.15 m (240') Boom	76.20 m (250') Boom	79.25 m (260') Boom	82.30 m (270') Boom	
14.0 (45-11)	28,900 (63,700)	26,200 (57,800)								
16.0 (52-6)	24,600 (54,200)	24,400 (53,800)	22,800 (50,300)	20,800 (45,900)	18,700 (41,200)	16,600 (36,600)				
18.0 (59-1)	20,400 (45,000)	20,200 (44,500)	20,000 (44,100)	19,800 (43,700)	17,800 (39,200)	15,900 (35,100)	14,300 (31,500)	12,500 (27,600)	10,800 (23,800)	
20.0 (65-7)	17,100 (37,700)	16,900 (37,300)	16,800 (37,000)	16,700 (36,800)	16,600 (36,600)	15,000 (33,100)	13,400 (29,500)	11,800 (26,000)	10,300 (22,700)	
22.0 (72-2)	14,400 (31,700)	14,400 (31,700)	14,200 (31,300)	14,200 (31,300)	14,200 (31,300)	13,700 (30,200)	12,500 (27,600)	11,200 (24,700)	9,600 (21,200)	
24.0 (78-9)	12,400 (27,300)	12,300 (27,100)	12,300 (27,100)	12,200 (26,900)	12,200 (26,900)	12,000 (26,500)	11,500 (25,400)	10,200 (22,500)	8,900 (19,600)	
26.0 (85-4)	10,800 (23,800)	10,700 (23,600)	10,600 (23,400)	10,500 (23,100)	10,100 (22,300)	10,100 (22,300)	10,100 (22,300)	9,200 (20,300)	8,100 (17,900)	
28.0 (91-10)	9,500 (20,900)	9,200 (20,300)	9,200 (20,300)	9,100 (20,100)	8,800 (19,400)	8,700 (19,200)	8,600 (19,000)	8,100 (17,900)	7,400 (16,300)	
30.0 (98-5)	8,300 (18,300)	8,000 (17,600)	7,900 (17,400)	7,800 (17,200)	7,700 (17,000)	7,600 (16,800)	7,500 (16,500)	7,000 (15,400)	6,600 (14,600)	
32.0 (105-0)	7,000 (15,400)	7,000 (15,400)	6,900 (15,200)	6,800 (15,000)	6,700 (14,800)	6,600 (14,600)	6,500 (14,300)	6,100 (13,400)	5,800 (12,800)	
34.0 (111-7)	6,300 (13,900)	6,100 (13,400)	6,000 (13,200)	5,900 (13,000)	5,800 (12,800)	5,700 (12,600)	5,600 (12,300)	5,400 (11,900)	5,100 (11,200)	
36.0 (118-1)	5,500 (12,100)	5,300 (11,700)	5,200 (11,500)	5,100 (11,200)	5,100 (11,200)	5,000 (11,000)	4,800 (10,600)	4,600 (10,100)	4,500 (9,900)	
38.0 (124-8)	4,900 (10,800)	4,600 (10,100)	4,600 (10,100)	4,500 (9,900)	4,400 (9,700)	4,300 (9,500)	4,100 (9,000)	3,900 (8,600)	3,800 (8,400)	
40.0 (131-3)	4,400 (9,700)	4,100 (9,000)	4,000 (8,800)	3,900 (8,600)	3,800 (8,400)	3,600 (7,900)	3,400 (7,500)	3,200 (7,100)	3,100 (6,800)	
42.0 (137-10)	3,800 (8,400)	3,500 (7,700)	3,400 (7,500)	3,300 (7,300)	3,200 (7,100)	2,900 (6,400)	2,800 (6,200)	2,600 (5,700)	2,500 (5,500)	
44.0 (144-4)	3,300 (7,300)	3,000 (6,600)	2,900 (6,400)	2,800 (6,200)	2,700 (6,000)	2,400 (5,300)	2,300 (5,100)	2,000 (4,400)		
46.0 (150-11)	2,900 (6,400)	2,600 (5,700)	2,400 (5,300)	2,200 (4,900)	2,100 (4,600)					
48.0 (157-6)	2,400 (5,300)	2,100 (4,600)								
50.0 (164-1)	2,000 (4,400)									

Operating radius in Meters (Ft.-In.)	18.29 m (60') Jib (equipped with 25 metric ton hook block) 27.43 m (90') (equipped with 12 metric ton ball hook)									
	57.91 m (190') Boom	60.96 m (200') Boom	64.01 m (210') Boom	67.06 m (220') Boom	70.10 m (230') Boom	73.15 m (240') Boom	76.20 m (250') Boom	79.25 m (260') Boom	82.30 m (270') Boom	
14.0 (45-11)	28,100 (61,900)	25,400 (56,000)								
16.0 (52-6)	23,900 (52,700)	23,700 (52,200)	22,100 (48,700)	20,100 (44,300)	18,000 (39,700)	15,800 (34,800)				
18.0 (59-1)	19,700 (43,400)	19,500 (43,000)	19,300 (42,500)	19,100 (42,100)	17,100 (37,700)	15,200 (33,500)	13,600 (30,000)	11,900 (26,200)	10,200 (22,500)	
20.0 (65-7)	16,400 (36,200)	16,300 (35,900)	16,200 (35,700)	16,100 (35,500)	16,000 (35,300)	14,400 (31,700)	12,800 (28,200)	11,200 (24,700)	9,700 (21,400)	
22.0 (72-2)	13,800 (30,400)	13,800 (30,400)	13,600 (30,000)	13,600 (30,000)	13,700 (30,200)	13,100 (28,900)	11,900 (26,200)	10,600 (23,400)	9,000 (19,800)	
24.0 (78-9)	11,900 (26,200)	11,800 (26,000)	11,700 (25,800)	11,600 (25,600)	11,600 (25,600)	11,400 (25,100)	10,900 (24,000)	9,600 (21,200)	8,300 (18,300)	
26.0 (85-4)	10,200 (22,500)	10,100 (22,300)	10,000 (22,000)	9,900 (21,800)	9,500 (20,900)	9,600 (21,200)	9,600 (21,200)	8,700 (19,200)	7,600 (16,800)	
28.0 (91-10)	8,900 (19,600)	8,600 (19,000)	8,700 (19,200)	8,600 (19,000)	8,300 (18,300)	8,300 (18,300)	8,200 (18,100)	7,600 (16,800)	6,900 (15,200)	
30.0 (98-5)	7,800 (17,200)	7,500 (16,500)	7,400 (16,300)	7,300 (16,100)	7,200 (15,900)	7,100 (15,700)	7,000 (15,400)	6,500 (14,300)	6,100 (13,400)	
32.0 (105-0)	6,500 (14,300)	6,500 (14,300)	6,400 (14,100)	6,300 (13,900)	6,200 (13,700)	6,100 (13,400)	6,100 (13,400)	5,700 (12,600)	5,300 (11,700)	
34.0 (111-7)	5,800 (12,800)	5,600 (12,300)	5,500 (12,100)	5,500 (12,100)	5,400 (11,900)	5,300 (11,700)	5,100 (11,200)	4,900 (10,800)	4,600 (10,100)	
36.0 (118-1)	5,000 (11,000)	4,900 (10,800)	4,800 (10,600)	4,700 (10,400)	4,600 (10,100)	4,500 (9,900)	4,300 (9,500)	4,100 (9,000)	4,000 (8,800)	
38.0 (124-8)	4,500 (9,900)	4,200 (9,300)	4,100 (9,000)	4,000 (8,800)	3,900 (8,600)	3,800 (8,400)	3,600 (7,900)	3,400 (7,500)	3,300 (7,300)	
40.0 (131-3)	3,900 (8,600)	3,600 (7,900)	3,500 (7,700)	3,400 (7,500)	3,300 (7,300)	3,100 (6,800)	2,900 (6,400)	2,700 (6,000)	2,600 (5,700)	
42.0 (137-10)	3,300 (7,300)	3,000 (6,600)	2,900 (6,400)	2,800 (6,200)	2,700 (6,000)	2,400 (5,300)	2,400 (5,300)	2,200 (4,900)	2,100 (4,600)	
44.0 (144-4)	2,800 (6,200)	2,500 (5,500)	2,400 (5,300)	2,300 (5,100)	2,300 (5,100)	2,000 (4,400)				
46.0 (150-11)	2,400 (5,300)	2,100 (4,600)	2,000 (4,400)							
48.0 (157-6)	2,000 (4,400)									

**WARRANTY.**

# Lifting Capacities

## JIB RATED LOADS IN KGS (LBS.)

• Main Boom Length 57.91m (190') to 67.06m (220')

Operating Radius in Meters (Ft.-In.)	57.91 m (190') Boom						60.96 m (200') Boom					
	12.19 m (40') Jib		18.29 m (60') Jib		27.43 m (90') Jib		12.19 m (40') Jib		18.29 m (60') Jib		27.43 m (90') Jib	
	Offset Angle		Offset Angle		Offset Angle		Offset Angle		Offset Angle		Offset Angle	
	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°
16.0 (52-6)	14,000 (30,900)											
18.0 (59-1)	14,000 (30,900)		10,000 (22,000)				14,000 (30,900)					
20.0 (65-7)	14,000 (30,900)	10,000 (22,000)	10,000 (22,000)				14,000 (30,900)	10,000 (22,000)	10,000 (22,000)			
22.0 (72-2)	14,000 (30,900)	10,000 (22,000)	10,000 (22,000)			3,900 (8,600)	14,000 (30,900)	10,000 (22,000)	10,000 (22,000)		3,900 (8,600)	
24.0 (78-9)	14,000 (30,900)	10,000 (22,000)	10,000 (22,000)	6,000 (13,200)	3,900 (8,600)		14,000 (30,900)	10,000 (22,000)	10,000 (22,000)	6,200 (13,700)	3,900 (8,600)	
26.0 (85-4)	13,000 (28,700)	10,000 (22,000)	10,000 (22,000)	6,000 (13,200)	3,900 (8,600)		12,900 (28,400)	10,000 (22,000)	10,000 (22,000)	6,200 (13,700)	3,900 (8,600)	
28.0 (91-10)	11,700 (25,800)	10,000 (22,000)	10,000 (22,000)	6,000 (13,200)	3,900 (8,600)		11,400 (25,100)	10,000 (22,000)	10,000 (22,000)	6,200 (13,700)	3,900 (8,600)	
30.0 (98-5)	10,500 (23,100)	10,000 (22,000)	10,000 (22,000)	6,000 (13,200)	3,900 (8,600)	3,300 (7,300)	10,200 (22,500)	10,000 (22,000)	10,000 (22,000)	6,200 (13,700)	3,900 (8,600)	3,300 (7,300)
32.0 (105-0)	9,200 (20,300)	9,200 (20,300)	9,200 (20,300)	6,000 (13,200)	3,900 (8,600)	3,300 (7,300)	9,200 (20,300)	9,200 (20,300)	9,200 (20,300)	6,200 (13,700)	3,900 (8,600)	3,300 (7,300)
34.0 (111-7)	8,500 (18,700)	8,500 (18,700)	8,500 (18,700)	6,000 (13,200)	3,900 (8,600)	3,300 (7,300)	8,300 (18,300)	8,300 (18,300)	8,300 (18,300)	6,200 (13,700)	3,900 (8,600)	3,300 (7,300)
36.0 (118-1)	7,700 (17,000)	7,700 (17,000)	7,700 (17,000)	6,000 (13,200)	3,900 (8,600)	3,300 (7,300)	7,500 (16,500)	7,500 (16,500)	7,500 (16,500)	6,200 (13,700)	3,900 (8,600)	3,300 (7,300)
38.0 (124-8)	7,100 (15,700)	7,100 (15,700)	7,100 (15,700)	6,000 (13,200)	3,900 (8,600)	3,300 (7,300)	6,800 (15,000)	6,800 (15,000)	6,800 (15,000)	6,200 (13,700)	3,900 (8,600)	3,300 (7,300)
40.0 (131-3)	6,500 (14,300)	6,500 (14,300)	6,500 (14,300)	6,000 (13,200)	3,900 (8,600)	3,300 (7,300)	6,200 (13,700)	6,200 (13,700)	6,200 (13,700)	6,200 (13,700)	3,900 (8,600)	3,300 (7,300)
42.0 (137-10)	5,900 (13,000)	5,900 (13,000)	5,900 (13,000)	5,900 (13,000)	3,900 (8,600)	3,300 (7,300)	5,600 (12,300)	5,600 (12,300)	5,600 (12,300)	5,600 (12,300)	3,900 (8,600)	3,300 (7,300)
44.0 (144-4)	5,400 (11,900)	5,400 (11,900)	5,400 (11,900)	5,400 (11,900)	3,900 (8,600)	3,300 (7,300)	5,100 (11,200)	5,100 (11,200)	5,100 (11,200)	5,100 (11,200)	3,900 (8,600)	3,300 (7,300)
46.0 (150-11)	5,000 (11,000)	5,000 (11,000)	5,000 (11,000)	5,000 (11,000)	3,900 (8,600)	3,300 (7,300)	4,700 (10,400)	4,700 (10,400)	4,700 (10,400)	4,700 (10,400)	3,900 (8,600)	3,300 (7,300)
48.0 (157-6)	4,500 (9,900)	4,500 (9,900)	4,500 (9,900)	4,500 (9,900)	3,900 (8,600)	3,300 (7,300)	4,200 (9,300)	4,200 (9,300)	4,200 (9,300)	4,200 (9,300)	3,900 (8,600)	3,300 (7,300)
50.0 (164-1)	4,100 (9,000)	4,100 (9,000)	4,100 (9,000)	4,100 (9,000)	3,900 (8,600)	3,300 (7,300)	3,800 (8,400)	3,800 (8,400)	3,800 (8,400)	3,800 (8,400)	3,800 (8,400)	3,300 (7,300)
Operating radius in Meters (Ft.-In.)	64.01 m (210') Boom						67.06 m (220') Boom					
	12.19 m (40') Jib		18.29 m (60') Jib		27.43 m (90') Jib		12.19 m (40') Jib		18.29 m (60') Jib		27.43 m (90') Jib	
	Offset Angle		Offset Angle		Offset Angle		Offset Angle		Offset Angle		Offset Angle	
	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°
18.0 (59-1)	14,000 (30,900)						14,000 (30,900)					
20.0 (65-7)	14,000 (30,900)		10,000 (22,000)				14,000 (30,900)		10,000 (22,000)			
22.0 (72-2)	14,000 (30,900)	10,000 (22,000)	10,000 (22,000)				14,000 (30,900)	10,000 (22,000)	10,000 (22,000)			
24.0 (78-9)	14,000 (30,900)	10,000 (22,000)	10,000 (22,000)			3,900 (8,600)	14,000 (30,900)	10,000 (22,000)	10,000 (22,000)		3,900 (8,600)	
26.0 (85-4)	12,800 (28,200)	10,000 (22,000)	10,000 (22,000)	6,400 (14,100)	3,900 (8,600)		12,700 (28,000)	10,000 (22,000)	10,000 (22,000)	6,500 (14,300)	3,900 (8,600)	
28.0 (91-10)	11,400 (25,100)	10,000 (22,000)	10,000 (22,000)	6,400 (14,100)	3,900 (8,600)		11,300 (24,900)	10,000 (22,000)	10,000 (22,000)	6,500 (14,300)	3,900 (8,600)	
30.0 (98-5)	10,100 (22,300)	10,000 (22,000)	10,000 (22,000)	6,400 (14,100)	3,900 (8,600)	3,300 (7,300)	10,000 (22,000)	10,000 (22,000)	10,000 (22,000)	6,500 (14,300)	3,900 (8,600)	
32.0 (105-0)	9,100 (20,100)	9,100 (20,100)	9,100 (20,100)	6,400 (14,100)	3,900 (8,600)	3,300 (7,300)	9,000 (19,800)	9,000 (19,800)	9,000 (19,800)	6,500 (14,300)	3,900 (8,600)	3,300 (7,300)
34.0 (111-7)	8,200 (18,100)	8,200 (18,100)	8,200 (18,100)	6,400 (14,100)	3,900 (8,600)	3,300 (7,300)	8,100 (17,900)	8,100 (17,900)	8,100 (17,900)	6,500 (14,300)	3,900 (8,600)	3,300 (7,300)
36.0 (118-1)	7,400 (16,300)	7,400 (16,300)	7,400 (16,300)	6,400 (14,100)	3,900 (8,600)	3,300 (7,300)	7,300 (16,100)	7,300 (16,100)	7,300 (16,100)	6,500 (14,300)	3,900 (8,600)	3,300 (7,300)
38.0 (124-8)	6,700 (14,800)	6,700 (14,800)	6,700 (14,800)	6,400 (14,100)	3,900 (8,600)	3,300 (7,300)	6,600 (14,600)	6,600 (14,600)	6,600 (14,600)	6,500 (14,300)	3,900 (8,600)	3,300 (7,300)
40.0 (131-3)	6,100 (13,400)	6,100 (13,400)	6,100 (13,400)	6,100 (13,400)	3,900 (8,600)	3,300 (7,300)	6,000 (13,200)	6,000 (13,200)	6,000 (13,200)	6,000 (13,200)	3,900 (8,600)	3,300 (7,300)
42.0 (137-10)	5,500 (12,100)	5,500 (12,100)	5,500 (12,100)	5,500 (12,100)	3,900 (8,600)	3,300 (7,300)	5,400 (11,900)	5,400 (11,900)	5,400 (11,900)	5,400 (11,900)	3,900 (8,600)	3,300 (7,300)
44.0 (144-4)	5,000 (11,000)	5,000 (11,000)	5,000 (11,000)	5,000 (11,000)	3,900 (8,600)	3,300 (7,300)	4,900 (10,800)	4,900 (10,800)	4,900 (10,800)	4,900 (10,800)	3,900 (8,600)	3,300 (7,300)
46.0 (150-11)	4,500 (9,900)	4,500 (9,900)	4,500 (9,900)	4,500 (9,900)	3,900 (8,600)	3,300 (7,300)	4,300 (9,500)	4,300 (9,500)	4,300 (9,500)	4,300 (9,500)	3,900 (8,600)	3,300 (7,300)
48.0 (157-6)	4,000 (8,800)	4,000 (8,800)	4,000 (8,800)	4,000 (8,800)	3,900 (8,600)	3,300 (7,300)	3,800 (8,400)	3,800 (8,400)	3,800 (8,400)	3,800 (8,400)	3,800 (8,400)	3,300 (7,300)
50.0 (164-1)	3,600 (7,900)	3,600 (7,900)	3,600 (7,900)	3,600 (7,900)	3,600 (7,900)	3,300 (7,300)	3,400 (7,500)	3,400 (7,500)	3,400 (7,500)	3,400 (7,500)	3,400 (7,500)	3,300 (7,300)
52.0 (170-7)	3,200 (7,100)	3,200 (7,100)	3,200 (7,100)	3,200 (7,100)	3,200 (7,100)	3,200 (7,100)	3,000 (6,600)	3,000 (6,600)	3,000 (6,600)	3,000 (6,600)	3,000 (6,600)	3,000 (6,600)
54.0 (177-2)	2,900 (6,400)	2,900 (6,400)	2,900 (6,400)	2,900 (6,400)	2,900 (6,400)	2,900 (6,400)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)
55.0 (180-5)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,500 (5,500)	2,500 (5,500)	2,500 (5,500)	2,500 (5,500)	2,500 (5,500)	2,500 (5,500)

**JIB RATED LOADS IN KGS (LBS.)**

•Main Boom Length 70.10m (230') to 82.30m (270')

Operating radius in Meters (Ft.-In.)	70.10 m (230') Boom						73.15 m (240') Boom								
	12.19 m (40') Jib		18.29 m (60') Jib		27.43 m (90') Jib		12.19 m (40') Jib		18.29 m (60') Jib		27.43 (90') Jib		12.19 m (40') Jib		
	Offset Angle		Offset Angle		Offset Angle		Offset Angle		Offset Angle		Offset Angle		Offset Angle		
	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°	
18.0 (59-1)	14,000 (30,900)														
20.0 (65-7)	14,000 (30,900)		10,000 (22,000)				14,000 (30,900)							13,700 (30,200)	
22.0 (72-2)	14,000 (30,900)	10,000 (22,000)	10,000 (22,000)				14,000 (30,900)	10,000 (22,000)	10,000 (22,000)					13,700 (30,200)	
24.0 (78-9)	14,000 (30,900)	10,000 (22,000)	10,000 (22,000)			3,900 (8,600)	14,000 (30,900)	10,000 (22,000)	10,000 (22,000)		3,900 (8,600)			13,700 (30,200)	10,000 (22,000)
26.0 (85-4)	12,600 (27,800)	10,000 (22,000)	10,000 (22,000)	6,800 (15,000)	3,900 (8,600)		12,300 (27,100)	10,000 (22,000)	10,000 (22,000)	6,800 (15,000)	3,900 (8,600)			12,300 (27,100)	10,000 (22,000)
28.0 (91-10)	11,100 (24,500)	10,000 (22,000)	10,000 (22,000)	6,800 (15,000)	3,900 (8,600)		10,800 (23,800)	10,000 (22,000)	10,000 (22,000)	6,800 (15,000)	3,900 (8,600)			10,800 (23,800)	10,000 (22,000)
30.0 (98-5)	9,900 (21,800)	9,900 (21,800)	9,900 (21,800)	6,800 (15,000)	3,900 (8,600)		9,800 (21,600)	9,800 (21,600)	9,800 (21,600)	6,800 (15,000)	3,900 (8,600)			9,700 (21,400)	9,700 (21,400)
32.0 (105-0)	8,900 (19,600)	8,900 (19,600)	8,900 (19,600)	6,800 (15,000)	3,900 (8,600)	3,300 (7,300)	8,800 (19,400)	8,800 (19,400)	8,800 (19,400)	6,800 (15,000)	3,900 (8,600)	3,300 (7,300)		8,700 (19,200)	8,700 (19,200)
34.0 (111-7)	8,000 (17,600)	8,000 (17,600)	8,000 (17,600)	6,800 (15,000)	3,900 (8,600)	3,300 (7,300)	7,900 (17,400)	7,900 (17,400)	7,900 (17,400)	6,800 (15,000)	3,900 (8,600)	3,300 (7,300)		7,700 (17,000)	7,700 (17,000)
36.0 (118-1)	7,200 (15,900)	7,200 (15,900)	7,200 (15,900)	6,800 (15,000)	3,900 (8,600)	3,300 (7,300)	7,100 (15,700)	7,100 (15,700)	7,100 (15,700)	6,800 (15,000)	3,900 (8,600)	3,300 (7,300)		6,900 (15,200)	6,900 (15,200)
38.0 (124-8)	6,500 (14,300)	6,500 (14,300)	6,500 (14,300)	6,500 (14,300)	3,900 (8,600)	3,300 (7,300)	6,400 (14,100)	6,400 (14,100)	6,400 (14,100)	6,400 (14,100)	3,900 (8,600)	3,300 (7,300)		6,200 (13,700)	6,200 (13,700)
40.0 (131-3)	5,900 (13,000)	5,900 (13,000)	5,900 (13,000)	5,900 (13,000)	3,900 (8,600)	3,300 (7,300)	5,700 (12,600)	5,700 (12,600)	5,700 (12,600)	5,700 (12,600)	3,900 (8,600)	3,300 (7,300)		5,500 (12,100)	5,500 (12,100)
42.0 (137-10)	5,300 (11,700)	5,300 (11,700)	5,300 (11,700)	5,300 (11,700)	3,900 (8,600)	3,300 (7,300)	5,000 (11,000)	5,000 (11,000)	5,000 (11,000)	5,000 (11,000)	3,900 (8,600)	3,300 (7,300)		4,900 (10,800)	4,900 (10,800)
44.0 (144-4)	4,800 (10,600)	4,800 (10,600)	4,800 (10,600)	4,800 (10,600)	3,900 (8,600)	3,300 (7,300)	4,500 (9,900)	4,500 (9,900)	4,500 (9,900)	4,500 (9,900)	3,900 (8,600)	3,300 (7,300)		4,400 (9,700)	4,400 (9,700)
46.0 (150-11)	4,200 (9,300)	4,200 (9,300)	4,200 (9,300)	4,200 (9,300)	3,900 (8,600)	3,300 (7,300)	4,000 (8,800)	4,000 (8,800)	4,000 (8,800)	4,000 (8,800)	3,900 (8,600)	3,300 (7,300)		3,800 (8,400)	3,800 (8,400)
48.0 (157-6)	3,700 (8,200)	3,700 (8,200)	3,700 (8,200)	3,700 (8,200)	3,700 (8,200)	3,300 (7,300)	3,500 (7,700)	3,500 (7,700)	3,500 (7,700)	3,500 (7,700)	3,500 (7,700)	3,300 (7,300)		3,300 (7,300)	3,300 (7,300)
50.0 (164-1)	3,300 (7,300)	3,300 (7,300)	3,300 (7,300)	3,300 (7,300)	3,300 (7,300)	3,300 (7,300)	3,100 (6,800)	3,100 (6,800)	3,100 (6,800)	3,100 (6,800)	3,100 (6,800)	3,100 (6,800)		2,900 (6,400)	2,900 (6,400)
52.0 (170-7)	2,900 (6,400)	2,900 (6,400)	2,900 (6,400)	2,900 (6,400)	2,900 (6,400)	2,900 (6,400)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)		2,500 (5,500)	2,500 (5,500)
54.0 (177-2)	2,600 (5,700)	2,600 (5,700)	2,600 (5,700)	2,600 (5,700)	2,600 (5,700)	2,600 (5,700)	2,400 (5,300)	2,400 (5,300)	2,400 (5,300)	2,400 (5,300)	2,400 (5,300)	2,400 (5,300)		2,200 (4,900)	2,200 (4,900)
55.0 (180-5)	2,400 (5,300)	2,400 (5,300)	2,400 (5,300)	2,400 (5,300)	2,400 (5,300)	2,400 (5,300)	2,200 (4,900)	2,200 (4,900)	2,200 (4,900)	2,200 (4,900)	2,200 (4,900)	2,200 (4,900)		2,000 (4,400)	2,000 (4,400)
Operating radius in Meters (Ft.-In.)	79.25 m (260') Boom						82.30 m (270') Boom								
	12.19 m (40') Jib		18.29 m (60') Jib		27.43 m (90') Jib		12.19 m (40') Jib		18.29 m (60') Jib		27.43 m (90') Jib				
	Offset Angle		Offset Angle		Offset Angle		Offset Angle		Offset Angle		Offset Angle				
	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°			
20.0 (65-7)	13,400 (29,500)														
22.0 (72-2)	13,400 (29,500)		10,000 (22,000)				11,100 (24,500)			10,000 (22,000)					
24.0 (78-9)	12,400 (27,300)	10,000 (22,000)	10,000 (22,000)				11,100 (24,500)	10,000 (22,000)	10,000 (22,000)						
26.0 (85-4)	11,400 (25,100)	10,000 (22,000)	10,000 (22,000)			3,900 (8,600)	10,300 (22,700)	10,000 (22,000)	10,000 (22,000)			3,900 (8,600)			
28.0 (91-10)	10,300 (22,700)	10,000 (22,000)	10,000 (22,000)	6,800 (15,000)	3,900 (8,600)		9,600 (21,200)	9,600 (21,200)	9,600 (21,200)	6,800 (15,000)	3,900 (8,600)				
30.0 (98-5)	9,200 (20,300)	9,200 (20,300)	9,200 (20,300)	6,800 (15,000)	3,900 (8,600)		8,800 (19,400)	8,800 (19,400)	8,800 (19,400)	6,800 (15,000)	3,900 (8,600)				
32.0 (105-0)	8,300 (18,300)	8,300 (18,300)	8,300 (18,300)	6,800 (15,000)	3,900 (8,600)		7,900 (17,400)	7,900 (17,400)	7,900 (17,400)	6,800 (15,000)	3,900 (8,600)				
34.0 (111-7)	7,500 (16,500)	7,500 (16,500)	7,500 (16,500)	6,800 (15,000)	3,900 (8,600)	3,300 (7,300)	7,200 (15,900)	7,200 (15,900)	7,200 (15,900)	6,800 (15,000)	3,900 (8,600)	3,300 (7,300)			
36.0 (118-1)	6,700 (14,800)	6,700 (14,800)	6,700 (14,800)	6,700 (14,800)	3,900 (8,600)	3,300 (7,300)	6,600 (14,600)	6,600 (14,600)	6,600 (14,600)	6,600 (14,600)	3,900 (8,600)	3,300 (7,300)			
38.0 (124-8)	6,000 (13,200)	6,000 (13,200)	6,000 (13,200)	6,000 (13,200)	3,900 (8,600)	3,300 (7,300)	5,900 (13,000)	5,900 (13,000)	5,900 (13,000)	5,900 (13,000)	3,900 (8,600)	3,300 (7,300)			
40.0 (131-3)	5,300 (11,700)	5,300 (11,700)	5,300 (11,700)	5,300 (11,700)	3,900 (8,600)	3,300 (7,300)	5,200 (11,500)	5,200 (11,500)	5,200 (11,500)	5,200 (11,500)	3,900 (8,600)	3,300 (7,300)			
42.0 (137-10)	4,700 (10,400)	4,700 (10,400)	4,700 (10,400)	4,700 (10,400)	3,900 (8,600)	3,300 (7,300)	4,600 (10,100)	4,600 (10,100)	4,600 (10,100)	4,600 (10,100)	3,900 (8,600)	3,300 (7,300)			
44.0 (144-4)	4,100 (9,000)	4,100 (9,000)	4,100 (9,000)	4,100 (9,000)	3,900 (8,600)	3,300 (7,300)	4,000 (8,800)	4,000 (8,800)	4,000 (8,800)	4,000 (8,800)	3,900 (8,600)	3,300 (7,300)			
46.0 (150-11)	3,500 (7,700)	3,500 (7,700)	3,500 (7,700)	3,500 (7,700)	3,500 (7,700)	3,300 (7,300)	3,400 (7,500)	3,400 (7,500)	3,400 (7,500)	3,400 (7,500)	3,400 (7,500)	3,400 (7,500)			
48.0 (157-6)	3,100 (6,800)	3,100 (6,800)	3,100 (6,800)	3,100 (6,800)	3,100 (6,800)	3,100 (6,800)	3,000 (6,600)	3,000 (6,600)	3,000 (6,600)	3,000 (6,600)	3,000 (6,600)	3,000 (6,600)			
50.0 (164-1)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,600 (5,700)	2,600 (5,700)	2,600 (5,700)	2,600 (5,700)	2,600 (5,700)	2,600 (5,700)			

76.20 m (250') Boom						
0' Jib	12.19 m (40') Jib		18.29 (60') Jib		27.43 m (90') Jib	
Angle	Offset Angle		Offset Angle		Offset Angle	
30°	10°	30°	10°	30°	10°	30°
	13,700					
	(30,200)					
	13,700		10,000			
	(30,200)		(22,000)			
	13,700	10,000	10,000			
	(30,200)	(22,000)	(22,000)			
	12,300	10,000	10,000		3,900	
	(27,100)	(22,000)	(22,000)		(8,600)	
	10,800	10,000	10,000	6,800	3,900	
	(23,800)	(22,000)	(22,000)	(15,000)	(8,600)	
	9,700	9,700	9,700	6,800	3,900	
	(21,400)	(21,400)	(21,400)	(15,000)	(8,600)	
3,300	8,700	8,700	8,700	6,800	3,900	
(7,300)	(19,200)	(19,200)	(19,200)	(15,000)	(8,600)	
3,300	7,700	7,700	7,700	6,800	3,900	3,300
(7,300)	(17,000)	(17,000)	(17,000)	(15,000)	(8,600)	(7,300)
3,300	6,900	6,900	6,900	6,800	3,900	3,300
(7,300)	(15,200)	(15,200)	(15,200)	(15,000)	(8,600)	(7,300)
3,300	6,200	6,200	6,200	6,200	3,900	3,300
(7,300)	(13,700)	(13,700)	(13,700)	(13,700)	(8,600)	(7,300)
3,300	5,500	5,500	5,500	5,500	3,900	3,300
(7,300)	(12,100)	(12,100)	(12,100)	(12,100)	(8,600)	(7,300)
3,300	4,900	4,900	4,900	4,900	3,900	3,300
(7,300)	(10,800)	(10,800)	(10,800)	(10,800)	(8,600)	(7,300)
3,300	4,400	4,400	4,400	4,400	3,900	3,300
(7,300)	(9,700)	(9,700)	(9,700)	(9,700)	(8,600)	(7,300)
3,300	3,800	3,800	3,800	3,800	3,800	3,300
(7,300)	(8,400)	(8,400)	(8,400)	(8,400)	(8,400)	(7,300)
3,300	3,300	3,300	3,300	3,300	3,300	3,300
(7,300)	(7,300)	(7,300)	(7,300)	(7,300)	(7,300)	(7,300)
3,100	2,900	2,900	2,900	2,900	2,900	2,900
(6,800)	(6,400)	(6,400)	(6,400)	(6,400)	(6,400)	(6,400)
2,700	2,500	2,500	2,500	2,500	2,500	2,500
(6,000)	(5,500)	(5,500)	(5,500)	(5,500)	(5,500)	(5,500)
2,400	2,200	2,200	2,200	2,200	2,200	2,200
(5,300)	(4,900)	(4,900)	(4,900)	(4,900)	(4,900)	(4,900)
2,200	2,000	2,000	2,000	2,000	2,000	2,000
4,900	(4,400)	(4,400)	(4,400)	(4,400)	(4,400)	(4,400)

90' Jib
Angle
30°

3,300
(7,300)
3,300
(7,300)
3,300
(7,300)
3,300
(7,300)
3,300
(7,300)
3,300
(7,300)
3,000
(7,300)
2,600
(5,700)

**THIS P&H KOBELCO MODEL 9170-TC MEETS THE REQUIREMENTS OF THE JAPANESE MOBILE CONSTRUCTION TYPE CRANE SAFETY CODE**

- Operating radius is the horizontal distance from center-line of rotation to a vertical line through the center of gravity of the load.
- Gross crane ratings shown are for units mounted on the P-KS152 crane carrier with dual front and rear axles.
- Ratings do not exceed 75% of tipping loads. Deduct weight of hook block(s), slings, and all other load handling accessories from main boom or jib rating shown.
- At radii and boom length where no ratings are shown on chart, operation is not intended or approved.
- Ratings are contingent upon the machine being equipped with the proper P&H KOBELCO boom.
- Ratings shown are based on over side and rear with outriggers being fully extended to a fulcrum point 3.49 m (11'5") from center of carrier.
- 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. The operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speeds accordingly.
- Mast required for all booms and gantry must be raised position for all operating conditions.
- Boom backstops are required for all boom length.
- Mid-point suspension (centerhitch) required when boom length is 57.91 m (190') or longer.
- Boom inserts and guy cables must be arranged as shown in the "Boom and Guy Cable Make-up Chart".
- Standard boom hoist reeving is 16 part line.
- Ratings are based on a total of three counterweights of 32,600 kg (71,900 lbs.) and a front bumper counter-weight of 6,100 kg (13,450 lbs.)
- Safe loads depend upon ground conditions, boom length, radius of operation and proper handling, all of which must be taken into account by the user.

**WARNING:**

- Welding or other repair to tubular steel booms may weaken the structure. See your P&H KOBELCO dealer for authorized boom repair service. Unauthorized repair will void all warranties.
- The wind effect on the lifted load can cause sufficient side load to overstress boom or jib structure. When suspended load will not remain in line with boom, derate chart 25%. We recommend stopping operation when wind is above 10 m/sec. (22 mph) and tying off, or lowering, boom when wind is above 16 m/sec. (36 mph). When continued operation under wind necessary, consult factory for special derated load rating chart.

### WEIGHT OF HOOK BLOCK

Hook Blocks	Kg (Lbs.)
25 metric ton block with single sheave (Std.)	700 (1,500)
65 metric ton block with three sheaves (Opt.)	900 (2,000)
150 metric ton block with seven sheaves (Opt.)	2,200 (4,900)
13.5 metric ton ball hook for lib (Opt.)	300 (700)

### MAXIMUM BOOM LENGTH TO LIFT OFF GROUND IN METERS (FT.)

#### With 32,600kg (71,900 lbs) Counterweight

Boom Over	With 6,100 kg (13,450 lbs.) Front Bumper Counterweight	
	With Outriggers Set, Rear Aux. Outriggers are Required for 85.30m (280') or longer.	
	Boom Only	Boom and Jib
Side	64.01 (210)	57.91 + 18.29 (190 + 60)
Rear	88.39 (290)	70.10 + 18.29 (230 + 60)
Boom Over	With 10,100 kg (22,250 lbs.) Front Bumper Counterweight	
	With Outriggers, and Front and Rear Aux. Outriggers Set	
	Boom Only	Boom and Jib
Side	64.01 (210)	57.91 + 18.29 (190 + 60)
Rear	88.39 (290)	82.30 + 27.43 (270 + 90)

### MAIN HOIST REEVING—28mm (1.10") dia. 6XFi (29)

No. of Parts of Line	1	2	3	4	5
Max. Load—kg (lbs.)	10,500 (23,100)	21,000 (46,300)	31,500 (69,400)	42,000 (92,600)	52,500 (115,700)
No. of Parts of Line	6	7	8	9	10
Max. Load—kg (lbs.)	65,000 (143,300)	73,500 (162,000)	84,000 (185,200)	94,500 (208,300)	105,000 (231,500)
No. of Parts of Line	11	12	13	14	
Max. Load—kg (lbs.)	115,500 (254,600)	126,000 (277,800)	136,500 (300,900)	150,000 (330,700)	

### JIB HOIST REEVING—24mm (0.94") dia. U4Xses (39)

No. of Parts of Line	1	2
Max. Load—kg (lbs.)	7,000 (15,400)	14,000 (30,900)

### BOOM MAKE-UP ARRANGEMENT CHART • WITH 7.26m (25 ft.) HEAVY DUTY TIP

Boom Length Meters (Ft.)	Boom Arrangement
18.29 (60)	Base—A—Tip
21.34 (70)	Base—B—Tip
24.38 (80)	Base—C—Tip
27.43 (90)	Base—A—C—Tip
30.48 (100)	Base—B—C—Tip
33.53 (110)	Base—C—C—Tip
36.58 (120)	Base—A—C—C—Tip
39.62 (130)	Base—B—C—C—Tip
42.67 (140)	Base—C—C—C—Tip
45.72 (150)	Base—A—C—C—C—Tip
48.77 (160)	Base—B—C—C—C—Tip
51.82 (170)	Base—A—B—C—C—C—Tip

Base = 7.62 m (25') Tip = 7.62 m (25')  
Inserts: A = 3.05 m (10'); B = 6.10 m (20'); C = 9.14 m (30')

### • WITH 10.67m (35 ft.) LIGHT DUTY TIP

Boom Length Meters (Ft.)	Boom Arrangement
27.43 (90)	Base—C—Tip
30.48 (100)	Base—A—C—Tip
33.53 (110)	Base—B—C—Tip
36.58 (120)	Base—C—C—Tip
39.62 (130)	Base—A—C—C—Tip
42.67 (140)	Base—B—C—C—Tip
45.72 (150)	Base—C—C—C—Tip
48.77 (160)	Base—A—C—C—C—Tip
51.82 (170)	Base—B—C—C—C—Tip
54.86 (180)	Base—A—B—C—C—C—Tip
57.91 (190)	Base—C—C—C—D—Tip
60.96 (200)	Base—A—C—C—C—D—Tip
64.01 (210)	Base—B—C—C—C—D—Tip
67.06 (220)	Base—B—C—C—D—D—Tip
70.10 (230)	Base—C—C—C—D—D—Tip
73.15 (240)	Base—C—C—C—A—D—D—Tip
76.20 (250)	Base—C—C—C—B—D—D—Tip
79.25 (260)	Base—A—B—C—C—C—D—D—Tip
82.30 (270)	Base—C—C—C—D—D—D—Tip
85.33 (280)	Base—A—C—C—C—D—D—D—Tip
88.39 (290)	Base—B—C—C—C—D—D—D—Tip

Base = 7.62 m (25') Tip = 10.67 m (35') Inserts: A = 3.05 m (10'); B = 6.10 m (20'); C = 9.14 m (30'); D = 12.19 (40')

- DO NOT USE 12.19 m (40') BOOM INSERT FOR BOOM LENGTH 54.86 m (180') OR SHORTER.

### JIB MAKE-UP ARRANGEMENT CHART

Job Length Meters (Ft.)	Jib Arrangement
12.19 (40)	Base—B—Tip
18.29 (60)	Base—B—B—Tip
27.43 (90)	Base—B—B—C—Tip

Base = 3.05 m (10') Tip = 3.05 m (10')  
Insert: B = 6.10 m (20'), C = 9.14 m (30')

- JIB CANNOT BE EXTENDED ON HEAVY DUTY TIP.

# Tower Crane

16 metric ton Crane Load  
48.77m Tower and 36.58m Jib

## Lifting Capacities

### RATED CRANE LOADS IN KGS (LBS.)

Operating Radius in Meters (Ft.-In.)	33.53 m (110'), 36.58 m (120'), 39.62 (130') Tower						Operating Radius in Meters (Ft.-In.)	42.67 m (140'), 45.72 m (150'), 48.77 m (160') Tower					
	21.34 m (70') Jib	24.38 m (80') Jib	27.43 m (90') Jib	30.48 m (100') Jib	33.53 m (110') Jib	36.58 m (120') Jib		21.34 m (70') Jib	24.38 m (80') Jib	27.43 m (90') Jib	30.48 m (100') Jib	33.53 m (110') Jib	36.58 m (120') Jib
11.0 (36-1)	16,000 (35,300)						11.0 (36-1)	16,000 (35,300)					
12.0 (39-4)	16,000 (35,300)	16,000 (35,300)					12.0 (39-4)	16,000 (35,300)	16,000 (35,300)				
13.0 (42-8)	16,000 (35,300)	16,000 (35,300)	16,000 (35,300)				13.2 (43-4)	16,000 (35,300)	16,000 (35,300)				
14.8 (48-7)	16,000 (35,300)	16,000 (35,300)	16,000 (35,300)	16,000 (35,300)			13.5 (44-3)	—	—	15,600 (34,400)			
15.5 (50-10)	15,100 (33,300)	15,100 (33,300)	15,100 (33,300)	15,100 (33,300)	13,000 (28,700)		14.0 (45-11)	15,100 (33,300)	15,100 (33,300)	15,100 (33,300)	15,100 (33,300)		
16.5 (54-2)	14,000 (30,900)	14,000 (30,900)	14,000 (30,900)	14,000 (30,900)	13,000 (28,700)	10,500 (23,100)	15.0 (49-3)	13,700 (30,200)	13,700 (30,200)	13,700 (30,200)	13,700 (30,200)		
17.0 (55-9)	13,500 (29,800)	13,500 (29,800)	13,500 (29,800)	13,500 (29,800)	13,000 (28,700)	10,500 (23,100)	15.7 (51-6)	—	—	—	—	13,000 (28,700)	
17.5 (57-5)	—	—	—	—	13,000 (28,700)	10,500 (23,100)	16.0 (52-6)	12,700 (28,000)	12,700 (28,000)	12,700 (28,000)	12,700 (28,000)	12,700 (28,000)	
18.0 (59-1)	12,600 (27,800)	12,600 (27,800)	12,600 (27,800)	12,600 (27,800)	12,600 (27,800)	10,500 (23,100)	16.5 (54-2)	—	—	—	—	—	10,500 (23,100)
19.0 (62-4)	11,800 (26,000)	11,800 (26,000)	11,800 (26,000)	11,800 (26,000)	11,800 (26,000)	10,500 (23,100)	17.0 (55-9)	11,800 (26,000)	11,800 (26,000)	11,800 (26,000)	11,800 (26,000)	11,800 (26,000)	10,500 (23,100)
20.0 (65-7)	11,000 (24,300)	11,000 (24,300)	11,000 (24,300)	11,000 (24,300)	11,000 (24,300)	10,500 (23,100)	18.0 (59-1)	10,900 (24,000)	10,900 (24,000)	10,900 (24,000)	10,900 (24,000)	10,900 (24,000)	10,500 (23,100)
20.7 (67-11)	—	—	—	—	—	10,500 (23,100)	18.6 (61-0)	—	—	—	—	—	10,500 (23,100)
22.0 (72-2)	9,700 (21,400)	9,700 (21,400)	9,700 (21,400)	9,700 (21,400)	9,700 (21,400)	9,700 (21,400)	19.0 (62-4)	10,200 (22,500)	10,200 (22,500)	10,200 (22,500)	10,200 (22,500)	10,200 (22,500)	10,200 (22,500)
24.0 (78-9)	—	8,600 (19,000)	8,600 (19,000)	8,600 (19,000)	8,600 (19,000)	8,600 (19,000)	20.0 (65-7)	9,500 (20,900)	9,500 (20,900)	9,500 (20,900)	9,500 (20,900)	9,500 (20,900)	9,500 (20,900)
25.0 (82-0)	—	8,100 (17,900)	—	—	—	—	22.0 (72-2)	8,400 (18,500)	8,400 (18,500)	8,400 (18,500)	8,400 (18,500)	8,400 (18,500)	8,400 (18,500)
26.0 (85-4)	—	—	7,700 (17,000)	7,700 (17,000)	7,700 (17,000)	7,700 (17,000)	24.0 (78-9)	—	7,500 (16,500)	7,500 (16,500)	7,500 (16,500)	7,500 (16,500)	7,500 (16,500)
28.0 (91-10)	—	—	6,900 (15,200)	6,900 (15,200)	6,900 (15,200)	6,900 (15,200)	25.0 (82-0)	—	7,000 (15,400)	—	—	—	—
30.0 (98-5)	—	—	—	6,200 (13,700)	6,200 (13,700)	6,200 (13,700)	26.0 (85-4)	—	—	6,700 (14,800)	6,700 (14,800)	6,700 (14,800)	6,700 (14,800)
32.0 (105-0)	—	—	—	—	5,700 (12,600)	5,700 (12,600)	28.0 (91-10)	—	—	6,000 (13,200)	6,000 (13,200)	6,000 (13,200)	6,000 (13,200)
33.0 (108-3)	—	—	—	—	5,400 (11,900)	—	30.0 (98-5)	—	—	—	5,400 (11,900)	5,400 (11,900)	5,400 (11,900)
34.0 (111-7)	—	—	—	—	—	5,100 (11,200)	32.0 (105-0)	—	—	—	—	4,800 (10,600)	4,800 (10,600)
							33.0 (108-3)	—	—	—	—	4,600 (10,100)	—
							34.0 (111-7)	—	—	—	—	—	4,400 (9,700)

NOTE: Major precautions for this model are identical to those for 9170-TC Truck Crane.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATED LOADS OR DISREGARD OF INSTRUCTIONS VOIDS THE WARRANTY.

### COMBINATIONS OF TOWER AND JIB

Tower Boom Length Meters (Ft.)	33.53 (110)	36.58 (120)	39.62 (130)
Max. Jib Length Meters (Ft.)	30.48 (100)	33.53 (110)	36.58 (120)
Tower Boom Length Meters (Ft.)	42.67 (140)	45.72 (150)	48.77 (160)
Max. Jib Length Meters (Ft.)	36.58 (120)	36.58 (120)	36.58 (120)

### TOWER BOOM MAKE-UP ARRANGEMENT CHART

Tower Boom Length Meters (Ft.)	Tower Boom Arrangement
33.53 (110)	Base-C-C-Cap, Base-A-B-C-Cap
36.58 (120)	Base-A-C-C-Cap
39.62 (130)	Base-B-C-C-Cap
42.67 (140)	Base-C-C-C-Cap, Base-A-B-C-C-Cap
45.72 (150)	Base-A-C-C-C-Cap
48.77 (160)	Base-B-C-C-C-Cap

Base = 7.62 m (25'); Cap = 7.62 m (25')  
Inserts: A = 3.05 m (10'), B = 6.10 m (20'), C = 9.14 m (30')

### WEIGHT OF HOOK BLOCK

Hook Block	Kg (Lbs.)
25 metric ton block with single sheave	700 (1,500)
65 metric ton block with three sheaves	900 (2,000)

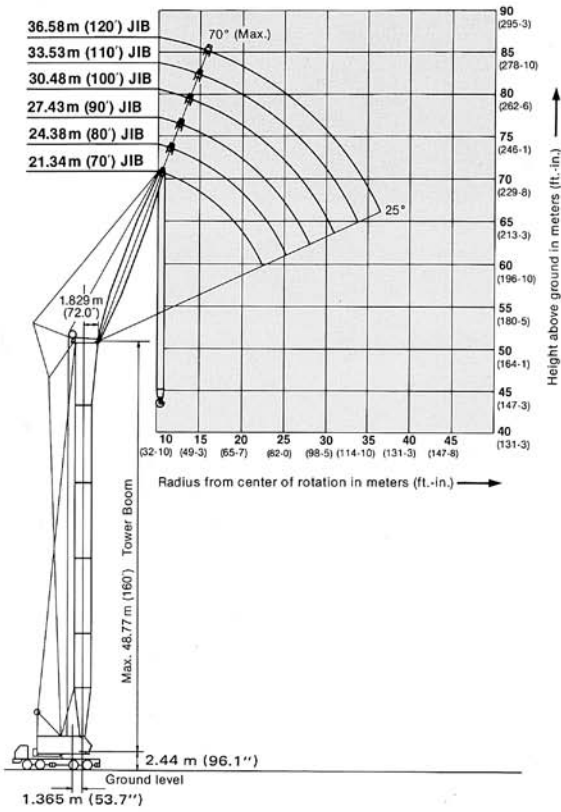
65 metric ton hook block required when jib length is 21.34 m (70').

### HOIST REEVING

No. of Parts of Line	1	2
Max. Load - kg (lbs.)	8,000 (17,600)	16,000 (35,300)



# Working Ranges



## JIB MAKE-UP ARRANGEMENT CHART

Jib Length Meters (Ft.)	Jib Arrangement
21.34 (70)	Base-B-A-Tip
24.38 (80)	Base-B-B-Tip
27.43 (90)	Base-B-C-Tip
30.48 (100)	Base-A-B-C-Tip
33.53 (110)	Base-B-B-C-Tip
36.58 (120)	Base-A-B-B-C-Tip

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



**KOBELCO**

# 9170-TC

*NOTE: Due to our policy of continual product improvement, all designs and specifications are subject to change without advance notice. Data herein is information in nature and shall not be construed to warrant suitability of the machine for any particular purpose as performance may vary with the conditions encountered. These statements are correct at time of going to press.*



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