

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 snapswitch.
- 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

Selection of neutral braking and free-fall

control feedback is precise.

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.

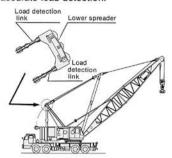
 The main control levers are shorttypes and their length can be adjusted as desired. They are arranged on the control stand together with a large tachometer and the most frequently used switches.

 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 Boom angle detection (from guy lines) Over moment Hook over hoist Boom over hoist Pre-alarm buzzer (Intermittent). Alarm lamp flashes slowly. 100% load: Boom angle 80°: Buzzer, automatic stop. Hook over hoisting: Buzzer, automatic stop. Tower iib angle 70° Buzzer, automatic stop. Set at desired angle: Alarm buzzer (Continuous) Alarm lamp flashes rapidly Automatic stop.

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

Alarm buzzer.

Hydraulic outrigger set by switch control

The sturdy hydraulic out and down outriggers are of a thoroughly fieldproven design, controlled via onetouch 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 translifter (optional) is used to jack up the upper machinery. Only a 20 metric ton crane is required for disassembly, reassembly and trailer loading/unloading.

Specifications

UPPER MACHINERY



ENGI	NE	
(Stanc	fard)	
Model		Mitsubishi 8DC8C diesel
Type		Direct injection type
Cycle		4
ers		8
ke	135 mm	x 130 mm (5.31" x 5.12")
	14.	.886 liters (908 cubic inch)

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. \times 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 $-518\,\mathrm{mm}$ (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 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 BOLLERS

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 floo

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.

3 9170-TC

CARRIER

(8 Wheels, 4 Wheel Drive, 12 Tires)

MODEL

P-KS152

WEIGHT

Carrier weightapprox. 36,700 kg (80,900 lbs.)
Including turret, hydraulic outriggers, floats, roller circle and standard tires. Excepting front bumper weight.



No. of Cylinders
Bore and Stroke
Displacement
Rated Horsepower
Max, Torque
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 ftlbs.) @ 1,500 rpm
Caaliaa

Vertical tube and corrugate fin type core with auxiliary tank, thermostatically controlled.

Starting ----- Electric 24 volt

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 (17.26") diameter by 101 mm (4") wide [3,226 cm² (500 sq. in.) total lining area], 155 cm² (24 sq. in.) air chambers. Rear lining: 514 mm (20.25") diameter by 178 mm (7") wide [8,464 cm² (1,312 sq. in.) total rear lining area], 232 cm² (36 sq. in.) air chambers. Total brake lining area: 11,690 cm² (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-elliptic 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 centerline of lackscrew.

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") \times 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 indicator, air pressure gauge, two level gauges and switches. Signal horn.

FRONT BUMPER WEIGHTS

Standard		 6,100 kg	13,450	lbs.)
Additiona	(optional)	 4,000 kg	(8,800	lbs.)

PERFORMANCE

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

CRANE ATTACHMENTS



HEAVY DUTY BOOM

Two piece, open throat lattice type tubular boom consisting of a tapered base section and a heavy duty tapered tip section having seven offset boom point sheaves 616 mm (24.25") p tch 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 extendible 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 section 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 $3.05 \,\mathrm{m}$ (10'), $6.10 \,\mathrm{m}$ (20'), $9.14 \,\mathrm{m}$ (30') and $12.19 \,\mathrm{m}$ (40') long. $12.19 \,\mathrm{m}$ (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 /101

JIB INSERT SECTIONS (OPTIONAL)

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

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

MAST

 $9.75\,\mathrm{m}$ (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 lo	onger]

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

DRUM WORKING DATA

		Front Drum	Rear Drum	Boom Hoist Drum
Function		Main hoist line	Jib hoist line	Boom hoist
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)
Capacit	y-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		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 n	n (160°).
Length in four sections 33	3.53 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 $^{\circ}$), 6.10 m and 9.14 m (30 $^{\circ}$) long.

IID

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.

ноок вьоск

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")
Jih suspension wire rone (lower)	36 mm (1.42")

TOWER BOOM BACKSTOPS

Telescoping type with spring bumper.

WORKING WEIGHT

DRUM WORKING DATA

		Front Drum	Rear Drum	Boom Hoist Drum
Function	on mm (in.)	Load line	Jib hoist line	Tower hoist
Pitch d	ia. mm (in.)	518 (20.39)	514 (20.24)	405 (15.94)
Drum I	ength mm (in.)	495 (19.49)	486 (19.13)	290 (11.42)
Wire ro	pe dia. mm (in.)	28 (1.10)	24 (0.94)	20 (0.79)
Capacit	ry-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)	(98.4)	30 (98.4)	14 (45.9)
*Line pull kg		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.

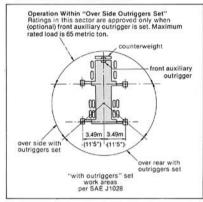
5 9170-TC

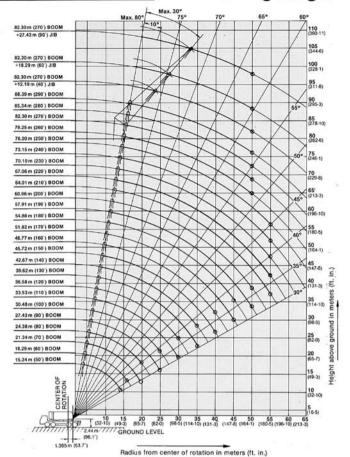
150-M ton Truck Crane

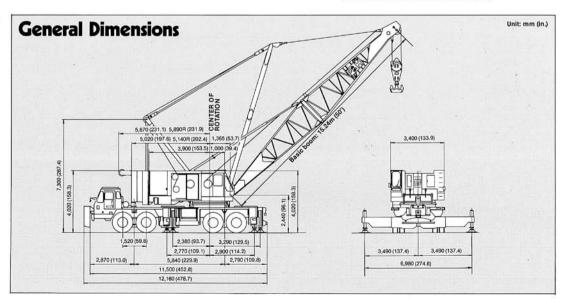
Working Ranges

88.39m Boom 82.30m Boom+27.43m Jib

WORKING AREAS







Lifting Capacities

WITH LIGHT DUTY TIP

RATED CRANE LOADS IN KGS (LBS.) —MAIN BOOM IN OVER SIDE AND REAR WORK AREAS WITH OUTRIGG ERS FI

Operating Radius in Meters (FtIn.)	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)) D
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)		is .						
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) 22.0	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)	
(72-2)	18,100 (39,900) 16,100	17,900 (39,500) 15,900	17,700 (39,000) 15,700	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)	
(78-9) 25.0	(35,500)	(35,100)	(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)	_
(82-0)	(33,500)	(32,800)	14,000	13,900	13,700	13,600	12.500			40.000	_	
(85-4)			(30,900)	(30,600)	(30,200)	(30,000)	13,500 (29,800) 12,100	13,200 (29,100) 11,900	13,100 (28,900) 11,800	13,000 (28,700) 11,700	13,000 (28,700) 11,700	
(91-10)			(28,000)	(27,800)	(27,300)	(26,900) 11,000	(26,700)	(26,200)	(26,000)	(25,800)	(25,800) 10,500	
(98-5)			(25,400)	(25,100)	(24,500)	(24,300) 10,000	(24,000)	(23,400)	(23,100)	(22,900)	(23,100) 9,200	
(105-0)					(22,500) 9,400	(22,000) 9,200	(21,800) 9,000	(21,200) 8,700	(20,900) 8,600	(20,700) 8,500	(20,300) 8,500	
(111-7)					(20,700) 8,900	(20,300) 8,800	(19,800)	(19,200)	(19,000)	(18,700)	(18,700)	
(114-10) 36.0					(19,600)	(19,400)	8,200	7,900	7,800	7,700	7,700	
(118-1) 38.0							(18,100) 7,600	(17,400) 7,300	(17,200) 7,200	(17,000) 7,100	(17,000) 7,100	
(124-8) 40.0					-		(16,800) 7,000	(16,100) 6,700	(15,900) 6,600	(15,700) 6,500	(15,700) 6,500	
(131-3) 42.0							(15,400)	(14,800)	(14,600) 6,100	(14,300) 6,000	(14,300) 5,900	
(137-10) 44.0									(13,400) 5,600	(13,200) 5,500	(13,000) 5,400	
(144-4) 45.0									(12,300) 5,400	(12,100) 5,300	(11,900)	
46.0									(11,900)	(11,700)	5,000	
(150-11) 48.0 (157-6)											(11,000) 4,500	
50.0 (164-1)											(9,900) 4,100	
52.0 (170-7)											(9,000)	
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 WARRAI

VITH OUTRIGG ERS FULLY EXTENDED AND SET

13 30 28 600 6	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 (FtIn.)
31 300		28 8								- 1			7.0 (23-0)
31,300		(S-1)						· ·					8.0
13,000 28,600 63,100 65,500 65,500 61,100 16,600 18,900 61,000 62,500 69,500 6											-	_	9.0
31,300 28,600 28,000 25,200 23,200 21,100 14,900 14,900 13,100 13,100 14,900 1											-		(29-6)
31,300 (28,600 (69,100) (63,100) (65,00) (61,100) (46,500) (41,700) (46,500) (41,700) (46,500) (49,700) (48,600) (49,200) (49,700) (44,300) (40,100) (48,600) (49,200) (49,700) (44,300) (40,100) (48,600) (49,200) (49,700) (44,300) (40,100) (48,600) (49,200) (49,700) (44,300) (49,700) (40,100) (49,600) (49,200) (49,700) (40,100) (49,600) (49,200) (49,700) (40,100) (49,600) (49,200) (49,700) (40,100) (49,600) (49,200) (49,700) (40,100) (49,600) (49,200) (49,700) (40,100) (49,600) (49,200) (49,200) (49,200) (49,700) (49,600) (49,200) (49,200) (49,600) (49,200													10.0 (32-10)
31,300 (28,600 (69,100) (63,100) (65,00) (61,100) (46,500) (41,700) (46,500) (41,700) (46,500) (49,700) (48,600) (49,200) (49,700) (44,300) (40,100) (48,600) (49,200) (49,700) (44,300) (40,100) (48,600) (49,200) (49,700) (44,300) (40,100) (48,600) (49,200) (49,700) (44,300) (49,700) (40,100) (49,600) (49,200) (49,700) (40,100) (49,600) (49,200) (49,700) (40,100) (49,600) (49,200) (49,700) (40,100) (49,600) (49,200) (49,700) (40,100) (49,600) (49,200) (49,700) (40,100) (49,600) (49,200) (49,200) (49,200) (49,700) (49,600) (49,200) (49,200) (49,600) (49,200													12.0 (39-4)
27,000 26,800 25,200 23,200 21,100 18,900 14,700 16,600 14,800 13,100 22,700 22,500 22,300 22,100 20,100 18,200 16,600 14,800 13,100 26,000 14,800 14,800 14,800 14,800 14,800 14,800 14,800 14,800 14,800 14,800 14,800 14,800 14,800 14,800 14,800 14,800 14,200 1										- 85			14.0
(69,500) (69,100) (65,600) (41,700) (46,500) (41,700) (16,600) (14,800) (13,100) (22,500) (22,300) (22,300) (22,100) (20,000) (48,000) (49,200) (48,700) (44,300) (40,100) (36,600) (32,600) (28,900) (25,400) (25,400) (23,100) (23,100) (24,200) (42,300) (42,100) (41,900) (41,700) (38,100) (36,600) (31,100) (27,800) (25,400) (25,400) (23,100) (21,600) (36,800) (36	27,000					21,100	18,900		_				(45-11) 16.0
(69,000) (49,600) (49,200) (48,700) (44,300) (40,100) (36,600) (32,600) (28,900) (28,900) (19,000 (19,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,						(46,500)	(41,700)						(52-6)
19,400 (42,300) (42,300) (42,100) (41,900) (41,700) (31,00) (31,600) (31,100) (27,800) (27,800) (23,000) (36,800) (36,800) (36,400) (3													18.0 (59-1)
16,700				19,100		18,900	17,300			12,600			20.0
(35,800) (36,800) (36,400) (36,400) (36,400) (36,400) (32,400) (22,500) (22,500) (26,000) (23,800) (21,800) (14,400) (14,400) (14,200) (13,700) (22,400) (22,300) (22,300) (22,300) (20,500) (20,500) (22,300) (22,300) (20,500) (22,300) (22,300) (22,300) (20,500) (22,300) (23,300) (23	16,700		16,700	16,500	16,500	16,500	15,900	14,700	13,400				(65-7)
(32,400)										(26,000)	(23,800)	(21,800)	(72-2)
13,000 12,900 12,800 12,800 12,700 12,600 12,300 12,300 11,400 10,300 9,500 8,700 11,700 (28,700) (28,700) (28,700) (28,700) (27,700) (27,100) (27,100) (27,100) (27,000) (27,							(31,300)	(30,200)			(22,300)		24.0 (78-9)
13,000 12,900 12,800 12,800 12,700 12,600 12,300 12,100 12,100 12,000 10,300 9,500 8,700 11,100 11,400 12,5100 12,5100 12,5100 12,5100 12,5100 12,5100 12,5100 12,5100 12,5100 12,5100 12,5100 11,400 11,400 11,400 12,5100 12,5100 12,5100 11,400	_		_	_		_			_	_		_	25.0 (82-0)
11,700							12,300	12,300	11,400				26.0
(25,800) (25,100) (25,100) (24,900) (24,500) (23,800) (22,700) (21,200) (19,400) (17,900) (0,500)													(85-4)
(23,100) (22,500) (22,300) (22,000) (21,800) (21,600) (21,400) (20,300) (19,400) (17,900) (16,500) (19,200) (20,300) (20,300) (20,100) (19,800) (19,600) (19,400) (19,200) (18,300) (17,400) (16,500) (18,700) (18,700) (18,300) (18,100) (17,900) (17,600) (17,400) (17,000) (16,500) (18,700) (18,700) (18,300) (18,100) (17,900) (17,600) (17,400) (17,000) (16,500) (19,200) (18,700) (18,700) (16,500) (18,700) (16,500) (16				The second secon				(23,800)	(22,700)	(21,200)	(19,400)	(17,900)	(91-10)
9,200 (20,300) 9,200 (20,300) 9,100 (19,800) 8,900 (19,400) 8,700 (19,200) 7,900 (16,300) 7,400 (16,300) 6,900 (15,200) (18,300) (18,300) (18,300) (18,300) (18,300) (18,300) (18,300) (18,300) (18,300) (17,400) (17,000) (16,500) (17,400) (16,500) (14,800) (14,100) (17,400) (17,000) (16,500) (14,800) (14,100) (17,000) (16,500) (14,800) (14,100) (17,000) (16,500) (14,800) (14,100) (17,000) (16,500) (14,100) (17,000) (16,500) (14,100) (15,500) (14,800) <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>30.0 (98-5)</td></td<>													30.0 (98-5)
8,500 (18,300) (18,100) (17,900) (17,600) (17,000) (17,000) (16,500) (15,900) (14,800) (14,100) (17,000) (17,000) (16,500) (15,900) (14,800) (14,100) (17,000) (17,000) (16,500) (16,500) (16,500) (16,100) (16,500) (14,800) (14,800) (14,800) (14,800) (14,800) (12,800) (15,500) (15,500) (15,500) (15,500) (15,500) (15,500) (15,500) (15,500) (15,500) (13,000) (12,100) (11,700) (13,000) (12,100) (11,70						8,900	8,800				7,400	6,900	32.0
(18,700) (18,300) (18,100) (17,900) (17,600) (17,400) (17,000) (16,500) (15,900) (14,800) (14,100) (17,000) (16,500) (14,800) (14,800) (14,800) (14,800) (13,000) (13,000) (12,800) (12,800) (12,500) (13,000) (13,000) (12,100) (13,000) (13,000) (13,000) (13,000) (13,000) (13,000) (13,000) (13,000) (13,000) (13,000) (13,000) (13,000) (13,000) (13,000) (12,100) (11,000) (10,000) (10,000) (10,000) (12,000) (12,000) (12,000) (10	8,500		8,300	8,200	8,100	8,000	7,900	7,700					(105-0)
7,700	(18,700)		(18,300)	(18,100)	(17,900)	(17,600)	(17,400)	(17,000)	(16,500)	(15,900)			(111-7)
(17,000) (16,500) (16,300) (16,300) (15,900) (15,700) (15,200) (14,800) (14,600) (13,400) (12,800) (12,800) (15,700) (15,200) (14,600) (14,600) (14,800) (16,500) (14,800) (14,800) (14,800) (14,800) (14,400) (14,300) (14,100) (13,700) (13,000) (12,100) (13,000) (12,100) (11,300) (13,000) (12,100) (13,000) (12,100) (13,000) (12,100) (13,000) (12,100) (11,500) (13,000) (12,100) (11,500) (10,800) (10,800) (10,800) (10,800) (10,800) (10,800) (10,800) (10,800) (10,800) (10,800) (10,800) (10,800) (10,800) (10,400) (10,800) (10,400) (10,100) (9,000) (10,400) (10,100) (9,000) (10,400) (10,100) (9,000) (10,400) (10,100) (10,400) (10,100) (10,400) (10,100) (10,100) (10,100) (10,100) (10,100) (10,100) <t< td=""><td>-</td><td></td><td>1000</td><td>49-5</td><td></td><td>-</td><td></td><td></td><td>_</td><td>_</td><td>_</td><td></td><td>35.0 (114-10)</td></t<>	-		1000	49-5		-			_	_	_		35.0 (114-10)
7,100 6,800 6,700 6,600 6,500 6,400 6,200 6,000 5,900 5,300 5,300 1,500 1,700 1,500 1,500 1,700 1,500 1,500 1,700 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>6,700</td><td></td><td>6,100</td><td></td><td>36.0 (118-1)</td></td<>									6,700		6,100		36.0 (118-1)
6,500			6,800	6,700	6,600	6,500	6,400	6,200	6,000	5,900	5,500	5,300	38.0
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$										THE RESERVE AND PARTY OF THE PA			(124-8)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			(13,700)		(13,200)	(13,000)	(12,600)	(12,100)	(11,700)	(11,500)	(10,800)	(10,400)	(131-3)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				(12,100)									42.0 (137-10)
5,000 (11,000) (10,400) (9,900) (9,500) (9,300) (8,800) (8,400) (7,700) (7,500) (6,800) (6,400) (10,900) (9,300) (8,800) (8,200) (7,700) (7,300) (6,800) (6,000) (6,500) (6,000) (1,500) (1,00							4,500			4,000	3,700	3,500	44.0
5,000			111,2007	(11,000)	(10,800)	(10,600)	(9,900)	(9,700)	(9,000)	(8,800)	(8,200)	(7,700)	(144-4) 45.0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	5,000		4 700	4 500	4 300	4 200	4.000	2 000	2.500	2 400			(147-8)
(9,900) (9,300) (8,800) (8,400) (8,200) (7,700) (7,300) (6,800) (6,600) (5,500) (1,500) 4,100 3,800 3,600 3,400 3,300 3,100 2,900 2,700 2,600 2,300 2,100 (9,000) (8,400) (7,900) (7,500) (7,300) (6,800) (6,000) (5,700) (5,700) (1,600)	(11,000)		(10,400)	(9,900)	(9,500)	(9,300)							46.0 (150-11)
4,100 (9,000) (8,400) (7,900) (7,500) (7,300) (6,800) (6,400) (6,000) (5,700) (5,100) (4,600) (1,700) (6,000) (6,400) (6,000) (6,500) (6,000)			4,200 (9,300)								2,700	2,500	48.0
3,200 3,000 2,900 2,700 2,500 (5,500) (1 (7,100) (6,600) (6,400) (6,000) (5,500) (1 2,900 2,700 2,400 2,200 (6,400) (6,000) (5,500) (1 (6,400) (6,000) (5,700) (5,300) (4,900) (1	4,100		3,800	3,600	3,400	3,300	3,100	2,900	2,700	2,600	2,300	2,100	(157-6) 50.0
(7,100) (6,600) (6,400) (6,000) (5,500) (1 2,900 2,700 2,600 2,400 2,200 (6,400) (6,000) (5,700) (5,300) (4,900)	(9,000)		(8,400)						(6,000)	(5,700)	(5,100)	(4,600)	(164-1) 52.0
(6,400) (6,000) (5,700) (5,300) (4,900)				(7,100)	(6,600)	(6,400)	(6,000)	(5,500)					(170-7)
													54.0 (177-2)
				2,700	2,500	2,400	2,200	2,000					55.0 (180-5)

NS 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 (FtIn.)	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. (16 Bo
4.0 (13-1)	150,000 (330,700)											Haraconton Co.	
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)			i				New Year	
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)		1	
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)	- 1	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
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)		(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,
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,
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,
25.0 (82-0)					14,700 (32,400)	14,400 (31,700)	_	_	0.0	-	_		=
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,
28.0 (91-10)							12,200 (26,900)	12,100 (26,700)	11,800 (26,000)	11,700 (25,800)	11,600 (25,600)		11,
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,
32.0 (105-0)									9,600 (21,200)	9,500 (20,900)	9,400 (20,700)		9,
34.0 (111-7)	7								8,800 (19,400)	8,700 (19,200)	8,600 (19,000)		8, (18,
35.0 (114-10)	4								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.
40.0 (131-3)											6,500 (14,300)		(15, 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 WARRANT

ERS FULLY EXTENDED AND SET

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

VARRANTY.

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

Operating	i ieroti	12.	19 m (40')	Jib (equip	ped with	25 metric	ton hook b	olock)	
radius in Meters (FtIn.)	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 (270') Boom
14.0 (45-11)	28,900 (63,700)	26,200							
16.0	24,600	24,400	22,800	20,800	18,700	16,600			-
18.0	(54,200)	20,200	(50,300)	19,800	17,800	15,900	14,300	12,500	10,80
(59-1)	(45,000)	(44,500)	(44,100)	(43,700)	(39,200)	(35,100)	(31,500)	(27,600)	
20.0 (65-7)	17,100 (37,700)	16,900 (37,300)	16,800 (37,000)	16,700 (36,800)	(36,600)	15,000 (33,100)	(29,500)	(26,000)	10,30
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	9,60
24.0 (78-9)	12,400 (27,300)	12,300 (27,100)	12,300 (27,100)	12,200 (26,900)	12,200	12,000	11,500	10,200	8,90
26.0 (85-4)	10,800	10,700	10,600	10,500	10,100	10,100	10,100	9,200	8,10
28.0	9,500	9,200	9,200	9,100	8,800	8,700	8.600	8,100	7,40
30.0	(20,900) 8,300	8,000	7,900	7,800	7,700	7,600	(19,000)	7,000	(16,30
(98-5)	(18,300)	(17,600)	(17,400)	(17,200)	(17,000)	(16,800)		(15,400)	6,600
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)	5,80
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
36.0 (118-1)	5,500	5,300	5,200	5,100	5,100	5,000	4,800	4,600	4,50
38.0	4,900	4,600	4,600	4,500	4,400	4,300	4,100	3,900	3,800
40.0	4,400	4,100	4,000	(9,900)	(9,700)	(9,500) 3,600	(9,000)	(8,600)	(8,400
(131-3)	(9,700)	(9,000)	(8,800)	(8,600)	(8,400)	(7,900)	(7,500)	(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)	(6,200)	(5,700)	2,500
44.0 (144-4)	(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)	10,000,	107.007	14,4007	
48.0	2,400	2,100	(5,500)	(4,900)	(4,600)				-
50.0	2,000	(4,600)							
(164-1)	(4,400)	102	0 m /60"	lib leavier	and wish 2	5 metric t		la als	1000
Operating radius	15 IIII.	2	7.43 m (90	') (equipp	ed with 12	metric to	n ball hoo	k)	
in Meters (FtIn.)	57.91 m (190')	60.96 m (200')	64.01 m (210')	67.06 m (220')	70.10 m (230')	73.15 m (240')	76.20 m (250')	79.25 m (260')	82.30 r (270')
14.0	28,100	25,400	Boom	Boom	Boom	Boom	Boom	Boom	Boom
(45-11)	(61,900)	(56,000)	00.100	00.400	40.000				
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							
20.0 (65-7)		(43,000)	19,300 (42,500)	19,100 (42,100)	17,100 (37,700)	15,200 (33,500)	(30,000)	11,900	
	16,400	16,300	16,200	(42,100) 16,100	16,000	(33,500) 14,400	12,800	(26,200)	9,700
22.0	16,400 (36,200) 13,800	(43,000) 16,300 (35,900) 13,800	(42,500) 16,200 (35,700) 13,600	(42,100) 16,100 (35,500) 13,600	(37,700) 16,000 (35,300) 13,700	(33,500) 14,400 (31,700) 13,100	(30,000) 12,800 (28,200) 11,900	(26,200) 11,200 (24,700) 10,600	9,700 (21,400
	16,400 (36,200)	(43,000) 16,300 (35,900)	(42,500) 16,200 (35,700) 13,600 (30,000)	(42,100) 16,100 (35,500) 13,600 (30,000)	(37,700) 16,000 (35,300) 13,700 (30,200)	(33,500) 14,400 (31,700) 13,100 (28,900)	(30,000) 12,800 (28,200) 11,900 (26,200)	(26,200) 11,200 (24,700) 10,600 (23,400)	9,700 (21,400 9,000 (19,800
22.0 (72-2) 24.0 (78-9)	16,400 (36,200) 13,800 (30,400) 11,900 (26,200)	(43,000) 16,300 (35,900) 13,800 (30,400) 11,800 (26,000)	(42,500) 16,200 (35,700) 13,600 (30,000) 11,700 (25,800)	(42,100) 16,100 (35,500) 13,600 (30,000) 11,600 (25,600)	(37,700) 16,000 (35,300) 13,700 (30,200) 11,600 (25,600)	(33,500) 14,400 (31,700) 13,100 (28,900) 11,400 (25,100)	(30,000) 12,800 (28,200) 11,900 (26,200) 10,900 (24,000)	(26,200) 11,200 (24,700) 10,600 (23,400) 9,600 (21,200)	9,700 (21,400 9,000 (19,800 8,300 (18,300
22.0 (72-2) 24.0 (78-9) 26.0 (85-4)	16,400 (36,200) 13,800 (30,400) 11,900 (26,200) 10,200 (22,500)	(43,000) 16,300 (35,900) 13,800 (30,400) 11,800 (26,000) 10,100 (22,300)	(42,500) 16,200 (35,700) 13,600 (30,000) 11,700 (25,800) 10,000 (22,000)	(42,100) 16,100 (35,500) 13,600 (30,000) 11,600 (25,600) 9,900 (21,800)	(37,700) 16,000 (35,300) 13,700 (30,200) 11,600 (25,600) 9,500 (20,900)	(33,500) 14,400 (31,700) 13,100 (28,900) 11,400 (25,100) 9,600 (21,200)	(30,000) 12,800 (28,200) 11,900 (26,200) 10,900 (24,000) 9,600 (21,200)	(26,200) 11,200 (24,700) 10,600 (23,400) 9,600	9,700 (21,400 9,000 (19,800 (18,300 7,600
22.0 (72-2) 24.0 (78-9) 26.0	16,400 (36,200) 13,800 (30,400) 11,900 (26,200) 10,200	(43,000) 16,300 (35,900) 13,800 (30,400) 11,800 (26,000)	(42,500) 16,200 (35,700) 13,600 (30,000) 11,700 (25,800) 10,000	(42,100) 16,100 (35,500) 13,600 (30,000) 11,600 (25,600) 9,900	(37,700) 16,000 (35,300) 13,700 (30,200) 11,600 (25,600) 9,500	(33,500) 14,400 (31,700) 13,100 (28,900) 11,400 (25,100) 9,600	(30,000) 12,800 (28,200) 11,900 (26,200) 10,900 (24,000) 9,600 (21,200) 8,200	(26,200) 11,200 (24,700) 10,600 (23,400) 9,600 (21,200) 8,700 (19,200) 7,600	9,700 (21,400 9,000 (19,800 8,300 (18,300 7,600 (16,800
22.0 (72-2) 24.0 (78-9) 26.0 (85-4) 28.0 (91-10) 30:0	16,400 (36,200) 13,800 (30,400) 11,900 (26,200) 10,200 (22,500) 8,900 (19,600) 7,800	(43,000) 16,300 (35,900) 13,800 (30,400) 11,800 (26,000) 10,100 (22,300) 8,600 (19,000) 7,500	(42,500) 16,200 (35,700) 13,600 (30,000) 11,700 (25,800) 10,000 (22,000) 8,700 (19,200) 7,400	(42,100) 16,100 (35,500) 13,600 (30,000) 11,600 (25,600) 9,900 (21,800) 8,600 (19,000) 7,300	(37,700) 16,000 (35,300) 13,700 (30,200) 11,600 (25,600) 9,500 (20,900) 8,300 (18,300) 7,200	(33,500) 14,400 (31,700) 13,100 (28,900) 11,400 (25,100) 9,600 (21,200) 8,300 (18,300) 7,100	(30,000) 12,800 (28,200) 11,900 (26,200) 10,900 (24,000) 9,600 (21,200) 8,200 (18,100) 7,000	(26,200) 11,200 (24,700) 10,600 (23,400) 9,600 (21,200) 8,700 (19,200) 7,600 (16,800) 6,500	9,700 (21,400 9,000 (19,800 8,300 (18,300 7,600 (16,800 (15,200 6,100
22.0 (72-2) 24.0 (78-9) 26.0 (85-4) 28.0 (91-10) 30.0 (98-5) 32.0	16,400 (36,200) 13,800 (30,400) 11,900 (26,200) 10,200 (22,500) 8,900 (19,600) 7,800 (17,200) 6,500	(43,000) 16,300 (35,900) 13,800 (30,400) 11,800 (26,000) 10,100 (22,300) 8,600 (19,000) 7,500 (16,500) 6,500	(42,500) 16,200 (35,700) 13,600 (30,000) 11,700 (25,800) 10,000 (22,000) 8,700 (19,200) 7,400 (16,300) 6,400	(42,100) 16,100 (35,500) 13,600 (30,000) 11,600 (25,600) 9,900 (21,800) 8,600 (19,000) 7,300 (16,100) 6,300	(37,700) 16,000 (35,300) 13,700 (30,200) 11,600 (25,600) 9,500 (20,900) 8,300 (18,300) 7,200 (15,900) 6,200	(33,500) 14,400 (31,700) 13,100 (28,900) 11,400 (25,100) 9,600 (21,200) 8,300 (18,300) 7,100 (15,700) 6,100	(30,000) 12,800 (28,200) 11,900 (26,200) 10,900 (24,000) 9,600 (21,200) 8,200 (18,100) 7,000 (15,400) 6,100	(26,200) 11,200 (24,700) 10,600 (23,400) 9,600 (21,200) 8,700 (19,200) 7,600 (16,800) 6,500 (14,300) 5,700	9,700 (21,400 9,000 (19,800 8,300 (18,300 (16,800 6,900 (15,200 (13,400 5,300
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	16,400 (36,200) 13,800 (30,400) 11,900 (26,200) 10,200 (22,500) 8,900 (19,600) 7,800 (17,200) 6,500 (14,300) 5,800	(43,000) 16,300 (35,900) 13,800 (30,400) 11,800 (26,000) 10,100 (22,300) 8,600 (19,000) 7,500 (16,500) 6,500 (14,300) 5,600	(42,500) 16,200 (35,700) 13,600 (30,000) 11,700 (25,800) 10,000 (22,000) 8,700 (19,200) 7,400 (16,300)	(42,100) 16,100 (35,500) 13,600 (30,000) 11,600 (25,600) 9,900 (21,800) 8,600 (19,000) 7,300 (16,100)	(37,700) 16,000 (35,300) 13,700 (30,200) 11,600 (25,600) 9,500 (20,900) 8,300 (18,300) 7,200 (15,900)	(33,500) 14,400 (31,700) 13,100 (28,900) 11,400 (25,100) 9,600 (21,200) 8,300 (18,300) 7,100 (15,700)	(30,000) 12,800 (28,200) 11,900 (26,200) 10,900 (24,000) 9,600 (21,200) 8,200 (18,100) 7,000 (15,400)	(26,200) 11,200 (24,700) 10,600 (23,400) 9,600 (21,200) 8,700 (19,200) 7,600 (16,800) 6,500 (14,300)	(22,500 9,700 (21,400 9,000 (19,800 (18,300 7,600 (16,800 6,900 (15,200 6,100 (13,400 5,300 (11,700
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)	16,400 (36,200) 13,800 (30,400) 11,900 (26,200) 10,200 (22,500) 8,900 (19,600) 7,800 (17,200) 6,500 (14,300) 15,800 (12,800)	(43,000) 16,300 (35,900) 13,800 (30,400) 11,800 (26,000) 10,100 (22,300) 8,600 (19,000) 7,500 (16,500) 6,500 (14,300) 5,600 (12,300)	(42,500) 16,200 (35,700) 13,600 (30,000) 11,700 (25,800) 10,000 (22,000) 8,700 (19,200) 7,400 (16,300) 6,400 (14,100) (12,100)	(42,100) 16,100 (35,500) 13,600 (30,000) 11,600 (25,600) 9,900 (21,800) 7,300 (16,100) 6,300 (13,900) (12,100)	(37,700) 16,000 (35,300) 13,700 (30,200) 11,600 (25,600) 9,500 (20,900) 8,300 (18,300) 7,200 (15,900) 6,200 (13,700) 5,400 (11,900)	(33,500) 14,400 (31,700) 13,100 (28,900) 11,400 (25,100) 9,600 (21,200) 8,300 (18,300) 7,100 (15,700) 6,100 (13,400) 5,300 (11,700)	(30,000) 12,800 (28,200) 11,900 (26,200) 10,900 (24,000) 9,600 (21,200) 8,200 (18,100) 7,000 (15,400) 6,100 (13,400) 5,100 (11,200)	(26,200) 11,200 (24,700) 10,600 (23,400) 9,600 (21,200) 8,700 (19,200) 7,600 (16,800) 6,500 (14,300) 5,700 (12,600) 4,900 (10,800)	(22,500 9,700 (21,400 (19,800 8,300 (18,300 (16,800 6,900 (15,200 6,100 (13,400 5,300 (11,700 4,600 (10,100
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)	16,400 (36,200) 13,800 (30,400) 11,900 (26,200) 10,200 (22,500) 8,900 (19,600) 7,800 (17,200) 6,500 (14,300) 5,800 (12,800) (11,000)	(43,000) 16,300 (35,900) 13,800 (30,400) 11,800 (26,000) 10,100 (22,300) 8,600 (19,000) 7,500 (16,500) 6,550 (14,300) 5,600 (12,3300) 4,900 (10,800)	(42,500) 16,200 (35,700) 13,600 (30,000) 11,700 (25,800) 10,000 (122,000) 8,700 (19,200) 7,400 (16,300) 6,400 (14,100) 4,800 4,800 4,800 (10,600)	(42,100) 16,100 (35,500) 13,600 (30,000) 11,600 (25,600) 9,900 (21,800) 8,600 (19,000) 7,300 (16,100) 6,300 (13,900) 5,500 (12,100) 4,700 (10,400)	(37,700) 16,000 (35,300) 13,700 (30,200) 11,600 (25,600) 9,500 (20,900) 8,300 (18,300) 7,200 (15,900) 6,200 (11,900) 5,400 (11,900) 4,600 (10,100)	[33,500) 14,400 (31,700) 13,100 (28,900) 11,400 (25,100) 9,600 (21,200) 8,300 (18,300) 7,100 (15,700) 6,100 (13,400) 5,300 (11,700) 4,500	(30,000) 12,800 (28,200) 11,900 (26,200) 10,900 (24,000) 9,600 (21,200) 8,200 (18,100) 7,000 (15,400) 6,100 (113,400) 5,100 (11,200) 4,300	(26,200) 11,200 (24,700) 10,600 (23,400) 9,600 (21,200) 8,700 (19,200) 7,600 (14,300) 5,700 (112,600) 4,900 4,100 4,100	(22,500 9,700 (21,400 9,000 (19,800 7,600 (18,300 (16,800 6,100 (11,700 (11,700 4,600 (10,100 4,000 (8,800
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 (1118-1) 38.0	16,400 (36,200) 13,800 (30,400) 11,900 (26,200) 10,200 (12,500) 8,900 (19,600) 7,800 (17,200) 6,500 (14,300) 5,800 (12,800) 5,000	(43,000) 16,300 (35,900) 13,800 (30,400) 11,800 (26,000) 10,100 (22,300) (19,000) 7,500 (16,500) 6,500 (114,300) 5,600 (12,300) 4,900 (10,800) 4,200 (9,300)	[42,500) 16,200 (35,700) 13,600 (30,000) 11,700 (25,800) 10,000 (22,000) 8,700 (19,200) 7,400 (16,300) 6,400 (114,100) 5,500 (10,600) 4,100 (10,600)	(42,100) 16,100 (33,500) 13,600 (30,000) 11,600 (25,600) 9,900 (21,800) 7,300 (16,100) 6,300 (13,900) 5,500 (12,100) 4,700	(37,700) 16,000 (35,300) 13,700 (30,200) 11,600 (25,500) 9,500 (20,900) 8,300 (18,300) 7,200 (115,900) 6,200 (13,700) 5,400 (11,900) 4,600	(33,500) 14,400 (31,700) 13,100 (28,900) 11,400 (25,100) 9,600 (21,200) 8,300 (18,300) 7,100 (15,700) 6,100 (13,400) 5,300 (11,700) 4,500	(30,000) 12,800 (28,200) 11,900 (26,200) 10,900 (24,000) 9,600 (21,200) 8,200 (18,100) 7,000 (15,400) 6,100 (13,400) 5,100 (11,200) 4,300	(26,200) 11,200 (24,700) 10,600 (23,400) 9,600 (21,200) 8,700 (19,200) 7,600 (16,800) 6,500 (14,300) 5,700 (12,600) 4,900 (10,800) 4,100	(22,500 9,700 (21,400 9,000 (19,800 8,300 7,600 (16,800 6,900 6,100 (11,700 5,300 (11,700 4,600 (8,800 3,300 3,300
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	16,400 (36,200) 13,800 (30,400) 11,900 (26,200) 10,200 (22,500) 7,800 (17,200) 6,500 (14,300) 5,800 (12,800) 10,200 4,500 (9,900) 3,900	(43,000) 16,300 (35,900) 13,800 (30,400) 11,800 (26,000) 10,100 (22,300) 8,600 (19,000) 7,500 (16,500) (14,300) 5,600 (12,300) 4,900 (10,800) 4,200 (9,300) 3,600	[42,500) 16,200 (35,700) 13,600 (30,000) 11,700 (25,800) 10,000 (22,000) 8,700 (19,200) 6,400 (14,100) 5,500 (12,100) 4,800 (110,600) 4,110 (9,000) 3,500	(42,100) 16,100 (35,500) 13,600 (30,000) 11,600 (25,600) 9,900 (21,800) 7,300 (16,100) 7,300 (12,100) 4,700 (10,400) (8,800) 4,000 (8,800)	(37,700) 16,000 (35,300) 13,700 (30,200) 11,600 (25,600) 9,500 (20,900) 8,300 (18,300) 7,200 (15,900) 6,200 (11,700) 5,400 (11,900) 4,600 (10,100) 3,900 (8,600) 3,300	[33,500) 14,400 (31,700) 13,100 (28,900) 11,400 (25,100) 9,600 (21,200) 8,300 (7,100 (15,700) 6,100 (13,400) 5,300 (11,700) 4,500 (9,900) 3,800 (8,400) 3,100	(30,000) 12,800 (128,200) 11,900 (26,200) 10,900 (21,200) 8,200 (18,100) 7,000 (15,400) 6,100 (11,200) 4,300 (9,500) 3,600 (7,900)	(26,200) 11,200 (24,700) 10,600 (23,400) 9,600 (21,200) 8,700 (19,200) 7,600 (16,800) 5,700 (14,300) 5,700 (10,800) 4,100 (9,000) 3,400 (7,500) 2,700	(22,500 9,700 (21,400 9,000 (19,800 8,300 7,600 (16,800 6,900 (15,200 6,100 (11,700 4,600 (10,100 4,000 3,300 7,300 2,600
22.0 (72-2) 24.0 (78-9) 24.0 (78-9) 26.0 (85-4) 28.0 (91-10) 30.0 (98-5) 32.0 (105-0) 34.0 (111-7) 38.0 (118-1) 38.0 (124-8) 40.0 (131-3) 42.0	16,400 (36,200) 13,800 (30,400) 11,900 (26,200) 10,200 (22,500) (19,600) 7,800 (17,200) 6,500 (11,4300) 5,800 (11,000) 4,500 (9,900) 3,900 (8,600)	(43,000) (16,300) (35,900) 13,800 (30,400) 11,800 (26,000) 10,100 (22,300) 8,600 (19,000) 7,500 (16,500) (14,300) 5,600 (12,300) 4,200 (9,300) 3,600 (7,900)	[42,500) [16,200] [13,600] [30,000] [11,700] [25,800] [10,000] [22,000] [8,700] [16,300] [16,300] [14,100] [5,500] [12,100] [4,100] [10,600] [4,100] [9,000] [3,500] [7,700] [2,900]	(42,100) (16,100) (35,500) 13,600 (30,000) 11,600 (25,600) 9,900 (21,800) 8,600 (19,000) 7,300 (16,100) 6,300 (13,900) 5,500 (12,100) 4,000 (4,000) (4,000) (8,800) 3,400 (7,500) 2,800	(37,700) (35,300) (13,300) (13,700) (30,200) (15,600) (25,600) (20,900) (8,300) (7,200) (15,900) (11,900) (11,900) (10,100) (3,900) (8,600) (7,300) (7,300) (7,300)	(33,500) 14,400 (31,700) 13,100 (28,900) 11,400 (25,100) 9,600 (21,200) 8,300 (18,300) 7,100 (13,400) 5,300 (11,700) 4,500 (11,700) 4,500 (3,400) 3,800 (8,400) 3,100 (6,800) 2,400	(30,000) 12,800 (128,200) 11,900 (26,200) 10,900 (21,200) 8,200 (18,100) 7,000 (115,400) 6,100 (13,400) 4,300 (19,500) 2,900 (6,400) 2,400	(26,200) 11,200 (24,700) 10,600 (23,400) 9,600 (21,200) 8,700 (19,200) 7,600 (16,800) 5,700 (12,600) (14,300) 5,700 (10,800) 4,100 (9,000) 2,700 (6,000) 2,700 (6,000) 2,200	(22,500 9,700 (21,400 9,000 (19,800 8,300 (16,800 6,900 (15,200 6,100 (11,700 4,600 (10,100 (8,800 3,300 (7,300 2,600 2,100
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 (118-1) 36.0 (124-8) 40.0 (131-3) 42.0 (137-10)	16,400 (36,200) 13,800 (30,400) 11,900 (26,200) 10,200 (22,500) (7,800) (17,200) 6,500 (17,200) 5,800 (11,200) 5,800 (11,200) 5,900 (11,200) 3,900 (8,600) 3,300 (7,300) 2,800	(43,000) 16,300 (35,900) 13,800 (30,400) 11,800 (26,000) 10,100 (19,000) 7,500 (16,500) 14,300) 5,600 (12,300) 4,200 (9,300) 3,600 (7,900) 3,000 (6,600) 2,500	[42,500) [16,200] [13,600] [30,000] [11,700] [25,800] [10,000] [22,000] [8,700] [19,200] [7,400] [16,300] [14,100] [5,500] [14,100] [4,100] [9,000] [10,000] [2,900] [2,900] [6,400] [2,900] [2,900] [6,400] [2,900] [6,400]	(42,100) 16,100 (35,500) 13,600 (30,000) 11,600 (25,600) 9,900 (21,800) 7,300 (16,100) 6,300 (13,900) 5,500 (12,100) 4,700 (10,400) 4,000 (8,800) 3,400 (7,500) 2,800 (7,500)	(37,700) (35,300) (15,300) (13,700) (30,200) (11,600) (25,600) (20,900) 8,300 (18,300) 7,200 (11,900) 5,400 (11,900) 3,900 (18,600) 3,300 (7,300) 2,700 (6,000) 2,300	(33,500) 14,400 (31,700) 13,100 (28,900) 11,400 (25,100) 9,600 (21,200) 8,300 (18,300) 7,100 (15,700) 5,300 (11,700) 3,800 (8,400) 3,100 (6,800) 2,400 (5,300) 2,000	(30,000) 12,800 (28,200) 11,900 (26,200) 10,900 (21,200) 8,200 (18,100) 7,000 (15,400) 5,100 (113,400) 4,300 (9,500) 3,600 (7,900) 2,900) 2,900	(26,200) 11,200 (24,700) 10,600 (23,400) 9,600 (21,200) 8,700 (16,800) 6,500 (114,300) 5,700 (112,600) 4,900 (10,800) 4,100 (9,000) 3,400 (7,500) 2,7600 (6,000)	(22,500 9,700 (21,400 9,000 (19,800 8,300 (16,800 6,900 (15,200 6,100 (11,700 4,600 (10,100 (8,800 3,300 (7,300 2,600 2,100
22.0 (72-2) 24.0 (78-9) 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 (131-3) 44.0 (131-3) 42.0 (137-10) 44.0 (144-4)	16,400 (36,200) 13,800 (30,400) 11,900 (26,200) 10,200 (22,500) (19,600) 7,800 (17,200) 6,500 (11,200) 5,800 (11,200) 4,500 (9,900) (9,900) 3,300 (8,600) 3,300 (7,300) 2,800 (6,200)	(43,000) 16,300 (35,900) 13,800 (30,400) 11,800 (26,000) 10,100 (22,300) 8,600 (19,000) 7,500 (16,500) (12,300) 4,900 (110,800) 4,200 (3,300) 4,200 (7,900) 3,600 (7,900) 3,600 (7,900) 2,500 (5,500)	[42,500) 16,200 (35,700) 13,600 (30,000) 11,700 (25,800) 10,000 (22,000) 8,700 (19,200) 6,400 (14,100) 5,500 (12,100) 4,800 (110,600) 3,500 (7,700) 2,900 (6,400) 2,400 (5,300)	(42,100) (16,100) (35,500) 13,600 (30,000) 11,600 (25,600) 9,900 (21,800) 8,600 (19,000) 7,300 (16,100) 6,300 (13,900) 5,500 (12,100) 4,000 (4,000) (4,000) (8,800) 3,400 (7,500) 2,800	(37,700) 16,000 (35,300) 13,700 (30,200) 11,600 (25,600) 9,500 (20,900) 8,300 (18,300) 7,200 (15,900) 6,200 (11,900) 4,600 (11,900) 4,600 (10,100) 3,900 (8,600) 2,700 (6,000)	[33,500) 14,400 (31,700) 13,100 (28,900) 11,400 (25,100) 9,600 (21,200) 8,300 (18,300) 7,100 (15,700) 6,100 (13,400) 5,300 (11,700) 4,500 (9,900) 3,800 (8,400) 3,100 (6,800) 2,400 (5,300)	(30,000) 12,800 (128,200) 11,900 (26,200) 10,900 (21,200) 8,200 (18,100) 7,000 (115,400) 6,100 (13,400) 4,300 (19,500) 2,900 (6,400) 2,400	(26,200) 11,200 (24,700) 10,600 (23,400) 9,600 (21,200) 8,700 (19,200) 7,600 (16,800) 5,700 (12,600) (14,300) 5,700 (10,800) 4,100 (9,000) 2,700 (6,000) 2,700 (6,000) 2,200	(22,500 9,700 (21,400 9,000 (19,800 8,300 (16,800 6,900 (15,200 6,100 (13,400 4,000 (10,100 (8,800 3,300 (10,7,300 2,600 (5,700 2,100
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)	16,400 (36,200) 13,800 (30,400) 11,900 (26,200) 10,200 (22,500) (7,800) (17,200) 6,500 (17,200) 5,800 (11,200) 5,800 (11,200) 5,900 (11,200) 3,900 (8,600) 3,300 (7,300) 2,800	(43,000) 16,300 (35,900) 13,800 (30,400) 11,800 (26,000) 10,100 (19,000) 7,500 (16,500) 14,300) 5,600 (12,300) 4,200 (9,300) 3,600 (7,900) 3,000 (6,600) 2,500	[42,500) [16,200] [13,600] [30,000] [11,700] [25,800] [10,000] [22,000] [8,700] [19,200] [7,400] [16,300] [14,100] [5,500] [14,100] [4,100] [9,000] [10,000] [2,900] [2,900] [6,400] [2,900] [2,900] [6,400] [2,900] [6,400]	(42,100) 16,100 (35,500) 13,600 (30,000) 11,600 (25,600) 9,900 (21,800) 7,300 (16,100) 6,300 (13,900) 5,500 (12,100) 4,700 (10,400) 4,000 (8,800) 3,400 (7,500) 2,800 (7,500)	(37,700) (35,300) (15,300) (13,700) (30,200) (11,600) (25,600) (20,900) 8,300 (18,300) 7,200 (11,900) 5,400 (11,900) 3,900 (18,600) 3,300 (7,300) 2,700 (6,000) 2,300	(33,500) 14,400 (31,700) 13,100 (28,900) 11,400 (25,100) 9,600 (21,200) 8,300 (18,300) 7,100 (15,700) 5,300 (11,700) 3,800 (8,400) 3,100 (6,800) 2,400 (5,300) 2,000	(30,000) 12,800 (128,200) 11,900 (26,200) 10,900 (21,200) 8,200 (18,100) 7,000 (115,400) 6,100 (13,400) 4,300 (19,500) 2,900 (6,400) 2,400	(26,200) 11,200 (24,700) 10,600 (23,400) 9,600 (21,200) 8,700 (19,200) 7,600 (16,800) 5,700 (12,600) (14,300) 5,700 (10,800) 4,100 (9,000) 2,700 (6,000) 2,700 (6,000) 2,200	(13,400 5,300 (11,700 4,600 (10,100 4,000 (8,800 3,300 (7,300 2,600 (5,700

Lifting Capacities

JIB RATED LOADS IN KGS (LBS.)

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

Operating Radius	12.19 m	(40') Jib	57.91 m (1	(60') Jib		(90') Jib	12 19 m	(40') Jib	60.96 m (2	(60') Jib	27.43 m	(904) 1
n Meters		Angle		Angle	_	Angle	The state of the s	Angle	-	Angle		Angle
(FtIn.)	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°
16.0	14,000											
(52-6) 18.0	14,000		10,000				14,000	-				
(59-1)	(30,900)		(22,000)				(30,900)					
20.0 (65-7)	(30,900)	10,000 (22,000)	10,000 (22,000)				14,000 (30,900)	10,000 (22,000)	10,000 (22,000)			
22.0	14,000	10,000	10,000		3,900	-	14,000	10,000	10,000		3,900	
(72-2)	14,000	10,000	10,000	6.000	3,900		(30,900)	(22,000)	(22,000)	0.000	(8,600)	
(78-9)	(30,900)			6,000 (13,200)	(8,600)		14,000 (30,900)	(22,000)	(22,000)	6,200 (13,700)	(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	10,000	6,200	3,900	
28.0	11,700	10,000	10,000	6,000	3,900		11,400	10,000	10,000	6,200	(8,600)	_
30.0	(25,800)	(22,000)		(13,200)	(8,600)	0.000	(25,100)	(22,000)	(22,000)	(13,700)	(8,600)	
(98-5)	10,500 (23,100)	(22,000)	(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)	3,30
32.0 (105-0)	9,200 (20,300)	9,200 (20,300)	9,200 (20,300)	6,000	3,900	3,300	9,200	9,200	9,200	6,200	3,900	3,30
34.0	8,500	8,500	8,500	6,000	(8,600)	(7,300) 3,300	(20,300) 8,300	8,300	8,300	6,200	3,900	3,30
(111-7)	(18,700)	(18,700)	(18,700)	(13,200)	(8,600)	(7,300)	(18,300)	(18,300)	(18,300)	(13,700)	(8,600)	(7,30
36.0 (118-1)	7,700	7,700 (17,000)	7,700 (17,000)	6,000 (13,200)	3,900 (8,600)	(7,300)	7,500 (16,500)	7,500 (16,500)	7,500 (16,500)	6,200 (13,700)	(8,600)	3,30
38.0	7,100	7,100	7,100	6,000	3,900	3,300	6,800	6,800	6,800	6,200	3,900	3,30
40.0	6,500	6,500	6,500	6,000	3,900	3,300	(15,000) 6,200	(15,000) 6,200	6,200	6,200	(8,600)	3,30
(131-3)	(14,300)	(14,300)	(14,300)	(13,200)	(8,600)	(7,300)	(13,700)	(13,700)	(13,700)	(13,700)	(8,600)	(7,30
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)	3,30
44.0	5,400	5,400	5,400	5,400	3,900	3,300	5,100	5,100	5,100	5,100	3,900	3,30
46.0	5,000	(11,900) 5,000	(11,900) 5,000	(11,900) 5,000	(8,600)	(7,300)	(11,200)		(11,200)	(11,200)	(8,600)	(7,30
(150-11)	(11,000)	(11,000)	(11,000)	(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)	3,30
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	4,200 (9,300)	4,200	4,200	4,200	3,900	3,30
50.0	4,100	4,100	4,100	4,100	3,900	3,300	3,800	3,800	(9,300)	(9,300)	(8,600)	3,30
(164-1)	(9,000)	(9,000)	(9,000)	(9,000)	(8,600)	(7,300)	(8,400)	(8,400)	(8,400)	(8,400)	(8,400)	(7,30
perating	12.19 m		64.01 m (2			(001) 115	10.10		67.06 m (2			
radius	12.19 m	(40) 316	18.29 m			(90') Jib	12.19 m	(40') Jib	18.29 m	(60') Jib	27.43 m	(90')
n Meters	Offset	Angle	Offset	Angle	Offcot	Angle	Offeat	Angle	Offent	Angle	Office	Anala
n Meters (FtIn.)	Offset 10°	Angle 30°	Offset 10°	Angle 30°	Offset 10°	Angle 30°	Offset 10°	Angle 30°	Offset 10°		Offset 10°	
(FtIn.) 18.0	10° 14,000						10° 14,000			Angle 30°		
(FtIn.)	10°		10°				10° 14,000 (30,900)		10°			
(FtIn.) 18.0 (59-1) 20.0 (65-7)	10° 14,000 (30,900) 14,000 (30,900)	30°	10,000 (22,000)				10° 14,000 (30,900) 14,000 (30,900)	30°	10,000 (22,000)			
18.0 (59-1) 20.0	10° 14,000 (30,900) 14,000		10°				10° 14,000 (30,900) 14,000 (30,900) 14,000	30°	10,000 (22,000) 10,000			
(FtIn.) 18.0 (59-1) 20.0 (65-7) 22.0 (72-2) 24.0	10° 14,000 (30,900) 14,000 (30,900) 14,000 (30,900)	10,000 (22,000)	10,000 (22,000) 10,000 (22,000) 10,000		3,900		10° 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 14,000	10,000 (22,000) 10,000	10,000 (22,000) 10,000 (22,000) 10,000		10°	
(FtIn.) 18.0 (59-1) 20.0 (65-7) 22.0 (72-2) 24.0 (78-9)	10° 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 14,000 (30,900)	10,000 (22,000) 10,000 (22,000)	10,000 (22,000) 10,000 (22,000) 10,000 (22,000)	30°	3,900 (8,600)		10° 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 14,000 (30,900)	10,000 (22,000) 10,000 (22,000)	10,000 (22,000) 10,000 (22,000) 10,000 (22,000)	30°	3,900 (8,600)	
(FtIn.) 18.0 (59-1) 20.0 (65-7) 22.0 (72-2) 24.0 (78-9) 26.0 (85-4)	10° 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 12,800 (28,200)	10,000 (22,000) 10,000 (22,000) 10,000 (22,000)	10°00 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000)	6,400 (14,100)	3,900 (8,600) 3,900 (8,600)		10° 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 12,700 (28,000)	10,000 (22,000) 10,000 (22,000) 10,000 (22,000)	10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000)	6,500 (14,300)	3,900 (8,600) 3,900 (8,600)	
(FtIn.) 18.0 (59-1) 20.0 (65-7) 22.0 (72-2) 24.0 (78-9) 26.0 (85-4) 28.0	10° 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 12,800 (28,200) 11,400	10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000	10°0 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000	6,400 (14,100) 6,400	3,900 (8,600) 3,900 (8,600) 3,900		10° 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 12,700 (28,000) 11,300	10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000	10° 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000	6,500 (14,300) 6,500	3,900 (8,600) 3,900 (8,600) 3,900	
(FtIn.) 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	10° 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 12,800 (28,200) 11,400 (25,100)	10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000	10°0 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000	6,400 (14,100) 6,400 (14,100) 6,400	3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900	3,300	10° 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 12,700 (28,000) 11,300 (24,900) 10,000	10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000	10°0 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000	6,500 (14,300) 6,500 (14,300) 6,500	3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900	
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(Ftin.) 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 (111-7) 36.0 (1118-1) 38.0 (124-8)	10° 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 12,800 (28,200) 11,400 (25,100) 9,100 (20,100) 8,200 (21,100) 18,100) 7,400 (16,300) 6,700 (14,800)	10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 9,100 (20,100) (20,100) 8,200 (18,100) 7,400 (16,300) 6,700 (14,800)	10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 9,100 (20,100) (20,100) 8,200 (18,100)	6,400 (14,100) 6,400 (14,100) 6,400 (14,100) 6,400 (14,100) 6,400 (14,100) 6,400 (14,100)	3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900	3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300	10° 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 11,300 (24,900) 11,300 (24,900) 9,000 (119,800) 8,100 (17,900) 7,300	10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 9,000 (17,980) 7,300 (16,100) 6,600 (14,600)	10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) (22,000) (22,000) (32,000) (32,000) (32,000) (41,000) (52,000) (7,300) (16,100) (6,600)	6,500 (14,300) 6,500 (14,300) 6,500 (14,300) 6,500 (14,300) 6,500 (14,300) 6,500	3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600)	3,30 (7,30 3,30 (7,30 3,30 (7,30 3,30
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(Ftin.) 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 (111-7) 38.0 (124-8) 40.0 (131-3) 44.0 (131-3) 44.0 (137-10) 44.0 (157-6) 50.0 (164-1) 50.0 (164-1) 50.0	10° 14,000 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 12,800 (28,200) 11,400 (25,100) 10,100 (25,100) 10,100 (20,100) 10,100 (20,100) 11,400 (11,400) 11,400 (11,400) 11,400 (11,400) 11,400 (11,400) 11,400 (11,400) 11,400 (11,400) 11,400 (11,400) 11,400 (11,400) 11,400 (11,400) 11,400 (11,400) 11,000 (11,400) 11,000	10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 9,100 (20,000) 18,200 (18,100) 7,400 (16,300) 6,700 (14,800) 6,100 (13,400) 5,500 (12,100) 5,500 (11,000) 4,500 (9,900) 4,500 (8,800) 3,600 (7,900) 3,200 (7,100)	10°0 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (20,000) 10,000 (21,000) 10,000 (21,000) 10,000 (21,000) 11,000 11,000 (11,4,000) 11,4,000 (12,100) 15,500 (12,100) 15,500 (11,000) 11,000 1	6,400 (14,100) 6,400 (14,100) 6,400 (14,100) 6,400 (14,100) 6,400 (14,100) 6,100 (14,100) 6,100 (13,400) 5,500 (12,100) 5,500 (12,100) 4,500 (9,900) 4,500 (9,900) 3,200 (7,900) 3,200 (7,100)	3,900 (8,600) 3,900 3,90	3,300 (7,300) 3,300 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,000 (7,300) 3,000 (7,300) 3,000 (7,3	10° 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 11,300 (22,000) 10,000 (22,000) 9,000 (19,800) 8,100 (17,900) 7,300 (11,600) 6,600 (11,900) 4,900 (11,900) 4,900 (11,900) 4,900 (11,900) 3,800 (8,400) 3,800 (8,400) 3,3400 (7,500) 3,000 (7,500) 3,000 (6,600)	10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 9,000 (19,800) 8,100 (17,900) 7,300 (116,100) 6,600 (14,600) 6,600 (11,900) 4,900 (11,900) 4,300 (9,500) (8,400) 3,3400 (7,500) 3,000 (7,500)	10°0 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (12,000) 10,000 (12,000) 10,000 (12,000) 10,000 (12,000) 10,000 (12,000) 10,000 (11,000) 11,000 (11,000) 11,000 (11,000) 11,000 (11,000) 11,000 (11,000) 11,000	6,500 (14,300) 6,500 (14,300) 6,500 (14,300) 6,500 (14,300) 6,500 (14,300) 6,500 (11,300) 6,500 (11,300) 4,900 (11,900) 4,900 (11,900) 4,900 (11,900) 3,800 (8,400) 3,400 (7,500) 3,000 (6,600)	3,900 (8,600) 3,900 3,900 (8,600) 3,900	3,30 (7,30 (7,30 3,30 (7
(Ftin.) 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 (131-3) 42.0 (131-10) 44.0 (144-4) 46.0 (150-11) 48.0 (150-11) 48.0 (155-6)	10° 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 12,800 (28,200) 11,400 (25,100) 10,100 (22,300) 9,100 (20,100) 8,200 (18,100) 7,400 (14,800) 6,700 (14,800) 6,100 (13,400) 5,500 (11,000) 5,500 (11,000) 4,500 (9,900) 4,000 (8,800) 3,600 (7,900) 3,200	10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 9,100 (20,100) 7,400 (18,100) 7,400 (118,100) 5,500 (113,400) 5,500 (12,100) 4,000 (8,800) 3,600 (7,900) 3,200	10°0 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 9,100 (20,100) 8,200 (18,100) 7,400 (18,100) 5,500 (11,400) 5,500 (11,200) 5,500 (11,200) 4,500 (9,900) 4,000 (8,800) 3,600 (7,900) 3,200	6,400 (14,100) 6,400 (14,100) 6,400 (14,100) 6,400 (14,100) 6,400 (14,100) 6,400 (14,100) 5,500 (12,100) 5,500 (12,100) 4,500 (19,900) 4,000 (8,800) 3,600 (7,900) 3,200	3,900 (8,600) 3,900 3,900 (8,600) 3,900 3,900 (8,600) 3,900 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,900 (8,600) 3,000 3,000 3,000 3,000 3,000 3,000 3,000 3,000 3,000	3,300 (7,300) 3,300 3,300 (7,300) 3,300 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,300 (7,300) 3,30	10° 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 14,000 (30,900) 11,300 (28,000) 11,300 (24,900) 10,000 (22,000) 9,000 (10,900) 7,300 (16,100) 6,600 (11,900) (14,600) 6,600 (11,900) (13,200) (10,800	10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 9,000 (10,980) 7,300 (16,100) 6,600 (11,900) 5,400 (11,3200) 5,400 (11,3200)	10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 10,000 (22,000) 9,000 (10,000 (10,000 (11,980) 7,300 (14,600) 6,600 (14,600) 6,600 (14,600) 6,600 (11,900) 4,300 (10,800) 4,300 (10,800) 4,300 (10,800) 3,800 (8,400) 3,400 (7,500) 3,000 (7,500)	6,500 (14,300) 6,500 (14,300) 6,500 (14,300) 6,500 (14,300) 6,500 (14,300) 6,500 (14,300) 5,400 (11,300) 5,400 (11,300) 5,400 (11,300) 5,400 (10,800) 4,300 (10,800) 4,300 (10,800) 3,800 (8,400) 3,400 (7,500) 3,000	3,900 (8,600) 3,900 3,90	3,300 (7,300 (7,300 (3,30) (7,300 (6,600 2,700 (6,600 4,7

11 9170-TC

JIB RATED LOADS IN KGS (LBS.)

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

Operating				30') Boom				Mariana Mariana and Mariana	73.15 m (2					
radius		(40') Jib	18.29 m			(90') Jib	12.19 m		18.29 m			90') Jib	12.19 m	
n Meters (FtIn.)		Angle	The state of the s	Angle		Angle	Offset 10°	Angle 30°	Offset 10°	Angle 30°	Offset 10°	Angle	Offset 10°	Angle
18.0	10°	30°	10°	30°	10°	30°	10°	30-	10-	30°	10-	30°	10°	30°
(59-1)	(30,900)													
20.0 (65-7)	(30,900)		10,000 (22,000)				(30,900)						13,700 (30,200)	
22.0	14,000	10,000	10,000				14,000	10,000	10,000	-			13,700	
(72-2)	(30,900)	10,000	10,000		3,900		14,000	10,000	10,000		3,900		13,700	10,00
(78-9)	(30,900)	(22,000)	(22,000)		(8,600)		(30,900)	(22,000)	(22,000)		(8,600)		(30,200)	(22,00
26.0 (85-4)	12,600 (27,800)	10,000 (22,000)	(22,000)	6,800 (15,000)	3,900 (8,600)		12,300 (27,100)	(22,000)	10,000 (22,000)	6,800 (15,000)	3,900 (8,600)		12,300 (27,100)	10,00
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)	10,00
30.0	9,900	9,900	9,900	6,800	3,900		9,800	9,800	9,800	6,800	3,900		9,700	9,7
(98-5)	(21,800) 8,900	(21,800) 8,900	(21,800) 8,900	(15,000) 6,800	3,900	3,300	(21,600) 8,800	(21,600) 8,800	(21,600) 8,800	(15,000) 6,800	(8,600)	3,300	(21,400) 8,700	8,7
(105-0)	(19,600)	(19,600)	(19,600)	(15,000)	(8,600)	(7,300)	(19,400)	(19,400)	(19,400)	(15,000)	(8,600)	(7,300)	(19,200)	(19,2
34.0 (111-7)	8,000 (17,600)	8,000 (17,600)	8,000 (17,600)	6,800 (15,000)	(8,600)	3,300 (7,300)	7,900 (17,400)	7,900 (17,400)	7,900 (17,400)	6,800 (15,000)	(8,600)	3,300 (7,300)	7,700 (17,000)	7,70
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)	6,90
38.0	6,500 (14,300)	6,500 (14,300)	6,500 (14,300)	6,500	3,900	3,300 (7,300)	6,400	6,400	6,400	6,400	3,900	3,300	6,200	6,2
40.0	5,900	5,900	5,900	(14,300) 5,900	(8,600)	(7,300)	5,700	5,700	5,700	5,700	(8,600)	(7,300)	(13,700) 5,500	13,7
(131-3)	(13,000)	(13,000)	(13,000)	(13,000)	(8,600)	3,300 (7,300)	(12,600)	(12,600)	(12,600)	(12,600)	(8,600)	(7,300)	(12,100)	(12,1
42.0 (137-10)	5,300 (11,700)	5,300 (11,700)	5,300 (11,700)	5,300 (11,700)	(8,600)	(7,300)	5,000	5,000	5,000	5,000 (11,000)	3,900 (8,600)	3,300 (7,300)	4,900 (10,800)	4,9
44.0	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)	(9,7
46.0	4,200		4,200	4,200	3,900	3,300	4,000	4,000	4,000	4,000	3,900	3,300	3,800	3,8
(150-11) 48.0	(9,300)	4,200 (9,300) 3,700	(9,300)	(9,300)	3,700	3,300	(8,800)	(8,800)	(8,800)	3,500	(8,600)	3,300	3,300	3,3
(157-6)	(8,200)	(8,200)	(8,200)	(8,200)	(8,200)	(7,300)	(7,700)	(7,700)	(7,700)	(7,700)	(7,700)	(7,300)	(7,300)	(7,3
50.0 (164-1)	(7,300)	3,300 (7,300)	(7,300)	(7,300)	3,300 (7,300)	(7,300)	(6,800)	3,100 (6,800)	(6,800)	3,100 (6,800)	3,100 (6,800)	3,100 (6,800)	(6,400)	2,9
52.0	2,900	2,900	2,900	2,900	2,900	2,900	2,700	2,700	2,700	2,700	2,700 (6,000)	2,700	2,500	2,5 (5,5
(170-7) 54.0	(6,400) 2,600	(6,400) 2,600	(6,400)	(6,400)	(6,400) 2,600	(6,400)	(6,000)	(6,000)	(6,000)	(6,000)	2,400	2,400	(5,500)	2.2
(177-2)	(5,700)	(5,700)	(5,700)	(5,700)	(5,700)	(5,700)	(5,300)	2,400 (5,300) 2,200	(5,300)	(5,300)	(5,300)	(5,300)	2,000	2,0
55.0 (180-5)	2,400 (5,300)	(5,300)	(5,300)	(5,300)	(5,300)	(5,300)	(4,900)	(4,900)	(4,900)	(4,900)	4,900	4,900	(4,400)	(4,4
Operating				(60') Boom		TILL LO			82.30 m (2	and the same before the same of the same o				
radius in Meters		(40') Jib Angle	18.29 m	(60') Jib Angle		(90') Jib Angle	12.19 m	(40') Jib Angle		(60') Jib Angle		(90') Jib t Angle		
(FtIn.)	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°	10°	30°		
20.0 (65-7)	13,400 (29,500)						11,100 (24,500)							
22.0	13,400		10,000				11,100		10,000				1	
(72-2)	(29,500)	10,000	10,000			-	(24,500)	10,000	10,000				-	
(78-9)	(27,300)	(22,000)	(22,000)				(24,500)	(22,000)	(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)		(8,600)			
28.0	10,300 (22,700)	10,000 (22,000)	10,000	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	9,200	9,200	9,200	6,800	3,900		8,800	8,800	8,800	6,800	3,900			
(98-5)	(20,300) 8,300	(20,300)	(20,300) 8,300	(15,000) 6,800	(8,600)		7,900	7,900	7,900	(15,000) 6,800	(8,600)			
(105-0)	(18,300)	(18,300)	(18,300)	(15,000)	(8,600)		(17,400)	(17,400)	(17,400)	(15,000)	(8,600)			
34.0 (111-7)	7,500 (16,500)	7,500 (16,500)	7,500 (16,500)	6,800 (15,000)	(8,600)	3,300 (7,300)	7,200 (15,900)	7,200 (15,900)	7,200 (15,900)	6,800 (15,000)	(8,600)	3,300 (7,300)		
36.0	6,700	6,700	6,700	6,700	3,900	3,300	6,600	6,600	6,600	6,600	3,900	3,300		
(118-1)	6,000	6,000	6,000	6,000	(8,600)	(7,300)	5,900	5,900	5,900	5,900	(8,600)	3,300	-	
(124-8)	(13,200) 5,300	(13,200)	(13,200) 5,300	(13,200) 5,300	(8,600)	(7,300)	5,200	5,200	5,200	5,200	(8,600)	(7,300)	-	
40.0 (131-3)	(11,700)	5,300 (11,700)	(11,700)	(11,700)	(8,600)	(7,300)	(11,500)	(11,500)	(11,500)	(11,500)	(8,600)	(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)	4,600 (10,100)	4,600 (10,100)	4,600 (10,100)	4,600 (10,100)	(8,600)	3,300 (7,300)		
42.0 (137-10)		4,100	4,100	4,100	3,900	3,300	4,000	4,000	4,000	4,000	3,900	3,300		
44.0	4,100	10.000			(8,600)	(7,300)	(8,800)	(8,800)	(8,800)	(8,800)	(8,600)	(7,300)		
(137-10) 44.0 (144-4)	(9,000)	(9,000)	(9,000)	(9,000)			3,400	3,400	3,400	3,400	3,400	3,300		
(137-10) 44.0 (144-4) 46.0 (150-11)	(9,000) 3,500 (7,700)	(9,000) 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)	3,300 (7,300)		
(137-10) 44.0 (144-4) 46.0	(9,000)	(9,000)	3,500	3,500	3,500	3,300	3,400 (7,500) 3,000 (6,600)	3,400 (7,500) 3,000 (6,600)	3,400 (7,500) 3,000 (6,600)	3,400 (7,500) 3,000 (6,600)	3,400 (7,500) 3,000 (6,600)	3,300 (7,300) 3,000 (7,300) 2,600		

		7	6.20 m (2	50') Boom	b-bount - in	4		
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 (30,200)		10,000 (22,000)					
	13,700 (30,200)	10,000 (22,000)	10,000 (22,000)					
	12,300 (27,100)	10,000 (22,000)	10,000 (22,000)		3,900 (8,600)			
6	10,800 (23,800)	10,000 (22,000)	10,000 (22,000)	6,800 (15,000)	3,900 (8,600)			
	9,700 (21,400)	9,700 (21,400)	9,700 (21,400)	6,800 (15,000)	3,900 (8,600)			
3,300 (7,300)	8,700 (19,200)	8,700 (19,200)	8,700 (19,200)	6,800 (15,000)	3,900 (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 (7,300)	6,200	6,200	6,200	6,200	3,900	3,300		
	(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 (5,300)	2,200	2,200	2,200	2,200	2,200	2,200		
	(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
Angl	е
20	20

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.
- 7. 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 deterimental to the safe operation of this equipment. The operator, therefore, has the responsibility to judge the existing conditions ard reduce lifted loads and operating speeds accordingly.
- Mast required for all booms and gantry must be raised position for all operating conditions.
- 9. 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".
- 12. 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.)
- 14. 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 tieing 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

		0 kg (13,450 lbs.) per Counterweight						
Boom Over	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)						
	With 10,10 Front Burn	00 kg (22,250 lbs.) per Counterweight						
Boom Over		Outriggers, and ar 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)

	T				
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	136,500	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-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-Tip
82.30 (270)	Base-C-C-C-D-D-Tip
85.33 (280)	Base-A-C-C-C-D-D-Tip
88.39 (290)	Base-B-C-C-C-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.



48.77m Tower and 36.58m Jib

Lifting Capacities

RATED CRANE LOADS IN KGS (LBS.)

Operating		m (110'),				THE RESIDENCE OF THE PARTY OF T	Operating					7 m (160')	
Radius in Meters (FtIn.)	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	Radius in Meters (FtIn.)	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 n (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					12.0 (39-4)	16,000 (35,300)	16,000 (35,300)				
13.0	16,000	16,000	16,000				13.2	16,000	16,000				
(42-8)	(35,300)	(35,300)	(35,300)				(43-4)	(35,300)	(35,300)				
14.8	16,000	16,000	16,000	16,000			13.5		7	15,600			
(48-7)	(35,300)	(35,300)	(35,300)	(35,300)			(44-3)	15 100	15 100	(34,400)	45.400		
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
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
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
20.7 (67-11)	-		_	_	_	10,500 (23,100)	18.6 (61-0)		-		-	_	10,500
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
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
25.0 (82-0)		8,100 (17,900)	-		_	0	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
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
28.0 (91-10)			6,900 (15,200)	6,900 (15,200)			25.0 (82-0)		7,000 (15,400)		1-		-
30.0 (98-5)				6,200 (13,700)			26.0 (85-4)			6,700 (14,800)	6,700 (14,800)	6,700 (14,800)	6,700
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
33.0 (108-3)					5,400 (11,900)	10 12-10	30.0 (98-5)				5,400 (11,900)	5,400 (11,900)	5,400
34.0 (111-7)						5,100 (11,200)	32.0 (105-0)					4,800 (10,600)	4,800
10000							33.0 (108-3)					4,600 (10,100)	
DOM:							34.0 (111-7)						4,400

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

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)	

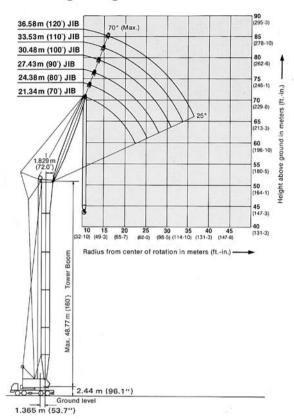
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TOWER BOOM MAKE-UP ARRANGEMENT CHART

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-Cap, Base-A-B-C-C-Cap
45.72 (150)	Base-A-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')

Working Ranges



JIB MAKE-UP ARRANGEMENT CHART

OID MAKE OF	AIIIAII GEMEITI GIIAIII
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')

P&H 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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