

P&H 9125-TC

140-ton Truck Crane



P&H 9125-TC

Basic Machine

● UPPER MACHINERY



POWER PLANT: Diesel: Cummins, V903 with torque converter (standard) 8 cyl., 139.7 mm (5.5") bore X 120.7 mm (4.75") stroke, 14,797 cc (903 cubic inch) displacement, 4 cycles, water cooled, natural aspirated air induction, 24 volt electric starting, 24 volt-35 amp. alternator, 227PS @ 2,400 rpm full load engine output, 81.6 m-kG (590 ft. lbs.) @ 1,500 rpm max. torque.

TORQUE CONVERTER: Niigata CBSO-100, 3 stage, output shaft governor drive, with disconnect clutch and freewheel.

ENGINE THROTTLE: Twist grip control on swing lever.

THROTTLE CONTROL -TORQUE CONVERTER OUTPUT SHAFT: Hand lever output shaft governor control.

FUEL TANK: Capacity 416 lt (109.9 gal.)

AIR CLEANER: Dry type



BOOM HOIST ASSEMBLY: Independent planetary gear type with external ratchets and automatic brake provides for raising or lowering boom under power and locking boom. Smooth double drums mounted on antifriction bearings.

Clutch— Boom hoist: band type internal expanding, 584 mm (23") dia. X 127 mm (5") wide. Planetary boom lower: band type external contracting, 647.7 mm (25.5") dia. X 101.6 mm (4") wide, hydraulic set-spring release safety pawl.

Brake— (2)-band type external expanding "full wrap" design, 762 mm (30") dia. X 76 mm (3") wide, spring set - hydraulic release. Single spring set hydraulic release safety pawl.

Double Drums— 401 mm (15.75") pitch dia. X 210 mm (8.25") long.

Drum Total Capacity (each) 80 m (262')
Cable Dia. 20 mm (0.79")
Line Pull (each) 9,000 kg (19,800 lbs.)
Line Speed (based on 1st layer of rope and torque converter output shaft at 1,200 rpm):

Hoisting 20.9 m/min (68.6 fpm)

Lowering 13.6 m/min (44.6 fpm)



MAIN DRUMS: Drums in tandem, mounted on antifriction bearings.

Clutch— band type internal expanding separate clutch for each machine function, 889 mm (35") dia. X 102 mm (4") wide.

Brakes— Front and rear drums: band type external contracting "full wrap" design, 1,016 mm (40") dia. X 127 mm (5") wide. Hydraulic set brake and additional spring set hydraulic release fail safe device, spring set hydraulic release safety pawl. Front and rear planetary drums: band type external contracting "full wrap" design, 1,016 mm (40") dia. X 127 mm (5") wide.

Drums— Front: 482 mm (18.98") pitch dia. X 431 mm (17") long. Grooved drum.

Rear: 478 mm (18.82") pitch dia. X 432 mm (17") long. Smooth drum.

(LINE DATA FOR FRONT DRUM)

Drum Capacity (1st layer) 22.7 m (74')

Drum Total Capacity 290 m (951')

Cable Dia. [6XFi (29)] 26 mm (1.02")

Line Pull 14,200 kg (31,300 lbs.)

Line Speed (based on 1st layer of rope and torque converter output shaft at 1,200 rpm):

Hoisting 47.9 m/min (157.2 fpm)

Lowering 79.6 m/min (261.2 fpm)

(LINE DATA FOR REAR DRUM)

Drum Capacity (1st layer) 26.3 m (86.3')

Drum Total Capacity 370 m (1213')

Cable Dia. [U4 X Ses (39), optional] 22 mm (0.87")

Line Pull 13,900 kg (30,600 lbs.)

Line Speed (based on 1st layer of rope and torque converter output shaft at 1,200 rpm):

Hoisting 48.1 m/min (157.8 fpm)

Lowering 79.7 m/min (261.5 fpm)



THIRD DRUM (OPTIONAL EXTRA):

Mounts on extension of front drum shaft to the left of main drum. Does not interfere with any other machine function or front end attachment.

Clutch— band type internal expanding, 584 mm (23") dia. X 127 mm (5") wide.

Brake— band type external contracting "full wrap" design, 648 mm (25.5") dia. X 102 mm (4") wide.



SWING UNITS: Swing motion through two electro-magnetic "Magnatorque" units. 660 mm (26") dia. X 159 mm (6.25") wide. powered by engine driven alternator. Bevel and spur gear drive.

SWING BRAKE: Band type external contracting, double acting, 457 mm (18") dia. X 63.5 mm (2.5") wide, spring set - hydraulic release.

TYPE OF FASTENING TO LOWER: 6 adjustable hook rollers—one double front, two double rear.

SWING ROLLERS: Live roller circle with 36—127 mm (5") roller (equally spaced) held in place by a retainer. Roller circle has 1,994 mm (78.5") pitch dia.

SWING GEAR: 132 internal cut teeth, 1,676 mm (66") pitch dia.

SWING SPEED: 0 ~ 3.6 rpm

FRAME: All welded frame and power box constructed of heavy steel plate.

POWER BOX: Completely seals gears (except swing) provides automatic lubrication from oil bath. Involute splined shafts are used, turn in taper roller bearings.

GANTRY: High gantry folding type, three position telescopic—two working and one traveling positions. Hydraulic power raise and lowering.

COUNTERWEIGHTS: Cast construction, two pieces. Underslung counterweight (standard)—removable using 4 hydraulic rams set in carrier frame 18,600 kg (41,000 lbs.)

Bustle additional counterweight (optional)—located beneath rear of upper machinery cab, removable with gantry and boom hoist 9,500 kg (21,000 lbs.)

Specifications



CONTROLS: In front of operator are foot pedals for front and rear drum brakes, hand levers for swing control, front and rear drum controls, boom hoist control, swing brake and engine speed control. At operators left are console mounted switches for front and rear drum pawls and brake locks, master switch, engine start, starting aid and lights, engine clutch hand lever.

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



CAB: Totally enclosed from weather. Full vision, safety glass, sliding front window and door, windshield wiper, reclining seat. Cab heater (optional).

ELECTRICAL EQUIPMENT: Cab front flood lights, cab inside lights, trouble light.

INSTRUMENTS: Hour meter, oil pressure gauge, water temperature gauge, ammeter for engine, oil temperature gauge for torque converter, oil pressure gauge for torque converter, glow indicator, pressure gauge for hydraulic control system.

SAFETY DEVICES: Crane over hoist alarm bell. Boom over hoist limiter. Boom angle indicator (indicate operation radius and rated load). Signal horn. Boom hoist drum lock. Front and rear hoist drum lock. Swing lock. Boom backstop.

TOOLS AND ACCESSORIES: A set of tools and accessories is furnished to each unit.

● CARRIER

(8 Wheels, 4 Wheel Drive, 12 Tires)

MODEL: KS-125

WEIGHT: Including turret, hydraulic outriggers, floats, roller circle and standard tires . . . 31,500 kg(69,400 lbs.)



POWER PLANT: Diesel: Cummins NS743-B320 (standard) . . . 6 cyl., 130.2 mm (5.13") bore X 152.4 mm (6") stroke, 12,170 cc (743 cubic inch) displacement, 4 cycle, super charged air induction, liquid-cooled, 24 volt electric starting, 24 volt - 30 AMP alternator, 13.2 CFM air compressor. 7.4 to 8.4 kg/cm² (105 to 120 psi) air governor. 320 PS @ 2,100 rpm full load engine output.

FUEL TANK: Capacity 284 lt (75 gal.)

RADIATOR: Liquid type, rubber mounted, vertical tube and fin type core with aux. water tank. Thermostat temperature control.

BATTERIES: Two (2) 12 volt H.D. rated, series connected. 200 AMP hours @ 20 hour rate.

CLUTCH: Lipe-Rollway 14-2 DLB with clutch booster (air assist).

TRANSMISSION: MAIN TRANSMISSION: Fuller T0-905F, twin counter shaft type, 5 speeds forward, 1 reverse.

AUXILIARY TRANSMISSION: Spicer RP8341-D, 4 speeds with air shift. Total of twenty (20) forward gear ratios.

PROP. SHAFTS: Front, intermediate and interaxle prop. shaft—KOYO-Mechanic 8.5C joint series.



FRONT AXLES: Tandem box section 160 mm (6.3") deep, 2,560 mm (100.8") track. Reverse "ELLIOT" steering knuckles, dynamic capacity per tandem 22,000 kg (48,500 lbs.).

REAR AXLES: Planetary drive tandem axle with inter-axle differential. 2,540 mm (100") track. 14.09 : 1 total ratio. Dynamic capacity per tandem 45,000 kg (99,200 lbs.).



STEERING: Ross worn and roller steering gear, 32.5 to 1 ratio. 533 mm (21") diameter steering wheel, linkage power assist.

SERVICE BRAKE: Full air brake on all wheels, internal expanding leading and trailing shoe type with digging brake valve. Three (3) relay valves.

Front Linings: 438 mm (17.24") diameter by 102 mm (4") wide [3,226 cm² (500 sq. in.) total front lining area], 103 cm² (16 sq. in.) air chambers.

Rear Linings: 514 mm (20.24") 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): Air release, spring set brake chambers on all rear wheels controlled from cab. Separate reservoir for emergency release of spring set brakes.

AIR RESERVOIR: Four (4) air reservoir [30 lt (7.9 gal.). Safety valve to be fitted on the first reservoir.

SUSPENSION: Rear: Unsprung box section bogie with torque rods. Self-aligning bearings on both ends of bogie beams. Front: Alloy steel semi-elliptic leaf springs with torsion bars.

TIRES AND RIMS: Twelve (12) 1400 X 24 —20PR tires. 10.00W X 24 rims.



OUTRIGGER HOUSINGS: Four (4) fabricated independent boxes of high strength low alloy steel plate. Front and rear boxes are pin connected and removable.

OUTRIGGER BEAMS: Four (4) fabricated reinforced box section beams of high strength low alloy steel plate. Beams telescope to fully extended position of 3,302 mm (130") from longitudinal centerline of carrier to centerline of jackscrew.

HYDRAULIC OUTRIGGER ASSEMBLY: Eight (8) double acting hydraulic cylinders provide independent horizontal and vertical movement of each beam. The outriggers are controlled by electric solenoid actuated directional control valves operated from two control panels.

FLOATS: Four (4) aluminum floats 673 mm (26.5") X 673 mm (26.5").

FRAME: Front section is fabricated from 457 mm (18") X 108 mm (4.25") channel. Rear section is a fabricated box section 578 mm (22.76") deep, crossbraced and reinforced. Removable bumper of 12 mm (0.47") bent plate. High strength low alloy steel plate used extensively. Two loops front and rear.

BODY: Cab, engine hood, front and side panels, front skirts, equipment boxes and dirt shields formed from sheet steel. Front and rear fenders, transmission cover, body floor plate, running boards, battery box and cover formed from non-skid floor plate.



CAB: 813 mm (32") wide one-man cab offset to left side of engine compartment, all windows are safety glass, electric windshield wiper, windshield washer, removable dash panel (with speedometer, tachograph, odometer, tachometer, air pressure gauge, ammeter, coolant temperature gauge, engine oil pressure gauge, fuel level gauge and switches), air horn, dome light, seat assembly, three (3) large rear view mirror. Crank down door window and slide-by type right side windows. Air vent on left side.

LIGHTING: Two headlights with foot operated dimmer switch. Stop, tail, directional, clearance, fog, tire, backup, parking and license plate lights. Two weather proof sockets provided for upper lighting during transit. In-cab dome light, illuminated gauges, emergency flasher and low air pressure warning. Warning alarm for backup and low air pressure.

MISCELLANEOUS EQUIPMENT: Tire inflation valve and hose, one (1) manual hydraulic jack, hydraulic counterweight removable assembly, fire extinguisher, upper lighting cable and special tools.

OPTIONS: 1.22 m (4') X 1.22 m (4') aluminum outrigger floats, front "fifth" jack float for 360° operation, mounting material for Pierce Loadster (optional extra.), two-piece, bumper counterweight 13,800 kg (30,500 lbs), heater and defroster, low profile floats, amber rotating light and trailer air and electrical connections.

● PERFORMANCE

(Based on Cummins NS743-B320 Engine)

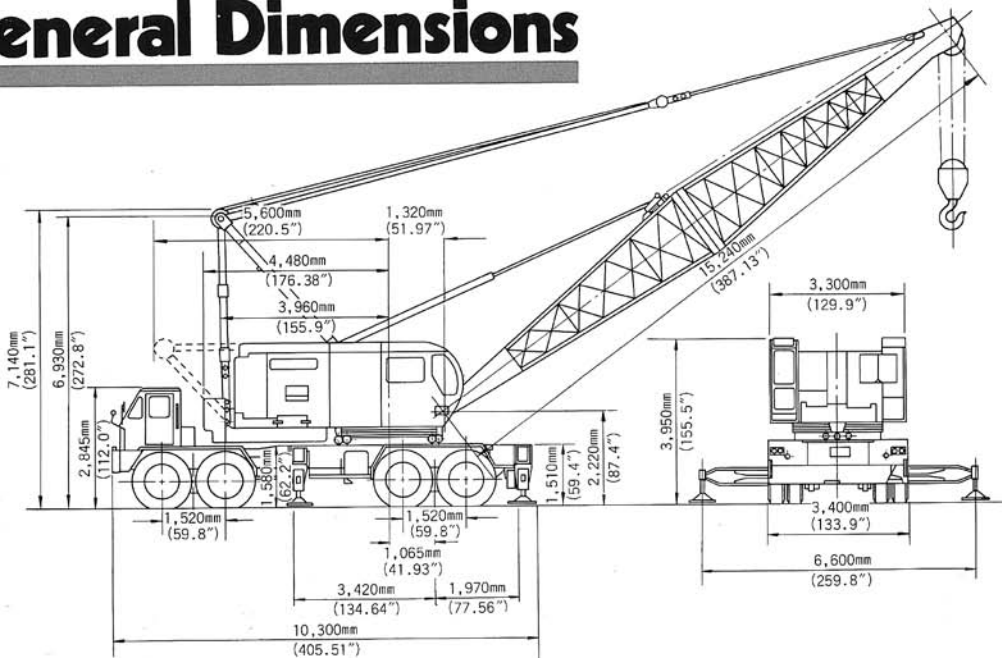
ON HIGHWAY: 15 forward speeds, 3 reverse speeds. Performance in highest and lowest gear based on engine @ full load RPM and 56,000 kg (123,500 #) GVW (class I, good surface road).

Lowest Gear: 5.1 km/h (3.2 MPH) to 18.5 percent grade.

HIGHEST GEAR: 65.5 Km/h (40.7 MPH) to 0.7 percent grade.

OFF HIGHWAY: 5 forward speeds, 1 reverse speed. Performance in lowest gear ratio based on engine @ max. torque RPM and 76,000 kg (167,600#) GVW (class II, road). 2.6 km/h (1.6 MPH) to 25.7 percent grade.

General Dimensions



140-ton Truck Crane

82.30m Boom

82.30m Boom + 18.29m Jib

● **GENERAL DATA**



LIGHT DUTY BOOM: Tubular high tensile steel chords, lattice construction, pin connected, extendible up to 82.30 m (270'): Basic length, two sections . . . 18.29m (60') Boom base section (standard). 7.62m (25')

Boom tip section (optional). 10.67 m (35') Open throat, cross section 1,752.6 mm sq. (69 in. sq.) with three boom point sheaves [one boom point sheave for 79.24 m (260') — 82.30 m (270') boom, two boom point sheaves for 64.01 m (210') — 76.20 m (250') boom, three boom point sheaves for 18.29 m (60')—60.96 m (200') boom] offset from centerline, on antifriction bearings, 613 mm (24.13") pitch dia.

HEAVY DUTY BOOM: Tubular high tensile steel chords, lattice construction, pin connected, extendible up to 76.20 m (250').

Basic length, two equal sections 15.24 m (50') Boom base section 7.62 m (25') Boom tip section (optional) 7.62 m (25') Open throat, cross section, 1,752.6 mm sq. (69 in. sq.) with five boom point sheaves offset from centerline on antifriction bearings, 613 mm (24.13") pitch dia.

HAMMERHEAD BOOM: Tubular high tensile steel chords, lattice construction, pin connected, extendible up to 54.86 m (180').

Basic length, two sections 12.19 m (40') Boom base section 7.62 m (25') Boom tip section 4.57 m (15') (with hammerhead cap)

Hammerhead arrangement, cross section, 1,752.6 mm sq. (69 in. sq.) with five boom point sheaves on antifriction bearings, 613 mm (24.13") pitch dia.

BOOM INSERT SECTION (OPTIONAL): Main boom insert available for extension tubular high tensile steel chords, lattice construction, pin connected cross section 1,752.6 mm sq. (69 in. sq.), available in 3.05 m (10'), 6.10 m (20'), 9.14 m (30') and 15.24 m (50') length.

JIB (OPTIONAL): Tubular high tensile steel chords, lattice construction, pin connected, extendible up to 18.29 m (60').

Basic length, two equal sections 6.10 m (20') Jib base section 3.05 m (10') Jib tip section 3.05 m (10') Open throat, cross section 737 mm sq. (29 in. sq.) with one jib point sheave on antifriction bearings. Jib cannot be extended on hammerhead tip.

JIB INSERT SECTION (OPTIONAL): Jib insert available for extension tubular high tensile steel chords, lattice construction, pin connected cross section, available in 6.10 m (20') length.

MAST (OPTIONAL): Required for heavy and light duty boom 57.91 m (190') and longer and on hammerhead booms 45.72 m (150') and longer. Mast is 9.10 m (30') long and is attached to boom foot during operation.

SUSPENSION WIRE ROPE: Boom suspension wire rope, 28 mm (1.1") dia. Intermediate boom suspension wire rope, 22 mm (0.87") dia. [for 60.96 m (200') boom and over the intermediate suspension wire rope must be used], optional. Jib suspension wire rope, 22 mm (0.87") dia., optional.



HOOK BLOCKS: Five sheaves with swivel hook, safety latch and 10 part hoist line, capacity 127 metric ton

Optional : Three sheaves with swivel hook, safety latch and 6 part hoist line, capacity 65 metric ton Single shaves with swivel hook, safety latch and 2 part hoist line, capacity (Standard) 25 metric ton Weighted ball hook with safety latch for jib, capacity 13.5 metric ton

BOOM HOIST REEVING: 12 parts line—spreader sheaves on antifriction bearings, 325 mm (12.8") pitch dia.

POWER CONTROLLED LOAD LOWERING: Planetary device for lowering load under power control. On front and rear drums. (Standard)

BOOM BACKSTOPS (STANDARD): Telescoping type with spring bumper.

WORKING WEIGHTS: Including standard and additional counterweight.

With hammerhead standard boom and 127 metric ton hook block 86,500 kg (190,700 lbs.) With heavy duty standard boom and 127 metric ton hook block (optional) 86,200 kg (190,000 lbs.) With light duty standard boom and 60 metric ton hook block (optional) 85,300 kg (188,100 lbs.)

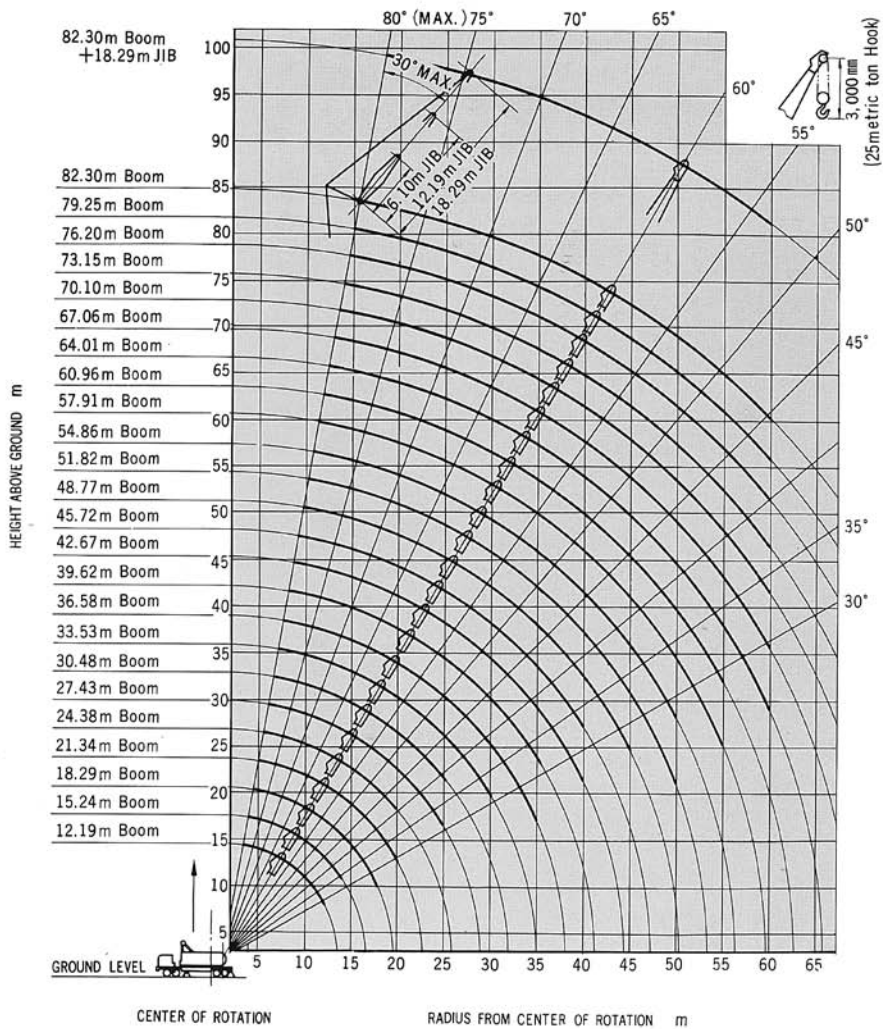
DRUM WORKING DATA

	Front Drum	Rear Drum	Boom Hoist (Double Drums)	Third Drum
Pitch Dia.	482mm (18.98")	478mm (18.82")	401mm (15.75")	414mm (16.30")
Rope Size	26mm (1.02")	22mm (0.87")	20mm (0.79")	18mm (0.71")
Capacity Total	290m (951')	370m (1,213')	80m (262')	50m (164')
*Line Speed Hoisting	47.9m/min (157.2 fpm)	48.1m/min (157.8 fpm)	Hoist 20.9m/min (68.6 fpm) Low 13.6m/min (44.6 fpm)	40.9m/min (134.2 fpm)
*Max Line Pull	14,200kg (31,300 lbs.)	13,900kg (30,600 lbs.)	9,000kg (19800 lbs.)	3,600kg (7,900 lbs.)
Bare Drum	Groove	Smooth	Smooth	Smooth

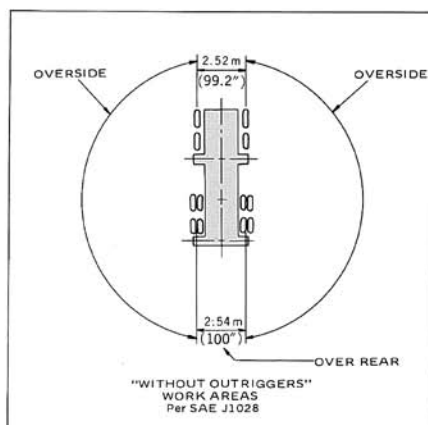
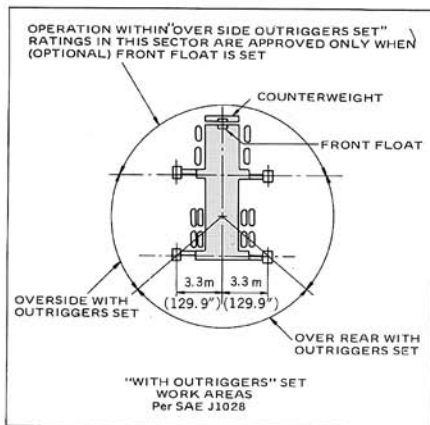
* Line Pull and Line Speed based on single line and 1st layer of rope and torque converter output shaft at 1,200 rpm.

	Basic Boom Length	Max. Rated Load	Max. Boom Length
Light Duty Boom	18.29m (60')	68,040kg (150,000lbs.)	82.30m (270')
Heavy Duty Boom	15.24m (50')	127,000kg (280,000lbs.)	76.20m (250')
Hammerhead Boom	12.19m (40')	127,000kg (280,000lbs.)	54.86m (180')

Working Ranges



WORKING AREAS



Lifting Capacities

WITH TAPERED TIP SECTIONS AND 28,100 LBS
RATED CRANE LOADS IN KGS (LBS.) – MAIN BOOM IN OVER S

Operating Radius in Meters (Ft. In.)	15.24 m (50') Boom			18.29 m (60') Boom			21.34 m (70') Boom			24.38 m (80') Boom			27.43 m (90') Boom			30.48 m (100') Boom		
	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating
3.8 (12.6)	81	17.7 (58-1)	127,000 (280,000)															
4.0 (13.1)	80	17.7 (58-1)	116,450 (256,730)															
5.0 (16.5)	77	17.5 (57-5)	93,880 (206,970)	79	20.6 (67-7)	86,000 (189,600)												
6.0 (19.8)	73	17.2 (56-5)	78,840 (173,810)	76	20.4 (66-11)	79,500 (175,270)	78	23.5 (77-1)	77,000 (169,760)									
7.5 (24.7)	67	16.7 (54-9)	63,790 (140,630)	71	20.0 (65-7)	63,540 (140,080)	74	23.2 (76-1)	63,380 (139,730)	76	26.3 (86-3)	63,240 (139,420)	77	29.4 (96-5)	63,010 (138,910)	79	32.5 (106-8)	61,300 (135,140)
9.0 (29.6)	61	16.0 (52-6)	53,310 (117,530)	66	19.4 (63-8)	53,460 (117,860)	70	22.7 (74-6)	53,400 (117,730)	72	25.9 (85-0)	53,330 (117,570)	74	29.1 (95-6)	53,260 (117,420)	76	32.2 (105-8)	53,100 (117,070)
10.5 (34.5)	54	15.0 (49-3)	42,210 (93,060)	61	18.6 (61-0)	42,360 (93,390)	65	22.0 (72-2)	42,270 (93,190)	68	25.3 (83-0)	42,210 (93,060)	71	28.6 (93-10)	42,140 (92,900)	73	31.8 (104-4)	42,050 (92,700)
12.0 (39.4)	46	13.7 (44-11)	34,830 (76,790)	55	17.7 (58-1)	34,980 (77,120)	61	21.3 (69-11)	34,890 (76,920)	65	24.7 (81-0)	34,820 (76,760)	68	28.0 (91-10)	34,760 (76,630)	70	31.3 (102-8)	34,560 (76,410)
13.5 (44.3)	38	12.0 (39-4)	29,550 (65,150)	49	16.5 (54-2)	29,690 (65,460)	56	20.3 (66-7)	29,580 (65,210)	61	23.9 (78-5)	29,510 (65,060)	64	27.4 (89-11)	29,440 (64,900)	67	30.7 (100-9)	29,330 (64,660)
15.0 (49.3)	27	9.6 (31-6)	25,590 (56,420)	42	15.0 (49-3)	25,730 (56,720)	51	19.2 (63-0)	25,600 (56,460)	56	23.0 (75-6)	25,530 (56,280)	61	26.6 (87-3)	25,460 (56,130)	64	30.0 (98-5)	25,330 (55,840)
18.0 (59.1)				25	10.3 (33-10)	20,220 (44,580)	39	16.1 (52-10)	20,090 (44,290)	47	20.6 (67-7)	20,020 (44,140)	53	24.6 (80-9)	19,950 (43,980)	57	28.3 (92-10)	19,820 (43,700)
21.0 (68.11)							23	11.0 (36-1)	16,380 (36,110)	37	17.3 (56-9)	16,300 (35,940)	45	22.0 (72-2)	16,230 (35,780)	50	26.1 (85-8)	16,100 (35,490)
24.0 (78.9)										22	11.8 (38-9)	13,630 (30,050)	35	18.3 (60-0)	13,560 (29,890)	42	23.2 (76-1)	13,410 (29,560)
27.0 (88.7)													23	12.5 (41-0)	11,780 (25,970)	34	19.7 (64-8)	11,640 (25,660)
30.0 (98.5)																20	14.0 (45-11)	10,050 (22,160)
33.0 (108.3)																		21
36.0 (118.1)																		
39.0 (127.11)																		
42.0 (137.10)																		
45.0 (147.8)																		
48.0 (157.6)																		

Operating Radius in Meters (Ft. In.)	51.82 m (170') Boom			54.86 m (180) Boom			57.1 m (190') Boom			60.96 m (200') Boom			64.01 m (210') Boom			67.06 m (220') Boom		
	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating
12.0 (39.4)	78	53.4 (175-2)	29,000 (63,930)	79	56.5 (185-4)	27,400 (60,410)												
13.5 (44.3)	77	53.1 (174-3)	27,600 (60,850)	77	56.2 (184-5)	26,100 (57,540)	78	59.3 (194-7)	26,500 (58,420)	79	62.4 (204-7)	23,500 (51,810)						
15.0 (49.3)	75	52.7 (172-11)	24,650 (54,340)	76	55.8 (183-1)	23,800 (52,470)	77	59.0 (193-7)	24,670 (54,390)	77	62.1 (203-9)	22,400 (49,380)	78	65.2 (213-11)	20,700 (45,640)	78	68.3 (224-1)	18,500 (40,790)
18.0 (59.1)	72	51.8 (169-11)	19,020 (41,930)	73	55.0 (180-5)	18,960 (41,800)	74	58.2 (192-11)	18,960 (41,800)	74	61.4 (201-5)	18,890 (41,650)	75	64.5 (211-7)	18,700 (41,230)	76	67.7 (222-1)	18,000 (39,680)
21.0 (68.11)	68	50.7 (166-4)	15,260 (33,640)	69	54.0 (177-2)	15,200 (33,510)	70	57.2 (187-8)	15,160 (33,420)	71	60.4 (200-8)	15,070 (33,220)	72	63.6 (208-8)	14,970 (33,000)	73	66.8 (219-2)	14,890 (32,830)
24.0 (78.9)	65	49.5 (162-5)	12,400 (27,340)	66	52.7 (172-11)	12,390 (27,320)	68	56.2 (184-5)	12,370 (27,270)	69	59.5 (195-3)	12,360 (27,250)	70	62.7 (205-9)	12,350 (27,230)	71	66.0 (216-6)	12,330 (27,180)
27.0 (88.7)	61	47.8 (156-10)	10,850 (23,920)	63	51.3 (168-4)	10,780 (23,770)	64	54.8 (179-9)	10,710 (23,610)	66	58.2 (190-11)	10,630 (23,440)	67	61.2 (200-9)	10,520 (23,190)	68	64.8 (212-7)	10,450 (23,040)
30.0 (98.5)	57	46.2 (151-7)	9,230 (20,360)	59	49.8 (163-5)	9,170 (20,220)	61	53.3 (174-10)	9,080 (20,020)	63	56.7 (186-0)	8,980 (19,800)	64	60.2 (197-6)	8,890 (19,600)	65	63.5 (208-4)	8,800 (19,400)
33.0 (108.3)	53	44.1 (144-8)	7,950 (17,530)	55	47.8 (156-10)	7,890 (17,390)	57	51.5 (169-0)	7,780 (17,150)	59	55.1 (180-9)	7,680 (16,930)	61	58.6 (192-3)	7,580 (16,710)	62	62.0 (203-5)	7,490 (16,510)
36.0 (118.1)	49	41.6 (136-6)	6,900 (15,210)	51	45.6 (149-7)	6,840 (15,080)	54	49.4 (162-1)	6,720 (14,820)	56	53.2 (174-5)	6,610 (14,570)	58	56.8 (186-4)	6,520 (14,370)	59	60.4 (198-2)	6,420 (14,150)
39.0 (127.11)	44	38.7 (127-0)	6,040 (13,320)	47	43.0 (141-1)	5,970 (13,160)	50	47.1 (154-6)	5,840 (12,870)	52	51.0 (167-4)	5,730 (12,630)	55	54.8 (179-9)	5,630 (12,410)	56	58.5 (191-1)	5,540 (12,210)
42.0 (137.10)	39	35.3 (115-10)	5,310 (11,710)	43	40.0 (131-3)	5,240 (11,550)	46	44.4 (145-8)	5,100 (11,240)	49	48.5 (159-1)	4,980 (10,980)	51	52.5 (172-3)	4,890 (10,780)	53	56.4 (185-0)	4,790 (10,560)
45.0 (147.8)	33	31.2 (102-4)	4,680 (10,320)	38	36.4 (119-5)	4,610 (10,160)	42	41.2 (135-2)	4,470 (9,850)	45	45.7 (149-11)	4,350 (9,590)	48	49.9 (163-9)	4,250 (9,370)	50	54.0 (177-2)	4,150 (9,150)
48.0 (157.6)	37	25.9 (85-0)	4,150 (9,150)	33	32.2 (105-8)	4,070 (8,970)	37	37.5 (123-0)	3,930 (8,660)	41	42.4 (139-1)	3,800 (8,380)	44	47.0 (154-2)	3,700 (8,160)	46	51.3 (168-4)	3,600 (7,940)
51.0 (167.4)	18	18.9 (62-0)	3,680 (8,110)	26	26.8 (87-11)	3,610 (7,960)	32	33.1 (108-7)	3,450 (7,610)	36	38.6 (126-8)	3,320 (7,320)	40	43.6 (143-1)	3,230 (7,120)	43	48.2 (158-2)	3,120 (6,880)
54.0 (177.2)				18	19.1 (62-8)	3,200 (7,050)	26	27.5 (90-3)	3,030 (6,680)	31	34.0 (111-7)	2,900 (6,400)	35	39.6 (129-11)	2,810 (6,190)	39	44.7 (146-8)	2,700 (5,950)
57.0 (187.0)							17	19.8 (65-0)	2,680 (5,910)	25	20.4 (66-11)	2,530 (5,580)	30	24.9 (81-6)	2,440 (5,380)	35	40.7 (133-6)	2,330 (5,140)
60.0 (196.10)										17	20.4 (66-11)	2,200 (4,850)	24	29.1 (95-6)	2,110 (4,650)	30	35.8 (117-5)	2,000 (4,410)

NOTES:

- Ratings above heavy line are limited by factors other than stability.
- Ratings at 7.5 m (24'-7") operating radius or less requires use of a 7.62 m (25') tip section with five (5) sheaves.
- Must required for all booms over 54.86 m (180') long and gantry must be in intermediate position.
- Midpoint suspension (center hitch) required for booms over 60.96 m (200') long.
- Boom lengths from 64.01 m (210') to 76.20 m (250') with a 10.67 m (35') tip section requires a two (2) sheave point.
- Ratings listed for booms 18.29 m (60') and longer are based on the use of a 10.67 m (35') tip section. When using booms with 7.62 m (25') section, 18.29 m (60.96 m (200') section, ratings below line and greater than 7.62 m (25') operating radius, deduct 470 kgs (1,040 lbs.).
- Maximum boom length with a 7.62 m tip section is 76.20 m (250').
- Boom length over 76.20 m (250') 10.67 m (35') tip section requires a c

100 KGS (62,000 LBS.) COUNTERWEIGHT

OVER SIDE AND OVER REAR WORK AREAS WITH OUTRIGGERS FULLY EXTENDED AND SET

Height (m)	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			Operating Radius in Meters (Ft. In.)
	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	
																			3.8 (12-6)
																			4.0 (13-1)
																			5.0 (16-5)
																			6.0 (19-8)
300 (140)																			7.5 (24-7)
100 (70)	77	35.3 (115-10)	52,950 (116,730)	78	38.5 (126-4)	49,370 (108,840)													9.0 (29-6)
150 (70)	75	35.0 (114-10)	41,940 (92,460)	76	38.1 (125-0)	41,840 (92,240)	77	41.2 (135-2)	41,740 (92,020)	78	44.4 (145-8)	40,100 (88,410)	79	47.5 (155-10)	35,500 (78,260)				10.5 (34-5)
160 (70)	72	34.5 (113-2)	34,550 (76,170)	73	37.7 (123-8)	34,440 (75,930)	75	40.9 (134-2)	34,360 (75,750)	76	44.0 (144-4)	34,240 (75,490)	77	47.2 (154-10)	34,150 (75,290)	78	50.3 (163-9)	32,100 (70,700)	12.0 (39-4)
130 (60)	69	34.0 (111-7)	29,220 (64,420)	71	37.2 (122-1)	29,100 (64,150)	72	40.4 (132-7)	29,010 (63,960)	74	43.6 (143-1)	28,890 (63,690)	75	46.8 (153-7)	28,780 (63,450)	76	49.9 (163-9)	28,650 (63,160)	13.5 (44-3)
130 (40)	66	33.4 (109-7)	25,220 (55,600)	68	36.7 (120-5)	25,190 (55,530)	70	39.9 (130-11)	25,110 (55,360)	72	43.2 (141-9)	25,000 (55,120)	73	46.4 (152-3)	24,890 (54,770)	74	49.5 (162-5)	24,770 (54,610)	15.0 (49-3)
120 (40)	61	31.9 (104-8)	19,720 (43,480)	63	35.3 (115-10)	19,580 (43,170)	65	38.7 (127-0)	19,510 (43,010)	67	42.0 (137-10)	19,400 (42,770)	69	45.3 (148-7)	19,270 (42,480)	70	48.6 (159-5)	19,150 (42,220)	18.0 (59-1)
100 (40)	55	30.0 (98-5)	15,990 (35,250)	58	33.6 (110-3)	15,850 (34,940)	61	37.2 (122-1)	15,780 (34,790)	63	40.6 (133-2)	15,660 (34,520)	65	44.0 (144-4)	15,530 (34,240)	67	47.4 (155-6)	15,400 (33,950)	21.0 (68-11)
110 (60)	48	27.5 (90-3)	13,300 (29,320)	52	31.5 (103-4)	13,150 (28,990)	55	35.3 (115-10)	13,080 (28,840)	58	38.9 (127-7)	12,970 (28,590)	61	42.5 (139-5)	12,830 (28,290)	63	46.0 (150-11)	12,700 (28,000)	24.0 (78-9)
140 (60)	41	24.8 (81-4)	11,540 (25,440)	46	28.9 (94-10)	11,400 (25,130)	51	33.3 (109-3)	11,340 (25,000)	54	36.9 (121-1)	11,240 (24,780)	57	40.8 (133-10)	11,080 (24,430)	59	44.3 (145-4)	10,940 (24,120)	27.0 (88-7)
150 (60)	33	20.7 (67-11)	9,950 (21,940)	40	25.9 (85-0)	9,800 (21,610)	45	30.5 (100-3)	9,740 (21,470)	49	34.7 (113-10)	9,640 (21,250)	52	38.7 (127-0)	9,500 (20,940)	55	42.5 (139-5)	9,380 (20,680)	30.0 (98-5)
	21	14.6 (47-11)	8,680 (19,140)	31	21.6 (70-10)	8,520 (18,780)	38	27.0 (88-7)	8,460 (18,650)	43	31.8 (104-4)	8,360 (18,430)	47	36.1 (118-5)	8,220 (18,120)	50	40.2 (131-11)	8,100 (17,860)	33.0 (108-3)
				20	15.3 (50-2)	7,480 (16,490)	30	22.5 (73-10)	7,430 (16,380)	37	28.1 (92-2)	7,320 (16,140)	42	33.0 (108-3)	7,180 (15,830)	46	37.4 (122-8)	7,050 (15,540)	36.0 (118-1)
							20	16.0 (52-6)	6,570 (14,480)	29	23.4 (76-9)	6,460 (14,240)	36	29.2 (95-10)	6,310 (13,910)	40	34.2 (112-2)	6,190 (13,650)	39.0 (127-11)
										19	16.6 (54-6)	5,740 (12,650)	28	24.3 (79-9)	5,590 (12,320)	34	30.2 (99-1)	5,460 (12,040)	42.0 (137-10)
													19	17.3 (56-9)	4,970 (10,960)	28	25.1 (82-4)	4,840 (10,670)	45.0 (147-8)
																18	17.9 (58-9)	4,310 (9,500)	48.0 (157-6)

Height (m)	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			Operating Radius in Meters (Ft. In.)
	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	
																12.0 (39-4)
																13.5 (44-3)
																15.0 (49-3)
100 (90)	79	71.4 (234-3)	16,500 (36,380)													18.0 (59-1)
100 (80)	76	70.8 (232-3)	16,000 (35,270)	77	73.9 (242-5)	14,300 (31,530)	78	77.0 (252-7)	11,800 (26,010)	78	80.0 (262-6)	11,000 (24,250)				21.0 (68-11)
130 (80)	74	70.0 (229-8)	14,400 (31,750)	75	73.2 (240-2)	13,800 (30,420)	75	76.2 (250-0)	11,400 (25,130)	76	79.6 (261-2)	10,700 (23,590)	76	82.6 (271-0)	9,200 (20,280)	24.0 (78-9)
130 (60)	71	69.1 (226-8)	12,320 (27,160)	72	72.3 (237-2)	12,200 (26,900)	73	75.5 (247-8)	11,000 (24,250)	74	78.7 (258-2)	10,300 (22,710)	74	81.8 (268-4)	8,800 (19,400)	27.0 (88-7)
150 (40)	69	68.0 (223-1)	10,290 (22,690)	70	71.4 (234-3)	10,220 (22,530)	71	74.6 (244-9)	10,100 (22,270)	72	77.8 (255-3)	9,900 (21,830)	72	81.0 (265-9)	8,500 (18,740)	30.0 (98-5)
100 (60)	66	66.9 (219-6)	8,640 (19,050)	67	70.2 (230-4)	8,570 (18,890)	68	73.5 (241-2)	8,450 (18,630)	69	76.7 (251-8)	8,300 (18,300)	70	80.0 (262-6)	8,100 (17,860)	33.0 (108-3)
190 (110)	64	65.5 (214-11)	7,330 (16,160)	65	68.9 (226-1)	7,260 (16,010)	66	72.2 (236-11)	7,140 (15,740)	67	75.5 (247-8)	7,010 (15,450)	68	78.8 (258-6)	6,870 (15,150)	36.0 (118-1)
120 (60)	61	63.9 (209-8)	6,270 (13,920)	62	67.4 (221-2)	6,190 (13,650)	63	70.8 (232-9)	6,070 (13,380)	65	74.2 (243-5)	5,940 (13,100)	66	77.5 (254-3)	5,800 (12,790)	39.0 (127-11)
140 (110)	58	62.1 (203-9)	5,380 (11,860)	60	65.7 (215-7)	5,300 (11,680)	61	69.2 (227-0)	5,180 (11,420)	62	72.7 (238-6)	5,050 (11,130)	63	76.1 (249-8)	4,910 (10,820)	42.0 (137-10)
160 (160)	55	60.1 (197-2)	4,640 (10,230)	57	63.8 (209-4)	4,560 (10,050)	58	67.4 (221-2)	4,430 (9,770)	60	71.0 (232-11)	4,300 (9,480)	61	74.5 (244-5)	4,150 (9,150)	45.0 (147-8)
150 (150)	52	57.9 (190-0)	4,000 (8,820)	54	61.7 (202-5)	3,920 (8,640)	56	65.5 (214-11)	3,790 (8,360)	57	69.1 (226-8)	3,660 (8,070)	58	72.7 (238-6)	3,510 (7,740)	48.0 (157-6)
140 (140)	49	55.4 (181-9)	3,450 (7,610)	51	59.4 (194-11)	3,370 (7,430)	53	63.3 (207-8)	3,240 (7,140)	54	67.1 (220-2)	3,100 (6,830)	56	70.8 (232-3)	2,960 (6,530)	51.0 (167-4)
120 (80)	45	52.6 (172-7)	2,970 (6,450)	48	56.8 (186-4)	2,890 (6,370)	50	60.9 (199-10)	2,760 (6,080)	52	64.8 (212-7)	2,620 (5,780)	53	68.7 (225-5)	2,470 (5,450)	54.0 (177-2)
130 (130)	42	49.4 (162-1)	2,550 (5,620)	45	53.9 (176-10)	2,470 (5,450)	47	58.2 (190-11)	2,330 (5,140)	49	62.3 (204-5)	2,200 (4,850)	51	66.3 (217-6)	2,050 (4,520)	57.0 (187-0)
140 (140)	38	45.1 (148-0)	2,170 (4,780)	41	50.6 (166-0)	2,090 (4,610)	44	55.2 (181-1)	1,960 (4,320)	46	59.5 (195-3)	1,820 (4,010)	48	63.7 (209-0)	1,670 (3,680)	60.0 (196-10)
110 (110)	34	41.7 (136-10)	1,840 (4,060)	37	46.9 (153-10)	1,760 (3,880)	40	51.8 (169-11)	1,620 (3,570)	43	56.4 (185-0)	1,490 (3,280)	45	60.8 (199-6)	1,340 (2,950)	

9 m (60') to 5 below heavy (25') operating lbs.), a 7.62 m (25')

sheave point.

WARNING: Maximum rating for 10.67 m (35') 3 sheave tip is 68,040 kgs (150,000 lbs.). Machine will tip over when upper is revolved over the side unless outriggers are fully extended and set.

(250') with a wires a one (1)

WITH TAPERED TIP SECTION AND 18,600 KGS (41,000 LBS.) COUNTERWEIGHT
RATED CRANE LOADS IN KGS (LBS.) – MAIN BOOM IN OVER SIDE AND OVER REAR WORK AREAS WITH OUTRIGGERS

Operating Radius in Meters (Ft.-in.)	15.24 m (50') Boom			18.29 m (60') Boom			21.34 m (70') Boom			24.38 m (80') Boom			27.43 m (90') Boom			30.48 m (100') Boom		
	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating
3.8 (12-6)	81	17.7 (58-1)	127,000 (280,000)															
4.0 (13-1)	80	17.7 (58-1)	116,450 (256,730)															
5.0 (16-5)	77	17.5 (57-5)	89,000 (196,210)	79	20.6 (67-7)	85,000 (187,390)												
6.0 (19-8)	73	17.2 (56-5)	75,500 (166,450)	76	20.4 (66-11)	75,500 (164,450)	78	23.5 (77-1)	74,600 (164,460)									
7.5 (24-7)	67	16.7 (54-9)	59,320 (130,780)	71	20.0 (65-7)	59,280 (130,690)	74	23.2 (76-1)	59,240 (130,600)	76	26.3 (86-3)	59,180 (130,470)	76	29.1 (95-6)	59,140 (130,380)	79	32.5 (106-8)	55,040 (120,160)
9.0 (29-6)	61	16.0 (52-6)	43,910 (96,800)	66	19.4 (63-8)	44,070 (97,160)	70	22.7 (74-6)	44,020 (97,050)	72	25.9 (85-0)	43,960 (96,920)	74	29.1 (95-6)	43,900 (96,780)	76	32.2 (105-8)	43,840 (96,650)
10.5 (34-5)	54	15.0 (49-3)	34,700 (76,500)	61	18.6 (61-0)	34,860 (76,850)	65	22.0 (72-2)	34,790 (76,700)	68	25.4 (83-4)	34,730 (76,570)	71	28.6 (93-10)	34,670 (76,430)	73	31.8 (104-4)	28,370 (75,260)
12.0 (39-4)	46	13.7 (44-11)	28,850 (63,600)	55	17.7 (58-1)	28,700 (63,270)	61	21.3 (69-11)	28,610 (63,070)	65	24.7 (81-0)	28,540 (62,920)	68	28.0 (91-0)	28,480 (62,790)	70	31.3 (102-8)	26,550 (65,550)
13.5 (44-3)	38	12.0 (39-4)	24,160 (53,260)	49	16.5 (54-2)	24,320 (53,620)	56	20.3 (66-7)	24,230 (53,420)	61	23.9 (78-5)	24,170 (53,290)	64	27.4 (89-11)	24,120 (53,180)	67	30.7 (100-9)	23,020 (50,750)
15.0 (49-3)	27	6.6 (31-6)	20,800 (45,860)	42	15.0 (49-3)	20,950 (46,190)	51	19.2 (63-0)	20,855 (45,970)	57	23.0 (75-6)	20,790 (45,830)	61	26.6 (87-3)	20,730 (45,700)	64	30.0 (98-5)	20,620 (45,460)
18.0 (59-1)				25	10.3 (33-10)	16,290 (35,910)	39	16.2 (52-10)	16,160 (35,630)	48	20.6 (67-7)	16,100 (35,490)	53	24.6 (80-9)	16,030 (35,340)	57	28.3 (92-10)	15,910 (35,080)
21.0 (68-11)							23	11.1 (36-1)	13,070 (28,810)	37	17.2 (56-5)	13,000 (28,660)	45	22.0 (72-2)	12,930 (28,510)	50	26.1 (85-8)	12,790 (28,200)
24.0 (78-9)										24	12.5 (41-0)	11,040 (24,340)	36	18.7 (61-4)	10,980 (24,210)	43	23.5 (77-1)	10,800 (23,810)
27.0 (88-7)													23	13.2 (43-4)	9,290 (20,480)	34	19.7 (64-8)	9,140 (20,150)
30.0 (98-5)																22	14.0 (45-11)	7,830 (17,260)
33.0 (108-3)																		
36.0 (118-1)																		
39.0 (127-11)																		
42.0 (137-10)																		
45.0 (147-8)																		

Operating Radius in Meters (Ft.-in.)	48.77m (160') Boom			51.82 m (170') Boom			54.86 m (180') Boom			57.91 m (190') Boom			60.96 m (200') Boom			64.01 m (210') Boom		
	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating
12.0 (39-4)	78	50.3 (165-0)	27,740 (61,160)	78	53.4 (175.2)	27,640 (60,940)	79	56.5 (185-4)	27,400 (60,410)									
13.5 (44-3)	76	49.9 (163-9)	23,410 (51,610)	77	53.1 (174.3)	23,300 (51,370)	77	56.2 (184-5)	23,260 (51,280)	78	59.3 (194-7)	23,370 (51,520)	79	62.4 (204-7)	23,000 (50,710)			
14.0 (45-0)	74	49.5 (162-5)	20,000 (44,090)	75	52.7 (172-11)	19,890 (43,850)	76	55.9 (183.5)	19,850 (43,760)	78	59.0 (193.7)	19,920 (43,920)	77	62.1 (203-9)	19,890 (43,890)	78	65.2 (213-11)	19,400 (42,770)
18.0 (59-1)	70	48.6 (159-5)	15,250 (33,620)	72	51.8 (169-11)	15,120 (33,330)	73	55.0 (180-5)	15,070 (33,220)	74	58.2 (190-11)	15,080 (33,250)	74	61.4 (201-5)	15,030 (33,140)	75	64.5 (211-7)	14,930 (32,930)
21.0 (68-11)	67	47.5 (155-10)	12,250 (27,010)	68	50.8 (166-8)	12,190 (26,870)	70	54.0 (177-2)	12,110 (26,700)	71	57.3 (188-0)	12,300 (27,120)	72	60.5 (198-6)	12,150 (26,790)	72	63.6 (208-8)	12,010 (26,580)
24.0 (78-9)	63	46.1 (151-3)	10,000 (22,050)	65	49.5 (162-5)	9,960 (21,960)	66	52.9 (173-7)	9,880 (21,780)	68	56.2 (184-5)	9,960 (21,960)	69	59.5 (195-3)	9,830 (21,670)	70	62.7 (205-9)	9,580 (21,360)
27.0 (88-7)	59	44.4 (145-8)	8,370 (18,450)	61	48.0 (157-6)	8,290 (18,280)	63	51.4 (168-8)	8,210 (18,100)	64	54.8 (179-9)	8,210 (18,100)	66	58.2 (190-11)	8,100 (17,860)	67	61.5 (201-9)	7,950 (17,770)
30.0 (98-5)	55	42.5 (139-5)	7,100 (15,650)	57	46.2 (151-7)	7,010 (15,450)	59	49.8 (163-5)	6,930 (15,280)	61	53.3 (174-10)	6,870 (15,150)	63	56.7 (186-0)	6,760 (14,900)	64	60.2 (197-6)	6,510 (14,370)
33.0 (108-3)	50	40.2 (131-11)	6,080 (13,400)	53	44.1 (144-8)	5,960 (13,140)	55	47.8 (156-10)	5,900 (13,010)	57	51.5 (169-0)	5,790 (12,760)	59	55.1 (180-9)	5,690 (12,540)	61	58.6 (192-3)	5,540 (12,210)
36.0 (118-1)	46	37.4 (122-8)	5,250 (11,570)	49	41.6 (136-6)	5,100 (11,240)	51	45.6 (149-7)	5,030 (11,090)	54	49.4 (162-1)	4,920 (10,850)	56	53.2 (173-6)	4,810 (10,600)	58	56.8 (186-4)	4,673 (10,300)
39.0 (127-11)	40	34.2 (112-2)	4,540 (10,010)	44	38.7 (127-0)	4,390 (9,680)	47	43.0 (141-1)	4,320 (9,520)	50	47.1 (154-6)	4,190 (9,240)	52	51.0 (167-4)	4,080 (8,990)	55	54.8 (179-9)	3,950 (8,710)
42.0 (137-10)	34	30.2 (99-1)	3,940 (8,690)	39	35.3 (115-10)	3,780 (8,330)	43	40.0 (131-3)	3,710 (8,180)	46	44.4 (145-8)	3,580 (7,890)	49	48.5 (159-1)	3,460 (7,630)	51	52.5 (172-3)	3,340 (7,360)
45.0 (147-8)	28	25.1 (82-4)	3,430 (7,560)	33	31.2 (102-4)	3,270 (7,210)	38	36.4 (119-6)	3,200 (7,050)	42	41.2 (135-2)	3,060 (6,750)	45	45.7 (149-11)	2,940 (6,480)	48	49.9 (163-9)	2,840 (6,260)
48.0 (157-6)	18	17.9 (58-9)	2,990 (6,590)	27	26.0 (85-4)	2,830 (6,240)	33	32.2 (105-8)	2,760 (6,080)	37	37.5 (123-0)	2,610 (5,750)	41	42.4 (139-1)	2,480 (5,470)	44	47.0 (154-0)	2,390 (5,270)
51.0 (167-4)				18	18.5 (60-8)	2,450 (5,400)	26	26.8 (87-11)	2,370 (5,220)	32	33.1 (108-7)	2,220 (4,890)	36	38.6 (126-8)	2,090 (4,610)	40	43.6 (143-1)	1,990 (4,390)
54.0 (177-2)							18	19.1 (62-8)	2,040 (4,500)	26	27.5 (90-3)	1,870 (4,120)	31	34.0 (111-7)	1,740 (3,840)	35	39.6 (129-11)	1,650 (3,640)
57.0 (187-0)										17	19.8 (65-0)	1,590 (3,510)	25	28.3 (92-10)	1,440 (3,170)	30	34.9 (114-6)	1,340 (2,950)

NOTES:

- Ratings above heavy line are limited by factors other than stability.
- Ratings at 7.5 m (24'-7") operating radius or less requires use of a 7.62 m (25') tip section with five (5) sheaves.
- Mast required for all booms over 54.86 m (180') long and gantry must be in intermediate position.
- Midpoint suspension (center hitch) required for booms over 60.96 m (200') long.
- Boom lengths 64.01 m (210') and longer with a 10.67 m (35') tip section required a two (2) sheave point.
- Ratings listed for booms 18.29 m (60') and longer are based on the use of a 10.67 m (35') tip section.

When using booms with a 7.62 m (25') section, 18.29 m (60') to 76.20 m (250') long; ratings below heavy line and less than 7.62 m (25') operating radius, deduct 470 kgs (1,040 lbs.)

WARNING: MAXIMUM R (35') IS 68,040 KGS (150,000 LBS.)

EIGHT

WITH OUTRIGGERS FULLY EXTENDED AND SET

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 (160') Boom			Operating Radius in Meters (Ft.-In.)
Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	
																		3.8 (12-6)
																		4.0 (13-1)
																		5.0 (16-5)
																		6.0 (19-8)
																		7.5 (24-7)
																		9.0 (29-6)
79	32.5 (106-8)	55,040 (130,160)																
76	32.2 (105-8)	43,840 (96,650)	77	35.3 (115-10)	43,730 (96,410)	78	38.5 (126-4)	43,660 (96,250)										
73	31.8 (104-4)	34,590 (75,260)	75	35.0 (114-10)	34,490 (76,040)	76	38.1 (125-0)	34,400 (75,840)	77	41.2 (135-2)	34,310 (75,640)	78	44.4 (145-8)	34,200 (75,400)	79	47.5 (155-10)	34,120 (75,220)	10.5 (34-5)
70	31.3 (102-8)	28,370 (61,550)	72	34.5 (113-2)	28,270 (62,300)	73	37.7 (123-8)	28,160 (62,080)	75	40.9 (134-2)	28,070 (61,880)	76	44.0 (144-4)	27,960 (61,640)	77	47.2 (154-10)	27,860 (61,240)	12.0 (39-4)
67	30.7 (100-9)	21,020 (52,950)	69	34.0 (111-7)	23,920 (52,730)	71	37.2 (122-1)	23,810 (52,490)	73	40.4 (132-7)	23,740 (52,340)	74	43.6 (143-1)	23,630 (52,100)	75	46.8 (153-7)	23,530 (51,870)	13.5 (44-3)
64	30.0 (98-5)	20,620 (45,460)	66	33.4 (109-7)	20,520 (45,240)	68	36.7 (120-5)	20,410 (45,000)	70	39.9 (130-1)	20,330 (44,820)	72	43.2 (141-9)	20,220 (44,580)	73	46.4 (152-3)	20,120 (44,360)	15.0 (49-3)
57	28.3 (92-10)	15,910 (35,080)	61	31.9 (104-8)	15,810 (34,860)	63	35.3 (115-10)	15,670 (34,550)	66	38.7 (127-0)	15,600 (34,390)	67	42.0 (137-2)	15,490 (34,150)	69	45.3 (148-7)	15,370 (33,890)	18.0 (59-1)
50	26.1 (85-8)	12,790 (28,200)	54	30.0 (98-5)	12,690 (27,980)	58	33.8 (110-1)	12,470 (27,490)	61	37.4 (122-8)	12,450 (27,450)	63	40.8 (133-10)	12,440 (27,430)	65	44.1 (144-8)	12,400 (27,340)	21.0 (68-1)
43	23.5 (77-1)	10,800 (23,810)	49	27.8 (91-2)	10,700 (23,590)	53	31.8 (104-4)	10,500 (23,150)	56	35.3 (115-10)	10,400 (22,930)	59	39.1 (128-3)	10,360 (22,840)	61	42.7 (140-1)	10,170 (22,420)	24.0 (78-9)
34	19.7 (64-8)	7,140 (15,150)	41	24.8 (81-4)	9,050 (19,950)	46	29.2 (95-10)	8,900 (19,620)	51	33.3 (109-3)	8,790 (19,380)	54	37.1 (121-9)	8,710 (19,200)	57	40.9 (134-2)	8,520 (18,780)	27.0 (88-7)
22	14.0 (45-11)	7,830 (17,260)	33	20.7 (67-1)	7,730 (17,040)	40	25.9 (85-0)	7,580 (16,710)	45	30.5 (100-1)	7,520 (16,580)	49	34.7 (113-10)	7,420 (16,360)	52	38.7 (127-0)	7,250 (15,980)	30.0 (98-5)
			21	14.6 (47-1)	6,690 (14,750)	31	21.6 (70-10)	6,530 (14,400)	38	27.1 (88-7)	6,470 (14,260)	43	31.8 (104-4)	6,370 (14,040)	47	36.1 (118-5)	6,230 (13,730)	33.0 (108-3)
						20	15.3 (50-2)	5,660 (12,520)	30	22.5 (73-10)	5,620 (12,390)	37	28.1 (92-2)	5,520 (12,170)	42	33.0 (108-0)	5,370 (11,840)	36.0 (118-1)
									20	16.0 (52-6)	4,920 (10,850)	29	23.4 (76-9)	4,810 (10,600)	36	29.2 (95-10)	4,660 (10,270)	39.0 (127-1)
												19	16.6 (54-6)	4,220 (9,300)	28	24.3 (79-9)	4,060 (8,950)	42.0 (137-10)
															19	17.3 (56-9)	3,560 (7,850)	45.0 (147-8)

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			Operating Radius in Meters (Ft.-In.)		
Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating			
															12.0 (39-4)		
															13.5 (44-3)		
															15.0 (49-3)		
															18.0 (59-1)		
															21.0 (68-1)		
															24.0 (78-9)		
															27.0 (88-7)		
															30.0 (98-5)		
															33.0 (108-3)		
															36.0 (118-1)		
															39.0 (127-1)		
															42.0 (137-10)		
															45.0 (147-8)		
78	65.2 (213-1)	19,400 (42,770)	78	68.3 (224-1)	18,400 (40,570)	79	71.4 (234-3)	16,500 (36,380)									
75	64.5 (211-7)	14,930 (32,910)	76	67.7 (222-1)	14,870 (32,780)	76	70.8 (232-3)	14,600 (32,190)	77	73.9 (242-5)	14,300 (31,530)	78	77.1 (252-1)	11,800 (26,010)			
72	63.6 (209-8)	12,910 (28,300)	73	66.8 (219-2)	12,040 (26,540)	74	70.0 (229-8)	11,930 (26,300)	75	73.2 (240-2)	11,810 (26,040)	75	76.3 (250-4)	11,400 (25,130)			
70	62.7 (205-9)	9,390 (21,360)	71	66.0 (216-0)	9,700 (21,380)	72	69.2 (226-8)	9,550 (21,050)	72	72.4 (237-2)	9,470 (20,880)	73	75.6 (248-0)	9,380 (20,680)			
67	61.5 (201-9)	7,950 (17,170)	68	64.8 (212-7)	7,950 (17,530)	69	68.1 (223-1)	7,790 (17,170)	70	71.4 (234-3)	7,720 (17,020)	71	74.6 (244-9)	7,610 (16,780)			
64	60.2 (197-6)	6,510 (14,570)	65	63.5 (208-4)	6,590 (14,530)	66	66.9 (219-6)	6,430 (14,180)	67	70.2 (230-4)	6,350 (14,000)	68	73.5 (241-2)	6,240 (13,760)			
61	58.6 (192-3)	5,540 (12,210)	62	62.1 (203-9)	5,500 (12,130)	64	65.5 (214-1)	5,350 (11,790)	65	68.9 (226-1)	5,270 (11,620)	66	72.2 (236-1)	5,150 (11,350)			
58	56.8 (186-4)	4,673 (10,300)	59	60.4 (198-2)	4,620 (10,190)	61	63.9 (209-8)	4,460 (9,830)	62	67.4 (221-2)	4,390 (9,680)	63	70.8 (232-3)	4,260 (9,390)			
55	54.8 (179-9)	3,950 (8,710)	56	58.5 (191-1)	3,890 (8,580)	58	62.1 (203-9)	3,730 (8,220)	50	65.7 (215-7)	3,650 (8,050)	61	69.2 (227-0)	3,530 (7,780)			
51	52.5 (172-3)	3,340 (7,360)	53	56.4 (185-0)	3,270 (7,210)	55	60.1 (197-2)	3,110 (6,860)	57	63.8 (209-4)	3,030 (6,680)	58	67.4 (221-2)	2,910 (6,420)			
48	49.9 (163-9)	2,840 (6,260)	50	54.0 (177-2)	2,740 (6,040)	52	57.9 (190-0)	2,590 (5,710)	54	61.7 (202-5)	2,510 (5,530)	56	65.5 (214-1)	2,380 (5,250)			
44	47.0 (154-0)	2,390 (5,270)	46	51.3 (168-4)	2,290 (5,050)	49	55.4 (181-9)	2,130 (4,700)	51	59.4 (194-1)	2,050 (4,520)	53	63.3 (207-8)	1,920 (4,230)			
40	43.6 (143-1)	1,990 (4,390)	43	48.2 (158-2)	1,910 (4,170)	45	52.6 (172-7)	1,740 (3,840)	48	56.8 (186-4)	1,660 (3,660)	50	60.9 (199-10)	1,520 (3,350)			
35	39.6 (129-1)	1,650 (3,640)	39	44.7 (146-8)	1,540 (3,400)	42	49.4 (162-1)	1,390 (3,060)	45	53.9 (176-10)	1,310 (2,890)	47	58.2 (190-1)	1,170 (2,580)			
30	34.9 (114-6)	1,340 (2,950)	35	40.7 (133-6)	1,230 (2,710)	38	45.8 (150-3)	1,080 (2,380)									

WARNING: MAXIMUM RATING FOR 10.67M (35') IS 68,040 KGS (150,000 LBS.)

**WITH TAPERED TIP SECTION AND 18,600 KGS (41,000 LBS.) COUNTERWEIGHT
RATED CRANE LOADS IN KGS (LBS.) – MAIN BOOM—WITHOUT OUTRIGGERS SET—TIRES AT 7KGS./CM²(100PSI)**

Operating Radius In Meters (Ft. In.)	15.24 m (50') Boom			18.29 m (60') Boom			21.34 m (70') Boom			24.38 m (80') Boom			24.73 m (90') Boom		
	Angle	Over Side	Over Rear	Angle	Over Side	Over Rear	Angle	Over Side	Over Rear	Angle	Over Side	Over Rear	Angle	Over Side	Over Rear
3.5 (11-6)	82		34,200 (75,400)												
4.0 (13-1)	80		31,800 (70,110)												
5.0 (16-5)	77		27,000 (59,520)	79		26,900 (59,300)									
6.0 (19-8)	73	18,930 (41,730)	23,300 (51,370)	76	18,700 (41,230)	22,900 (50,490)	78	18,600 (41,010)	22,800 (50,270)						
7.5 (24-7)	67	15,500 (34,170)	19,200 (42,330)	71	15,200 (33,510)	18,900 (41,670)	74	15,000 (33,070)	18,700 (41,230)	76	14,800 (32,630)	18,500 (40,790)	77	14,700 (32,410)	18,300 (40,340)
9.0 (29-6)	61	12,900 (28,440)	15,740 (34,700)	66	12,800 (28,220)	15,900 (35,050)	70	12,500 (27,560)	15,800 (34,830)	72	12,400 (27,340)	15,600 (34,390)	74	12,100 (26,680)	15,400 (33,950)
10.5 (34-5)	54	10,900 (24,030)	13,000 (28,660)	61	10,600 (23,370)	13,200 (29,100)	65	10,500 (23,150)	13,100 (28,880)	68	10,400 (22,930)	13,000 (28,660)	71	10,100 (22,270)	12,900 (28,440)
12.0 (39-4)	46	9,500 (20,940)	10,950 (24,140)	55	9,200 (20,280)	11,200 (24,690)	61	9,100 (20,060)	11,100 (24,470)	65	9,000 (19,840)	11,000 (24,250)	68	8,800 (19,400)	10,900 (24,030)
13.5 (44-3)	38	8,350 (18,410)	9,250 (20,390)	49	8,100 (17,860)	9,600 (21,160)	56	8,000 (17,640)	9,500 (20,940)	61	7,900 (17,420)	9,400 (20,720)	64	7,600 (16,760)	9,300 (20,500)
15.0 (49-3)	27	7,250 (15,980)	8,100 (17,860)	42	7,100 (15,650)	8,400 (18,520)	51	7,000 (15,430)	8,300 (18,300)	56	6,900 (15,210)	8,200 (18,080)	61	6,600 (14,550)	8,100 (17,860)
18.0 (59-1)				25	5,700 (12,570)	6,600 (14,550)	39	5,600 (12,350)	6,500 (14,330)	47	5,500 (12,130)	6,400 (14,110)	53	5,200 (11,460)	6,300 (13,890)
21.0 (78-9)							23	4,500 (9,920)	5,200 (11,460)	37	4,000 (8,820)	5,100 (11,240)	45	4,100 (9,040)	5,000 (11,020)
24.0 (88-7)										24	3,600 (7,940)	4,200 (9,260)	35	3,300 (7,280)	4,000 (8,820)
27.0 (88-7)													23	2,600 (5,730)	3,300 (7,280)

Operating Radius In Meters (Ft. In.)	30.48 m (100') Boom			33.53 m (110') Boom			36.58 m (120') Boom			39.62 m (130') Boom		
	Angle	Over Side	Over Rear	Angle	Over Side	Over Rear	Angle	Over Side	Over Rear	Angle	Over Side	Over Rear
7.5 (24-7)	79	14,600 (31,290)	18,100 (39,900)									
9.0 (29-6)	76	12,000 (26,460)	15,200 (33,510)	77	11,700 (25,790)	15,000 (33,070)	78	11,400 (25,130)	14,900 (32,850)			
10.5 (34-5)	73	10,000 (22,050)	12,800 (28,220)	75	9,800 (21,610)	12,700 (28,000)	76	9,700 (21,380)	12,500 (27,560)	77	9,600 (21,160)	12,400 (27,340)
12.0 (39-4)	70	8,500 (18,740)	10,800 (23,810)	72	8,300 (18,300)	10,700 (23,590)	73	8,200 (18,080)	10,500 (23,150)	75	8,100 (17,860)	10,400 (22,930)
13.5 (44-3)	67	7,400 (16,310)	9,200 (20,280)	69	7,200 (15,870)	9,000 (19,840)	71	7,100 (15,650)	8,900 (19,620)	72	7,000 (15,430)	8,800 (19,400)
15.0 (49-3)	64	6,400 (14,110)	8,000 (17,640)	66	6,200 (13,670)	7,800 (17,200)	68	6,100 (13,450)	7,700 (16,980)	70	6,000 (13,230)	7,600 (16,760)
18.0 (59-1)	57	5,000 (11,020)	6,100 (13,450)	61	4,700 (10,580)	5,900 (13,010)	63	4,700 (10,360)	5,800 (12,790)	65	4,600 (10,140)	5,700 (12,570)
21.0 (68-11)	50	4,000 (8,820)	4,800 (10,580)	54	3,800 (8,380)	4,700 (10,360)	58	3,600 (7,940)	4,500 (9,920)	61	3,500 (7,720)	4,400 (9,700)
24.0 (78-9)	43	3,100 (6,830)	3,900 (8,600)	49	2,900 (6,390)	3,800 (8,380)	53	2,800 (6,170)	3,600 (7,940)	55	2,700 (5,950)	3,500 (7,720)
27.0 (88-7)	34	2,500 (5,510)	3,200 (7,050)	41	2,300 (5,070)	3,100 (6,830)	46	2,200 (4,850)	2,900 (6,390)	51	2,100 (4,630)	2,700 (5,950)
30.0 (98-5)	22	2,000 (4,410)	2,600 (5,730)	33	1,800 (3,970)	2,500 (5,510)	39	1,700 (3,750)	2,300 (5,070)	45	1,600 (3,530)	2,200 (4,850)

NOTE:

- When using booms with a 7.62 m (25') tip section, 18.29 m (60') to 39.67 m (130') long, deduct 470 kg (1,040 lbs.).
- Ratings shown do not exceed maximum approved tire capacity.

•Maximum approved boom length for travel with boom over rear of carrier is 39.67 m (130') boom or 33.53 m (110') boom and 9.14 m (20') jib. Gantry must be in raised position to travel with boom attached.

WITH 4.57M (15FT.) HAMMERHEAD TIP SECTIONS AND 18,600 KGS (41,000 LBS.) COUNTERWEIGHT

RATED CRANE LOADS IN KGS (LBS.) – MAIN BOOM–WITHOUT OUTRIGGERS SET–TIRES AT 7KGS/CM² (100PSI)

Operating Radius In Meters (Ft.-In.)	12.19 m (40') Boom			15.24 m (50') Boom			18.29 m (60') Boom			21.34 m (70') Boom			24.38 m (80') Boom		
	Angle	Over Side	Over Rear	Angle	Over Side	Over Rear	Angle	Over Side	Over Rear	Angle	Over Side	Over Rear	Angle	Over Side	Over Rear
3.7 (12-2)	80		33,700 (74,300)												
4.0 (13-1)	79		31,800 (70,110)												
5.0 (16-5)	76		26,900 (59,300)	79		26,800 (59,080)	81		25,800 (48,720)						
6.0 (19-8)	71	18,800 (41,450)	23,200 (51,150)	76	18,700 (41,230)	23,100 (50,930)	78	18,000 (39,680)	22,100 (48,720)	80	17,700 (39,020)	21,900 (48,280)			
7.5 (24-7)	64	15,200 (33,510)	19,600 (43,210)	70	15,100 (33,290)	19,500 (42,990)	73	14,200 (31,310)	18,000 (39,680)	76	14,100 (31,090)	17,800 (39,240)	77	14,000 (30,860)	17,700 (39,020)
9.0 (29-6)	56	12,600 (27,780)	15,500 (34,170)	63	12,400 (27,340)	15,300 (33,730)	68	11,800 (26,010)	15,000 (33,070)	71	11,600 (25,570)	14,900 (32,850)	74	11,500 (25,350)	14,800 (32,630)
10.5 (34-5)	46	10,700 (23,590)	12,800 (28,220)	57	10,600 (23,370)	12,600 (27,780)	63	9,800 (21,610)	12,400 (27,340)	67	9,700 (21,380)	12,300 (27,120)	70	9,600 (21,160)	12,200 (26,900)
12.0 (39-4)	35	9,200 (20,280)	10,600 (23,370)	49	9,000 (19,840)	10,400 (22,930)	57	8,300 (18,300)	10,300 (22,710)	62	8,200 (18,080)	10,200 (22,490)	66	8,000 (17,640)	10,100 (22,270)
13.5 (44-3)				41	7,800 (17,200)	8,600 (18,960)	51	7,100 (15,650)	8,800 (19,400)	58	7,000 (15,430)	8,700 (19,180)	62	6,900 (15,210)	8,500 (18,740)
15.0 (49-3)				32	6,800 (14,990)	7,700 (16,980)	45	6,200 (13,670)	7,600 (16,760)	53	6,100 (13,450)	7,400 (16,310)	58	6,000 (13,230)	7,300 (16,090)
18.0 (59-1)							29	4,800 (10,580)	5,600 (12,350)	42	4,600 (10,140)	5,500 (12,130)	49	4,500 (9,920)	5,400 (11,900)
21.0 (68-11)										27	3,600 (7,940)	4,400 (9,700)	39	3,400 (7,500)	4,200 (9,260)
24.0 (78-9)													25	2,500 (5,510)	3,300 (7,280)
Operating Radius In Meters (Ft.-In.)	27.43 m (90') Boom			30.48 m (100') Boom			33.53 m (110') Boom			36.58 m (120') Boom					
	Angle	Over Side	Over Rear	Angle	Over Side	Over Rear	Angle	Over Side	Over Rear	Angle	Over Side	Over Rear			
7.5 (24-7)	79	13,700 (30,200)	17,400 (38,360)	80	13,500 (29,760)	17,200 (37,920)									
9.0 (29-6)	75	11,200 (24,690)	14,500 (31,970)	77	11,000 (24,250)	14,300 (31,530)	78	10,900 (24,030)	14,100 (31,090)	79	10,700 (23,590)	14,000 (30,870)			
10.5 (34-5)	72	9,300 (20,500)	12,100 (26,680)	74	9,100 (20,060)	11,900 (26,230)	75	9,000 (19,840)	11,800 (26,010)	77	8,800 (19,400)	11,600 (25,570)			
12.0 (39-4)	69	7,800 (17,200)	10,000 (22,050)	71	7,600 (16,760)	9,900 (21,830)	73	7,400 (16,310)	9,800 (21,610)	74	7,300 (16,090)	9,600 (21,160)			
13.5 (44-3)	65	6,700 (14,770)	8,400 (18,520)	68	6,500 (14,330)	8,300 (18,300)	70	6,300 (13,890)	8,200 (18,080)	72	6,200 (13,670)	8,000 (17,640)			
15.0 (49-3)	62	5,800 (12,790)	7,200 (15,870)	65	5,600 (12,350)	7,100 (15,650)	67	5,400 (11,900)	7,000 (15,430)	69	5,200 (11,460)	6,800 (14,990)			
18.0 (59-1)	55	4,300 (9,480)	5,300 (11,680)	59	4,100 (9,040)	5,200 (11,460)	62	3,900 (8,600)	5,100 (11,240)	64	3,800 (8,380)	4,900 (10,800)			
21.0 (68-11)	47	3,200 (7,050)	4,100 (9,040)	52	3,100 (6,830)	4,000 (8,820)	56	2,800 (6,170)	3,800 (8,380)	59	2,700 (5,950)	3,700 (8,160)			
24.0 (78-9)	37	2,300 (5,070)	3,200 (7,050)	44	2,200 (4,850)	3,000 (6,610)	50	2,000 (4,410)	2,900 (6,390)	54	1,900 (4,190)	2,700 (5,950)			
27.0 (88-7)	24	1,700 (3,750)	2,500 (5,510)	35	1,600 (3,530)	2,300 (5,070)	43	1,400 (3,090)	2,200 (4,850)	48	1,300 (2,870)	2,000 (4,410)			
30.0 (98-5)				24	1,100 (2,430)	1,700 (3,750)	34	900 (1,980)	1,600 (3,530)	41	800 (1,760)	1,500 (3,310)			

NOTE: Ratings shown do not exceed maximum approved tire capacity.

●Maximum approved boom length for travel without front bumper counterweight is 39.62 m (130') or 33.53 m (110') boom and 9.14 m (30') jib. Boom must be positioned over rear of carrier. Gantry must be in raised position to travel with boom attached.

**WITH 4.57M (15FT.) HAMMERHEAD TIP SECTION AND 28,100 KGS (62,000 LBS.) CO
RATED CRANE LOADS IN KGS (LBS.) – MAIN BOOM IN OVER SIDE AND OVER REAR WORK AREAS WITH OUTRIGGERS FU**

Operating Radius In Meters (Ft.-In.)	12.19 m (40') Boom			15.24 m (50') Boom			18.29 m (60') Boom			21.34 m (70') Boom			24.38 m (80') Boom		
	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating
3.65 (12-0)	82	15.4 (50-6)	127,000 (280,000)												
4.0 (13-1)	79	15.1 (49-6)	121,000 (266,760)												
5.0 (16-5)	76	15.0 (49-3)	102,800 (226,630)	79	18.1 (59-5)	88,980 (196,170)	81	21.3 (69-11)	85,200 (187,830)						
6.0 (19-8)	71	14.7 (48-3)	85,900 (189,380)	76	17.9 (58-8)	80,200 (176-810)	78	21.0 (68-11)	79,500 (175,270)	80	24.1 (79-1)	76,000 (167,550)			
7.5 (24-7)	64	14.0 (45-11)	64,900 (143,080)	70	17.5 (57-5)	59,200 (130,510)	73	20.7 (67-11)	58,700 (129,410)	76	23.8 (78-1)	58,600 (129,190)	77	26.9 (88-3)	58,500 (128,970)
9.0 (29-6)	56	13.3 (43-8)	49,000 (108,030)	63	16.8 (55-1)	47,200 (104,060)	68	20.1 (65-11)	47,000 (103,620)	71	23.4 (76-9)	46,900 (103,400)	74	26.5 (86-11)	46,800 (103,180)
10.5 (34-5)	46	12.1 (39-8)	39,200 (86,420)	57	16.0 (52-6)	39,000 (85,980)	63	19.5 (64-0)	38,800 (85,540)	67	22.8 (74-10)	38,600 (85,100)	70	26.1 (85-8)	38,500 (84,880)
12.0 (39-4)	35	10.3 (33-10)	33,600 (74,080)	49	14.8 (48-7)	33,400 (73,630)	57	18.6 (61-0)	33,200 (73,190)	62	22.1 (72-6)	33,100 (72,970)	66	25.5 (83-8)	33,000 (72,750)
13.5 (44-3)				41	13.3 (43-8)	28,600 (63,050)	51	17.5 (57-5)	28,400 (62,610)	58	21.3 (69-11)	28,300 (62,390)	62	24.8 (81-4)	28,200 (62,170)
15.0 (49-3)				32	11.2 (36-9)	24,600 (54,230)	45	16.2 (53-2)	24,400 (53,790)	53	20.2 (66-3)	24,300 (53,570)	58	23.9 (78-5)	24,300 (53,350)
18.0 (59-1)							29	12.1 (39-8)	18,800 (41,450)	42	17.4 (57-1)	18,700 (41,230)	49	21.7 (71-2)	18,600 (41,010)
21.0 (68-11)										27	12.9 (42-4)	15,400 (33,950)	39	18.5 (60-8)	15,200 (33,510)
24.0 (78-9)													25	13.5 (44-3)	12,600 (27,780)
27.0 (88-7)															
30.0 (98-5)															

Operating Radius In Meters (Ft.-In.)	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		
	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating
9.0 (29-6)	79	39.0 (127-11)	46,400 (102,290)												
10.5 (34-5)	77	38.7 (127-0)	37,900 (83,560)	78	41.8 (137-2)	37,800 (83,330)	79	44.9 (147-4)	37,700 (83,110)	79	48.0 (157-6)	36,100 (79,590)			
12.0 (39-4)	74	38.4 (126-0)	32,400 (71,430)	76	41.5 (136-2)	32,300 (71,210)	77	44.6 (146-4)	32,200 (70,990)	77	47.7 (156-6)	32,100 (70,770)	78	50.9 (167-0)	32,000 (70,550)
13.5 (44-3)	72	37.9 (124-4)	27,500 (60,630)	73	41.1 (134-10)	27,400 (60,410)	75	44.3 (145-4)	27,300 (60,190)	76	47.4 (155-6)	27,100 (59,750)	76	50.5 (165-8)	27,000 (59,520)
15.0 (49-3)	69	37.4 (122-8)	23,600 (52,030)	71	40.6 (133-2)	23,500 (51,810)	72	43.8 (143-8)	23,400 (51,590)	74	47.0 (154-2)	23,200 (51,150)	75	50.2 (164-8)	23,100 (50,930)
18.0 (59-1)	64	36.2 (118-9)	18,100 (39,900)	66	39.5 (129-7)	17,900 (39,460)	68	42.8 (140-5)	17,800 (39,240)	70	46.0 (150-11)	17,700 (39,020)	71	49.3 (161-9)	17,500 (38,580)
21.0 (68-11)	59	34.6 (113-6)	14,700 (32,410)	62	38.1 (125-0)	14,500 (31,970)	64	41.5 (136-2)	14,400 (31,750)	66	44.8 (147-0)	14,300 (31,530)	67	48.2 (158-2)	14,100 (31,090)
24.0 (78-9)	54	32.8 (107-7)	12,200 (26,900)	57	36.5 (119-9)	12,000 (26,460)	59	40.0 (131-3)	11,800 (26,010)	62	43.5 (142-9)	11,700 (25,790)	64	46.9 (153-10)	11,500 (25,350)
27.0 (88-7)	48	30.3 (99-5)	10,100 (22,270)	52	34.3 (112-6)	10,000 (22,050)	55	38.1 (125-0)	9,800 (21,610)	58	41.8 (137-2)	9,700 (21,380)	60	45.4 (148-11)	9,500 (20,940)
30.0 (98-5)	41	27.2 (89-3)	8,200 (18,080)	46	31.7 (104-0)	8,100 (17,860)	50	35.8 (117-5)	8,000 (17,640)	53	39.7 (130-3)	7,900 (17,420)	56	43.5 (142-9)	7,700 (16,980)
33.0 (108-3)	33	23.2 (76-1)	7,100 (15,650)	39	28.4 (93-2)	7,000 (15,430)	44	33.0 (108-3)	6,800 (14,990)	48	37.2 (122-1)	6,700 (14,770)	51	41.2 (135-2)	6,500 (14,330)
36.0 (118-1)				32	24.1 (79-1)	6,000 (13,230)	38	29.5 (96-9)	5,800 (12,790)	43	34.2 (112-2)	5,700 (12,570)	46	38.6 (126-8)	5,500 (12,130)
39.0 (127-11)							31	25.0 (82-0)	5,000 (11,020)	37	30.6 (82-0)	4,900 (10,800)	41	35.5 (116-6)	4,700 (10,360)
42.0 (137-10)										30	25.9 (85-0)	4,200 (9,260)	36	31.6 (103-8)	4,000 (8,820)
45.0 (147-8)													29	26.8 (87-11)	3,100 (6,830)
48.0 (157-6)															
51.0 (167-4)															

**COUNTERWEIGHT
FULLY EXTENDED AND SET**

27.43 m (90') Boom			30.48 m (100') Boom			33.53 m (110') Boom			Operating Radius in Meters (Ft.-In.)
Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	
									3.65 (12-0)
									4.0 (13-1)
									5.0 (16-5)
									6.0 (19-8)
79	30.0 (98-5)	58,300 (128,530)	80	33.1 (108-7)	58,200 (128,310)				7.5 (24-7)
75	29.7 (97-5)	46,700 (102,960)	77	32.8 (107-7)	46,600 (102,740)	78	35.9 (117-9)	46,500 (102,510)	9.0 (29-6)
72	29.3 (96-2)	38,400 (84,660)	74	32.4 (106-4)	38,200 (84,220)	75	35.6 (116-10)	38,100 (84,000)	10.5 (34-5)
69	28.8 (94-6)	32,900 (72,530)	71	32.0 (105-0)	32,700 (72,090)	73	35.2 (115-6)	32,500 (71,650)	12.0 (39-4)
65	28.2 (92-6)	28,000 (61,730)	68	31.5 (103-4)	27,900 (61,510)	70	34.7 (113-10)	27,700 (61,070)	13.5 (44-3)
62	27.4 (89-11)	24,000 (52,910)	65	30.8 (101-1)	23,900 (52,690)	67	34.1 (111-11)	23,700 (52,250)	15.0 (49-3)
55	25.6 (84-0)	18,500 (40,790)	59	29.2 (95-10)	18,300 (40,340)	62	32.7 (107-3)	18,200 (40,120)	18.0 (59-1)
47	23.2 (76-1)	15,100 (33,290)	52	27.2 (89-3)	14,900 (32,850)	56	31.9 (104-8)	14,800 (32,630)	21.0 (68-11)
37	19.8 (65-0)	12,500 (27,560)	44	24.5 (80-5)	12,400 (27,340)	50	28.7 (94-2)	12,300 (27,120)	24.0 (78-9)
24	14.3 (46-11)	10,600 (23,370)	35	21.2 (69-7)	10,400 (22,930)	43	26.0 (85-4)	10,300 (22,710)	27.0 (88-7)
						34	27.2 (72-10)	8,300 (18,300)	30.0 (98-5)

51.82 m (170') Boom			54.86 m (180') Boom			Operating Radius in Meters (Ft.-In.)
Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	
						9.0 (29-6)
						10.5 (34-5)
79	54.0 (177-2)	29,200 (64,370)	79	57.1 (187-4)	27,000 (59,520)	12.0 (39-4)
77	53.7 (176-2)	26,900 (59,300)	78	56.8 (186-4)	26,300 (57,980)	13.0 (44-3)
76	53.3 (174-10)	23,000 (50,710)	76	56.5 (185-4)	22,800 (50,270)	15.0 (49-3)
72	52.5 (172-0)	17,400 (38,360)	73	55.7 (182-9)	17,300 (38,140)	18.0 (59-1)
69	51.4 (168-8)	14,000 (30,860)	70	54.7 (179-6)	13,900 (30,640)	21.0 (68-11)
65	50.3 (165-0)	11,400 (25,130)	67	53.6 (175-10)	11,300 (24,910)	24.0 (78-9)
62	48.8 (160-1)	9,400 (20,740)	63	52.3 (171-7)	9,300 (20,500)	27.0 (88-7)
58	47.1 (154-6)	7,600 (16,760)	60	50.7 (166-4)	7,400 (16,310)	30.0 (98-5)
54	45.1 (148-0)	6,400 (14,100)	56	48.8 (160-1)	6,300 (13,890)	33.0 (108-3)
50	42.7 (140-1)	5,400 (11,900)	52	46.6 (152-11)	5,300 (11,680)	36.0 (118-1)
45	39.9 (130-11)	4,600 (10,140)	48	44.1 (144-8)	4,500 (9,920)	39.0 (127-11)
40	36.6 (120-1)	3,900 (8,600)	44	41.2 (135-2)	3,800 (8,380)	42.0 (137-10)
35	32.6 (106-11)	3,000 (6,610)	39	37.8 (124-0)	2,800 (6,170)	45.0 (147-8)
28	27.6 (90-7)	2,500 (5,510)	34	33.6 (110-3)	2,300 (5,070)	48.0 (157-6)
			27	28.5 (93-6)	1,900 (4,190)	51.0 (167-4)

NOTE:

1. Ratings above heavy line are limited by factors other than stability.
2. Mast is required for booms 45.72 m (150') and longer, gantry must be in intermediate position.

WARNING: MACHINE WITH 28,100 KGS (62,000 LBS.) COUNTER-WEIGHT WILL TIP OVER WHEN UPPER IS REVOLVED OVER THE SIDE UNLESS OUTRIGGERS ARE FULLY EXTENDED AND SET.

WITH 4.57M (15FT.) HAMMERHEAD TIP SECTION AND 18,600 KGS (41,000 LBS.) CO RATED CRANE LOADS IN KGS (LBS.) – MAIN BOOM IN OVER SIDE AND OVER REAR WORK AREAS WITH OUTRIGGER

Operating Radius In Meters (Ft.-In.)	12.19 m (40') Boom			15.24 m (50') Boom			18.29 m (60') Boom			21.34 m (70') Boom			24.38 m (80') Boom		
	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating
3.65 (12-0)	82	15.4 (50-6)	127,000 (280,000)												
4.0 (13-1)	79	15.1 (49-6)	118,000 (260,150)												
5.0 (16-5)	76	15.0 (49-3)	96,600 (212,970)	79	18.1 (59-5)	88,980 (196,170)	81	21.3 (69-11)	85,200 (187,830)						
6.0 (19-8)	71	14.7 (48-3)	78,800 (173,720)	76	17.9 (58-8)	76,200 (167,990)	78	21.0 (68-11)	76,100 (167,770)	80	24.1 (79-1)	76,000 (167,550)			
7.5 (24-7)	64	14.0 (45-11)	55,400 (112,140)	70	17.5 (57-5)	55,300 (121,920)	73	20.6 (65-11)	55,000 (121,250)	76	23.8 (78-1)	54,900 (121,030)	77	26.9 (88-3)	54,600 (120,370)
9.0 (29-6)	56	13.3 (43-8)	40,900 (90,170)	63	16.8 (55-1)	40,700 (89,730)	68	20.1 (65-11)	40,500 (89,290)	71	23.4 (76-9)	40,400 (89,070)	74	26.5 (86-11)	40,200 (88,630)
10.5 (34-5)	46	12.1 (39-8)	32,000 (70,550)	57	16.0 (52-6)	31,800 (70,110)	63	19.5 (64-0)	31,600 (69,670)	67	22.8 (74-10)	31,500 (69,450)	70	26.1 (85-8)	31,300 (69,000)
12.0 (39-4)	35	10.3 (33-10)	26,000 (57,320)	49	14.8 (48-7)	25,900 (57,100)	57	18.6 (61-0)	25,700 (56,660)	62	22.1 (72-6)	25,600 (56,440)	66	25.5 (83-8)	25,500 (56,220)
13.5 (44-3)				41	13.3 (43-8)	21,800 (48,060)	51	17.5 (57-5)	21,700 (47,840)	58	21.3 (69-11)	21,600 (47,620)	62	24.8 (81-4)	21,500 (47,400)
15.0 (49-3)				32	11.2 (36-9)	18,800 (41,450)	45	16.2 (53-2)	18,700 (41,230)	53	20.2 (66-3)	18,600 (41,010)	58	23.9 (78-5)	18,500 (40,790)
18.0 (59-1)							29	12.1 (39-8)	14,400 (31,750)	42	17.4 (57-1)	14,200 (31,310)	49	21.7 (71-2)	14,000 (30,860)
21.0 (68-11)										27	12.9 (42-4)	11,500 (25,350)	39	18.5 (60-8)	11,400 (25,130)
24.0 (78-9)													25	13.5 (44-3)	9,400 (20,720)
27.0 (88-7)															
30.0 (98-5)															

Operating Radius In Meters (Ft.-In.)	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		
	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating
9.0 (29-6)	79	39.0 (127-11)	39,800 (87,740)												
10.5 (34-5)	77	38.7 (127-0)	30,800 (67,900)	78	41.8 (137-2)	30,700 (67,680)	79	44.9 (147-4)	30,600 (67,460)	79	48.0 (157-6)	30,500 (67,240)			
12.0 (39-4)	74	38.4 (126-0)	25,000 (55,120)	76	41.5 (136-2)	24,900 (54,900)	77	44.6 (146-4)	24,800 (54,670)	77	47.7 (156-6)	24,600 (54,230)	78	50.9 (167-0)	24,500 (54,010)
13.5 (44-3)	72	37.9 (124-4)	21,000 (46,300)	73	41.1 (134-10)	20,900 (46,100)	75	44.3 (145-4)	20,800 (45,860)	76	47.4 (156-6)	20,600 (45,420)	76	50.5 (165-8)	20,400 (44,970)
15.0 (49-3)	69	37.4 (122-8)	17,900 (39,460)	71	40.6 (133-2)	17,800 (39,240)	72	43.8 (143-8)	17,700 (39,020)	74	47.0 (154-2)	17,500 (38,580)	75	50.2 (164-8)	17,400 (38,360)
18.0 (59-1)	64	36.2 (118-9)	13,500 (29,760)	66	39.5 (129-7)	13,400 (29,540)	68	42.8 (140-5)	13,300 (29,320)	70	46.0 (150-11)	13,200 (29,100)	71	49.3 (161-9)	13,000 (28,660)
21.0 (68-11)	59	34.6 (113-6)	10,900 (24,030)	62	38.1 (125-0)	10,700 (23,590)	64	41.5 (136-2)	10,600 (23,370)	66	44.8 (147-0)	10,500 (23,150)	67	48.2 (158-2)	10,400 (22,930)
24.0 (78-9)	54	32.8 (107-7)	8,900 (19,620)	57	36.5 (119-9)	8,800 (19,400)	59	40.0 (131-3)	8,600 (18,960)	62	43.5 (142-9)	8,500 (18,740)	64	46.9 (153-10)	8,300 (18,300)
27.0 (88-7)	48	30.3 (99-5)	7,300 (16,090)	52	34.3 (112-6)	7,200 (15,870)	55	38.1 (125-0)	7,100 (15,650)	58	41.8 (137-2)	6,900 (15,210)	60	45.4 (148-11)	6,800 (14,990)
30.0 (98-5)	41	27.2 (89-3)	6,100 (13,450)	46	31.7 (104-0)	6,000 (13,230)	50	35.8 (117-5)	5,800 (12,790)	53	39.7 (130-3)	5,700 (12,570)	56	43.5 (142-9)	5,600 (12,350)
33.0 (108-3)	33	23.2 (76-1)	5,200 (11,460)	39	28.4 (93-2)	5,100 (11,240)	44	33.0 (108-3)	4,900 (10,800)	48	37.2 (122-1)	4,800 (10,580)	51	41.2 (135-2)	4,600 (10,140)
36.0 (118-1)				32	24.1 (79-1)	4,300 (9,480)	38	29.5 (96-9)	4,200 (9,260)	43	34.2 (112-2)	4,000 (8,820)	46	38.6 (126-8)	3,900 (8,600)
39.0 (127-11)							31	25.0 (82-0)	3,600 (7,940)	37	30.6 (82-0)	3,400 (7,500)	41	35.5 (116-6)	3,300 (7,280)
42.0 (137-10)										30	25.9 (85-0)	3,000 (6,610)	36	31.6 (103-8)	2,800 (6,170)
45.0 (147-8)													29	26.8 (87-11)	2,400 (5,290)
48.0 (157-6)															
51.0 (167-4)															

**(S.) COUNTERWEIGHT
TRIGGERS FULLY EXTENDED AND SET**

0') Boom		27.43 m (90') Boom			30.48 m (100') Boom			33.53 m (110') Boom			Operating Radius in Meters (Ft.-In.)
Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating		
										3.65 (12-0)	
										4.0 (13-1)	
										5.0 (16-5)	
										6.0 (19-8)	
54,600 (120,370)	79	30.6 (98-5)	54,500 (120,150)	80	33.1 (108-7)	54,400 (119,930)				7.5 (24-7)	
40,200 (88,630)	75	29.7 (97-5)	40,100 (88,410)	77	32.8 (107-7)	40,000 (88,180)	78	35.9 (117-9)	39,900 (87,960)	9.0 (29-6)	
31,300 (69,000)	72	29.3 (96-2)	31,100 (68,560)	74	32.4 (106-4)	31,000 (68,340)	75	35.6 (116-10)	30,900 (68,120)	10.5 (34-5)	
25,500 (56,220)	69	28.8 (94-6)	25,400 (56,000)	71	32.0 (105-0)	25,300 (55,780)	73	35.2 (115-6)	25,200 (55,560)	12.0 (39-4)	
21,500 (47,400)	65	28.2 (92-6)	21,400 (47,180)	68	31.5 (103-4)	21,300 (46,960)	70	34.7 (113-10)	21,200 (46,740)	13.5 (44-3)	
18,500 (40,790)	62	27.4 (89-11)	18,300 (40,340)	65	30.8 (101-1)	18,200 (40,120)	67	34.1 (111-11)	18,100 (39,900)	15.0 (49-3)	
14,000 (30,860)	55	25.6 (84-0)	13,900 (30,640)	59	29.2 (95-10)	13,800 (30,420)	62	32.7 (107-3)	13,700 (30,200)	18.0 (59-1)	
11,400 (25,130)	47	23.2 (76-1)	11,300 (24,910)	52	27.2 (89-3)	11,200 (24,690)	56	31.9 (104-8)	11,000 (24,250)	21.0 (68-11)	
9,400 (20,720)	37	19.8 (65-0)	9,300 (20,500)	44	24.5 (80-5)	9,200 (20,280)	50	28.7 (94-2)	9,100 (20,060)	24.0 (78-9)	
	24	14.3 (46-11)	7,800 (17,200)	35	21.2 (69-7)	7,600 (16,760)	43	26.0 (85-4)	7,500 (16,530)	27.0 (88-7)	
							34	22.2 (72-10)	6,300 (13,890)	30.0 (98-5)	

0') Boom		51.82 m (170') Boom			54.68 m (180') Boom			Operating Radius in Meters (Pt.-In.)
Rating	Angle	Boom Pt. El.	Rating	Angle	Boom Pt. El.	Rating		
							9.0 (29-6)	
							10.5 (34-5)	
24,500 (54,010)	79	54.0 (177-2)	24,400 (53,790)	79	57.1 (187-4)	24,200 (53,350)	12.0 (39-4)	
20,400 (44,970)	77	53.7 (176-2)	20,300 (44,750)	78	56.8 (186-4)	20,200 (44,530)	13.5 (44-3)	
17,400 (38,360)	76	53.3 (174-10)	17,300 (38,140)	76	56.5 (185-4)	17,100 (37,700)	15.0 (49-3)	
13,000 (28,660)	72	52.5 (172-0)	12,900 (28,440)	73	55.7 (182-9)	12,700 (28,000)	18.0 (59-1)	
10,400 (22,930)	69	51.4 (168-8)	10,300 (22,710)	70	54.7 (179-6)	10,100 (22,270)	21.0 (68-11)	
8,300 (18,300)	65	50.3 (165-0)	8,200 (18,080)	67	53.6 (175-10)	8,100 (17,860)	24.0 (78-9)	
6,800 (14,990)	62	48.8 (160-1)	6,700 (14,770)	63	52.3 (171-7)	6,500 (14,330)	27.0 (88-7)	
5,600 (12,350)	58	47.1 (154-6)	5,500 (12,130)	60	50.7 (166-4)	5,300 (11,680)	30.0 (98-5)	
4,600 (10,140)	54	45.1 (148-0)	4,500 (9,920)	56	48.8 (160-1)	4,400 (9,700)	33.0 (108-3)	
3,900 (8,600)	50	42.7 (140-1)	3,800 (8,380)	52	46.6 (152-11)	3,600 (7,940)	36.0 (118-1)	
3,300 (7,280)	45	39.9 (130-11)	3,200 (7,050)	48	44.1 (144-8)	3,000 (6,610)	39.0 (127-11)	
2,800 (6,170)	40	36.6 (120-1)	2,700 (5,950)	44	41.2 (135-2)	2,600 (5,730)	42.0 (137-10)	
2,400 (5,290)	35	32.6 (106-11)	2,300 (5,070)	39	37.8 (124-0)	2,100 (4,630)	45.0 (147-8)	
	28	27.6 (90-7)	1,900 (4,190)	34	33.6 (110-3)	1,600 (3,530)	48.0 (157-6)	
				27	28.5 (93-6)	1,400 (3,090)	51.0 (167-4)	

NOTE:
 1. Ratings inside of box are limited by factors other than stability.
 2. Mast is required for booms 45.72 m (150') and longer, gantry must be in intermediate position.

THIS P&H MODEL 9125-TC MEETS THE REQUIREMENTS OF ANSI B30.5 - 1968. BOOM STRUCTURE HAS BEEN TESTED PER SAE J 987. MACHINE STABILITY HAS BEEN TESTED PER SAE J 765.

1. Operating radius is the horizontal distance from centerline of rotation to a vertical line through the center of gravity of the load.
2. Ratings shown are only combination of KOBE manufactured upper, boom, jib, counterweights, carrier and outriggers.
3. Boom backstops are required for all boom lengths. Boom inserts must be arranged as shown in the Boom Make-Up Chart.
4. Standard boom hoist reeving is 12 part line. Gantry must be in raised position for all operating conditions except when mast is required.
5. When boom is equipped with jib, main hook ratings must be reduced by 680 kgs (1,500 lbs.) for 6.10 m (20') or 9.14 m (30') jib; 900 kgs (2,000 lbs.) for 12.19 m (40') jib; 1,130 kgs (2,500 lbs.) for 15.24 m (50') jib and 1,360 kgs (3,000 lbs.) for 18.29 m (60').
6. Refer to diagrams for applicable working area.
7. Ratings shown are based on freely suspended loads and make no allowance for such factors as wind effect on lifted loads, 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.
8. Ratings do not exceed 85% of tipping load as determined by SAE J765. Deduct weight of hook block(s), slings, cement bucket, and all other load handling accessories from main boom or jib rating shown.
9. Main Hoist Rope; 26 mm (1.02") dia. 6 X 29 I.W.R.C.,

breaking strength 54,500 kgs(120,200 lbs.).
 10. Maximum approved travel speed with 13,800 kg (30,200 lbs.) is 1 km/h (0.6 mph). All tires must be evenly inflated to 7 kgs/cm² (100 psi).

WARNING

- Using this equipment in excess of rated loads, in area of chart not rated, or with disregard of instructions will result in unsafe operating conditions and is a violation of the U.S. Dept. of Labor, Safety and Health Regulations for construction.
- When operating crane "without outriggers" loads lifted over rear and swung over side, will increase in radius due to tire deflection. This increase in radius must be compensated for by raising boom, or machine may tip over.
- 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 stopping operation when wind is above 13 m/sec. (30 mph) and tying off, or lowering, boom when wind is above 22 m/sec. (50 mph). When continued operation under windy conditions is necessary, consult factory for special derated load rating chart.

MAXIMUM JIB RATINGS IN KGS. (LBS.)

FOR LIFTING CRANE SERVICE					
22 MM (0.87") DIA. U4XSES(39) — NON-ROTATING ROPE					
*Use Two Parts of Line for Loads above 9,700 Kgs (21,380 lbs.)					
Offset Angle Jib to Boom Under Full Load	6.10m (20') Jib	9.14m (30') Jib	12.19m (40') Jib	15.24m (50') Jib	18.29m (60') Jib
10°	13,680 (30,000) *	9,070 (20,000)	7,250 (16,000)	5,890 (13,000)	4,850 (10,700)
20°	11,340 (25,000)	8,160 (18,000)	6,570 (14,500)	5,260 (11,600)	4,440 (9,800)
30° Max.	10,430 (23,000)	7,710 (17,000)	6,120 (13,500)	4,980 (11,000)	4,210 (9,300)
FOR BUCKET SERVICE					
10°	10,880 (24,000)	7,250 (16,000)	5,800 (12,800)	4,710 (10,400)	3,880 (8,560)
20°	9,070 (20,000)	6,520 (14,400)	5,200 (11,600)	4,200 (9,280)	3,550 (7,840)
30° Max.	8,340 (18,400)	6,160 (13,600)	4,890 (10,800)	3,980 (8,800)	3,360 (7,440)

1. Jib Crane Ratings are based on strength of materials.
2. When main boom load rating at operating radius is less than maximum jib ratings, stability governs and the lower value of main boom load rating must be used.
3. Jibs are intended to increase lifting height — not operating

radius — therefore, maximum jib operating radius is limited to maximum rated radius of boom length on which jib is mounted.
 4. Locate jib backstay anchor at base end of first insert below boom tip section.

MAIN HOIST DRUM RATED LOADS FOR 26 MM (1.02 IN.) DIA. 6X29 N.I.W.R.C.

Number of Parts of Main Hoist Reeving	1	2	3	4	5	6	7	8	9	10
Max. Load—kgs (lbs.)	12,610 (27,800)	25,220 (55,600)	37,830 (83,400)	50,440 (111,200)	63,050 (139,000)	75,660 (166,800)	88,270 (194,600)	100,880 (222,400)	113,490 (250,000)	127,000 (280,000)

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

WITH 18,600 KGS (41,000 LBS.) COUNTERWEIGHT						
Boom Over	Without Front Bumper Counterweight				With 13,800 Kgs (30,500 Lbs.) Front Bumper Counterweight and Outriggers Set	
	With Outriggers Set		Without Outriggers Set			
	Boom Only	Boom & Jib	Boom Only	Boom & Jib	Boom Only	Boom & Jib
4.57M (15FT.) HAMMERHEAD TIP SECTION WITH 5 SHEAVES						
Side	54.86 (180)	51.82 + 15.24 (170 + 150)	36.58 (120)	30.48 + 9.14 (100 + 30)	Not Approved	
Over	54.86 (180)	54.86 + 9.14 (180 + 30)	39.62 (130)	33.35 + 6.10 (110 + 20)		
7.62M (25 FT.) TIP SECTION WITH 5 SHEAVES						
Side	60.96 (200)	54.86 + 15.24 (180 + 50)	39.62 (130)	33.53 + 9.14 (110 + 30)	60.96 (200)	54.86 + 15.24 (180 + 50)
Over	64.01 (210)	57.91 + 9.14 (190 + 30)	39.62 (130)	36.58 + 6.10 (120 + 20)	76.20 (250)	70.10 + 18.29 (230 + 60)
10.67M (35 FT.) TIP SECTION WITH 2 SHEAVES						
Side	64.01 (210)	57.91 + 18.29 (190 + 60)	39.62 (130)	33.53 + 9.14 (110 + 30)	64.01 (210)	57.91 + 18.29 (190 + 60)
Over	67.06 (220)	60.96 + 12.19 (200 + 40)	39.62 (130)	36.58 + 6.10 (120 + 20)	76.20 (250)	76.20 + 18.29 (250 + 60)
WITH 28,100 KGS (62,000 LBS.) COUNTERWEIGHT						
Boom Over	Without Front Bumper Counterweight				With 13,800 Kgs (30,500 Lbs.) Front Bumper Counterweight and Outriggers set	
	With Outriggers Set		Without Outriggers Set			
	Boom Only	Boom & Jib	Boom Only	Boom & Jib	Boom Only	Boom & Jib
4.57M (15 FT.) HAMMERHEAD TIP SECTION WITH 5 SHEAVES						
Side	54.86 (180)	54.86 + 18.29 (180 + 60)	Not Approved		Not Approved	
Rear	54.86 (180)	54.86 + 18.29 (180 + 60)				
7.62M (25 FT.) TIP SECTION WITH 5 SHEAVES						
Side	70.10 (230)	60.96 + 18.29 (200 + 60)	Not Approved		70.10 (230)	60.96 + 18.29 (200 + 60)
Rear	70.10 (230)	60.96 + 18.29 (200 + 60)			76.20 (250)	76.20 + 18.29 (250 + 60)
10.67M (35 FT.) TIP SECTION WITH 2 SHEAVES						
Side	73.15 (240)	64.01 + 18.29 (210 + 60)	Not Approved		73.15 (240)	64.01 + 18.29 (210 + 60)
Rear	73.15 (240)	64.01 + 18.29 (210 + 60)			82.30 (270)	82.30 + 15.24 (270 + 50)
10.67M (35 FT.) TIP SECTION WITH 1 SHEAVE						
Side	73.15 (240)	64.01 + 18.29 (210 + 60)	Not Approved		73.15 (240)	64.01 + 18.29 (210 + 60)
Rear	73.15 (240)	64.01 + 18.29 (210 + 60)			82.30 (270)	82.30 + 18.29 (270 + 60)

RECOMMENDED WIRE ROPE LENGTH FOR DRUMS—METERS (FT.)

Boom Length M (Ft.)	Main Hoist Drum	Jib Hoist Drum	Boom Length M (Ft.)	Main Hoist Drum	Jib Hoist Drum
12.19 (40)	155.4 (510)	68.6 (225)	48.77 (160)	207.3 (680)	173.7 (570)
15.24 (50)	195.1 (640)	74.7 (245)	51.82 (170)	219.5 (720)	182.9 (600)
18.29 (60)	208.8 (685)	82.3 (270)	54.86 (180)	231.6 (760)	192.0 (630)
21.34 (70)	192.0 (630)	91.4 (300)	57.91 (190)	243.8 (800)	201.2 (660)
24.38 (80)	189.0 (620)	100.6 (330)	60.96 (200)	256.0 (840)	210.3 (690)
27.43 (90)	181.4 (595)	109.7 (360)	64.01 (210)	202.7 (665)	219.5 (720)
30.48 (100)	199.6 (655)	118.9 (390)	67.07 (220)	211.8 (695)	228.6 (750)
33.53 (110)	217.9 (715)	128.0 (420)	70.10 (230)	221.0 (725)	237.7 (780)
36.58 (120)	236.2 (775)	137.2 (450)	73.15 (240)	230.1 (755)	246.9 (810)
39.62 (130)	213.4 (700)	146.3 (480)	76.20 (250)	239.3 (785)	256.0 (840)
42.67 (140)	228.6 (750)	155.4 (510)	79.25 (260)	248.4 (815)	202.7 (665)
45.72 (150)	243.8 (800)	164.6 (540)	82.30 (270)	172.2 (565)	208.8 (685)

WEIGHT OF P&H HOOK BLOCK—KGS (LBS.)

5 Sheave 127 Metric Ton Hook Block	1,700 (3,700)
3 Sheave 65 Metric Ton Hook Block	900 (2,000)
Single Sheave 25 Metric Ton Hook Block	500 (1,100)
Ball Hook Block	300 (700)

BOOM MAKE-UP ARRANGEMENT CHART

● 7.62 M (25FT.) TIP SECTION

Boom Length M (Ft.)	Boom Arrangement	Boom Length M (Ft.)	Approximate Mid-Point Connection Up Boom from Boom Foot Pin			
			M (Ft.)	Adjust Mid-Point Rope Length q to q Pin, to		
				M (Ft.-In.)	*Mid-Point Deflection Range (Min. and Max.)	
				MM (In.)		
30.48 (100)	Base-B-C-Tip					
33.53 (110)	Base-A-B-C-TIP	64.01 (210)	32.00 (105)	24.1 (79-2)	266.70 to 342.90 (10.5 to 13.5)	Base-A-B-D-C-D-Tip
36.58 (120)	Base-B-D-Tip	67.06 (220)	35.05 (115)	27.1 (89-0)	273.05 to 361.95 (10.75 to 14.25)	Base-B-B-D-C-D-Tip
39.62 (130)	Base-C-D-Tip	70.10 (230)	38.10 (125)	30.0 (98-6)	292.10 to 381.00 (11.5 to 15.0)	Base-D-D-C-D-Tip
42.67 (140)	Base-A-C-D-Tip	73.15 (240)	35.05 (115)	27.1 (89-0)	298.45 to 393.70 (11.75 to 15.5)	Base-A-C-D-D-Tip
45.72 (150)	Base-B-C-D-Tip	76.20 (250)	38.10 (125)	30.2 (99-0)	311.15 to 406.40 (12.25 to 16.0)	Base-B-C-D-D-Tip
48.77 (160)	Base-A-B-C-D-Tip					
51.82 (170)	Base-B-D-D-Tip					
54.86 (180)	Base-C-D-D-Tip					
57.91 (190)	Base-A-C-D-D-Tip					
60.96 (200)	Base-B-C-D-D-Tip					

* When erecting boom, adjust mid-point turnbuckles to limit mid-point deflection within specified mid-point deflection range.

Base = 7.62m (25') Tip = 7.62m (25') Inserts: A = 3.05m (10'); B = 6.10m (20'); C = 9.14m (30'); D = 15.24m (50')

● 10.67 M (35FT.) TIP SECTION

Boom Length M (Ft.)	Boom Arrangement	Boom Length M (Ft.)	Approximate Mid-Point Connection Up Boom from Boom Foot Pin			
			M (Ft.)	Adjust Mid-Point Rope Length Q to Q Pin, to		
				M (Ft.-In.)	*Mid-Point Deflection Range (Min. and Max.)	
				MM (In.)		
30.48 (100)	Base-A-C-Top					
33.53 (110)	Base-B-C-Tip	64.01 (210)	32.00 (105)	24.2 (79-6)	266.70 to 342.90 (10.5 to 13.5)	Base-D-C-B-D-Tip
36.58 (120)	Base-A-B-C-Tip	67.06 (220)	32.00 (105)	24.1 (78-11)	273.05 to 361.95 (10.75 to 14.25)	Base-A-B-D-C-D-Tip
39.62 (130)	Base-D-B-Tip	70.10 (230)	38.10 (125)	30.1 (98-8)	292.10 to 381.00 (11.5 to 15.0)	Base-D-D-B-D-Tip
42.67 (140)	Base-C-D-Tip	73.15 (240)	38.10 (125)	30.1 (98-8)	298.45 to 393.70 (11.75 to 15.5)	Base-D-D-C-D-Tip
45.72 (150)	Base-A-C-D-Tip	76.20 (250)	35.05 (115)	27.3 (89-6)	311.15 to 406.40 (12.25 to 16.0)	Base-A-C-D-D-D-Tip
48.77 (160)	Base-B-C-D-Tip	79.25 (260)	38.10 (125)	30.1 (98-8)	330.20 to 431.80 (13.0 to 17.0)	Base-B-C-D-D-D-Tip
51.82 (170)	Base-A-B-C-D-Tip	82.30 (270)	41.15 (135)	33.2 (108-11)	342.90 to 444.50 (13.5 to 17.5)	Base-A-B-C-D-D-D-Tip
54.86 (180)	Base-B-D-D-Tip					
57.91 (190)	Base-C-D-D-Tip					
60.96 (200)	Base-A-C-D-D-Tip					

* When erecting boom, adjust mid-point turnbuckles to limit mid-point deflection within specified mid-point deflection range.

Base = 7.62m (25') Tip = 10.67m (35') Inserts: A = 3.05m (10'); B = 6.10m (20'); C = 9.14m (30'); D = 15.24m (50')

● 4.57 M (15FT.) HAMMERHEAD TIP

Boom Length M (Ft.)	Boom Arrangement
30.48 (100)	Base-A-B-C-TIP
33.53 (110)	Base-B-D-TIP
36.58 (120)	Base-C-D-TIP
39.62 (130)	Base-A-C-D-TIP
42.67 (140)	Base-B-C-D-TIP
45.72 (150)	Base-A-B-C-D-TIP
48.77 (160)	Base-B-D-D-TIP
51.82 (170)	Base-C-D-D-TIP
54.86 (180)	Base-A-C-D-D-TIP

Base = 7.62m (25') TIP = 4.57m (15')
 Inserts: A=3.05m (10'); B=6.10m (20'); C=9.14m (30'); D=15.24m (50')

WARNING: When assembling boom inserts, do not cantilever more than 18.29 m (60') of inserts past point of pendant rope attachment to boom. Relocate point of attachment out on boom as additional inserts are added.

P&H 9125-TC

NOTE: In furtherance of 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.

Licensed by HARNISCHFEGER INTERNATIONAL CORPORATION
Milwaukee, Wisconsin, U.S.A.



CONSTRUCTION MACHINERY DIVISION

Tokyo Head Office:

Tekko Bldg.,

No. 8-2, 1-chome, Marunouchi, Chiyoda-ku, Tokyo, Japan

Phone: Tokyo (03) 218-7111

Cable: "KOBESTEEL TOKYO"

Telex: No. 222-3601 (KOBESTEEL TOK)

Construction Machinery Plant:

123, Fukuda, Okubo-cho, Akashi-city, Japan

Phone: Akashi (078) 936-1331

Cable: "KOBESTEEL AKA"

Telex: No. 5628944 (KOBESTL J)

Address Inquiries to: