

P&H **KOBELCO**



9200-TC

200-M ton Truck Crane

 **KOBE STEEL, LTD.**

Bulletin No. 9200-TC-103

200 metric ton capacity to the biggest jobs with ease.

Max. lifting capacity: **200** metric tons x **4.5** m

Max. boom length: **97.54** m

Max. boom & jib length: **85.34** m + **30.48** m

Increased operational accuracy at all speeds

- The 9200-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. Transmission shifting is controlled by a 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 1,490 rpm. This keeps the engine running below its rated rpm automatically during light-load operation even if line speed is at the maximum level, and extends engine life and reduces noise.

Revolutionary Hydrotorque® System for smooth swing.

- The 9200TC uses Hydrotorque®, a revolutionary hydraulic swing control system with proven efficiency in many other P & H KOBELCO cranes. The hydraulic pressure acting on the swing motor, that is swing torque, is precisely controlled by lever movement so that the swing starts and stops without shocks. In addition, swing operation is smooth and sure since it is not affected by engine rpm variation.
- When the swing control lever is returned to neutral, the boom will continue to move by its own momentum, thereby eliminating another source of shocks. The swing motion immediately stops without shocks when the lever is thrown into reverse. Sure and speedy work handling is assured with minimum load-shake.
- Minimum operating force is required. The lever gives the operator delicate control of swing torque and swing brake force.

Selection of neutral braking and free-fall

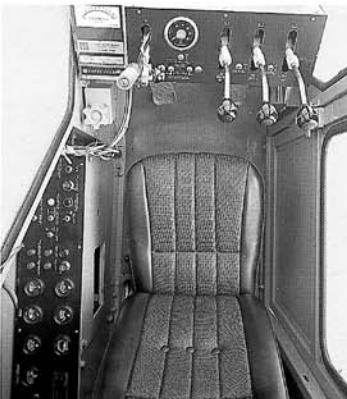
Two operating methods are available for both the front and rear drums when the control lever is set in neutral. One provides automatic braking, while the other provides free-fall which is controlled by the brake pedal. The desired method can be selected according to work requirements.

Easy operation

The control for main hoist, auxiliary hoist and boom hoist uses a reliable, full flow hydraulic control system equipped with an accumulator. Response is excellent, and operation is easy and stable.

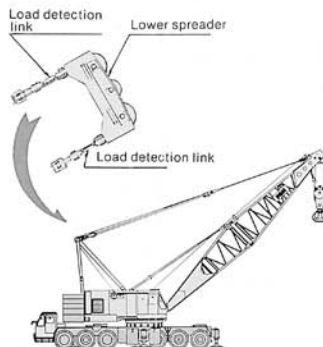
Wide, comfortable, and safe cab

- The angular 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 and their length can be adjusted as desired. They are arranged on the control stand together with the snap switches for crane operation, pilot lamps, and an oversized tachometer.
- The high-back reclining seat with an integrated head rest has suspension for added comfort, and 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 with a load cell attached to the lower spreader. This system eliminates rope wear and damage while assuring extremely accurate load detection.

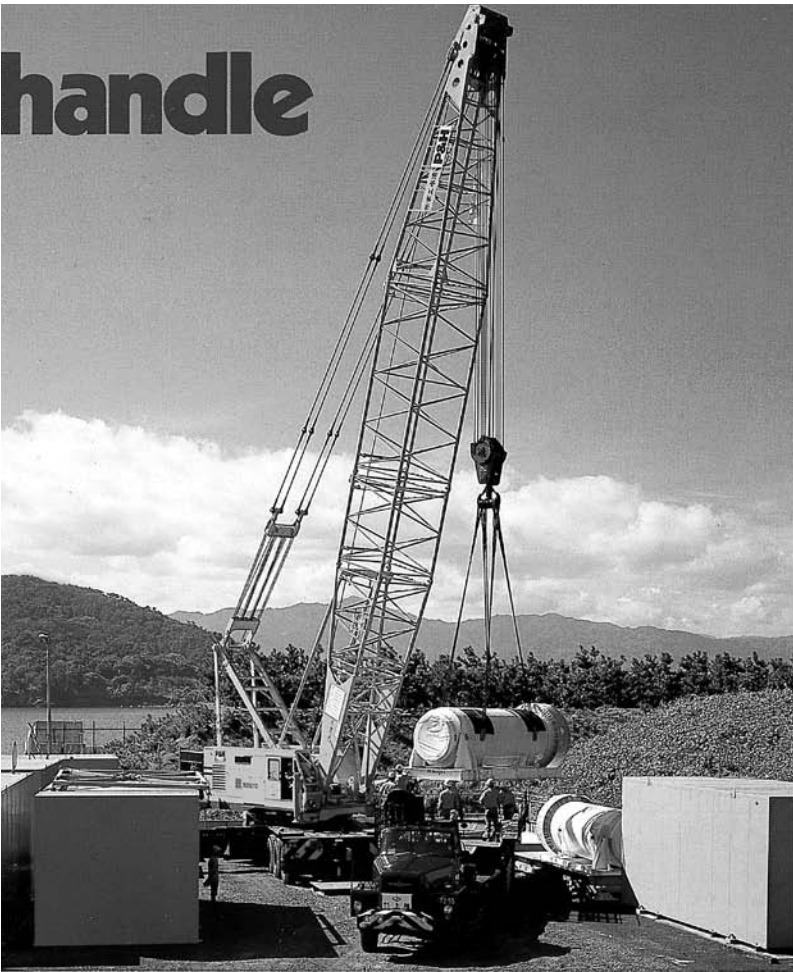


- All rated crane load data are stored in mode cartridges. Over load is prevented by changing digital switch setting according to the boom type and length in use.
- Load limit (rated crane load) and boom angle are displayed digitally. The ratio of actual detected load to load limit is displayed as a percentage. Both displays are easy to read. Boom angle range can be set freely according to the working conditions to assure added safety in operation.

Complete safety devices

- Crane hook over hoist alarm buzzer and limit switch
- Boom over hoist limit switch
- Boom backstops
- Boom hoist drum pawl lock
- Front and rear drum brakes with fail-safe device
- Front and rear drum pawl locks
- Swing lock for travelling
- Boom angle indicator and others
- Crane load moment limiter (optional)

handle

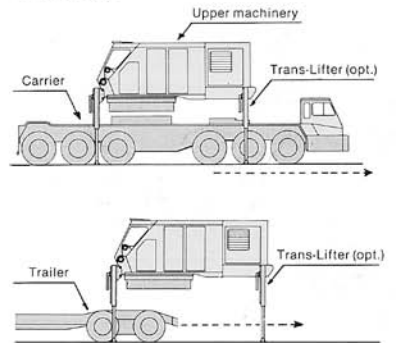
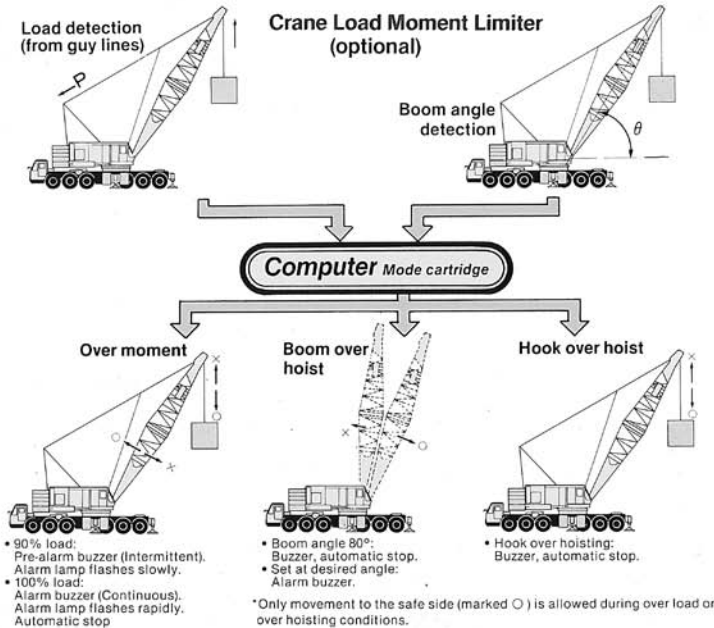


KOBELCO's exclusive cross-type hydraulic outriggers

- The cross-type hydraulic outrigger arrangement used for the 9200-TC, developed by Kobe Steel, is a thoroughly practical design, in which four outriggers are positioned at the sides, front, and back of the carrier to distribute the load in four directions. The sturdy front and rear outriggers form an integral part of the carrier frame.
- Since the front outrigger is integrated in the carrier frame and the rear outrigger can be folded in, dismounting is not required. The large outriggers at the sides can be easily removed for road travel, and folded in for movement at the work site. In addition, small outriggers are provided for auxiliary use, as in job preparation. They are folded into the carrier sides for road travel.
- The outriggers are controlled via one-touch solenoid switches provided on both the right and left sides of the carrier to allow quick and accurate setting from either side.

Easy disassembly and reassembly for transportation

- The five-piece counterweight is mounted behind the machinery cab for easy removal.
- To separate upper machinery from the carrier, pull out the sixteen wedges at the skirts of the swing bearing, then jack up the upper machinery using the trans-lifters optionally installed on the upper frame. The upper machinery can be loaded on a trailer simply by driving out the carrier and backing in the trailer under the upper machinery. With the trans-lifters, only a 20 metric ton crane is needed for disassembly and reassembly.



9200-TC 2

Specifications

UPPER MACHINERY



ENGINE

(Standard)

Model	Mitsubishi 8DC9C diesel
Type	Direct injection
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	260 ps @ 2,200 rpm
Max. Torque	98 kg-m (709 ft.-lbs.) @ 1,200 rpm
Cooling	Water cooled
Starting	Electric 24 volt-6.0 kW
Generator	24 volt-1.0 kW
Radiator	Vertical tube and fin type core, thermostatically controlled

Air Cleaner Dry type with replaceable paper element
 Fuel Tank Capacity 400 liters (106 U.S. gal.)

BATTERIES

Two 12 volt, heavy duty, with battery relay. Series connected.

TORQUE CONVERTER

Niigata TACN-20-1101, single stage, stationary housing type with integral drives for swing, control and converter charging pumps, and with two speed electro hydraulic power shift transmission, actuated by electrical switch.

Hydraulic system: Gear type pump charges converter. Oil to water heat exchanger cools fluid. Filtered with full flow pressure filters with replaceable elements.

SPEED CONTROL

Twist grip control on swing lever, for all operations.

HYDRAULIC PUMPS

All driven from heavy duty pump drive.

Swing Pump: Two axial piston type.

Torque Converter Charging Pump: Gear type.

Control System Pump: Gear type.



BOOM HOIST ASSEMBLY

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

Clutch: 584 mm (23") dia. x 127 mm (5") wide, hand 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, and spring set hydraulically released safety pawl provided on right hand drum.

Planetary boom lowering: Band type external contracting, spring set hydraulically released safety pawl.

Drums: 401 mm (15.79") pitch dia. x 332 mm (13.07") long. Twin grooved drums mounted on tapered roller bearings.



FRONT AND REAR DRUMS (LOAD DRUMS)

One drum on one drum shaft system 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 available. Hydraulic set, with additional spring set hydraulically released brake lock — fail safe device, and spring set hydraulically released 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 585 mm (23.03") long, split type and grooved drum.

Rear — 514 mm (20.24") pitch dia. x 589 mm (23.19") long, split type and grooved drum.



SWING UNIT

Hydraulic axial piston motor driving through planetary reducer to output swing pinion 360° rotation.

Swing speed 2.2 rpm

SWING BRAKES

Spring set, hydraulically released and actuated by electrical switch, disc type brakes mounted on swing reducer.

FASTENING TO LOWER

Quick disconnect capability for dismantling upper structure, 16 wedges.



CONTROLS

In front of operator are foot pedals for front and rear drum brakes, four adjustable short hand levers for swing control, front and rear drum controls, and boom hoist control, switches for front and rear drum pawls and brake locks, positive-negative brake select (front and rear drum brakes) and transmission shift. Hand throttle (twist grip) and swing brake lock switch on swing lever. At operator's left are console mounted control switches, meters and gauges (see instruments).

ELECTRICAL SYSTEM

All wiring color corded for easy servicing, individual fused branch circuits.

HYDRAULIC SYSTEM

Main/aux. hoist and boom hoist controls: Full flow hydraulic system provides power to front/rear drum brakes and clutches and boom hoist brakes and clutches. Full flow system operates at 100 kg/cm² (1,420 psi) line pressure. Response is instant, positive and smooth to operator's light touch. Pumped fluid is filtered, stored in accumulator under pressure, cooled in reservoir and filtered again before returning to pump.

Swing control: Semi-closed loop system. Maximum pressure rating 210 kg/cm² (3,000 psi.). Oil to air heat exchanger cools fluid. Filtered with full flow return filters with replaceable paper elements. Reservoir holds 280 liters (74 U.S. gal.).



OPERATOR'S CAB

Totally enclosed from weather. 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 and defroster (optional) available.

LIGHTING

Two cab front flood lights, three cab inside lights and one 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, engine preheat indicator and hydraulic control pressure gauge.

SAFETY DEVICES

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

GANTRY

High gantry folding type. Fitted with sheave frame for boom hoist reeving. Lowers automatically toward rear into cab recess. Hydraulic lift is standard. Position is fully raised and fully lowered with linkage, locked in fully raised position.

COUNTERWEIGHTS

Five-piece, cast construction, mounted behind machinery cab.
 Total weight 45,700 kg (100, 700 lbs.)

TOOLS AND ACCESSORIES

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

TRANS-LIFTER (OPTIONAL)

Trans-lifter system allows quick and easy upper machinery removal and trailer loading. Hinge mounted four vertical cylinders lift up the upper machinery and give road clearance of 1,890 mm (74.4") for self trailer loading.

CARRIER

(12 Wheels, 4 Wheel Drive, 16 Tires)

MODEL KS 201

WEIGHT

Carrier weight approx. 39,400 kg (86,900 lbs.)
Including turret and hydraulic outriggers with standard tires. Ex-
cepting large outriggers.



ENGINE (Standard)

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

No. of Cylinders 10
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 140 kg-m (1,013 ft. lbs.) @ 1,400 rpm
Cooling Water cooled
Starting Electric 24 volt
Capacity 370 liters (97.7 U.S. gal.)

(Optional)

Hino EV700, direct injection type, 10 cyl., 4 cycle, 415 PS @ 2,400 rpm rated engine output.

RADIATOR

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

CLUTCH Single dry plate.

TRANSMISSION

Main transmission: 10 speed forward, 2 speed reverse.
Auxiliary transmission: 4 speed.



STEERING

Recirculating ball screw type with hydraulic power
booster.

SERVICE BRAKE

Dual circuit air on all twelve wheels, internal expanding
leading and trailing shoe type.

PARKING BRAKE

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

SUSPENSION

Front and rear-unsprung box section bogie with torque rods. Self-
aligning on both ends of bogie beams.

TIRES Sixteen (16) 14.00 x 24 - 24 PR.



HYDRAULIC OUTRIGGER

Total of six (6) double acting hydraulic cylinders provide
independent vertical movement of each outrigger.

LARGE OUTRIGGERS

Two (2) fabricated reinforced box section large outrig-
gers of high strength low alloy steel plate. Large outriggers are pin
connected, folded and removed. Large outriggers extend to position
of 5,000 mm (196.9") from longitudinal center line of carrier to
center line of jackpad.

SMALL OUTRIGGERS

Four (4) fabricated outriggers of high strength low alloy steel plate.
Rear or two (2) side outriggers are pin connected and retracted during
travel. Front outrigger is mounted to cross member of frame.

FLOATS Four (4) aluminum floats.

ADDITIONAL WEIGHTS

Four (4) 5,000 kg (11,000 lbs.) counterweights to be mounted on the
large outriggers.



CAB

One-man cab offset to left side of engine compartment.

INSTRUMENTS

Tachometer, speedometer, fuel gauge, engine oil pressure
gauge, engine water temperature gauge, ammeter, low

air pressure indicator, air pressure gauge, two level gauges and switches.
Signal horn.

LIGHTING

Two headlights, two taillights, two directional signal lights and one cab
inside light.

AUXILIARY WHEELS (OPTIONAL)

Aux. wheel with hydraulic suspension. Installed to two (2) side
outriggers for stability when travelling with long boom.
Tires: Four (4) 10.00 x 20, 14 PR.

PERFORMANCE

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

Max. Travel Speed 60 km/h (37.3 mph)
Gradeability 24%
Min. Turning Radius 11.9 m (39'-1")

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 ten offset boom point sheaves
616 mm (24.25") pitch dia. with antifriction bearings.

Sections are pin connected, have a 2,096 mm (82.5") deep x 2,210
mm (84") wide cross section and complete with suspension cable as-
semblies. High tensile steel chords all welded. Boom extendible to
24.38 m (80').

Basic length 15.24 m (50')
Boom base section 7.62 m (25')
Boom tip section 7.62 m (25')

LIGHT DUTY BOOM

Two piece, open throat lattice type tapered boom consisting of a
tapered base section and a light duty tapered tip section having five
offset boom point sheaves 616 mm (24.25") pitch dia. with antific-
tion bearings. Sections are pin connected, have 2,096 mm (82.5")
deep x 2,210 mm (87") wide cross section and complete with suspen-
sion cable assemblies. High tensile steel chords all welded. Boom
extendible to 97.54 m (320').

Basic length 18.29 m (60')
Boom base section (standard) 7.62 m (25')
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
39.62 m (130') 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 30.48 m (100'). For lifts not exceeding
15,000 kg (3,3100 lbs.). Jib cannot be extended on heavy duty tip.

Basic length 12.19 m (40')
Jib base section 4.57 m (15')
Jib insert 3.05 m (10')
Jib tip section 4.57 m (15')

JIB INSERT SECTION (OPTIONAL)

Jib insert available for extension, tubular lattice type, high tensile
steel chords, all welded, pin connections.
Available in 6.10 m (20') long.

MAST

10.7 m (35'-1") long. Rectangular box section cross laced steel. Mast
foot 450 mm (17.72") above boom foot to allow close coupling of
mast and boom base for low clearance travel. Fitted with sheave
frame on mast peak pin for boom hoist reeving. Required for all light
duty booms. Do not use mast for all heavy duty booms.



HOOK BLOCKS

25 metric ton block with single sheave, swivel hook, safety latch and three (3) parts hoist line.

200 metric ton block with ten sheaves, swivel hook, safety latch and twenty (20) parts hoist line—optional.

100 metric ton block with five sheaves, swivel hook, safety latch and ten (10) parts hoist line — optional.

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

12 metric ton weighted ball hook with safety latch and two (2) parts hoist line for jib — optional.

DIAMETER OF WIRE ROPE

Hoist wire rope — 6 x Fi (29) 28 mm (1.10")

Jib hoist wire rope — U4 x Ses (39) 24 mm (0.94")

Boom hoist wire rope 20 mm (0.79")

Boom suspension wire rope (Heavy duty boom) 36 mm (1.42")

Boom suspension wire rope (light duty boom) 32 mm (1.26")

Jib suspension wire rope 26 mm (1.02")

Intermediate boom suspension wire rope 24 mm (0.94")

[Required when boom length is 64.01 m (210') or longer]

BOOM HOIST REEVING

Eighteen (18) parts of 20 mm (0.79") dia. high strength wire rope.

BOOM BACKSTOPS

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

CABLE GUIDE ROLLERS (OPTIONAL)

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

WORKING WEIGHT

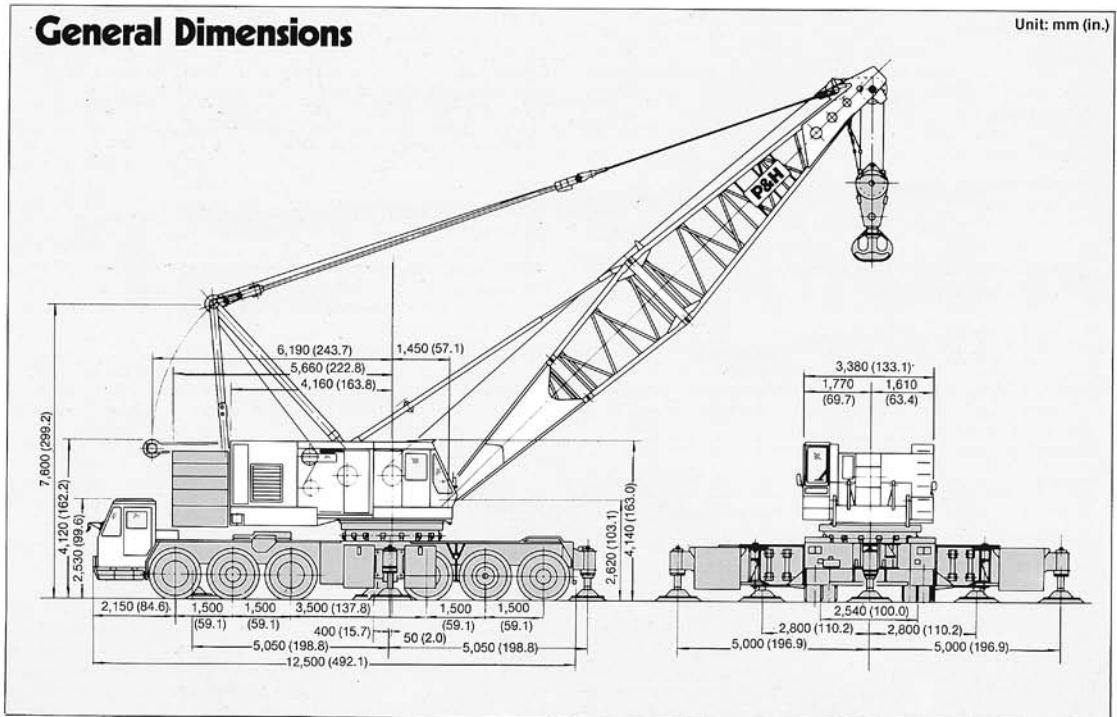
Working weight Approx. 157,000 kg (346,100 lbs.)

Including 15.24 m (50') heavy duty boom, 200 metric ton hook block, 45,700 kg (100,700 lbs.) counterweights, carrier, hydraulic outriggers and 5,000 kg (11,000 lbs.) additional counterweights.

DRUM WORKING DATA

		Front Drum	Rear Drum	Boom Hoist Drum
Function		Main hoist line	Jib hoist line	Boom hoist line
Pitch dia.	mm (in.)	518 (20.39)	514 (20.24)	401 (15.79)
Drum length	mm (in.)	585 (23.03)	589 (23.19)	332 (13.07)
Wire rope dia.	mm (in.)	28 (1.10)	24 (0.94)	20 (0.79)
Capacity-Total	m (ft.)	382 (1,253)	434 (1,423)	168 x 2 (551 x 2)
* Line speed	Hoisting m/min (fpm)	60 (197)	60 (197)	24 (79)
	Lowering m/min (fpm)	52 (171)	52 (171)	16 (52)
* 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 1,490 rpm. In case of low speed transmission, the line speed becomes one half of the above figures.



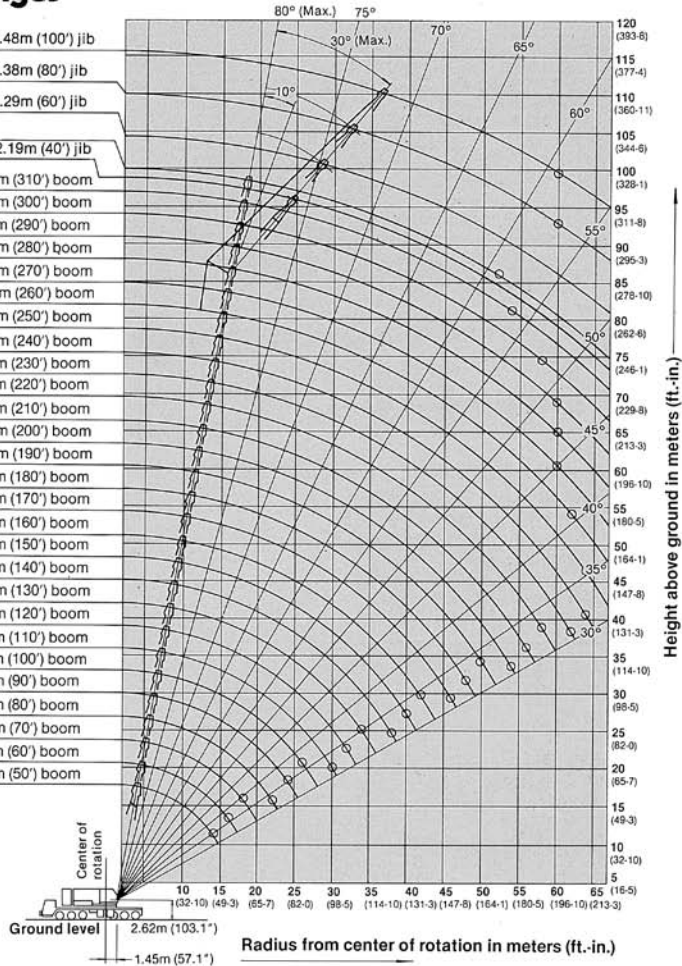
200-M ton Truck Crane

200 metric ton Crane Load 97.54m Boom 85.34m Boom + 30.48m Jib

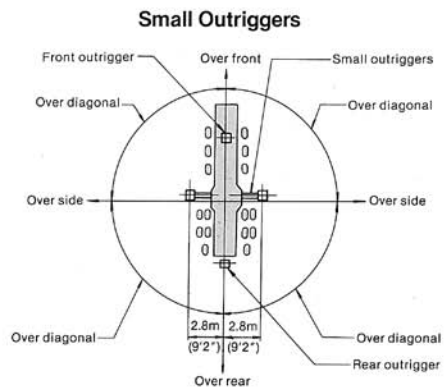
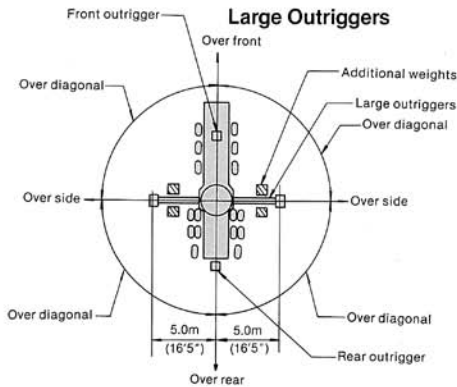
Working Ranges

- 85.34m (280') boom + 30.48m (100') jib
- 85.34m (280') boom + 24.38m (80') jib
- 85.34m (280') boom + 18.29m (60') jib
- 97.54m (320') boom
- 85.34m (280') boom + 12.19m (40') jib

- 94.49m (310') boom
- 91.44m (300') boom
- 88.39m (290') boom
- 85.34m (280') boom
- 82.30m (270') boom
- 79.25m (260') boom
- 76.20m (250') boom
- 73.15m (240') boom
- 70.10m (230') boom
- 67.06m (220') boom
- 64.01m (210') boom
- 60.96m (200') boom
- 57.91m (190') boom
- 54.86m (180') boom
- 51.82m (170') boom
- 48.77m (160') boom
- 45.72m (150') boom
- 42.67m (140') boom
- 39.62m (130') boom
- 36.58m (120') boom
- 33.53m (110') boom
- 30.48m (100') boom
- 27.43m (90') boom
- 24.38m (80') boom
- 21.34m (70') boom
- 18.29m (60') boom
- 15.24m (50') boom



Working Areas



"With outriggers" set work areas per SAE J1028

Lifting Capacities

WITH HEAVY DUTY TIP RATED CRANE LOADS IN KGS (LBS.)—MAIN BOOM IN 360° WORK AREAS

Operating Radius in Meters (Ft.-In.)	With Large Outriggers and Additional Weights				With Large Outriggers, Without Additional Weights			
	15.24m (50') Boom	18.29m (60') Boom	21.34m (70') Boom	24.38m (80') Boom	15.24m (50') Boom	18.29m (60') Boom	21.34m (70') Boom	24.38m (80') Boom
4.5 (14-9)	200,000 (440,900)				200,000 (440,900)			
5.0 (16-5)	186,900 (412,000)	170,800 (376,500)			186,900 (412,000)	170,800 (376,500)		
5.5 (18-1)	173,800 (383,200)	160,900 (354,700)	151,900 (334,900)		173,800 (383,200)	160,900 (354,700)	151,900 (334,900)	
6.0 (19-8)	160,700 (354,300)	151,000 (332,900)	144,200 (317,900)	134,100 (295,600)	160,700 (354,300)	151,000 (332,900)	144,200 (317,900)	134,100 (295,600)
7.0 (23-0)	134,500 (296,500)	131,200 (289,200)	128,900 (284,200)	125,400 (276,500)	134,500 (296,500)	131,200 (289,200)	128,900 (284,200)	125,400 (276,500)
8.0 (26-3)	110,600 (243,800)	110,400 (243,400)	110,200 (242,900)	110,100 (242,700)	107,600 (237,200)	107,400 (236,800)	107,200 (236,300)	106,900 (235,700)
9.0 (29-6)	92,900 (204,800)	93,100 (205,300)	92,900 (204,800)	92,700 (204,400)	87,500 (192,900)	87,100 (192,000)	86,900 (191,600)	86,300 (190,300)
10.0 (32-10)	79,000 (174,200)	80,000 (176,400)	79,800 (175,900)	79,500 (175,300)	73,500 (162,000)	73,100 (161,200)	72,900 (160,700)	72,300 (159,400)
12.0 (39-4)	58,400 (128,700)	61,400 (135,400)	61,200 (134,900)	61,000 (134,500)	55,300 (121,900)	55,000 (121,300)	54,800 (120,800)	54,200 (119,500)
14.0 (45-11)	44,000 (97,000)	48,900 (107,800)	48,700 (107,400)	48,600 (107,100)	44,000 (97,000)	43,800 (96,600)	43,600 (96,100)	43,100 (95,000)
16.0 (52-6)		39,900 (88,000)	39,800 (87,700)	39,700 (87,500)		36,200 (79,800)	36,000 (79,400)	35,600 (78,500)
18.0 (59-1)			33,000 (72,800)	33,000 (72,800)			30,500 (67,200)	30,200 (66,600)
20.0 (65-7)				27,800 (61,300)				26,100 (57,500)
22.0 (72-2)				23,600 (52,000)				22,900 (50,500)
Operating Radius in Meters (Ft.-In.)	With Small Outriggers and Three Piece Upper Counterweights							
	15.24m (50') Boom	18.29m (60') Boom	21.34m (70') Boom	24.38m (80') Boom				
4.5 (14-9)	88,900 (196,000)							
5.0 (16-5)	82,100 (181,000)	80,000 (176,400)						
5.5 (18-1)	75,300 (166,000)	73,800 (162,700)	72,700 (160,300)					
6.0 (19-8)	68,600 (151,200)	67,500 (149,800)	66,800 (147,300)	66,700 (147,000)				
7.0 (23-0)	55,000 (121,300)	55,000 (121,300)	55,000 (121,300)	54,900 (121,000)				
8.0 (26-3)	45,100 (99,400)	44,800 (98,800)	44,700 (98,500)	44,500 (98,100)				
9.0 (29-6)	38,000 (83,800)	37,600 (82,900)	37,400 (82,500)	37,300 (82,200)				
10.0 (32-10)	32,700 (72,100)	32,300 (71,200)	32,100 (70,800)	32,000 (70,500)				
12.0 (39-4)	25,400 (56,000)	25,000 (55,100)	24,800 (54,700)	24,600 (54,200)				
14.0 (45-11)	20,500 (45,200)	20,200 (44,500)	20,000 (44,100)	19,800 (43,700)				
16.0 (52-6)		16,800 (37,000)	16,600 (36,600)	16,400 (36,200)				
18.0 (59-1)			14,100 (31,100)	13,800 (30,400)				
20.0 (65-7)				11,900 (26,200)				
22.0 (72-2)				10,300 (22,700)				

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

WITH LIGHT DUTY TIP RATED CRANE LOADS IN KGS

Operating Radius in Meters (Ft.-In.)	18.29m (60') Boom	21.34m (70') Boom	
5.0 (16-5)	100,000 (220,500)		
6.0 (19-8)	100,000 (220,500)	100,000 (220,500)	
7.0 (23-0)	100,000 (220,500)	100,000 (220,500)	
8.0 (26-3)	100,000 (220,500)	100,000 (220,500)	
9.0 (29-6)	100,000 (220,500)	100,000 (220,500)	
10.0 (32-10)	83,700 (184,500)	83,700 (184,500)	
12.0 (39-4)	62,900 (138,700)	62,900 (138,700)	
14.0 (45-11)	50,200 (110,700)	50,100 (110,500)	
16.0 (52-6)	41,700 (91,900)	41,500 (91,500)	
18.0 (59-1)		35,200 (77,600)	
20.0 (65-7)			
22.0 (72-2)			
30.0 (98-5)			
32.0 (105-0)			
34.0 (111-7)			
36.0 (118-1)			
38.0 (124-8)			
40.0 (131-3)			
42.0 (137-10)			
44.0 (144-4)			
46.0 (150-11)			
48.0 (157-6)			
50.0 (164-1)			
52.0 (170-7)			
54.0 (177-2)			
56.0 (183-9)			
58.0 (190-3)			
60.0 (196-10)			
62.0 (203-5)			
64.0 (210-0)			

NOTE: Ratings inside of box are limited by strength

(LBS.)—MAIN BOON IN 360° WORK AREAS WITH LARGE OUTRIGGERS AND ADDITIONAL WEIGHTS

	24.38m (80') Boom	27.43m (90') Boom	30.48m (100') Boom	33.53m (110') Boom	36.58m (120') Boom	39.62m (130') Boom	42.67m (140') Boom	45.72m (150') Boom	48.77m (160') Boom	51.82m (170') Boom	54.86m (180') Boom	57.91m (190') Boom	60.96m (200') Boom
	100,000 (220,500)												
	100,000 (220,500)	100,000 (220,500)	100,000 (220,500)										
	100,000 (220,500)	100,000 (220,500)	100,000 (220,500)	100,000 (220,500)									
	92,000 (202,800)	92,000 (202,800)	92,000 (202,800)	90,000 (198,400)	88,500 (195,100)	84,000 (185,200)							
	79,100 (174,400)	79,100 (174,400)	78,900 (173,900)	77,500 (170,900)	77,400 (170,600)	76,000 (167,600)	74,700 (164,700)	68,600 (151,200)					
	61,400 (135,400)	61,300 (135,100)	61,000 (134,500)	60,300 (132,900)	60,100 (132,500)	60,000 (132,300)	60,000 (132,300)	59,700 (131,600)	58,900 (129,900)	55,100 (121,500)	50,900 (112,200)	46,900 (103,400)	
	49,700 (109,600)	49,600 (109,300)	49,400 (108,900)	48,900 (107,800)	48,700 (107,400)	48,500 (106,900)	48,400 (106,700)	48,200 (106,300)	48,200 (106,300)	48,200 (106,300)	47,500 (104,700)	43,100 (95,000)	41,90 (92,40)
	41,500 (91,500)	41,400 (91,300)	41,200 (90,800)	40,900 (90,200)	40,700 (89,700)	40,400 (89,100)	40,300 (88,800)	40,100 (88,400)	40,000 (88,200)	39,900 (88,000)	39,500 (87,100)	39,200 (86,400)	39,20 (86,40)
	35,200 (77,600)	35,200 (77,600)	35,100 (77,400)	34,900 (76,900)	34,700 (76,500)	34,500 (76,100)	34,300 (75,600)	34,200 (75,400)	34,000 (75,000)	33,800 (74,500)	33,500 (73,900)	33,400 (73,600)	33,30 (73,40)
	30,700 (67,700)	30,500 (67,200)	30,400 (67,000)	30,300 (66,800)	30,100 (66,400)	29,900 (65,900)	29,700 (65,500)	29,600 (65,300)	29,400 (64,800)	29,200 (64,400)	29,000 (63,900)	28,900 (63,700)	28,70 (63,30)
	26,900 (59,300)	26,800 (59,100)	26,700 (58,900)	26,600 (58,600)	26,400 (58,200)	26,300 (58,000)	26,100 (57,500)	26,000 (57,300)	25,800 (56,900)	25,600 (56,400)	25,400 (56,000)	25,300 (55,800)	25,10 (55,30)
		23,700 (52,200)	23,600 (52,000)	23,600 (52,000)	23,400 (51,600)	23,300 (51,400)	23,100 (50,900)	23,100 (50,900)	22,800 (50,300)	22,600 (49,800)	22,500 (49,600)	22,300 (49,200)	22,10 (48,70)
			21,100 (46,500)	21,100 (46,500)	21,000 (46,300)	20,900 (46,100)	20,700 (45,600)	20,600 (45,400)	20,400 (45,000)	20,200 (44,500)	20,100 (44,300)	19,900 (43,900)	19,70 (43,40)
				19,000 (41,900)	18,900 (41,700)	18,800 (41,400)	18,700 (41,200)	18,600 (41,000)	18,300 (40,300)	18,200 (40,100)	18,000 (39,700)	17,900 (39,500)	17,60 (38,80)
				17,200 (37,900)	17,100 (37,700)	17,100 (37,700)	16,900 (37,300)	16,800 (37,000)	16,600 (36,600)	16,400 (36,200)	16,300 (35,900)	16,100 (35,500)	15,90 (35,10)
					15,500 (34,200)	15,500 (34,200)	15,400 (34,000)	15,300 (33,700)	15,000 (33,100)	14,900 (32,800)	14,800 (32,600)	14,600 (32,200)	14,30 (31,50)
						14,200 (31,300)	14,100 (31,100)	14,000 (30,900)	13,700 (30,200)	13,600 (30,000)	13,500 (29,800)	13,300 (29,300)	13,00 (28,70)
							12,900 (28,400)	12,800 (28,200)	12,600 (27,800)	12,500 (27,600)	12,400 (27,300)	12,100 (26,700)	11,80 (26,00)
							11,900 (26,200)	11,800 (26,000)	11,500 (25,400)	11,500 (25,400)	11,300 (24,900)	11,100 (24,500)	10,80 (23,80)
								10,900 (24,000)	10,600 (23,400)	10,600 (23,400)	10,400 (22,900)	10,200 (22,500)	9,90 (21,80)
									9,800 (21,600)	9,800 (21,600)	9,600 (21,200)	9,300 (20,500)	9,00 (19,80)
										9,100 (20,100)	8,900 (19,600)	8,600 (19,000)	8,30 (18,30)
											8,400 (18,500)	8,200 (18,100)	7,900 (17,400)
												7,600 (16,800)	7,300 (16,100)
													6,700 (14,800)
													6,40 (14,10)
													5,90 (13,00)
													5,40 (11,90)

materials.

9.96m (200') Boom	64.01m (210') Boom	67.06m (220') Boom	70.10m (230') Boom	73.15m (240') Boom	76.20m (250') Boom	79.25m (260') Boom	82.30m (270') Boom	85.34m (280') Boom	88.39m (290') Boom	91.44m (300') Boom	94.49m (310') Boom	97.54m (320') Boom	Operating Radius in Meters (Ft.-In.)
													5.0 (16-5)
													6.0 (19-8)
													7.0 (23-0)
													8.0 (26-3)
													9.0 (29-6)
													10.0 (32-10)
													12.0 (39-4)
													14.0 (45-11)
1,900 2,400	41,300 (91,100)	38,300 (84,400)	35,100 (77,400)										16.0 (52-6)
9,200 6,400	39,200 (86,400)	35,800 (78,900)	33,800 (74,500)	31,000 (68,300)	28,100 (61,900)	25,800 (56,900)	23,900 (52,700)						18.0 (59-1)
3,300 3,400	33,200 (73,200)	33,200 (73,200)	32,500 (71,700)	29,500 (65,000)	26,900 (59,300)	24,700 (54,500)	22,900 (50,500)	21,100 (46,500)	19,100 (42,100)	17,500 (38,600)			20.0 (65-7)
8,700 3,300	28,500 (62,800)	28,500 (62,800)	28,100 (61,900)	28,000 (61,700)	25,700 (56,700)	23,600 (52,000)	21,800 (48,100)	20,100 (44,300)	18,200 (40,100)	16,600 (36,600)	15,200 (33,500)	13,700 (30,200)	22.0 (72-2)
5,100 5,300	24,900 (54,900)	24,900 (54,900)	24,500 (54,000)	24,500 (54,000)	24,500 (54,000)	22,500 (49,600)	20,800 (45,900)	19,200 (42,300)	17,300 (38,100)	15,800 (34,800)	14,300 (31,500)	12,900 (28,400)	24.0 (78-9)
2,100 8,700	21,900 (48,300)	21,900 (48,300)	21,600 (47,600)	21,600 (47,600)	21,600 (47,600)	21,400 (47,200)	19,700 (43,400)	18,200 (40,100)	16,400 (36,200)	14,900 (32,800)	13,400 (29,500)	12,100 (26,700)	26.0 (85-4)
9,700 3,400	19,500 (43,000)	19,400 (42,800)	19,200 (42,300)	19,200 (42,300)	19,200 (42,300)	19,000 (41,900)	18,700 (41,200)	17,300 (38,100)	15,500 (34,200)	14,100 (31,100)	12,500 (27,600)	11,300 (24,900)	28.0 (91-10)
7,600 8,900	17,500 (38,600)	17,400 (38,400)	17,200 (37,900)	17,200 (37,900)	17,100 (37,700)	17,000 (37,500)	16,800 (37,000)	16,300 (35,900)	14,600 (32,200)	13,200 (29,100)	11,700 (25,800)	10,500 (23,100)	30.0 (98-5)
5,900 5,100	15,700 (34,600)	15,600 (34,400)	15,500 (34,200)	15,500 (34,200)	15,300 (33,700)	15,200 (33,500)	15,100 (33,300)	14,700 (32,400)	13,700 (30,200)	12,300 (27,100)	10,800 (23,800)	9,700 (21,400)	32.0 (105-0)
4,300 1,500	14,200 (31,300)	14,100 (31,100)	14,000 (30,900)	13,900 (30,600)	13,800 (30,400)	13,700 (30,200)	13,600 (30,000)	13,200 (29,100)	12,800 (28,200)	11,500 (25,400)	10,000 (22,000)	8,900 (19,600)	34.0 (111-7)
3,000 8,700	12,900 (28,400)	12,800 (28,200)	12,600 (27,800)	12,600 (27,800)	12,400 (27,300)	12,300 (27,100)	12,200 (26,900)	12,000 (26,500)	11,600 (25,600)	10,600 (23,400)	9,300 (20,500)	8,100 (17,900)	36.0 (118-1)
1,800 6,000	11,700 (25,800)	11,600 (25,600)	11,500 (25,400)	11,400 (25,100)	11,200 (24,700)	11,100 (24,500)	11,000 (24,300)	10,700 (23,600)	10,500 (23,100)	9,800 (21,600)	8,500 (18,700)	7,300 (16,100)	38.0 (124-8)
0,800 3,800	10,700 (23,600)	10,600 (23,400)	10,400 (22,900)	10,300 (22,700)	10,200 (22,500)	10,000 (22,000)	10,000 (22,000)	9,600 (21,200)	9,500 (20,900)	9,000 (19,800)	7,800 (17,200)	6,600 (14,600)	40.0 (131-3)
9,900 1,800	9,800 (21,600)	9,700 (21,400)	9,500 (20,900)	9,400 (20,700)	9,200 (20,300)	9,100 (20,100)	9,000 (19,800)	8,700 (19,200)	8,500 (18,700)	8,200 (18,100)	7,100 (15,700)	5,900 (13,000)	42.0 (137-10)
9,000 8,300	9,000 (19,800)	8,800 (19,400)	8,700 (19,200)	8,500 (18,700)	8,300 (18,300)	8,200 (18,100)	8,100 (17,900)	7,800 (17,200)	7,700 (17,000)	7,500 (16,500)	6,400 (14,100)	5,200 (11,500)	44.0 (144-4)
8,300 6,800	8,300 (18,300)	8,100 (17,900)	7,900 (17,400)	7,700 (17,000)	7,600 (16,800)	7,400 (16,300)	7,300 (16,100)	7,000 (15,400)	6,900 (15,200)	6,800 (15,000)	5,800 (12,800)	4,600 (10,100)	46.0 (150-11)
7,000 5,400	7,000 (15,400)	7,400 (16,300)	7,200 (15,900)	7,000 (15,400)	6,900 (15,200)	6,700 (14,800)	6,600 (14,600)	6,300 (13,900)	6,200 (13,700)	6,100 (13,400)	5,100 (11,200)	4,000 (8,800)	48.0 (157-6)
6,400 4,100	6,400 (14,100)	6,200 (13,700)	6,000 (13,200)	5,700 (12,600)	5,600 (12,300)	5,400 (11,900)	5,200 (11,500)	5,000 (11,000)	4,900 (10,800)	4,800 (10,600)	3,900 (8,600)	2,900 (6,400)	50.0 (164-1)
5,900 3,000	5,900 (13,000)	5,700 (12,600)	5,500 (12,100)	5,200 (11,500)	5,100 (11,200)	4,900 (10,800)	4,700 (10,400)	4,400 (9,700)	4,400 (9,700)	4,300 (9,500)	3,400 (7,500)	2,400 (5,300)	52.0 (170-7)
5,400 1,900	5,400 (11,900)	5,300 (11,700)	5,000 (11,000)	4,700 (10,400)	4,600 (10,100)	4,300 (9,500)	4,100 (9,000)	3,800 (8,400)	3,800 (8,400)	3,700 (8,200)	2,800 (6,200)		54.0 (177-2)
	5,000 (11,000)	4,800 (10,600)	4,600 (10,100)	4,200 (9,300)	4,100 (9,000)	3,900 (8,600)	3,600 (7,900)	3,300 (7,300)	3,300 (7,300)	3,100 (6,800)			56.0 (183-9)
		4,400 (9,700)	4,200 (9,300)	3,800 (8,400)	3,600 (8,000)	3,400 (7,500)	3,100 (6,800)	2,800 (6,200)	2,800 (6,200)	2,600 (5,700)			58.0 (190-3)
			3,800 (8,400)	3,300 (7,300)	3,200 (7,100)	3,000 (6,600)	2,700 (6,000)	2,400 (5,300)	2,400 (5,300)				60.0 (196-10)
			3,400 (7,500)	3,000 (6,600)	2,900 (6,400)	2,600 (5,700)							62.0 (203-5)
				2,600 (5,700)	2,500 (5,500)								64.0 (210-0)

WITH LIGHT DUTY TIP

RATED CRANE LOADS IN KGS (LBS.)—MAIN BOOM IN 360° WORK AREAS WITH LARGE OUTRIGGERS, WITHOUT ADDI

Operating radius in Meters (Ft.-In.)	18.29m (60') Boom	21.34m (70') Boom	24.38m (80') Boom	27.43m (90') Boom	30.48m (100') Boom	33.53m (110') Boom	36.58m (120') Boom	39.62m (130') Boom	42.67m (140') Boom	45.72m (150') Boom	48.77m (160') Boom	51.82m (170') Boom	54.8 (180) Boom
5.0 (16-5)	100,000 (220,500)												
6.0 (19-8)	100,000 (220,500)	100,000 (220,500)	100,000 (220,500)										
7.0 (23-0)	100,000 (220,500)	100,000 (220,500)	100,000 (220,500)	100,000 (220,500)	100,000 (220,500)								
8.0 (26-3)	100,000 (220,500)	100,000 (220,500)	100,000 (220,500)	100,000 (220,500)	100,000 (220,500)	100,000 (220,500)							
9.0 (29-6)	90,300 (199,100)	90,300 (199,100)	90,300 (199,100)	90,300 (199,100)	90,300 (199,100)	90,000 (198,400)	88,500 (195,100)	84,000 (185,200)					
10.0 (32-10)	75,500 (166,400)	75,500 (166,400)	75,500 (166,400)	75,500 (166,400)	75,400 (166,200)	75,200 (165,800)	75,100 (165,600)	75,000 (165,300)	74,700 (164,700)	68,600 (151,200)			
12.0 (39-4)	56,600 (124,800)	56,600 (124,800)	56,600 (124,800)	56,500 (124,600)	56,400 (124,300)	56,200 (123,900)	56,200 (123,900)	56,200 (123,900)	56,200 (123,900)	56,200 (123,900)	56,100 (123,700)	55,100 (121,500)	50.9 (112.2)
14.0 (45-11)	45,000 (99,200)	45,000 (99,200)	45,000 (99,200)	44,900 (99,000)	44,800 (98,800)	44,600 (98,300)	44,400 (97,900)	44,400 (97,900)	44,400 (97,900)	44,300 (97,700)	44,300 (97,700)	44,300 (97,700)	44,1 (97.2)
16.0 (52-6)	37,200 (82,000)	37,200 (82,000)	37,200 (82,000)	37,100 (81,800)	36,900 (81,400)	36,800 (81,100)	36,600 (80,700)	36,500 (80,500)	36,500 (80,500)	36,300 (80,000)	36,200 (79,800)	36,200 (79,800)	36,1 (79.6)
18.0 (59-1)		31,500 (69,400)	31,500 (69,400)	31,400 (69,200)	31,200 (68,800)	31,100 (68,600)	30,900 (68,100)	30,800 (67,900)	30,800 (67,900)	30,600 (67,500)	30,400 (67,000)	30,300 (66,800)	30,3 (66.8)
20.0 (65-7)			27,200 (60,000)	27,100 (59,700)	27,000 (59,500)	26,800 (59,100)	26,600 (58,600)	26,500 (58,400)	26,500 (58,400)	26,300 (58,000)	26,100 (57,500)	26,000 (57,300)	25.9 (57.1)
22.0 (72-2)			23,900 (52,700)	23,800 (52,500)	23,600 (52,000)	23,500 (51,800)	23,300 (51,400)	23,200 (51,100)	23,100 (50,900)	22,900 (50,500)	22,700 (50,000)	22,600 (49,800)	22.6 (49.8)
24.0 (78-9)				21,100 (46,500)	20,900 (46,100)	20,800 (45,900)	20,600 (45,400)	20,500 (45,200)	20,400 (45,000)	20,200 (44,500)	20,000 (44,100)	19,900 (43,900)	19.8 (43.7)
26.0 (85-4)					18,700 (41,200)	18,600 (41,000)	18,400 (40,600)	18,300 (40,300)	18,200 (40,100)	18,000 (39,700)	17,800 (39,200)	17,700 (39,000)	17.6 (38.8)
28.0 (91-10)						16,700 (36,800)	16,500 (36,400)	16,500 (36,400)	16,300 (35,900)	16,200 (35,700)	15,900 (35,100)	15,900 (35,100)	15.7 (34.6)
30.0 (98-5)						15,200 (33,500)	14,900 (32,800)	14,900 (32,800)	14,800 (32,600)	14,600 (32,200)	14,300 (31,500)	14,300 (31,500)	14.2 (31.3)
32.0 (105-0)							13,600 (30,000)	13,600 (30,000)	13,400 (29,500)	13,300 (29,300)	13,000 (28,700)	13,000 (28,700)	12.8 (28.2)
34.0 (111-7)								12,400 (27,300)	12,200 (26,900)	12,100 (26,700)	11,800 (26,000)	11,800 (26,000)	11.6 (25.5)
36.0 (118-1)									11,200 (24,700)	11,100 (24,500)	10,800 (23,800)	10,800 (23,800)	10.6 (23.4)
38.0 (124-8)									10,300 (22,700)	10,200 (22,500)	9,900 (21,800)	9,900 (21,800)	9.7 (21.4)
40.0 (131-3)										9,400 (20,700)	9,100 (20,100)	9,100 (20,100)	8.9 (19.6)
42.0 (137-10)											8,400 (18,500)	8,400 (18,500)	8.2 (18.1)
44.0 (144-4)												7,800 (17,200)	7.5 (16.5)
46.0 (150-11)												7,200 (15,900)	6.9 (15.2)
48.0 (157-6)													6.4 (14.1)
50.0 (164-1)													
52.0 (170-7)													
54.0 (177-2)													
56.0 (183-9)													
58.0 (190-3)													
60.0 (196-10)													

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

ADDITIONAL WEIGHTS

54.86m (180') Boom	57.91m (190') Boom	60.96m (200') Boom	64.01m (210') Boom	67.06m (220') Boom	70.10m (230') Boom	73.15m (240') Boom	76.20m (250') Boom	79.25m (260') Boom	82.30m (270') Boom	85.34m (280') Boom	88.39m (290') Boom		
50,900 (112,200)	46,900 (103,400)												
44,100 (97,200)	44,100 (97,200)	41,900 (92,400)	41,300 (91,100)	38,300 (84,400)	35,100 (77,400)								
36,100 (79,600)	36,000 (79,400)	36,000 (79,400)	35,800 (78,900)	35,800 (78,900)	32,500 (71,700)	31,000 (68,300)	28,100 (61,900)	25,800 (56,900)	23,900 (52,700)				
30,300 (66,800)	30,200 (66,600)	30,100 (66,400)	30,000 (66,100)	30,000 (66,100)	29,800 (65,700)	29,600 (65,300)	26,700 (58,900)	24,800 (54,700)	22,900 (50,500)	21,000 (46,300)	19,100 (42,100)		
25,900 (57,100)	25,900 (57,100)	25,700 (56,700)	25,600 (56,400)	25,600 (56,400)	25,500 (56,200)	25,300 (55,800)	25,200 (55,600)	23,700 (52,200)	21,900 (48,300)	20,200 (44,500)	18,100 (39,900)		
22,600 (49,800)	22,500 (49,600)	22,300 (49,200)	22,200 (48,900)	22,200 (48,900)	22,100 (48,700)	22,000 (48,500)	21,900 (48,300)	20,900 (46,100)	20,900 (46,100)	19,200 (42,300)	17,200 (37,900)		
19,800 (43,700)	19,700 (43,400)	19,500 (43,000)	19,400 (42,800)	19,400 (42,800)	19,300 (42,500)	19,200 (42,300)	19,200 (42,300)	18,500 (40,800)	18,500 (40,800)	18,300 (40,300)	16,200 (35,700)		
17,600 (38,800)	17,500 (38,600)	17,300 (38,100)	17,100 (37,700)	17,100 (37,700)	17,000 (37,500)	16,900 (37,300)	16,900 (37,300)	16,400 (36,200)	16,400 (36,200)	16,200 (35,700)	15,300 (33,700)		
15,700 (34,600)	15,600 (34,400)	15,400 (34,000)	15,200 (33,500)	15,200 (33,500)	15,100 (33,300)	15,000 (33,100)	15,000 (33,100)	14,600 (32,200)	14,600 (32,200)	14,400 (31,700)	14,300 (31,500)		
14,200 (31,300)	14,100 (31,100)	13,800 (30,400)	13,600 (30,000)	13,600 (30,000)	13,500 (29,800)	13,300 (29,300)	13,300 (29,300)	13,100 (28,900)	13,000 (28,700)	12,800 (28,200)	12,700 (28,000)		
12,800 (28,200)	12,700 (28,000)	12,400 (27,300)	12,300 (27,100)	12,200 (26,900)	12,000 (26,500)	11,900 (26,200)	11,900 (26,200)	11,700 (25,800)	11,700 (25,800)	11,400 (25,100)	11,300 (24,900)		
11,600 (25,500)	11,500 (25,400)	11,200 (24,700)	11,100 (24,500)	11,000 (24,300)	10,800 (23,800)	10,600 (23,400)	10,600 (23,400)	10,500 (23,100)	10,400 (22,900)	10,100 (22,300)	10,100 (22,300)		
10,600 (23,400)	10,500 (23,100)	10,200 (22,500)	10,000 (22,000)	9,900 (21,800)	9,700 (21,400)	9,500 (20,900)	9,500 (20,900)	9,400 (20,700)	9,300 (20,500)	9,000 (19,800)	9,000 (19,800)		
9,700 (21,400)	9,600 (21,200)	9,200 (20,300)	9,100 (20,100)	8,900 (19,600)	8,800 (19,400)	8,500 (18,700)	8,500 (18,700)	8,400 (18,500)	8,300 (18,300)	8,000 (17,600)	8,000 (17,600)		
8,900 (19,600)	8,800 (19,400)	8,400 (18,500)	8,200 (18,100)	8,100 (17,900)	7,900 (17,400)	7,700 (17,000)	7,600 (16,800)	7,500 (16,500)	7,400 (16,300)	7,100 (15,700)	7,100 (15,700)		
8,200 (18,100)	8,100 (17,900)	7,700 (17,000)	7,500 (16,500)	7,400 (16,300)	7,100 (15,700)	6,900 (15,200)	6,800 (15,000)	6,700 (14,800)	6,600 (14,600)	6,300 (13,900)	6,200 (13,700)		
7,500 (16,500)	7,400 (16,300)	7,000 (15,400)	6,800 (15,000)	6,700 (14,800)	6,400 (14,100)	6,200 (13,700)	6,100 (13,400)	6,000 (13,200)	5,800 (12,800)	5,500 (12,100)	5,500 (12,100)		
6,900 (15,200)	6,800 (15,000)	6,400 (14,100)	6,200 (13,700)	6,100 (13,400)	5,800 (12,800)	5,500 (12,100)	5,500 (12,100)	5,300 (11,700)	5,100 (11,200)	4,900 (10,800)	4,800 (10,600)		
6,400 (14,100)	6,300 (13,900)	5,900 (13,000)	5,700 (12,600)	5,500 (12,100)	5,200 (11,500)	4,900 (10,800)	4,900 (10,800)	4,700 (10,400)	4,500 (9,900)	4,200 (9,300)	4,200 (9,300)		
	5,800 (12,800)	5,400 (11,900)	5,200 (11,500)	5,000 (11,000)	4,700 (10,400)	4,400 (9,700)	4,300 (9,500)	4,100 (9,000)	3,900 (8,600)	3,600 (7,900)	3,600 (7,900)		
		4,900 (10,800)	4,700 (10,400)	4,500 (9,900)	4,200 (9,300)	3,900 (8,600)	3,800 (8,400)	3,600 (7,900)	3,400 (7,500)	3,100 (6,800)	3,100 (6,800)		
		4,500 (9,900)	4,300 (9,500)	4,100 (9,000)	3,800 (8,400)	3,400 (7,500)	3,300 (7,300)	3,100 (6,800)	2,900 (6,400)	2,600 (5,700)	2,600 (5,700)		
			3,900 (8,600)	3,700 (8,200)	3,300 (7,300)	3,000 (6,600)	2,900 (6,400)	2,600 (5,700)	2,400 (5,300)				
				3,300 (7,300)	3,000 (6,600)	2,600 (5,700)	2,500 (5,500)						
					2,600 (5,700)								

STEEL CRANE LOADS IN KGS (LBS.)—MAIN BOOM IN 360° WORK AREAS WITH SMALL OUTRIGGERS AND THREE PIECE UPPER COUNTERWEIGHTS

	91.44m (300') Boom	Operating Radius in Meters (Ft.-In.)	Operating radius in Meters (Ft.-In.)	18.29m (60') Boom	21.34m (70') Boom	24.38m (80') Boom	27.43m (90') Boom	30.48m (100') Boom	33.53m (110') Boom	36.58m (120') Boom	39.62m (130') Boom	Operating radius in Meters (Ft.-In.)
		5.0 (16-5)		80,000 (176,400)								5.0 (16-5)
		6.0 (19-8)		68,000 (149,900)	68,000 (149,900)	68,000 (149,900)						6.0 (19-8)
		7.0 (23-0)		56,000 (123,500)	56,000 (123,500)	56,000 (123,500)	56,000 (123,500)	56,000 (123,500)				7.0 (23-0)
		8.0 (26-3)		46,400 (102,300)	46,400 (102,300)	46,400 (102,300)	46,400 (102,300)	46,400 (102,300)	46,400 (102,300)			8.0 (26-3)
		9.0 (29-6)		39,400 (86,900)	39,400 (86,900)	39,400 (86,900)	39,400 (86,900)	39,400 (86,900)	39,400 (86,900)	39,300 (86,600)	39,300 (86,600)	9.0 (29-6)
		10.0 (32-10)		34,100 (75,200)	34,100 (75,200)	34,100 (75,200)	34,100 (75,200)	34,100 (75,200)	33,800 (74,500)	33,600 (74,100)	33,600 (74,100)	10.0 (32-10)
		12.0 (39-4)		26,500 (58,400)	26,500 (58,400)	26,500 (58,400)	26,500 (58,400)	26,500 (58,400)	26,000 (57,300)	25,800 (56,900)	25,800 (56,900)	12.0 (39-4)
		14.0 (45-11)		21,400 (47,200)	21,400 (47,200)	21,400 (47,200)	21,400 (47,200)	21,300 (47,000)	20,900 (46,100)	20,700 (45,600)	20,700 (45,600)	14.0 (45-11)
		16.0 (52-6)		17,700 (39,000)	17,700 (39,000)	17,700 (39,000)	17,700 (39,000)	17,600 (38,800)	17,200 (37,900)	17,100 (37,700)	17,100 (37,700)	16.0 (52-6)
	17,500 (38,600)	18.0 (59-1)			14,900 (32,800)	14,900 (32,800)	14,900 (32,800)	14,800 (32,600)	14,500 (32,000)	14,400 (31,700)	14,400 (31,700)	18.0 (59-1)
	16,600 (36,600)	20.0 (65-7)				12,800 (28,200)	12,700 (28,000)	12,600 (27,800)	12,400 (27,300)	12,300 (27,100)	12,300 (27,100)	20.0 (65-7)
	15,800 (34,800)	22.0 (72-2)				11,000 (24,300)	10,900 (24,000)	10,900 (24,000)	10,700 (23,600)	10,600 (23,400)	10,600 (23,400)	22.0 (72-2)
	14,900 (32,800)	24.0 (78-9)					9,500 (20,900)	9,400 (20,700)	9,300 (20,500)	9,300 (20,500)	9,300 (20,500)	24.0 (78-9)
	14,000 (30,900)	26.0 (85-4)						8,200 (18,100)	8,200 (18,100)	8,200 (18,100)	8,200 (18,100)	26.0 (85-4)
	13,200 (29,100)	28.0 (91-10)							7,200 (15,900)	7,200 (15,900)	7,200 (15,900)	28.0 (91-10)
	12,300 (27,100)	30.0 (98-5)							6,400 (14,100)	6,400 (14,100)	6,400 (14,100)	30.0 (98-5)
		32.0 (105-0)								5,700 (12,600)	5,700 (12,600)	32.0 (105-0)
	9,800 (21,600)	34.0 (111-7)									5,100 (11,200)	34.0 (111-7)
	8,800 (19,400)	36.0 (118-1)										
	7,800 (17,200)	38.0 (124-8)		42.67m (140') Boom	45.72m (150') Boom	48.77m (160') Boom	51.82m (170') Boom	54.86m (180') Boom	57.91m (190') Boom	60.96m (200') Boom		Operating radius in Meters (Ft.-In.)
	6,900 (15,200)	40.0 (131-3)										10.0 (32-10)
	6,100 (13,400)	42.0 (137-10)										12.0 (39-4)
	5,400 (11,900)	44.0 (144-4)										14.0 (45-11)
	4,700 (10,400)	46.0 (150-11)										16.0 (52-6)
	4,000 (8,800)	48.0 (157-6)										18.0 (59-1)
	3,500 (7,700)	50.0 (164-1)										20.0 (65-7)
	2,900 (6,400)	52.0 (170-7)										22.0 (72-2)
	2,400 (5,300)	54.0 (177-2)										24.0 (78-9)
		56.0 (183-9)										26.0 (85-4)
		58.0 (190-3)										28.0 (91-10)
		60.0 (196-10)										30.0 (98-5)
												32.0 (105-0)
												34.0 (111-7)
												36.0 (118-1)
												38.0 (124-8)
												40.0 (131-3)
												42.0 (137-10)

JIB RATED LOADS IN KGS (LBS.) WITH LARGE OUTRIGGERS AND ADDITIONAL COUNTERWEIGHTS

***M**

Operating Radius in Meters (Ft.-In.)	64.01m (210') Boom								67.06m (220') Boom							
	12.19m (40') Jib		18.29m (60') Jib		24.38m (80') Jib		30.48m (100') Jib		12.19m (40') Jib		18.29m (60') Jib		24.38m (80') 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)	15,000 (33,100)									15,000 (33,100)						
20.0 (65-7)	15,000 (33,100)		12,000 (26,500)						15,000 (33,100)		12,000 (26,500)					
22.0 (72-2)	15,000 (33,100)	14,000 (30,900)	12,000 (26,500)		8,000 (17,600)				15,000 (33,100)	14,000 (30,900)	12,000 (26,500)		8,000 (17,600)			
24.0 (78-9)	15,000 (33,100)	14,000 (30,900)	12,000 (26,500)		8,000 (17,600)		4,000 (8,800)		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)		8,000 (17,600)			
26.0 (85-4)	15,000 (33,100)	14,000 (30,900)	12,000 (26,500)	8,000 (17,600)	8,000 (17,600)		4,000 (8,800)		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)	8,000 (17,600)	8,000 (17,600)			
28.0 (91-10)	15,000 (33,100)	14,000 (30,900)	12,000 (26,500)	8,000 (17,600)	8,000 (17,600)		4,000 (8,800)		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)	8,000 (17,600)	8,000 (17,600)			
30.0 (98-5)	15,000 (33,100)	14,000 (30,900)	12,000 (26,500)	8,000 (17,600)	8,000 (17,600)	6,000 (13,200)	4,000 (8,800)		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)	8,000 (17,600)	8,000 (17,600)	6,000 (13,200)		
32.0 (105-0)	14,200 (31,300)	13,500 (29,800)	12,600 (28,000)	8,000 (17,600)	8,000 (17,600)	6,000 (13,200)	4,000 (8,800)	3,000 (6,600)	14,100 (31,100)	14,000 (30,900)	12,000 (26,500)	8,000 (17,600)	8,000 (17,600)	6,000 (13,200)		
34.0 (111-7)	12,900 (28,400)	12,900 (28,400)	12,000 (26,500)	8,000 (17,600)	7,900 (17,400)	6,000 (13,200)	4,000 (8,800)	3,000 (6,600)	12,800 (28,200)	12,800 (28,200)	12,000 (26,500)	8,000 (17,600)	7,900 (17,400)	6,000 (13,200)		
36.0 (118-1)	11,700 (25,800)	11,700 (25,800)	11,700 (25,800)	8,000 (17,600)	7,800 (17,200)	6,000 (13,200)	4,000 (8,800)	3,000 (6,600)	11,600 (25,600)	11,600 (25,600)	11,600 (25,600)	8,000 (17,600)	7,800 (17,200)	6,000 (13,200)		
38.0 (124-8)	10,700 (23,600)	10,700 (23,600)	10,700 (23,600)	8,000 (17,600)	7,600 (16,800)	6,000 (13,200)	4,000 (8,800)	3,000 (6,600)	10,600 (23,400)	10,600 (23,400)	10,600 (23,400)	8,000 (17,600)	7,700 (17,000)	6,000 (13,200)		
40.0 (131-3)	9,800 (21,600)	9,800 (21,600)	9,800 (21,600)	8,000 (17,600)	7,400 (16,300)	5,900 (13,000)	4,000 (8,800)	3,000 (6,600)	9,700 (21,400)	9,700 (21,400)	9,700 (21,400)	8,000 (17,600)	7,700 (17,000)	6,000 (13,200)		
42.0 (137-10)	9,000 (19,800)	9,000 (19,800)	9,000 (19,800)	7,700 (17,000)	7,200 (15,900)	5,800 (12,800)	4,000 (8,800)	3,000 (6,600)	8,800 (19,400)	8,800 (19,400)	8,800 (19,400)	7,800 (17,200)	7,600 (16,800)	5,900 (13,000)		
44.0 (144-4)	8,300 (18,300)	8,300 (18,300)	8,300 (18,300)	7,500 (16,500)	7,000 (15,400)	5,600 (12,300)	3,900 (8,600)	3,000 (6,600)	8,100 (17,900)	8,100 (17,900)	8,100 (17,900)	7,600 (16,800)	7,500 (16,500)	5,800 (12,800)		
46.0 (150-11)	7,600 (16,800)	7,600 (16,800)	7,600 (16,800)	7,200 (15,900)	6,800 (15,000)	5,500 (12,100)	3,800 (8,400)	3,000 (6,600)	7,400 (16,300)	7,400 (16,300)	7,400 (16,300)	7,400 (16,300)	7,400 (16,300)	5,700 (12,600)		
48.0 (157-6)	7,000 (15,400)	7,000 (15,400)	7,000 (15,400)	7,000 (15,400)	6,600 (14,600)	5,400 (11,900)	3,700 (8,200)	2,900 (6,400)	6,800 (15,000)	6,800 (15,000)	6,800 (15,000)	6,800 (15,000)	6,800 (15,000)	5,600 (12,300)		
50.0 (164-1)	6,400 (14,100)	6,400 (14,100)	6,400 (14,100)	6,400 (14,100)	6,400 (14,100)	5,300 (11,700)	3,600 (7,900)	2,900 (6,400)	6,200 (13,700)	6,200 (13,700)	6,200 (13,700)	6,200 (13,700)	6,200 (13,700)	5,500 (12,100)		
52.0 (170-7)	5,900 (13,000)	5,900 (13,000)	5,900 (13,000)	5,900 (13,000)	5,900 (13,000)	5,200 (11,500)	3,500 (7,700)	2,800 (6,200)	5,700 (12,600)	5,700 (12,600)	5,700 (12,600)	5,700 (12,600)	5,700 (12,600)	5,400 (11,900)		
54.0 (177-2)	5,400 (11,900)	5,400 (11,900)	5,400 (11,900)	5,400 (11,900)	5,400 (11,900)	5,100 (11,200)	3,400 (7,500)	2,800 (6,200)	5,300 (11,700)	5,300 (11,700)	5,300 (11,700)	5,300 (11,700)	5,300 (11,700)	5,300 (11,700)		
56.0 (183-9)	5,000 (11,000)	5,000 (11,000)	5,000 (11,000)	5,000 (11,000)	5,000 (11,000)	5,000 (11,000)	3,300 (7,300)	2,700 (6,000)	4,800 (10,600)	4,800 (10,600)	4,800 (10,600)	4,800 (10,600)	4,800 (10,600)	4,800 (10,600)		
58.0 (190-3)									4,400 (9,700)	4,400 (9,700)	4,400 (9,700)	4,400 (9,700)	4,400 (9,700)	4,400 (9,700)		
60.0 (196-10)																
62.0 (203-5)																
64.0 (210-0)																

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

- Operating radius is the horizontal distance from centerline of rotation to a vertical line through the center of gravity of the load.
- Ratings do not exceed 75% of tipping load.
- Main boom ratings (Shown on page 7 ~ 12):
Deduct weight of hook block, slings and all other load handling accessories from ratings shown.
- Jib ratings (Shown on page 13 ~ 17):
Deduct weight of main hook block, jib hook block, slings and all other load handling accessories from ratings shown.
- Main boom ratings when equipped with jib (Shown on page 17 ~ 18):
Deduct weight of main hook block, slings and all other load handling accessories from ratings shown. Ratings shown consider effect of the weight of jib and jib hook block — 25 metric ton hook block when equipped with 12.19 m (40') or 18.29 m (60') jib, 12 metric ton ball hook when equipped with 24.38 m (80') or 30.48 m (100') jib.

boom Length 64.01m (210') to 79.25m (260')

		70.10m (230') Boom								73.15m (240') Boom							
30.48m (100') Jib		12.19m (40') Jib		18.29m (60') Jib		24.38m (80') Jib		30.48m (100') Jib		12.19m (40') Jib		18.29m (60') Jib		24.38m (80') Jib			
Offset Angle		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°	10°	30°		
		15,000 (33,100)															
		15,000 (33,100)		12,000 (26,500)						15,000 (33,100)							
		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)						15,000 (33,100)	14,000 (30,900)	12,000 (26,500)					
4,000 (8,800)		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)		8,000 (17,600)		4,000 (8,800)		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)		8,000 (17,600)			
4,000 (8,800)		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)		8,000 (17,600)		4,000 (8,800)		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)		8,000 (17,600)		4	
4,000 (8,800)		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)		8,000 (17,600)		4,000 (8,800)		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)		8,000 (17,600)		4	
4,000 (8,800)		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)		8,000 (17,600)	6,000 (13,200)	4,000 (8,800)		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)		8,000 (17,600)	6,000 (13,200)	4	
4,000 (8,800)		14,000 (30,900)	12,000 (26,500)	8,000 (17,600)	6,000 (13,200)	4,000 (8,800)		3,000 (6,600)		13,900 (30,600)	13,900 (30,600)	12,000 (26,500)		8,000 (17,600)	6,000 (13,200)	4	
4,000 (8,800)	3,000 (6,600)	12,600 (27,800)	12,000 (26,500)	8,000 (17,600)	8,000 (17,600)	6,000 (13,200)		4,000 (8,800)	3,000 (6,600)	12,600 (27,800)	12,600 (27,800)	11,400 (26,500)		8,000 (17,600)	6,000 (13,200)	4	
4,000 (8,800)	3,000 (6,600)	11,500 (25,400)	11,500 (25,400)	8,000 (17,600)	7,900 (17,400)	6,000 (13,200)		4,000 (8,800)	3,000 (6,600)	11,400 (25,100)	11,400 (25,100)	10,300 (22,700)		7,900 (17,400)	6,000 (13,200)	4	
4,000 (8,800)	3,000 (6,600)	10,400 (22,900)	10,400 (22,900)	8,000 (17,600)	7,700 (17,000)	6,000 (13,200)		4,000 (8,800)	3,000 (6,600)	10,300 (22,700)	10,300 (22,700)	9,000 (20,000)		7,900 (17,400)	6,000 (13,200)	4	
4,000 (8,800)	3,000 (6,600)	9,500 (20,900)	9,500 (20,900)	8,000 (17,600)	7,500 (16,500)	6,000 (13,200)		4,000 (8,800)	3,000 (6,600)	9,400 (20,700)	9,400 (20,700)	8,000 (17,600)		7,800 (17,200)	6,000 (13,200)	4	
4,000 (8,800)	3,000 (6,600)	8,700 (19,200)	8,700 (19,200)	8,000 (17,600)	7,400 (16,300)	6,000 (13,200)		4,000 (8,800)	3,000 (6,600)	8,500 (18,700)	8,500 (18,700)	8,000 (17,600)		7,800 (17,200)	6,000 (13,200)	4	
3,900 (8,600)		7,900 (17,400)	7,900 (17,400)	7,600 (16,800)	7,300 (16,100)	5,900 (13,000)		4,000 (8,800)	3,000 (6,600)	7,700 (17,000)	7,700 (17,000)	7,000 (15,400)		7,700 (17,000)	5,900 (13,000)	4	
3,800 (8,400)		7,200 (15,900)	7,200 (15,900)	7,200 (15,900)	7,200 (15,900)	5,800 (12,800)		3,900 (8,600)	3,000 (6,600)	7,000 (15,400)	7,000 (15,400)	7,000 (15,400)		7,000 (15,400)	5,800 (12,800)	4	
3,700 (8,200)		6,600 (14,600)	6,600 (14,600)	6,600 (14,600)	6,600 (14,600)	5,700 (12,600)		3,800 (8,400)	3,000 (6,600)	6,300 (13,900)	6,300 (13,900)	6,300 (13,900)		6,300 (13,900)	5,800 (12,800)	4	
3,600 (7,900)		6,000 (13,200)	6,000 (13,200)	6,000 (13,200)	6,000 (13,200)	5,600 (12,300)		3,700 (8,200)	3,000 (6,600)	5,700 (12,600)	5,700 (12,600)	5,700 (12,600)		5,700 (12,600)	5,700 (12,600)	3	
3,500 (7,700)		5,500 (12,100)	5,500 (12,100)	5,500 (12,100)	5,500 (12,100)	5,500 (12,100)		3,600 (7,900)	2,900 (6,400)	5,200 (11,500)	5,200 (11,500)	5,200 (11,500)		5,200 (11,500)	5,200 (11,500)	3	
3,400 (7,500)		5,000 (11,000)	5,000 (11,000)	5,000 (11,000)	5,000 (11,000)	5,000 (11,000)		3,500 (7,700)	2,800 (6,200)	4,700 (10,400)	4,700 (10,400)	4,700 (10,400)		4,700 (10,400)	4,700 (10,400)	3	
3,300 (7,300)		4,600 (10,100)	4,600 (10,100)	4,600 (10,100)	4,600 (10,100)	4,600 (10,100)		3,400 (7,500)	2,800 (6,200)	4,200 (9,300)	4,200 (9,300)	4,200 (9,300)		4,200 (9,300)	4,200 (9,300)	3	
3,200 (7,100)		4,200 (9,300)	4,200 (9,300)	4,200 (9,300)	4,200 (9,300)	4,200 (9,300)		3,300 (7,300)	2,700 (6,000)	3,800 (8,400)	3,800 (8,400)	3,800 (8,400)		3,800 (8,400)	3,800 (8,400)	3	
		3,800 (8,400)	3,800 (8,400)	3,800 (8,400)	3,800 (8,400)	3,800 (8,400)		3,200 (7,100)	2,600 (5,700)	3,300 (7,300)	3,300 (7,300)	3,300 (7,300)		3,300 (7,300)	3,300 (7,300)	3	
		3,400 (7,500)	3,400 (7,500)	3,400 (7,500)	3,400 (7,500)	3,400 (7,500)		3,100 (6,800)	2,500 (5,500)	3,000 (6,600)	3,000 (6,600)	3,000 (6,600)		3,000 (6,600)	3,000 (6,600)	3	
										2,600 (5,700)	2,600 (5,700)	2,600 (5,700)		2,600 (5,700)	2,600 (5,700)	2	
																1	

- 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.
- At radii and boom lengths 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 boom.
- Mast is required for light duty boom and is not required for heavy duty boom.
- Gantry must be raised in position for all operating conditions.
- Boom backstops are required for all boom lengths.
- Mid-point suspension (centerhitch) required when boom length is 64.01 m (210') or longer.
- Boom inserts and guy cables must be arranged as shown in the "Owner and Operator's Manual".
- Standard boom hoist reeving is 18 part line.
- Ratings shown are based on a total of five counterweights of 45,700 kg (100,700 lbs.) and four additional weights of 20,000 kg (44,100 lbs.).
- Boom lengths for jib mounting is 64.01 m (210') to 85.34 m (280').
- 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.

NOTE:
This P & H KOBELCO model 9200-TC meets the requirements of Japanese Mobile Construction Type Crane Safety Code.

		76.20m (250') Boom								79.25m (260') Boom								Operating Radius in Meters (Ft.-In.)
30.48m (100') Jib		12.19m (40') Jib		18.29m (60') Jib		24.38m (80') Jib		30.48m (100') Jib		12.19m (40') Jib		18.29m (60') Jib		24.38m (80') Jib				
Offset Angle		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°	10°	30°			
																18.0 (59-1)		
																20.0 (65-7)		
																22.0 (72-2)		
																24.0 (78-9)		
																26.0 (85-4)		
																28.0 (91-10)		
																30.0 (98-5)		
																32.0 (105-0)		
																34.0 (111-7)		
																36.0 (118-1)		
																38.0 (124-8)		
																40.0 (131-3)		
																42.0 (137-10)		
																44.0 (144-4)		
																46.0 (150-11)		
																48.0 (157-6)		
																50.0 (164-1)		
																52.0 (170-7)		
																54.0 (177-2)		
																56.0 (183-9)		
																58.0 (190-3)		
																60.0 (196-10)		
																62.0 (203-5)		
																64.0 (210-0)		

WARNING

- Welding or other repair to tubular steel booms may weaken the structure. See your P & H 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 tying off, or lowering boom when wind is above 16 m/sec. (35 mph)

JIB RATED LOADS IN KGS (LBS.) WITH LARGE OUTRIGGERS AND ADDITIONAL WEIGHTS

***Main Boom Length 79.25m (2**

Operating Radius in Meters (Ft.-In.)	79.25m (260') Boom		82.30m (270') Boom						85.34m (280') Boom							
	30.48m (100') Jib		12.19m (40') Jib		18.29m (60') Jib		24.38m (80') Jib		30.48m (100') Jib		12.19m (40') Jib		18.29m (60') Jib		24.38m (80') Jib	
	Offset Angle		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°	10°	30°
20.0 (65-7)			15,000 (33,100)													
22.0 (72-2)			15,000 (33,100)			12,000 (26,500)					15,000 (33,100)					
24.0 (78-9)			15,000 (33,100)	14,000 (30,900)	12,000 (26,500)						15,000 (33,100)	14,000 (30,900)	12,000 (26,500)			
26.0 (85-4)	4,000 (8,800)		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)			8,000 (17,600)		4,000 (8,800)	15,000 (33,100)	14,000 (30,900)	12,000 (26,500)		8,000 (17,600)	
28.0 (91-10)	4,000 (8,800)		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)	8,000 (17,600)	8,000 (17,600)		4,000 (8,800)		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)	8,000 (17,600)	8,000 (17,600)	
30.0 (98-5)	4,000 (8,800)		15,000 (33,100)	14,000 (30,900)	12,000 (26,500)	8,000 (17,600)	8,000 (17,600)		4,000 (8,800)		14,700 (32,400)	14,000 (30,900)	12,000 (26,500)	8,000 (17,600)	8,000 (17,600)	
32.0 (105-0)	4,000 (8,800)		13,600 (30,000)	13,600 (30,000)	12,000 (26,500)	8,000 (17,600)	8,000 (17,600)	6,000 (13,200)	4,000 (8,800)		13,200 (29,100)	13,200 (29,100)	12,000 (26,500)	8,000 (17,600)	8,000 (17,600)	6,000 (13,200)
34.0 (111-7)	4,000 (8,800)		12,200 (26,900)	12,200 (26,900)	12,000 (26,500)	8,000 (17,600)	8,000 (17,600)	6,000 (13,200)	4,000 (8,800)		12,000 (26,500)	12,000 (26,500)	12,000 (26,500)	8,000 (17,600)	8,000 (17,600)	6,000 (13,200)
36.0 (118-1)	4,000 (8,800)	3,000 (6,600)	11,000 (24,300)	11,000 (24,300)	11,000 (24,300)	8,000 (17,600)	8,000 (17,600)	6,000 (13,200)	4,000 (8,800)	3,000 (6,600)	10,700 (23,600)	10,700 (23,600)	10,700 (23,600)	8,000 (17,600)	8,000 (17,600)	6,000 (13,200)
38.0 (124-8)	4,000 (8,800)	3,000 (6,600)	10,000 (22,000)	10,000 (22,000)	10,000 (22,000)	8,000 (17,600)	8,000 (17,600)	6,000 (13,200)	4,000 (8,800)	3,000 (6,600)	9,600 (21,200)	9,600 (21,200)	9,600 (21,200)	8,000 (17,600)	8,000 (17,600)	6,000 (13,200)
40.0 (131-3)	4,000 (8,800)	3,000 (6,600)	9,000 (19,800)	9,000 (19,800)	9,000 (19,800)	8,000 (17,600)	7,700 (17,000)	6,000 (13,200)	4,000 (8,800)	3,000 (6,600)	8,700 (19,200)	8,700 (19,200)	8,700 (19,200)	8,000 (17,600)	7,900 (17,400)	6,000 (13,200)
42.0 (137-10)	4,000 (8,800)	3,000 (6,600)	8,100 (17,900)	8,100 (17,900)	8,100 (17,900)	8,000 (17,600)	7,500 (16,500)	6,000 (13,200)	4,000 (8,800)	3,000 (6,600)	7,800 (17,200)	7,800 (17,200)	7,800 (17,200)	7,800 (17,200)	7,800 (17,200)	6,000 (13,200)
44.0 (144-4)	4,000 (8,800)	3,000 (6,600)	7,300 (16,100)	7,300 (16,100)	7,300 (16,100)	7,300 (16,100)	7,300 (16,100)	6,000 (13,200)	4,000 (8,800)	3,000 (6,600)	7,000 (15,400)	7,000 (15,400)	7,000 (15,400)	7,000 (15,400)	7,000 (15,400)	6,000 (13,200)
46.0 (150-11)	4,000 (8,800)	3,000 (6,600)	6,600 (14,600)	6,600 (14,600)	6,600 (14,600)	6,600 (14,600)	6,600 (14,600)	5,900 (13,000)	4,000 (8,800)	3,000 (6,600)	6,300 (13,900)	6,300 (13,900)	6,300 (13,900)	6,300 (13,900)	6,300 (13,900)	6,000 (13,200)
48.0 (157-6)	4,000 (8,800)	3,000 (6,600)	5,900 (13,000)	5,900 (13,000)	5,900 (13,000)	5,900 (13,000)	5,900 (13,000)	5,900 (13,000)	4,000 (8,800)	3,000 (6,600)	5,600 (12,300)	5,600 (12,300)	5,600 (12,300)	5,600 (12,300)	5,600 (12,300)	5,600 (12,300)
50.0 (164-1)	3,900 (8,600)	3,000 (6,600)	5,200 (11,500)	5,200 (11,500)	5,200 (11,500)	5,200 (11,500)	5,200 (11,500)	5,200 (11,500)	3,900 (8,600)	3,000 (6,600)	5,000 (11,000)	5,000 (11,000)	5,000 (11,000)	5,000 (11,000)	5,000 (11,000)	5,000 (11,000)
52.0 (170-7)	3,800 (8,400)	3,000 (6,600)	4,700 (10,400)	4,700 (10,400)	4,700 (10,400)	4,700 (10,400)	4,700 (10,400)	4,700 (10,400)	3,800 (8,400)	3,000 (6,600)	4,400 (9,700)	4,400 (9,700)	4,400 (9,700)	4,400 (9,700)	4,400 (9,700)	4,400 (9,700)
54.0 (177-2)	3,600 (7,900)	2,900 (6,400)	4,100 (9,000)	4,100 (9,000)	4,100 (9,000)	4,100 (9,000)	4,100 (9,000)	4,100 (9,000)	3,700 (8,200)	2,900 (6,400)	3,800 (8,400)	3,800 (8,400)	3,800 (8,400)	3,800 (8,400)	3,800 (8,400)	3,800 (8,400)
56.0 (183-9)	3,500 (7,700)	2,800 (6,200)	3,600 (7,900)	3,600 (7,900)	3,600 (7,900)	3,600 (7,900)	3,600 (7,900)	3,600 (7,900)	3,600 (7,900)	2,800 (6,200)	3,300 (7,300)	3,300 (7,300)	3,300 (7,300)	3,300 (7,300)	3,300 (7,300)	3,300 (7,300)
58.0 (190-3)	3,400 (7,500)	2,800 (6,200)	3,100 (6,800)	3,100 (6,800)	3,100 (6,800)	3,100 (6,800)	3,100 (6,800)	3,100 (6,800)	3,100 (6,800)	2,800 (6,200)	2,800 (6,200)	2,800 (6,200)	2,800 (6,200)	2,800 (6,200)	2,800 (6,200)	2,800 (6,200)
60.0 (196-10)	3,000 (6,600)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,700 (6,000)	2,400 (5,300)	2,400 (5,300)	2,400 (5,300)	2,400 (5,300)	2,400 (5,300)	2,400 (5,300)
62.0 (210-0)	2,600 (5,700)	2,600 (5,700)														

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

BOOM MAKE-UP ARRANGEMENT CHART
• WITH 7.62m (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-A-B-Tip

Base = 7.62 m (25'), Tip = 7.62 m (25')
 Inserts: A = 3.05 m (10'), B = 6.10 m (20')

NOTE: Mast is not required for all heavy duty booms.
 Boom suspension wire rope 36 mm (1.42").

• WITH 10.67m (35 ft.) LIGHT DUTY TIP

Boom Length Meters (Ft.)	Boom Arrangement
21.34 (70)	Base-A-Tip
24.38 (80)	Base-B-Tip
27.43 (90)	Base-C-Tip
30.48 (100)	Base-A-C-Tip
33.53 (110)	Base-B-C-Tip
36.58 (120)	Base-A-B-C-Tip
39.62 (130)	Base-C-D-Tip
42.67 (140)	Base-A-C-D-Tip
45.72 (150)	Base-B-C-D-Tip
48.77 (160)	Base-A-B-C-D-Tip
51.82 (170)	Base-C-D-D-Tip
54.86 (180)	Base-A-C-D-D-Tip
57.91 (190)	Base-B-C-D-D-Tip

NOTE: Mast required for all boom lengths.
 Boom suspension wire rope 32 mm (1.26").

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 m (40')

Boom Length Meters (Ft.)
60.96 (200)
64.01 (210)
67.06 (220)
70.10 (230)
73.15 (240)
76.20 (250)
79.25 (260)
82.30 (270)
85.34 (280)
88.39 (290)
91.44 (300)
94.49 (310)
97.54 (320)

9.25m (260') to 85.34m (280')

Angle	Offset	Angle	Operating Radius in Meters (Ft.-In.)
30°	10°	30°	20.0 (65-7)
			22.0 (72-2)
			24.0 (78-9)
			26.0 (85-4)
	4,000 (8,800)		28.0 (91-10)
	4,000 (8,800)		30.0 (98-5)
6,000 (3,200)	4,000 (8,800)		32.0 (105-0)
6,000 (3,200)	4,000 (8,800)		34.0 (111-7)
6,000 (3,200)	4,000 (8,800)	3,000 (6,600)	36.0 (118-1)
6,000 (3,200)	4,000 (8,800)	3,000 (6,600)	38.0 (124-8)
6,000 (3,200)	4,000 (8,800)	3,000 (6,600)	40.0 (131-3)
6,000 (3,200)	4,000 (8,800)	3,000 (6,600)	42.0 (137-10)
6,000 (3,200)	4,000 (8,800)	3,000 (6,600)	44.0 (144-4)
6,000 (3,200)	4,000 (8,800)	3,000 (6,600)	46.0 (150-11)
5,600 (2,300)	4,000 (8,800)	3,000 (6,600)	48.0 (157-6)
5,000 (1,000)	4,000 (8,800)	3,000 (6,600)	50.0 (164-1)
4,400 (9,700)	3,900 (8,600)	3,000 (6,600)	52.0 (170-7)
3,800 (8,400)	3,800 (8,400)	3,000 (6,600)	54.0 (177-2)
3,300 (7,300)	3,300 (7,300)	2,900 (6,400)	56.0 (183-9)
2,800 (6,200)	2,800 (6,200)	2,800 (6,200)	58.0 (190-3)
2,400 (5,300)	2,400 (5,300)	2,400 (5,300)	60.0 (196-10)
			62.0 (203-5)

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

Operating Radius in Meters (Ft.-In.)	12.19 m (40') Jib									
	64.01m (210') Boom	67.06m (220') Boom	70.10m (230') Boom	73.15m (240') Boom	76.20m (250') Boom	79.25m (260') Boom	82.30m (270') Boom	85.34m (280') Boom	64.01m (210') Boom	67.06m (220') Boom
14-0 (45-11)	38,200 (84,200)	35,200 (77,600)	32,000 (70,500)						37,800 (83,300)	34,800 (76,700)
16-0 (52-6)	36,200 (79,800)	32,800 (72,300)	30,800 (67,900)	28,000 (61,700)	25,100 (55,300)	22,700 (50,000)	20,800 (45,900)		35,800 (78,900)	32,400 (71,400)
18-0 (59-1)	30,300 (66,800)	30,300 (66,800)	29,500 (65,000)	26,500 (58,400)	23,900 (52,700)	21,700 (47,800)	19,900 (43,900)	18,100 (39,900)	29,800 (65,700)	29,800 (65,700)
20-0 (65-7)	25,600 (56,400)	25,600 (56,400)	25,200 (55,600)	25,100 (55,300)	22,900 (50,500)	20,700 (45,600)	18,800 (41,400)	17,100 (37,700)	25,200 (55,600)	25,200 (55,600)
22-0 (72-2)	22,000 (48,500)	22,000 (48,500)	21,600 (47,600)	21,600 (47,600)	21,600 (47,600)	19,600 (43,200)	17,900 (39,500)	16,300 (35,900)	21,600 (47,600)	21,600 (47,600)
24-0 (78-9)	19,000 (41,900)	19,000 (41,900)	18,700 (41,200)	18,700 (41,200)	18,700 (41,200)	18,500 (40,800)	16,800 (37,000)	15,200 (33,500)	18,700 (41,200)	18,700 (41,200)
26-0 (85-4)	16,600 (36,600)	16,500 (36,400)	16,300 (35,900)	16,300 (35,900)	16,300 (35,900)	16,100 (35,500)	15,800 (34,800)	14,400 (31,700)	16,300 (35,900)	16,200 (35,700)
28-0 (91-10)	14,700 (32,400)	14,500 (32,000)	14,300 (31,500)	14,300 (31,500)	14,200 (31,300)	14,100 (31,100)	13,900 (30,600)	13,400 (29,500)	14,300 (31,500)	14,200 (31,300)
30-0 (98-5)	12,900 (28,400)	12,800 (28,200)	12,600 (27,800)	12,600 (27,800)	12,400 (27,300)	12,300 (27,100)	12,100 (26,700)	11,800 (26,000)	12,600 (27,800)	12,500 (27,600)
32-0 (105-0)	11,400 (25,100)	11,300 (24,900)	11,200 (24,700)	11,000 (24,300)	10,900 (24,000)	10,800 (23,800)	10,700 (23,600)	10,300 (22,700)	11,100 (24,500)	11,000 (24,300)
34-0 (111-7)	10,100 (22,300)	10,000 (22,000)	9,800 (21,600)	9,800 (21,600)	9,600 (21,200)	9,400 (20,700)	9,300 (20,500)	9,100 (20,100)	9,800 (21,600)	9,700 (21,400)
36-0 (118-1)	8,900 (19,600)	8,800 (19,400)	8,700 (19,200)	8,600 (19,000)	8,400 (18,500)	8,300 (18,300)	8,100 (17,900)	7,800 (17,200)	8,600 (19,000)	8,500 (18,700)
38-0 (124-8)	7,900 (17,400)	7,800 (17,200)	7,600 (16,800)	7,500 (16,500)	7,400 (16,300)	7,200 (15,900)	7,200 (15,900)	6,700 (14,800)	7,600 (16,800)	7,500 (16,500)
40-0 (131-3)	7,100 (15,700)	6,900 (15,200)	6,700 (14,800)	6,600 (14,600)	6,400 (14,100)	6,300 (13,900)	6,200 (13,700)	5,900 (13,000)	6,700 (14,800)	6,600 (14,600)
42-0 (137-10)	6,300 (13,900)	6,100 (13,400)	5,900 (13,000)	5,700 (12,600)	5,500 (12,100)	5,400 (11,900)	5,300 (11,700)	5,000 (11,000)	6,000 (13,200)	5,700 (12,600)
44-0 (144-4)	5,600 (12,300)	5,400 (11,900)	5,200 (11,500)	4,900 (10,800)	4,800 (10,600)	4,600 (10,100)	4,500 (9,900)	4,200 (9,300)	5,300 (11,700)	5,100 (11,200)
46-0 (150-11)	4,900 (10,800)	4,700 (10,400)	4,500 (9,900)	4,300 (9,500)	4,100 (9,000)	3,900 (8,600)	3,800 (8,400)	3,500 (7,700)	4,600 (10,100)	4,400 (9,700)
48-0 (157-6)	4,300 (9,500)	4,100 (9,000)	3,900 (8,600)	3,600 (7,900)	3,500 (7,700)	3,200 (7,100)	3,100 (6,800)	2,800 (6,200)	4,000 (8,800)	3,800 (8,400)
50-0 (164-1)	3,700 (8,200)	3,500 (7,700)	3,300 (7,300)	3,000 (6,600)	2,900 (6,400)	2,700 (6,000)	2,400 (5,300)	2,200 (4,900)	3,500 (7,700)	3,200 (7,100)
52-0 (170-7)	3,300 (7,300)	3,000 (6,600)	2,800 (6,200)	2,500 (5,500)	2,400 (5,300)	2,200 (4,900)			3,000 (6,600)	2,800 (6,200)
54-0 (177-2)	2,800 (6,200)	2,700 (6,000)	2,300 (5,100)						2,500 (5,500)	2,400 (5,300)
56-0 (183-9)	2,400 (5,300)	2,200 (4,900)							2,100 (4,600)	

Lengths (Ft.)	Boom Arrangement
(200)	Base-A-B-C-D-D-Tip
(210)	Base-D-D-C-D-Tip
(220)	Base-A-C-D-D-Tip
(230)	Base-B-C-D-D-Tip
(240)	Base-B-C-D-A-D-D-Tip
(250)	Base-B-D-D-A-D-D-Tip
(260)	Base-C-D-D-A-D-D-Tip
(270)	Base-C-D-D-B-D-D-Tip
(280)	Base-A-B-D-D-C-D-D-Tip
(290)	Base-D-D-D-C-D-D-Tip
(300)	Base-A-C-D-D-D-D-Tip
(310)	Base-B-C-D-D-D-D-Tip
(320)	Base-B-C-D-D-A-D-D-D-Tip

JIB MAKE-UP ARRANGEMENT CHART

Jib Length Meters (Ft.)	Jib Arrangement
12.19 (40)	Base-A-Tip
18.29 (60)	Base-A-B-Tip
24.38 (80)	Base-A-B-B-Tip
30.48 (100)	Base-A-B-B-B-Tip

Base = 4.57 m (15'), Tip = 4.57 m (15')
 Inserts: A = 3.05 m (10'), B = 6.10 m (20')
 NOTE: Jib cannot be extended on heavy duty tip.

WEIGHT OF HOOK BLOCK

Hook Blocks	Kg (Lb.)
200 metric ton block with ten sheaves	3,400 (7,500)
100 metric ton block with five sheaves	1,800 (4,000)
65 metric ton block with three sheaves	900 (2,000)
25 metric ton block with single sheave	700 (1,500)
12 metric ton ball hook for jib	300 (700)

OUTRIGGERS AND ADDITIONAL WEIGHTS

		18.29 m (60') Jib 24.38 m (80') Jib					30.48 m (100') Jib							Operating Radius in Meters (Ft.-In.)
70.10m (230') Boom	73.15m (240') Boom	76.20m (205') Boom	79.25m (260') Boom	82.30m (270') Boom	85.34m (280') Boom	64.01m (210') Boom	67.06m (220') Boom	70.10m (230') Boom	73.15m (240') Boom	76.20m (250') Boom	79.25m (260') Boom	82.30m (270') Boom	85.34m (280') Boom	
31,600 (69,700)						37,200 (82,000)	34,200 (75,400)	31,100 (68,600)						14.0 (45-11)
30,400 (67,000)	27,600 (60,800)	24,700 (54,500)	22,200 (48,900)	20,400 (45,000)		35,300 (77,800)	31,900 (70,300)	29,900 (65,900)	27,100 (59,700)	24,200 (53,400)	21,800 (48,100)	20,000 (44,100)		16.0 (52-6)
29,100 (64,200)	26,100 (57,500)	23,500 (51,800)	21,300 (47,000)	19,500 (43,000)	17,700 (39,000)	29,300 (64,600)	29,300 (64,600)	28,700 (63,300)	25,700 (56,700)	23,100 (50,900)	20,900 (46,100)	19,100 (42,100)	17,300 (38,100)	18.0 (59-1)
24,800 (54,700)	24,700 (54,500)	22,200 (48,900)	20,300 (44,800)	18,400 (40,600)	16,700 (36,800)	24,700 (54,500)	24,700 (54,500)	24,300 (53,600)	24,200 (53,400)	22,000 (48,500)	19,800 (43,700)	18,000 (39,700)	16,300 (35,900)	20.0 (65-7)
21,200 (46,700)	21,200 (46,700)	21,200 (46,700)	19,200 (42,300)	17,500 (38,500)	15,900 (35,100)	21,200 (46,700)	21,200 (46,700)	20,800 (45,900)	20,800 (45,900)	20,800 (45,900)	18,800 (41,400)	17,100 (37,700)	15,500 (34,200)	22.0 (72-2)
18,400 (40,600)	18,300 (40,300)	18,300 (40,300)	18,100 (39,900)	16,400 (36,200)	14,900 (32,800)	18,200 (40,100)	18,200 (40,100)	18,000 (39,700)	18,000 (39,700)	18,000 (39,700)	17,800 (39,200)	16,000 (35,300)	14,500 (32,000)	24.0 (78-9)
16,000 (35,300)	16,000 (35,300)	16,000 (35,300)	15,800 (34,800)	15,500 (34,200)	14,100 (31,100)	15,900 (35,100)	15,800 (34,800)	15,600 (34,400)	15,600 (34,400)	15,600 (34,400)	15,400 (34,000)	15,100 (33,300)	13,700 (30,200)	26.0 (85-4)
14,000 (30,900)	14,000 (30,900)	13,900 (30,600)	13,800 (30,400)	13,600 (30,000)	13,100 (28,900)	13,900 (30,600)	13,800 (30,400)	13,600 (30,000)	13,600 (30,000)	13,500 (29,800)	13,400 (29,500)	13,200 (29,100)	12,700 (28,000)	28.0 (91-10)
12,300 (27,100)	12,300 (27,100)	12,100 (26,700)	12,000 (26,500)	11,800 (26,000)	11,500 (25,400)	12,200 (26,900)	12,100 (26,700)	12,000 (26,500)	12,000 (26,500)	11,700 (25,800)	11,600 (25,600)	11,400 (25,100)	11,100 (24,500)	30.0 (98-5)
10,900 (24,000)	10,800 (23,800)	10,700 (23,600)	10,500 (23,100)	10,400 (22,900)	10,000 (22,000)	10,700 (23,600)	10,600 (23,400)	10,500 (23,100)	10,400 (22,900)	10,300 (22,700)	10,200 (22,500)	10,100 (22,300)	9,700 (21,400)	32.0 (105-0)
9,500 (20,900)	9,500 (20,900)	9,300 (20,500)	9,200 (20,300)	9,100 (20,100)	8,800 (19,400)	9,400 (20,700)	9,300 (20,500)	9,100 (20,100)	9,100 (20,100)	8,900 (19,600)	8,800 (19,400)	8,700 (19,200)	8,500 (18,700)	34.0 (111-7)
8,400 (18,500)	8,300 (18,300)	8,100 (17,900)	8,000 (17,500)	7,900 (17,400)	7,600 (16,800)	8,300 (18,300)	8,200 (18,100)	8,100 (17,900)	8,000 (17,600)	7,800 (17,200)	7,600 (16,800)	7,600 (16,800)	7,200 (15,900)	36.0 (118-1)
7,300 (16,100)	7,200 (15,900)	7,100 (15,700)	6,900 (15,200)	6,900 (15,200)	6,500 (14,300)	7,300 (16,100)	7,300 (16,100)	7,200 (15,900)	7,000 (15,400)	6,900 (15,200)	6,800 (15,000)	6,500 (14,300)	6,200 (13,700)	38.0 (124-8)
6,400 (14,100)	6,300 (13,900)	6,100 (13,400)	6,000 (13,200)	5,900 (13,000)	5,500 (12,300)	6,400 (14,100)	6,300 (13,900)	6,100 (13,400)	6,000 (13,200)	5,800 (12,800)	5,600 (12,300)	5,500 (12,300)	5,300 (11,700)	40.0 (131-3)
5,600 (12,300)	5,400 (11,900)	5,200 (11,500)	5,100 (11,200)	5,000 (11,000)	4,700 (10,400)	5,600 (12,300)	5,400 (11,900)	5,300 (11,700)	5,100 (11,200)	4,900 (10,800)	4,800 (10,600)	4,700 (10,400)	4,400 (9,700)	42.0 (137-10)
4,900 (10,800)	4,600 (10,100)	4,500 (9,900)	4,300 (9,500)	4,200 (9,300)	3,900 (8,600)	4,900 (10,800)	4,700 (10,400)	4,500 (9,900)	4,300 (9,500)	4,200 (9,300)	4,000 (8,800)	3,900 (8,600)	3,600 (7,900)	44.0 (144-4)
4,200 (9,300)	4,000 (8,800)	3,800 (8,400)	3,600 (7,900)	3,500 (7,700)	3,200 (7,100)	4,300 (9,500)	4,100 (9,000)	3,800 (8,400)	3,600 (7,900)	3,500 (7,700)	3,300 (7,300)	3,200 (7,100)	2,900 (6,400)	46.0 (150-11)
3,600 (7,900)	3,300 (7,300)	3,200 (7,100)	3,000 (6,600)	2,800 (6,200)	2,500 (5,500)	3,700 (8,200)	3,500 (7,700)	3,300 (7,300)	3,000 (6,600)	2,800 (6,200)	2,600 (5,700)	2,500 (5,500)	2,200 (4,900)	48.0 (157-6)
3,000 (6,600)	2,700 (6,000)	2,600 (5,700)	2,400 (5,300)	2,200 (4,900)		3,100 (6,800)	2,900 (6,400)	2,700 (6,000)	2,400 (5,300)	2,200 (5,100)	2,100 (4,600)			50.0 (164-1)
2,500 (5,500)	2,200 (4,900)	2,100 (4,600)				2,700 (6,000)	2,500 (5,500)	2,200 (4,900)						52.0 (172-2)
2,100 (4,600)						2,200 (4,900)	2,100 (4,600)							54.0 (177-2)
														56.0 (183-9)

MAXIMUM BOOM LENGTH TO LIFT OFF GROUND ON LARGE OUTRIGGERS AND ADDITIONAL WEIGHTS

Boom Over	Boom Only	Boom and Jib
Rear	97.54m (320')	85.34m + 30.48m (280' + 100')
Side	94.49m (310')	82.30m + 30.48m (270' + 100')
Diagonal	85.34m (280')	73.15m + 30.48m (240' + 100')

MAIN HOIST REEVING

No. of Parts of Line	1	2	3	4	5
Max. Load - kg (lb.)	10,000 (22,000)	20,000 (44,100)	30,000 (66,100)	40,000 (88,200)	50,000 (110,200)
No. of Parts of Line	6	7	8	9	10
Max. Load - kg (lb.)	60,000 (132,300)	70,000 (154,300)	80,000 (176,400)	90,000 (198,400)	100,000 (220,500)
No. of Parts of Line	11	12	13	14	15
Max. Load - kg (lb.)	110,000 (242,500)	120,000 (264,600)	130,000 (286,600)	140,000 (308,600)	150,000 (330,700)
No. of Parts of Line	16	17	18	19	20
Max. Load - kg (lb.)	160,000 (352,700)	170,000 (374,800)	180,000 (396,800)	190,000 (418,900)	200,000 (440,900)

MAXIMUM BOOM LENGTH TO LIFT OFF GROUND ON SMALL OUTRIGGERS AND THREE PIECE UPPER COUNTERWEIGHTS

Boom Over	Boom Only
Rear	60.96m(200')
Side	60.96m(200')
Diagonal	60.96m(200')

JIB HOIST REEVING

No. of Parts of Line	1	2
Max. Load - kg (lb.)	7,500 (16,500)	15,000 (33,100)



9200-TC

NOTE: Due to our policy of continual product improvement, all designs and specifications are subject to change without advance notice. Data herein is informational 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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