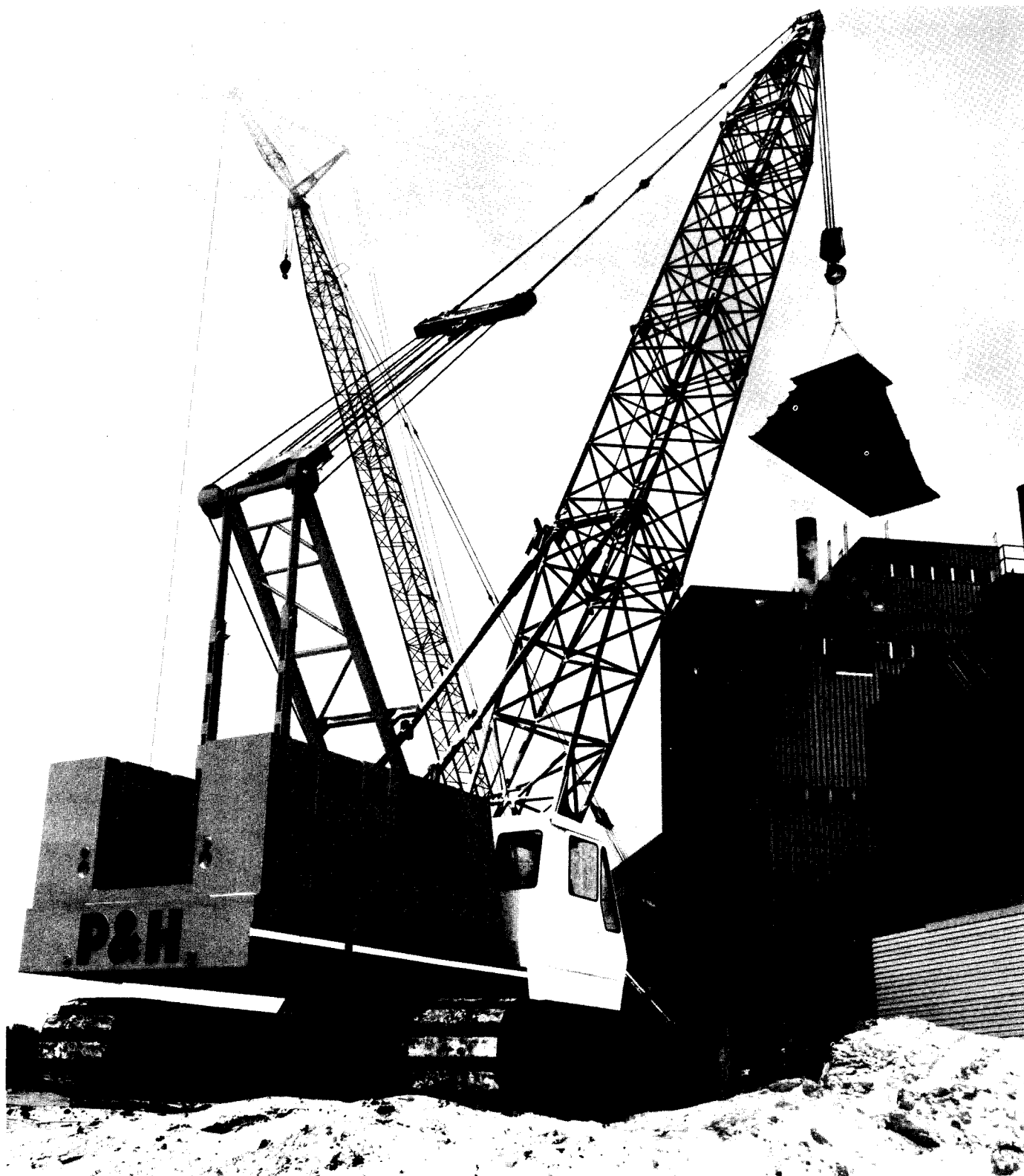


# P&H<sup>®</sup> 5100

## 100-ton Crawler Crane



- Hydraulically Retractable Crawlers
- Torque Converter Transmission
- Longest Boom in Class
- Hydrostatic Propel
- Short Lever Controls
- Super-Quiet Modular Cab

**Specifications**

# Specifications

## BOOM



Boom is of open throat, lattice construction, fabricated from round tubular 100,000 PSI yield strength alloy steel chord members, and reinforced with contour-cut tubular lacings. Sections are pin connected and furnished with appropriate load line guide rollers and pin connected 1.375" (34.9mm) dia. boom pendants. Maximum cross-section of 3.5" (89mm) O.D. chord members is 62" x 62" (1.575M x 1.575M).

50' (15.2m) basic boom consists of the base and tip sections.

**BASE SECTION:** 25' (7.6m) long tapered section with pin connected feet on 62" (1.575m) centers. Boom angle indicator (pendulum type) is mounted on leg adjacent to operator's cab.

**TIP SECTION:** 25' (7.6m) long tapered section has an open throat and five offset boom point sheaves, 18.625" (473mm) P.D. with roller bearings for .875" (22mm) hoist rope (21.3:1 rope ratio).

**BOOM INSERT SECTIONS (OPTIONAL):** Available in 10' (3m), 20' (6m), 30' (9m) and 50' (15.2m) lengths. Boom is extendible to 230' (70m).

**JIB (OPTIONAL):** Jib is of open throat, lattice construction, fabricated from round tubular alloy steel chord members and reinforced with contour-cut tubular lacings. Sections are pin connected. Furnished with compression strut and appropriate front and back stay pendants of .75" (19mm) 6x25 E.I.P.S. I.W.R.C. rope. Maximum cross-section of 1.75" (44mm) O.D. chord members is 24" x 22" (609mm x 558mm).

20' (6m) basic jib consists of 10' (3m) long tapered lattice base section and a 10' (3m) long tapered tip section with an open throat and a single 18.625" P.D. point sheave on roller bearings for .875" (22mm) jib hoist rope (21.3:1 rope ratio). Anchor provided at tip for 2 part hoist rope.

**JIB INSERT SECTIONS (OPTIONAL):** Available in 10' (3m) and 20' (6m) lengths. Jib is extendible to 60' (18.2m).

**BOOM POINT EXTENSION (OPTIONAL):** A short jib with a single 18.625" (473mm) P.D. sheave on roller bearings for .875" (22mm) jib hoist rope (21.3:1 rope ratio). Anchor provided at tip for 2 part hoist rope.

**BOOM POINT SHEAVE GUARD (OPTIONAL):** Roller type.

**BOOM BACKSTOPS:** Dual lever type, with spring-loaded shock absorber ends.

**BOOM HOIST KICKOUT:** Restricts raising boom at angles greater than recommended.

**BOOM ANGLE INDICATOR:** Mechanical pendulum type mounted on boom base section. Electronic type is optional.

**BOOM MIDPOINT SUSPENSION PENDANTS (OPTIONAL):** Required only for the 230' (70m) long boom.

**BOOM AND JIB ERECTION:** Maximum boom combinations that can be self-erected.

Position of Boom	Two Counterweights (61,000 lbs.) 27,670 Kg.	One Counterweight (30,500 lbs.) 13,835 Kg.
Over Front with Crawlers Blocked	230' (70m) Boom or 210' (64m) Boom and 20-60' (6-18.2m) Jib	170' (51.8m) Boom or 140' (42.6m) Boom and 20-60' (6-18.2m) Jib
Over End or Side with Crawlers Extended	200' (61m) Boom or 180' (55m) Boom and 20-60' (6-18.2m) Jib	170' (51.8m) Boom or 130' (39.6m) Boom and 20-60' (6-18.2m) Jib
Over Side with Crawlers Retracted		140' (42.6m) Boom or 100' (30.5m) Boom and 20-60' (6-18.2m) Jib

## HOOK BLOCKS (OPTIONAL):

BLOCK CAPACITY	SHEAVES	WIRE ROPE SIZE INCHES	RATIO ROPE TO SHEAVE	JOHNSON BLOCK WEIGHT
24,000 lb. (10,886 kg.)	WEIGHTED HOOK WITH SWIVEL			451 lb. (205 kg.)
60,000 lb. (27,216 kg.)	1	.875	16.143:1	593 lb. (269 kg.)
140,000 lb. (63,504 kg.)	3	.875	18.429:1	1268 lb. (575 kg.)
200,000 lb. (90,720 kg.)	5	.875	18.429:1	1887 lb. (856 kg.)

## UPPERSTRUCTURE



**FRAME AND TRANSMISSION:** All welded frame and integral sealed "powerbox" transmission case constructed of heavy, high strength steel plate is precision machined for proper alignment of all components. Transmission shaft mountings are line bored to insure precise alignment. Involute splined shafts turn in roller and ball bearings. Hardened gears and roller chains are sealed and splash lubricated in oil tight "powerbox" for long trouble-free operation. Load drums are mounted above transmission on "powerbox" side frames.

**MACHINERY CAB:** Low profile, steel construction with access panels on both sides and rear to machinery. No lines pass through cab. Machinery is in compact arrangement, easy to maintain and repair. Deck covered with non-skid paint. Roof top access ladder. Counterweights attach to rear of cab.

**GANTRY:** Two position, telescopic gantry supports boom suspension and is raised and lowered by boom hoist ropes.

**BOOM HOIST SPREADERS:** Lower spreader assembly is pinned to gantry and contains 6 sheaves 12.75" (324mm) P.D. with roller bearings for 10-part .75" (19mm) dia. wire rope boom hoist reeving to upper spreader. (17:1 rope ratio.)

Upper spreader assembly serves as connection for boom suspension pendants. Contains 6 sheaves 12.75" (324mm) P.D. with roller bearings for 10-part boom hoist reeving.

**COUNTERWEIGHTS:** One or two piece, located behind rear of machinery cab, bolt connected with shear ledge support. Each piece is 30,500 lbs. (13,835 Kg). Quickly installed or removed by use of rope pendants from gantry. One piece is standard, second piece is optional as crane attachment!

**OPERATORS CAB:** Environmental, modular type isolated from machinery cab, detachable for transportation. Rubber mounted and foam insulated for sound suppression. Full vision cab has safety glass in all windows; sliding door, tilt-back ceiling window and self-storing front window. Seven-way adjustable seat has cushion head and armrests. Standard equipment includes insulated floor mat, electric windshield wipers, (front and top windows) dome light, signal horn, circular level, gauge light dimmer switch, coat hanger, circuit breakers for electrical protection and quick disconnects for hydraulic and electrical connections. All wiring is coded for easy servicing. Optional equipment includes heater, defroster, fire extinguisher, catwalks, air conditioner, elevated cab platform, seat belt, drum mirror and tool kit.

DBA ratings in cab —	Door Closed	Door Open
Engine at low idle —	61.0	67.5
Engine at high idle —	74.0	82.0



**CONTROLS:** In front of operator are foot pedals for throttle, front and rear drum brakes. Drum brake pedals are short stroke and power-assisted. Console mounted short stroke levers are for front and rear drum controls and boom hoist control. Move lever backward to raise load (or boom) — move forward to lower load (or boom). Front drum turn indicator is located on lever (optional rear drive turn indicator is also available.) A signal horn button is mounted on the boom hoist lever.

At operators left are console mounted swing control lever and optional third drum control lever. A twist grip throttle control as well as a swing brake control switch are located on the swing lever. Move lever forward to swing

left — move backward to swing right. Console mounted equipment includes hourmeter, optional tachometer and switches for ignition, cold weather starting aid, panel light dimmer, engine clutch (with signal light), boom hoist override, rear drum pawl, front drum pawl, rear drum holding brake and front drum holding brake. Other switches and gauges located above and alongside left side window include windshield wipers (top and front), heater (opt.), defroster fan (opt.), overhoist safety light and buzzer (opt.), engine fault warning light and buzzer (opt.), engine oil pressure gauge, water temperature gauge, voltmeter, fuel gauge, torque converter oil temperature gauge, converter charge pressure gauge and hydraulic system pressure gauge. Gauges have both English and Metric scales and international symbols.

On the left side console wall behind the operator is the electrical system circuit breaker panel protecting the various upper circuits. Mounted on the lower right side of operators seat are the propel control joystick and the propel holding brake switch. Forward or backward movement of the joystick controls speed and direction of both crawlers. Movement to right or left controls steering (both skid and counter-rotational steering.)

**HYDRAULIC SYSTEM:** Full flow hydraulic system provides power to front and rear drum clutches and boom hoist brakes and clutches. Front and rear drum brakes are power-assisted providing smooth, positive feel (similar to power brakes on automobiles). Full flow system operates at 1500 psi (105 Kg/cm) line pressure. Response is instant, positive and smooth. Pumped fluid is filtered, stored in an accumulator under pressure, cooled in 15 gal. (57 liter) reservoir and filtered again before returning to pump.



**POWER PLANT:**

**ENGINE:**

Make Cummins  
 Model VT-555  
 Type Diesel  
 No. of Cylinders 8  
 Bore x Stroke, In. 4.625 x 4.125  
 mm 117.5 x 104.8  
 Displacement, In.<sup>3</sup> 555  
 liters 9.1  
 Cycles 4  
 Air Induction Turbo-Charged

**TRANSMISSION:**

Make Twin Disc  
 Model 4-SDO-1622-1, type 4-MS305  
 Type — Torque converter, stationary housing type with integral drives for propel, control and converter charging pumps. Has dump valve as disconnect clutch.

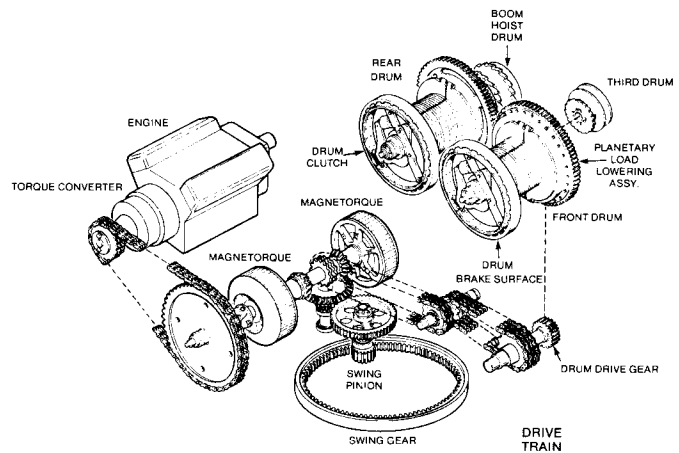
**RATINGS:**

NET HP @ RPM 188 @ 3000  
 (Flywheel)  
 Net HP @ RPM 133 @ 1800  
 (Converter Output Shaft)  
 Altitude Range 0-7500' (0-2286 M)  
 Temp. Range in F. 30° to 115° w/o starting aid  
 (C.) (-1.1° to 46°)

**ACCESSORIES:**

**Cooling Radiator** Liquid, recirculating bypass  
 Tube and fin type, thermostat controlled, rubber mounted  
**Fan** 8 blade, 26 inch (660 mm) diameter suction type  
**Starting** 24 volt motor  
 Cold weather starting aid  
**Electrical System** 24 volt 50 amp. alternator and 2-215 amp. hr. @ 20 hour rate batteries, 12 volt series connected

**Fuel Tank** 100 gal. (379 liters). Meets FHWA requirements, siphon-proof.  
**Air Cleaner** Panel type, two stage dry  
**Lube oil filter** — Remote mounted - replaceable. Full flow and by-pass.  
**Fuel filter** — Dual spin-on - replaceable.  
**Lube oil capacity** — Engine - 5 gallons (19 liters). Filter - 2.9 gallons (11 liters).  
**Coolant capacity** — Engine - 4 gallons (15.1 liters). Radiator 5.95 gallons (21.7 liters).  
**Converter charging hydraulic system** — Gear type pump charges converter. Oil to water heater exchanger cools fluid. Filtered with full flow pressure filters with replaceable paper elements. Reservoir holds 25 gals. (95 L).  
**Propel pumps** — All driven from heavy duty 2-station pump drive. Propel pumps — two variable displacement piston type pumps, one for each crawler drive.  
**Propel (crawler) drive** — Closed loop system. Maximum pressure rating 5500 PSI (387 kg/cm<sup>2</sup>). Oil to air heat exchanger cools fluid. Filtered with full flow pressure filters with replaceable paper elements. Reservoir with cool weather by-pass holds 25 gal. (94 L) to provide make-up oil.



**LOAD HOIST SYSTEM**



Independent work-motion system consisting of two drums in tandem, powered by enclosed chain transmission and gearing from engine driven torque converter. Front drum underwinds and rear drum overwinds. Each drum is a one-piece fabrication consisting of brake/clutch drum (left) load drum (center) and planetary lowering (or optional brake) drum (right) mounted on a drum shaft and supported by grease lubricated roller bearings.

**CRANE LOAD DRUMS (FRONT & REAR):** 18.375 (467 mm) P.D. x 13.62" (346 mm) long Lebus style grooved lagging bolted to drum. For .875" (22 mm) dia. wire rope (21:1 rope ratio). Rope capacity is 635' (193.5 M) storage, 526' (160.3 M) working length. Supplied with 230' (70 M) or 3 parts of wire rope for basic boom.

**CLAMSHELL LOAD DRUMS (FRONT & REAR):** 18.375" (467 mm) P.D. x 13.875" (352 mm) long spiral grooved lagging bolted to drum. For .875" (22 mm) dia. wire rope (21:1 rope ratio). First layer rope capacity is 62' (18.9 M). Supplied with 165' (50.3 M) closing line and 135' (41.1 M) holding line for basic boom.

**DRAGLINE LOAD DRUMS (FRONT):** 18.5" (470 mm) P.D. x 13.875 (352 mm) long spiral grooved lagging bolted to drum. For 1.0" (25 mm) dia. wire rope (18.5:1 rope ratio). First layer rope capacity is 55' (16.8 M). Supplied with 70' (21.3 M) digging line for basic boom. In-haul max. speed is 166 FPM (50.6 MPM), available line pull is 23,653 lbs. (10, 726 kg.).

**(REAR):** 18.375" (467 mm) P.D. x 13.875" (352 mm) long spiral grooved lagging bolted to drum. For .875" (22 mm) dia. wire rope (21:1 rope ratio). First layer rope capacity is 62' (18.9 M). Supplied with 130' (39.6 M) hoist line for basic boom.



**DRUM CLUTCHES:** 28" (711 mm) dia. x 4" (102 mm) wide, internal expanding full band type, involute splined on shaft. Hydraulically actuated by clutch lever.



**DRUM BRAKES:** 32.5" (825 mm) dia. x 5" (127 mm) wide, external contracting full-wrapped band type, automatic safety brake hydraulically set with additional spring set-hydraulically released lock actuated by foot pedal. Hydraulically controlled safety pawl for locking drum.



**PLANETARY POWER LOAD LOWERING:** Rapid, controlled safe lowering through reverse planetary gearing in drum using engine power. 32.5" (825 mm) dia. x 5" (127 mm) wide, external contracting full-wrapped band brake engages planetary gears.

**DUAL BRAKES (OPTIONAL):** For duty cycle work (free-fall loads). Replaces planetary power load lowering on either drum.

**DRUM ROTATION INDICATORS (FRONT STD. — REAR OPTIONAL):** Clutch control lever handles pulsate per drum revolution, in either direction.

LOAD DRUM HOIST PERFORMANCE							
LINE PULL		MAXIMUM LINE SPEED					
Lbs.	Kg.	1st Layer FPM MPM		3rd Layer FPM MPM		6th Layer FPM MPM	
5,000	2,268	165	50.3	193	58.8	235	71.6
10,000	4,536	165	50.3	193	58.8	235	71.6
15,000	6,804	165	50.3	193	58.8	235	71.6
20,000 Front	9,072	165	50.3	193	58.9	205	62.5
20,000 Rear	9,072	165	50.3	190	57.9	198	60.4

**FRONT DRUM** — Available Line Pull 23,814 lb. (10,802 Kg.)

**REAR DRUM** — Available Line Pull 23,110 lb. (10,483 Kg.)

**TAGLINE WINDER (Supplied with Clamshell Attachment):** McCaffrey Rud-O-Matic, spring type #1248, with 70' (21.3 M) .375" (9 mm) tagline wire rope.

**FAIRLEAD (Supplied with Dragline Attachment):** Two sheave swivel type, with 2 front guide rollers, roller bearings, dirt guard. Sheaves are 15.5" (394 mm) P.D. for 1.0" (25 mm) digging line (15.5:1 rope ratio).



**THIRD DRUM (OPTIONAL):** 16.125" (409 mm) P.D. x 6" (152 mm) long for .625" (16 mm) dia. wire rope (25.8:1 rope ratio). Rope capacity is 263' (80 M) storage. 212' (64.5 M) working length. Rope not supplied. Drum mounts on extension of drum shaft to left of front drum.

Does not interfere with any machine function or attachment. Design and control similar to load drums.



**CLUTCH:** 23" (584 mm) dia. x 4" (102 mm) wide internal expanding full band type, involute splined on shaft. Hydraulically actuated by clutch lever.



**BRAKE:** 25.5" (648 mm) dia. x 3" (76 mm) wide external contracting full-wrapped band type. Hydraulically actuated by foot pedal.

THIRD DRUM HOIST PERFORMANCE						
	1st Layer		3rd Layer		5th Layer	
	Lbs.	Kg.	Lbs.	Kg.	Lbs.	Kg.
Available Hoisting Line Pull*	27,130	12,306	23,800	10,796	21,210	9,621
	FPM	MPM	FPM	MPM	FPM	MPM
Available Hoisting Line Speed	145	44.2	165	50.3	185	56.4

\*Permissible Line Pull is 8,000 Lbs. (3,629 Kg) Per Part of Line for .625" (16 mm) dia. wire rope.

## BOOM HOIST SYSTEM



An independent work-motion system — driven by and supported by rear load drum shaft. Controlled raising and lowering of boom with engine power — raising through clutch engagement, lowering through low speed planetary gear drive, with automatic safety pawls always engaged during raising, lowering, or holding operations.

**BOOM HOIST DRUM:** Single drum is a one-piece fabrication consisting of planetary hub, load drum center and brake/clutch drum. The drum as well as planetary spider have ratchet teeth which engaged the locking pawls.

Drum is 13.75" (349 mm) P.D. x 7" (178 mm) long, grooved for .75" (19 mm) dia. wire rope (18.33:1 rope ratio). Rope capacity is 400' (122 M) storage, 333' (101 M) working length. Supplied with 465' (142 M) or 10 parts of wire rope.



**DRUM CLUTCH:** 23" (584 mm) dia. x 4" (102 mm) wide, internal expanding full band type, involute splined on shaft. Hydraulically actuated by boom hoist lever being moved rearward.



**DRUM BRAKE (Lowering):** 25.5" (647 mm) dia. x 3" (76 mm) wide, external contracting, full wrapped band type automatic safety brake, spring-set — hydraulically released, actuated by boom hoist lever being returned to neutral position.



**PLANETARY BRAKE (Lowering):** 25.5" (647 mm) dia. x 3" (76 mm) wide, external contracting, full wrapped band type. Hydraulically set-spring released, actuated by forward movement of boom hoist lever. As drum brake is released hydraulically, hoist pawl is automatically released, planetary pawl is automatically engaged and planetary brake is set. As the brake is set, planetary gears reverse drum rotation, lowering the boom by engine power through the planetary.

BOOM HOIST DRUM PERFORMANCE						
MAXIMUM LINE SPEED	1st LAYER FPM MPM		4th LAYER FPM MPM		7th LAYER FPM MPM	
HOISTING*	123	37.5	159	48.5	195	59.4
LOWERING	80	24.4	100	30.5	128	39.0

\*Based on engine full load HP at governed RPM.

## SWING SYSTEM



"Magnetorque®" Swing Drive is an independent work-motion system and consists of driving and driven members coupled by magnetic force through an air gap. Driving member is chain driven from rear of engine. Driven member drives swing gear through bevel and spur gears. Lever controlled excitation.

**COUPLING:** 2-26" (660 mm) dia. x 6.25" (159 mm) wide, electro-magnetic "Magnetorque®". Powered by engine driven alternator.



**BRAKE:** 18" (457 mm) dia. x 2.5" (64 mm) wide, band type, external contracting. Hydraulic release, spring set.

**SWING GEAR:** Internal cut teeth, 48.82" (1240 mm) P.D.

SWING PERFORMANCE		
Swing Speed	Maximum rpm	4.79

**FASTENING TO UNDERCARRIAGE:** P&H Triple row roller bearing 63.84" (1620 mm) O.D. Swing Circle® with swing gear integral. Bolted to both upperstructure and undercarriage.

**HOUSE LOCK:** Two position (front and rear) pin-in-hole lock manually engaged is standard. A positive 360° position lock is optional.

## UNDERCARRIAGE



**CAR BODY:** Car body of Alloy Steel welded construction with double axle housing integral and hydraulic swivel for crawler drive. Crawler frames shear mounted and bolted to end of extendible axles.

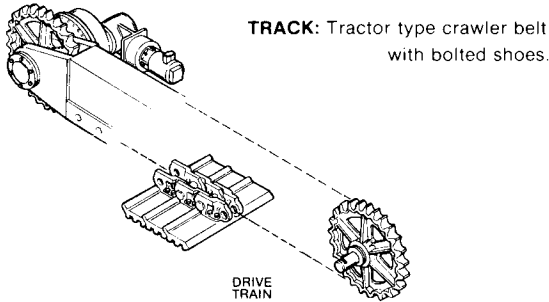
### CRAWLER:

Crawler side frames are extendible and retractable by means of hydraulic cylinders to convert from wide track operating condition to a narrower overall width for travel and transportation. Two banks of valves, one on each end of the car body, control the extension cylinders to each side frame. A valve in the upper diverts fluid from the upper control system to the extension cylinders. Jacks are not needed to extend or retract crawlers. Crawlers designed with quick hydraulic line disconnect feature for individual removal as a unit from axles. Crawler belt tension maintained by shims between track adjusting bearing block and frame. 13 lower rollers in each frame, with double rolling surfaces, 11.5" (279 mm) dia.

**CRAWLER DRIVE:** Independent hydraulic propel drive built into each crawler side frame. Each drive consists of a piston type motor propelling a driving sprocket (wheel) through a planetary gear box. Self-contained system eliminates gear and chain drives in carbody and shaft extensions when axles are extended.

**CRAWLER BRAKES:** Spring set, hydraulically released parking brakes are built into each propel drive.

**STEERING MECHANISM:** The hydraulic propel system provides both differential speed steering (driving one track faster than the other) and counter-rotating steering (driving each track in opposite direction) with single joystick control.



**TRACK:** Tractor type crawler belt with bolted shoes.

**DRIVE TRAIN**

**CRAWLER SHOES:** Total number 118 both sides. 36" (914 mm) flat forged (std.). 42" (1067 mm) flat forged optional extra.

**OPTIONAL EQUIPMENT:** Load moment device, load indicating device, anti-two block device, spreader control, magnet and controls, two-speed hoist, hydraulic boom foot pin assembly, automatic brakes, dead-man controls, light and generating package (either automotive or 110V-AC), dragline bucket, and clamshell bucket.

### WEIGHTS:

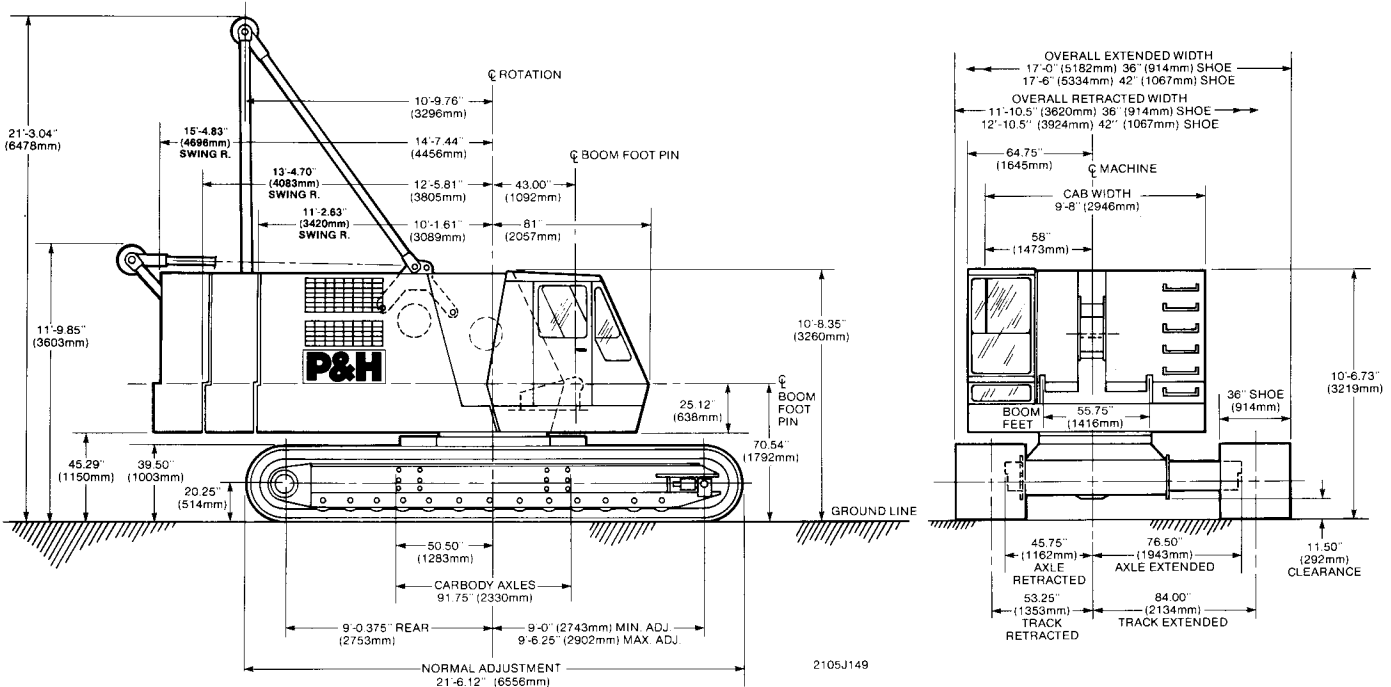
Basic machine, with 50 gallons fuel,		
two counterweights, 36" shoes, 50		
foot boom, 3 part hoist rope, 30 ton		
hook block	172,786 lbs.	(78,376 Kg)
Basic machine with one counterweight	142,286 lbs.	(64,541 Kg)
Upper structure (basic machine) with 50		
gallons fuel, 3 part hoist rope, gantry,		
backstops, cab but less counterweight	39,389 lbs.	(17,867 Kg)
Lower machine with crawlers, 36" shoes	65,286 lbs.	(29,614 Kg)
Carbody with Swing Circle*, cylinders,		
axles	19,010 lbs.	(8,623 Kg)
Crawler side frame with 36" shoes	23,813 lbs.	(10,802 Kg)
Crawler side frame with 42" shoes	28,238 lbs.	(12,809 Kg)
Counterweight (each)	30,500 lbs.	(13,835 Kg)
Boom Weights:		
Boom Base with pins	2,700 lbs.	(1,225 Kg)
Boom tip with pendants, pins	3,161 lbs.	(1,434 Kg)
10 foot insert with pendants, pins	.960 lbs.	(435 Kg)
20 foot insert with pendants, pins	1,480 lbs.	(671 Kg)
30 foot insert with pendants, pins	2,010 lbs.	(912 Kg)
50 foot insert with pendants, pins	3,000 lbs.	(1,361 Kg)
Jib weights:		
Jib Base with pins	.330 lbs.	(150 Kg)
Jib Tip with pins	.404 lbs.	(183 Kg)
Jib Strut with pins	.415 lbs.	(188 Kg)
10 foot insert with pins	.178 lbs.	(81 Kg)
20 foot insert with pins	.320 lbs.	(145 Kg)

### AVERAGE GROUND BEARING PRESSURE

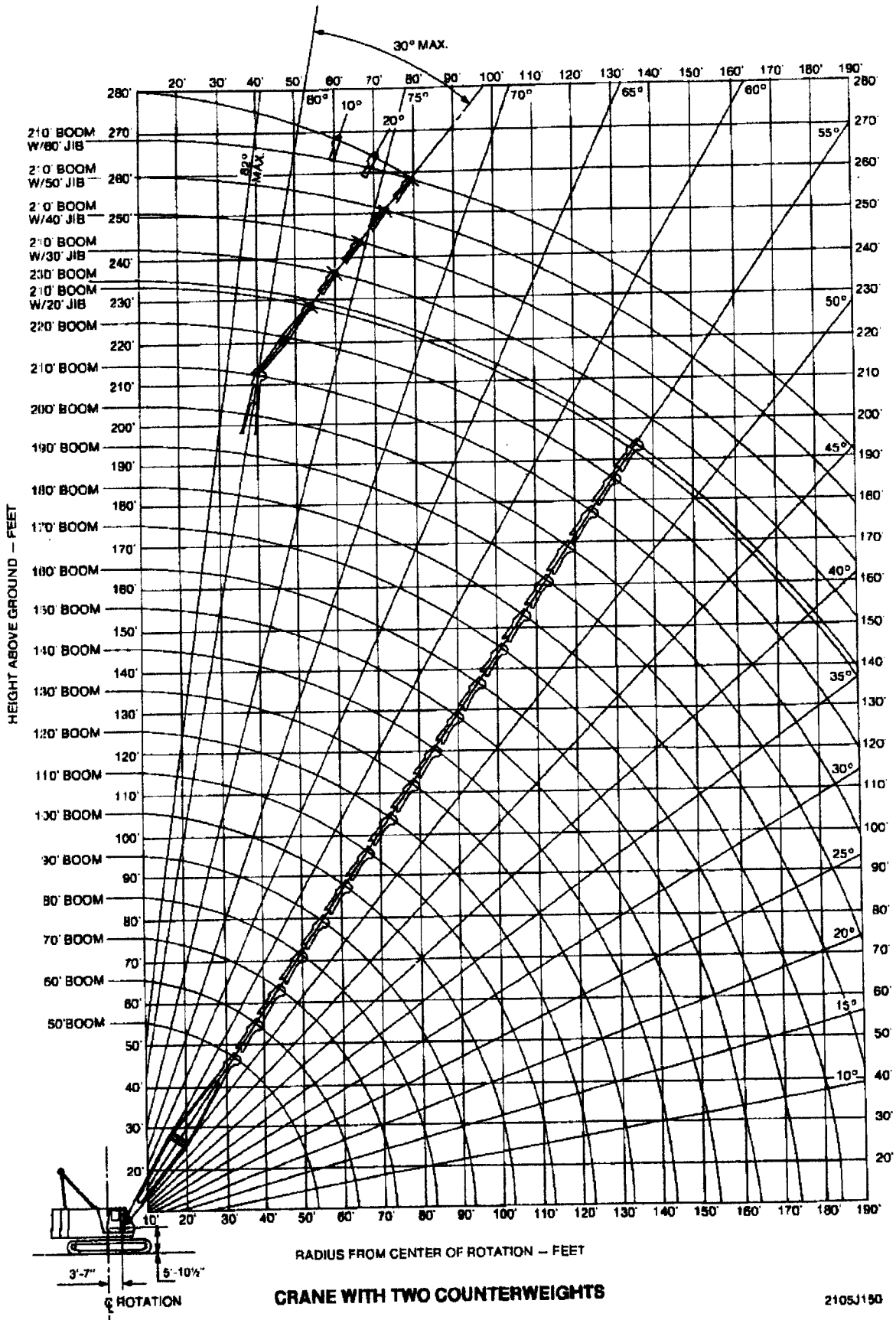
BASIC MACHINE:	PSI	Kg/cm <sup>2</sup>
with 2 counterweights, 36" shoes	10.24	0.72
42" shoes	9.23	0.65
with 1 counterweight, 36" shoes	8.43	0.59
42" shoes	7.68	0.54

**TRAVEL SPEED:** 1.09 mph (1.75 km/h) approximate.

Maximum grade recommended for travel is 20%.



# working ranges



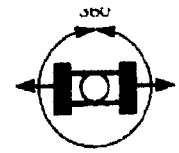


two counterweights

# RATINGS LIFT CRANE SERVICE

62" x 62" boom

crawlers fully extended



75% stability					rated boom loads in pounds									
Boom Length (ft)	Load Radius (ft)	Boom Angle Δ°	Boom Point Elev (ft)	360° Rated Load (lbs)	Boom Length (ft)	Load Radius (ft)	Boom Angle Δ°	Boom Point Elev (ft)	360° Rated Load (lbs)	Boom Length (ft)	Load Radius (ft)	Boom Angle Δ°	Boom Point Elev (ft)	360° Rated Load (lbs)
50	11	82	56.9	200,000	110	20	82	116.2	100,000	150	30	80	155.1	60,000
	12	81	56.7	200,000		25	79	115.4	79,900		35	78	154.2	48,600
	15	78	56.2	160,000		30	77	114.4	61,300		40	76	153.1	40,300
	20	72	54.9	113,900		35	74	113.1	49,400		45	74	151.8	34,300
	25	66	53.0	80,800		40	71	111.5	41,200		50	72	150.3	29,700
	30	59	50.5	62,300		45	68	109.7	35,100		60	68	146.8	23,000
	35	52	47.0	50,400		50	65	107.6	30,500		70	64	142.8	18,900
	40	44	42.5	42,300		60	60	102.4	23,800		80	60	137.5	15,500
	45	35	36.3	36,200		70	54	96.4	19,700		90	56	131.2	13,000
	50	23	26.8	31,600		80	47	88.0	16,300		100	51	123.7	11,000
60	15	80	66.4	159,500	90	39	77.3	13,700	110	46	114.7	9,300		
	20	75	65.3	113,800	100	30	62.6	11,700	120	40	103.8	8,000		
	25	70	62.8	80,700	110	17	38.8	10,100	130	33	90.2	6,900		
	30	65	61.8	62,200	120	20	80	125.6	79,800	140	26	72.3	6,000	
	35	59	59.1	50,300		30	78	124.6	61,200	150	14	44.0	5,200	
	40	53	55.8	42,100		35	75	123.4	49,300	160	30	81	165.3	60,000
	45	47	51.6	36,000		40	73	122.0	41,100		35	79	164.4	48,400
50	40	46.3	31,400	45		70	120.4	35,000	40		77	163.4	40,200	
60	21	28.6	24,700	50		68	118.5	30,300	45		75	162.2	34,100	
70	15	81	76.5	159,200		60	62	113.9	23,700		50	73	160.8	29,400
	20	77	75.6	113,700	70	57	108.5	19,600	60		70	157.5	22,700	
	25	73	74.3	80,600	80	51	101.3	16,200	70		66	153.8	18,600	
	30	68	72.6	62,100	90	45	92.3	13,600	80	62	148.9	15,300		
	35	64	70.5	50,200	100	38	80.7	11,600	90	58	143.2	12,700		
	40	59	67.8	42,000	110	29	65.2	10,000	100	54	136.4	10,700		
	45	54	64.5	35,900	120	16	40.2	8,600	110	49	128.3	9,000		
80	20	79	85.8	113,600	130	25	81	135.7	79,600	120	44	118.8	7,700	
	25	75	84.7	80,500		30	79	134.8	61,000	130	39	107.3	6,600	
	30	71	83.2	61,900		35	76	133.7	49,000	140	32	93.1	5,700	
	35	67	81.4	50,000		40	74	132.5	40,900	150	25	74.5	4,900	
	40	64	79.1	41,900		45	72	130.9	34,800	160	14	45.2	4,200	
	45	59	76.4	35,800		50	69	129.2	30,100	170	30	81	175.4	60,000
	50	55	73.2	31,100		60	65	125.0	23,400		35	80	174.6	48,200
	60	46	64.9	24,500		70	60	120.2	19,300		40	78	173.6	40,100
	70	35	54.0	20,300		80	55	113.8	15,900		45	76	172.5	33,900
	80	20	34.3	16,900		90	49	106.0	13,300		50	74	171.2	29,200
90	20	80	96.0	113,500	100	43	96.3	11,300	60		71	168.1	22,500	
	25	77	95.0	80,300	110	36	84.0	9,700	70		68	164.6	18,500	
	30	73	93.7	61,700	120	28	67.6	8,300	80		64	160.2	15,100	
	35	70	92.1	49,800	130	15	41.5	7,200	90		60	154.8	12,500	
	40	67	90.1	41,600	140	25	82	145.8	79,400		100	56	148.6	10,500
	45	63	87.8	35,500		30	79	145.0	60,800	110	52	141.3	8,900	
	50	59	85.1	30,900		35	77	144.0	48,800	120	47	132.8	7,500	
	60	52	78.2	24,200		40	75	142.8	40,700	130	43	122.7	6,400	
	70	44	69.8	20,100		45	73	141.4	34,600	140	37	110.7	5,500	
	80	33	57.0	16,700		50	71	139.8	29,900	150	31	95.9	4,700	
90	18	35.9	14,200	60		67	136.0	23,200	160	24	76.6	4,000		
100	20	81	106.1	100,000		70	62	131.6	19,100	170	18	46.4	3,400	
	25	78	105.2	80,100		80	58	125.8	15,700	32R549 A				
	30	75	104.1	61,600		90	53	118.9	13,200					
	35	72	102.6	49,600	100	47	110.4	11,200						
	40	69	100.9	41,500	110	41	100.1	9,500						
	45	66	98.9	35,400	120	35	87.2	8,200						
	50	63	96.5	30,700	130	27	70.0	7,100						
	60	56	90.6	24,000	140	15	42.8	6,200						
	70	49	83.6	19,900										
	80	41	73.6	16,500										
90	32	59.9	14,000											
100	17	37.4	12,000											

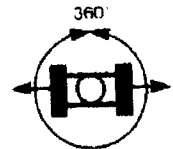
**DEDUCTION FROM RATED BOOM LOADS WHEN LIFTING OVER BOOM POINT WITH JIB ATTACHED**

JIB LENGTH	20 FT	30 FT	40 FT	50 FT	60 FT
DEDUCT — LBS	2100	2300	2800	3300	3800

**WARNING**

Do not attempt to lift more than rated load at load radius shown, or lift where no radius or load is listed, as crane may tip or collapse.

Do not attempt to lift more than rated loads shown in shaded areas — a machine failure may occur.



# RATINGS LIFT CRANE SERVICE

## 62" x 62" boom

two counterweights

crawlers fully extended

75% stability					rated boom loads in pounds										
Boom Length (ft)	Load Radius (ft)	Boom Angle Δ°	Boom Point Elev. (ft)	360° Rated Load (lbs)	Boom Length (ft)	Load Radius (ft)	Boom Angle Δ°	Boom Point Elev. (ft)	360° Rated Load (lbs)	Boom Length (ft)	Load Radius (ft)	Boom Angle Δ°	Boom Point Elev. (ft)	360° Rated Load (lbs)	
180	30	82	185.5	52,700	200	35	81	205.0	37,900	220	35	82	225.2	29,100	
	35	80	184.7	47,900		40	80	204.1	35,900		40	81	224.4	27,600	
	40	79	183.8	39,800		45	78	203.2	33,200		45	79	223.6	26,300	
	45	77	182.7	33,700		50	77	202.1	28,500		50	78	222.6	25,000	
	50	75	181.5	29,000		60	74	199.8	21,400		60	76	220.5	21,300	
	60	72	178.6	22,300		70	71	196.7	17,800		70	73	217.7	17,400	
	70	69	175.4	18,300		80	68	193.0	14,400		80	70	214.4	14,000	
	80	65	171.2	14,900		90	65	188.6	11,800		90	67	210.5	11,400	
	90	62	166.3	12,300		100	62	183.6	9,800		100	64	206.0	9,300	
	100	58	160.5	10,300		110	58	177.8	8,200		110	62	200.9	7,700	
	110	54	153.8	8,800		120	55	171.3	6,800		120	59	195.2	6,400	
	120	50	146.1	7,300		130	51	163.7	5,700		130	55	188.7	5,300	
	130	46	137.1	6,200		140	48	155.2	4,800		140	52	181.3	4,300	
	140	41	126.6	5,300		150	44	145.3	4,000		150	49	173.1	3,500	
	150	36	114.0	4,400		160	39	133.8	3,300		160	45	163.7	2,800	
	160	30	98.7	3,800		170	34	120.3	2,700		170	41	153.0	2,200	
	170	23	78.7	3,200		180	29	103.9	2,200		230	35	82	235.3	26,300
	180	13	47.5	2,800		190	22	82.6	1,700			40	81	234.6	25,300
190	35	81	194.8	40,000	210	35	82	215.1	33,200	45		80	233.7	24,600	
	40	79	194.0	39,800		40	80	214.3	31,700	50		79	232.8	23,700	
	45	78	193.0	33,500		45	79	213.4	30,400	60		76	230.8	20,900	
	50	76	191.8	28,800		50	77	212.4	28,300	70		74	228.1	17,100	
	60	73	189.1	22,000		60	75	210.1	21,400	80		71	224.9	13,700	
	70	70	186.1	18,000		70	72	207.2	17,600	90		68	221.3	11,100	
	80	67	182.1	14,600		80	69	203.7	14,200	100		66	217.0	9,100	
	90	63	177.5	12,100		90	66	199.6	11,600	110		63	212.2	7,500	
	100	60	172.2	10,000		100	63	194.9	9,600	120		60	206.8	6,100	
	110	56	166.0	8,400		110	60	189.5	8,000	130		57	200.7	5,000	
	120	53	158.9	7,100		120	57	183.3	6,600	140		54	193.8	4,100	
	130	49	150.7	6,000		130	54	176.4	5,500	150		51	186.1	3,300	
	140	45	141.3	5,000		140	50	168.5	4,600	160		48	177.5	2,600	
	150	40	130.3	4,200		150	46	159.5	3,800	170		44	167.8	1,900	
	160	35	117.2	3,500		160	42	149.2	3,100						
	170	30	101.3	2,900		170	38	137.3	2,500						
	180	23	80.7	2,400		180	33	123.4	1,900						
	190	13	48.6	1,900											

32P548-A

### DEDUCTION FROM RATED BOOM LOADS WHEN LIFTING OVER BOOM POINT WITH JIB ATTACHED

JIB LENGTH	20 FT.	30 FT.	40 FT.	50 FT.	60 FT.
DEDUCT — LBS.	2100	2300	2800	3300	3800

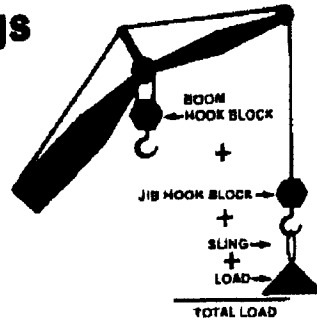
#### WARNING

Do not attempt to lift more than **rated load at load radius** shown, or lift where no radius or load is listed, as crane may tip or collapse.

Do not attempt to lift more than **rated loads shown in shaded areas** — a machine failure may occur.



# Jib ratings



## Jib ratings


The total load that can be lifted over a jib is limited by either the rated jib loads or by the rated boom loads on which the jib is mounted.


Follow these steps to determine the total load that can be lifted over the jib:

- Step 1. Measure the jib load radius. The load radius must not be longer than the longest radius in the rated boom load chart for the length of boom on which the jib is mounted.
- Step 2. Determine the load rating of the boom at the jib load radius by using the rated boom load chart for the counterweight, crawler extension, work area and length of boom (without jib) being used.
- Step 3. Determine jib rating for the length and offset of the jib from the rated jib load chart.
- Step 4. The total load that can be lifted is the lower of the two ratings determined in Steps 2 and 3.

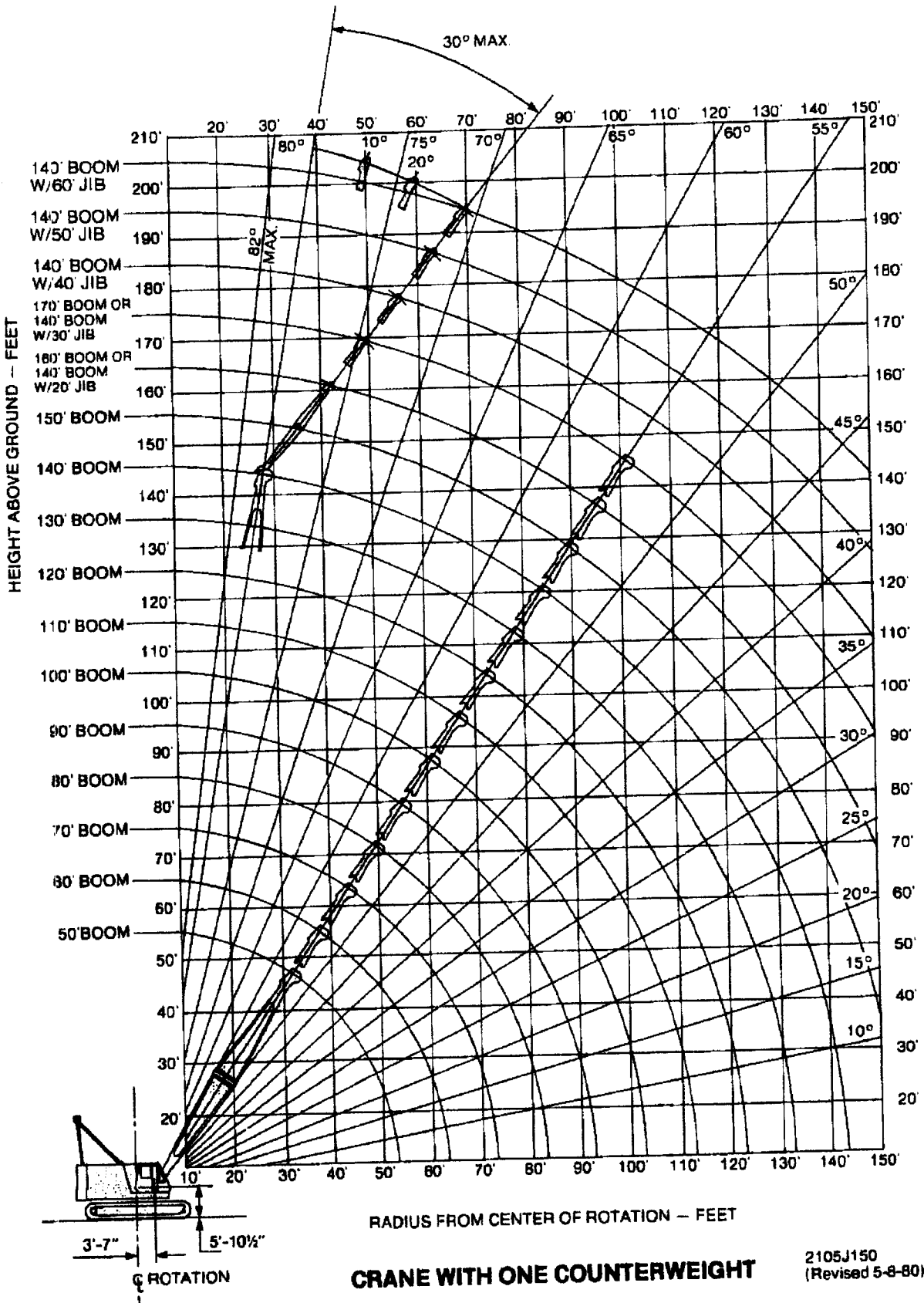
### WARNINGS

- Do not attempt to lift more with the jib (at any radius) than the rated load for the boom at that radius, as crane may tip or collapse.
- Do not attempt to lift more than rated jib loads shown in shaded areas — jib may collapse before crane tips.
- When lifting over jib point with hook block suspended from boom point, include the weight of the boom hook block as a part of the total load.

Jib Ratings For LIFT CRANE SERVICE					
rated jib loads in pounds					
Offset Angle of Jib to Boom Under Full Load	20 Foot Jib	30 foot Jib	40 Foot Jib	50 Foot Jib	60 Foot Jib
10°	22,000*	20,000	16,000	12,000	8,000
20°	16,000	14,500	12,000	9,500	7,000
30°	13,000	11,000	8,500	7,000	6,000
Standard Wire Rope — 7/8 inch dia. Type 25 *Use 2 part of line for loads above 20,000 lbs.					
Optional Wire Rope — 7/8 inch dia. Type 11 (Non-Rotating)  Use only 1 part of line. Loads not to exceed 11,800 lbs. Use of swivel is not approved with this rope.					

Jib Ratings For CONCRETE BUCKET SERVICE					
rated jib loads in pounds					
Offset Angle of Jib to Boom Under Full Load	20 Foot Jib	30 Foot Jib	40 Foot Jib	50 Foot Jib	60 Foot Jib
10°	16,000	16,000	12,800	8,600	5,400
20°	12,800	11,600	9,600	7,600	5,800
30°	10,400	8,800	6,800	5,600	4,800
Standard Wire Rope — 7/8 inch dia. Type 25 Use 1 part of line.					
Optional Wire Rope — 7/8 inch dia. Type 11 (Non-Rotating)  Use only 1 part of line. Loads not to exceed 11,800 lbs. Use of swivel is not approved with this rope.					

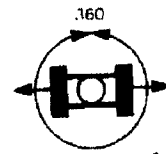
# working ranges





one counterweight

# RATINGS LIFT CRANE SERVICE 62" x 62" boom



crawlers fully extended

75% stability					rated boom loads in pounds				
Boom Length (ft)	Load Radius (ft)	Boom Angle Δ°	Boom Point Elev. (ft)	360° Rated Load (lbs)	Boom Length (ft)	Load Radius (ft)	Boom Angle Δ°	Boom Point Elev. (ft)	360° Rated Load (lbs)
50	11	82	56.9	200,000	110	20	82	116.2	75,900
	12	81	56.7	184,400		25	79	115.4	53,800
	15	78	56.2	130,000		30	77	114.4	41,100
	20	72	54.9	77,400		35	74	113.1	32,800
	25	66	53.04	54,600		40	71	111.5	27,000
	30	59	50.5	41,900		45	68	109.7	22,800
	35	52	47.0	33,700		50	66	107.9	20,200
	40	44	42.5	28,100		60	60	102.9	15,400
	45	35	36.3	23,900		70	54	96.4	12,200
	50	25	28.7	21,200		80	47	88.0	9,800
60	15	80	66.4	130,100	90	39	77.3	8,000	
	20	75	65.3	77,400	100	30	62.6	6,700	
	25	70	63.8	54,500	110	17	38.8	5,500	
	30	65	61.8	41,800	120	25	80	125.6	53,700
	35	59	59.1	33,600		30	78	124.6	40,900
	40	53	55.8	27,900		35	75	123.4	32,700
	45	47	51.6	23,700		40	73	122.0	26,900
	50	41	47.2	21,000		45	70	120.4	22,700
60	23	30.7	16,300	50		68	118.8	20,100	
70	15	81	76.5	130,100		60	63	114.3	15,300
	20	77	75.6	77,400		70	57	108.5	12,100
	25	73	74.3	54,500	80	51	101.3	9,700	
	30	68	72.6	41,700	90	45	92.3	8,000	
	35	64	70.5	33,500	100	38	80.7	6,500	
	40	59	67.8	27,800	110	29	65.2	5,500	
	45	54	64.5	23,600	120	16	40.2	4,800	
	50	50	61.2	21,000	130	25	81	135.7	53,500
	60	38	50.7	16,200		30	79	134.8	40,800
	70	21	32.5	13,000		35	76	133.7	32,500
80	20	79	85.8	77,300		40	74	132.5	26,700
	25	75	84.7	54,400		45	72	130.9	22,500
	30	71	83.2	41,600		50	70	129.5	19,900
	35	67	81.4	33,400		60	65	125.4	15,000
	40	64	79.1	27,700		70	60	120.2	11,800
	45	59	76.4	23,500		80	55	113.8	9,400
	50	56	73.8	20,800		90	49	106.0	7,600
	60	47	65.7	16,100	100	43	96.3	6,200	
	70	35	54.0	12,800	110	36	84.0	5,100	
	80	20	34.3	10,500	120	28	67.6	4,200	
90	20	80	96.0	77,200	130	15	41.5	3,400	
	25	77	95.0	54,200	140	25	82	145.8	53,400
	30	73	93.7	41,400		30	79	145.0	40,600
	35	70	92.1	33,200		35	77	144.0	32,300
	40	67	90.1	27,400		40	75	142.8	26,500
	45	63	87.8	23,200		45	73	141.4	22,300
	50	60	85.6	20,600		50	71	140.1	19,700
	60	52	78.9	15,900		60	67	136.3	14,900
	70	44	69.8	12,600		70	62	131.6	11,600
	80	33	57.0	10,300		80	58	125.8	9,300
90	18	35.9	8,500	90		53	118.9	7,500	
100	20	81	106.1	77,000	100	47	110.4	6,100	
	25	78	105.2	54,000	110	41	100.1	5,000	
	30	75	104.1	41,200	120	35	87.2	4,100	
	35	72	102.6	33,000	130	27	70.0	3,300	
	40	69	100.9	27,300	140	15	42.8	2,700	
	45	66	98.9	23,100	150	30	80	155.1	40,400
	50	63	96.9	20,400		35	78	154.2	32,000
	60	57	91.1	15,700		40	76	153.1	26,300
	70	49	83.6	12,400		45	74	151.8	22,000
	80	41	73.6	10,100		50	73	150.6	19,500
90	32	59.9	8,300	60		69	147.1	14,700	
100	17	37.4	6,900	70		64	142.8	11,400	
110	20	82	116.2	75,900		80	60	137.5	9,000
	25	79	115.4	53,800		90	56	131.2	7,300
	30	77	114.4	41,100		100	51	123.7	5,900
	35	74	113.1	32,800	110	46	114.7	4,800	
	40	71	111.5	27,000	120	40	103.8	3,900	
	45	68	109.7	22,800	130	33	90.2	3,100	
	50	66	107.9	20,200	140	26	72.3	2,500	
	60	60	102.9	15,400	150	14	44.0	1,900	
	70	54	96.4	12,200	160	30	81	165.3	40,200
	80	47	88.0	9,800		35	79	164.4	31,800
90	39	77.3	8,000	40		77	163.4	26,000	
100	30	62.6	6,700	45		76	162.4	21,800	
110	17	38.8	5,500	50		74	161.0	19,200	
120	25	80	125.6	53,700		60	70	157.8	14,400
	30	78	124.6	40,900		70	66	153.8	11,200
	35	75	123.4	32,700		80	62	148.9	8,800
	40	73	122.0	26,900		90	58	143.2	7,000
	45	70	120.4	22,700		100	54	136.4	5,600
	50	68	118.8	20,100	110	49	128.3	4,500	
	60	63	114.3	15,300	120	44	118.8	3,600	
	70	57	108.5	12,100	130	39	107.3	2,900	
	80	51	101.3	9,700	140	32	93.1	2,200	
	90	45	92.3	8,000	150	25	74.5	1,600	
130	25	81	135.7	53,500	170	30	81	175.4	40,000
	30	79	134.8	40,800		35	80	174.6	31,700
	35	76	133.7	32,500		40	78	173.6	25,900
	40	74	132.5	26,700		45	76	172.7	21,400
	45	72	130.9	22,500		50	75	171.4	19,100
	50	70	129.5	19,900		60	71	168.4	14,300
	60	65	125.4	15,000		70	68	164.6	11,000
	70	60	120.2	11,800		80	64	160.2	8,600
	80	55	113.8	9,400		90	60	154.8	6,800
	90	49	106.0	7,600		100	56	148.6	5,400
140	25	82	145.8	53,400	110	52	141.3	4,300	
	30	79	145.0	40,600	120	47	132.8	3,400	
	35	77	144.0	32,300	130	43	122.7	2,600	
	40	75	142.8	26,500	140	37	110.7	2,000	
	45	73	141.4	22,300	180	30	81	175.4	40,000
	50	71	140.1	19,700		35	80	174.6	31,700
	60	67	136.3	14,900		40	78	173.6	25,900
	70	62	131.6	11,600		45	76	172.7	21,400
	80	58	125.8	9,300		50	75	171.4	19,100
	90	53	118.9	7,500		60	71	168.4	14,300
100	47	110.4	6,100	70		68	164.6	11,000	
110	41	100.1	5,000	80		64	160.2	8,600	
120	35	87.2	4,100	90		60	154.8	6,800	
130	27	70.0	3,300	100		56	148.6	5,400	
140	15	42.8	2,700	110	52	141.3	4,300		

### DEDUCTION FROM RATED BOOM LOADS WHEN LIFTING OVER BOOM POINT WITH JIB ATTACHED

JIB LENGTH	20 FT.	30 FT.	40 FT.	50 FT.	60 FT.
DEDUCT — LBS	2100	2300	2800	3300	3800

### WARNING

Do not attempt to lift more than rated load at load radius shown, or lift where no radius or load is listed, as crane may tip or collapse.

Do not attempt to lift more than rated loads shown in shaded areas — a machine failure may



one counterweight

# RATINGS LIFT CRANE SERVICE

62" x 62" boom

crawlers retracted



75% stability						rated boom loads in pounds											
Boom Length (ft)	Load Radius (ft)	Boom Angle A°	Boom Point Elev (ft)	Rated Load (lbs)		Boom Length (ft)	Load Radius (ft)	Boom Angle A°	Boom Point Elev (ft)	Rated Load (lbs)		Boom Length (ft)	Load Radius (ft)	Boom Angle A°	Boom Point Elev (ft)	Rated Load (lbs)	
				Over Side	Over End					Over Side	Over End					Over Side	Over End
50	11	82	56.9	122,000	200,000	110	20	82	118.2	47,100	78,200	150	30	80	155.1	25,900	41,100
	12	81	56.7	104,800	184,500		25	79	115.4	34,500	54,800		35	79	154.4	21,500	32,700
	15	78	56.2	73,200	132,100		30	77	114.4	26,700	41,800		40	77	153.3	17,700	26,800
	20	72	54.9	48,100	78,800		35	74	113.1	21,600	33,400		45	75	152.0	14,800	22,500
	25	66	53.0	35,500	55,800		40	71	111.5	18,500	27,600		50	73	150.6	12,500	19,900
	30	59	50.5	27,800	42,700		45	68	109.7	15,500	23,300		60	69	147.1	9,200	15,000
	35	52	47.0	22,700	34,400		50	66	107.9	13,300	20,600		70	64	142.8	6,900	11,700
	40	44	42.5	19,600	28,600		60	60	102.9	10,000	15,900		80	60	137.5	5,200	9,300
	45	35	36.3	16,700	24,400		70	54	96.4	7,700	12,500		90	56	131.2	4,000	7,500
	50	25	28.7	14,400	21,600		80	47	88.0	6,100	10,100		100	51	123.7	3,000	6,100
60	15	80	66.4	73,100	132,200	120	25	80	125.6	34,300	54,700	160	30	81	165.3	25,700	40,900
	20	75	65.3	48,000	78,600		30	78	124.6	26,600	41,700		35	79	164.5	21,400	32,500
	25	70	63.8	35,300	55,500		35	76	123.6	21,500	33,300		40	77	163.5	17,400	26,800
	30	65	61.8	27,600	42,600		40	73	122.3	18,400	27,500		45	76	162.4	14,500	22,300
	35	59	59.1	22,500	34,200		45	71	120.7	15,400	23,200		50	74	161.0	12,200	19,700
	40	53	55.8	19,400	28,400		50	68	118.8	13,100	20,500		60	70	157.8	8,900	14,800
	45	47	51.6	16,500	24,200		60	63	114.3	9,800	15,600		70	66	153.8	6,600	11,400
	50	41	47.2	14,200	21,400		70	57	108.5	7,600	12,300		80	62	148.9	5,000	9,000
60	23	30.7	10,900	16,600	80	51	101.3	5,900	9,900	90	58	143.2	3,700	7,200			
70	15	81	76.5	73,000	132,200	130	25	81	135.7	34,100	54,500	170	30	81	175.4	25,500	40,800
	20	77	75.6	47,900	78,700		30	79	134.8	28,400	41,500		35	80	174.7	21,200	32,300
	25	73	74.3	35,300	55,500		35	77	133.9	21,500	33,100		40	78	173.8	17,300	26,400
	30	68	72.6	27,500	42,500		40	74	132.7	18,100	27,300		45	76	172.7	14,300	22,100
	35	64	70.5	22,400	34,100		45	72	131.2	15,200	23,000		50	75	171.4	12,100	19,500
	40	59	67.8	19,300	28,300		50	70	129.5	13,000	22,900		60	71	168.4	8,700	14,600
	45	54	64.5	16,400	24,100		60	65	125.4	9,700	15,400		70	68	164.6	6,400	11,300
	50	50	61.2	14,100	21,400		70	60	120.2	7,400	12,100		80	64	160.2	4,800	8,900
	60	38	40.7	10,800	16,500		80	55	113.8	5,700	9,600		90	60	154.8	3,500	7,100
	70	21	32.5	8,600	13,300		90	49	106.0	4,500	7,800		100	56	148.6	2,500	5,800
80	20	79	85.8	47,800	78,600	140	25	82	145.8	33,900	54,300	150	30	81	195.9	25,000	40,000
	25	75	84.7	35,100	55,300		30	79	145.0	28,100	41,300		35	80	194.2	21,500	32,900
	30	71	83.2	27,400	42,400		35	78	144.2	21,500	32,900		40	78	193.0	17,900	27,000
	35	67	81.4	22,200	34,000		40	76	143.0	17,900	27,000		45	73	141.6	15,000	22,700
	40	64	79.1	19,100	28,200		45	73	141.6	15,000	22,700		50	71	140.1	12,700	20,100
	45	59	76.4	16,200	23,900		50	67	136.3	9,400	15,200		60	67	136.3	8,400	15,200
	50	56	73.8	13,900	21,200		60	62	131.6	7,100	11,900		70	62	131.6	7,100	11,900
	60	47	65.7	10,600	16,400		80	58	125.8	5,500	9,500		80	58	125.8	5,500	9,500
	70	35	54.0	8,300	13,100		90	53	118.9	4,200	7,700		90	53	118.9	4,200	7,700
	80	20	34.3	6,700	10,700		100	47	110.4	3,200	6,300		100	47	110.4	3,200	6,300
90	20	80	96.0	47,600	78,500	150	25	82	145.8	33,900	54,300	150	30	81	195.9	25,000	40,000
	25	77	95.0	34,900	55,200		30	79	145.0	28,100	41,300		35	80	194.2	21,500	32,900
	30	73	93.7	27,100	42,200		35	78	144.2	21,500	32,900		40	78	193.0	17,900	27,000
	35	70	92.1	22,000	33,800		40	76	143.0	17,900	27,000		45	73	141.6	15,000	22,700
	40	67	90.1	18,900	28,000		45	73	141.6	15,000	22,700		50	71	140.1	12,700	20,100
	45	63	87.8	16,000	23,700		50	71	140.1	12,700	20,100		60	67	136.3	9,400	15,200
	50	60	85.6	13,700	21,000		60	67	136.3	9,400	15,200		70	62	131.6	7,100	11,900
	60	52	78.9	10,400	16,200		80	62	131.6	7,100	11,900		80	58	125.8	5,500	9,500
	70	44	69.8	8,100	12,900		90	58	125.8	5,500	9,500		90	53	118.9	4,200	7,700
	80	33	57.0	6,500	10,500		100	53	118.9	4,200	7,700		100	47	110.4	3,200	6,300
90	18	35.9	5,200	8,700	110	41	100.1	2,400	5,200	110	41	100.1	2,400	5,200			
100	20	81	106.1	47,400	78,300	150	120	35	87.2	1,700	4,200	150	130	43	122.7	—	2,800
	25	78	105.2	34,700	55,000		130	27	70.0	—	3,500		140	37	110.7	—	2,100
	30	75	104.1	27,000	42,000		140	15	42.8	—	2,800		150	21	95.9	—	1,600
	35	72	102.6	21,800	33,800												
	40	69	100.9	18,700	27,800												
	45	66	98.9	15,900	23,500												
	50	63	96.9	13,500	20,900												
	60	57	91.1	10,300	16,000												
	70	49	83.6	8,000	12,700												
	80	41	73.6	6,300	10,300												
90	32	59.9	5,000	8,500													
100	17	37.4	4,000	7,100													

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### DEDUCTION FROM RATED BOOM LOADS WHEN LIFTING OVER BOOM POINT WITH JIB ATTACHED

JIB LENGTH	20 FT.	30 FT.	40 FT.	50 FT.	60 FT.
DEDUCT — LBS	2100	2300	2800	3300	3800

### WARNING

Do not attempt to lift more than rated load at load radius shown, or lift where no radius or load is listed, as crane may tip or collapse.

Do not attempt to lift more than rated loads shown in shaded areas — a machine failure may occur.

# Information

See Operators Manual For Boom Erection Procedure

## BOOM ERECTION

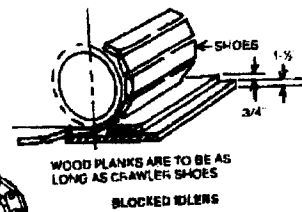
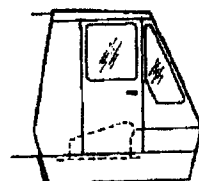
(MAXIMUM LENGTHS THAT CAN BE RAISED)

BOOM POSITION	BOOM ONLY		BOOM AND JIB	
	Two Counterweights	One Counterweight	Two Counterweights	One Counterweight
Over front end with idlers blocked (shown below)	230'	170'	210' boom plus 20' to 60' jib	140' boom plus 20' to 60' jib
Over end or Over side with crawlers extended	200'	170'	180' boom plus 20' to 60' jib	130' boom plus 20' to 60' jib
Over side with crawlers retracted	<b>WARNING</b> ⚠ Do not swing over side with two counterweights and crawlers retracted - Crane may tip backwards	140'	<b>WARNING</b> ⚠ Do not swing over side with two counterweights and crawlers retracted - Crane may tip backwards	100' boom plus 20' to 60' jib

### WARNINGS ⚠

Do not attempt to erect more than the maximum boom (or maximum boom with jib combination) because tipping or structural damage may occur.

Front idlers must be blocked as shown. When idlers are blocked, erection and lowering must be done into the wind (a strong backwind may cause crane to tip.)



## BOOM MAKE-UP ARRANGEMENT

BOOM LENGTH (FEET)	BOOM INSERT ARRANGEMENT		BOOM ROLLERS		JIB STRUT PENDANT CONNECTION TO BOOM
	Base (25') = B Tip (25') = T		No. Required	Distance From Boom Point (Feet)	Distance From Boom Point (Feet)
	RECOMMENDED	ALTERNATE			
50	B + T	—	0	—	25
60	B + 10' + T	—	0	—	35
70	B + 20' + T	—	0	—	45
80	B + 30' + T	B + 10' + 20' + T	0	—	55
90	B + 10' + 30' + T	—	0	—	65
100	B + 50' + T	B + 20' + 30' + T	0	—	75
110	B + 10' + 50' + T	B + 10' + 20' + 30' + T	0	—	78
120	B + 20' + 50' + T	B + 20' + 30' + T	0	—	78
130	B + 30' + 50' + T	B + 10' + 20' + 20' + 30' + T	0	—	78
140	B + 10' + 30' + 50' + T	—	0	—	78
150	B + 50' + 50' + T	B + 20' + 30' + 50' + T	1	124	76
160	B + 10' + 50' + 50' + T	B + 10' + 20' + 30' + 50' + T	1	124	76
170	B + 20' + 50' + 50' + T	B + 10' + 30' + 30' + 50' + T	1	124	76
180	B + 30' + 50' + 50' + T	B + 20' + 30' + 30' + 50' + T	1	124	76
190	B + 10' + 30' + 50' + 50' + T	B + 10' + 20' + 30' + 30' + 50' + T	1	124	76
200	B + 50' + 50' + 50' + T	B + 20' + 30' + 50' + 50' + T	1	124	76
210	B + 10' + 50' + 50' + 50' + T	B + 30' + 30' + 50' + 50' + T	1	124	78
220	B + 20' + 50' + 50' + 50' + T	B + 10' + 30' + 30' + 50' + 50' + T	2	124 & 174	Do Not Attach Jibs
230	B + 30' + 50' + 50' + 50' + T	B + 20' + 30' + 30' + 50' + 50' + T	2	124 & 174	Do Not Attach Jibs

### WARNINGS ⚠

- Boom inserts must be arranged as indicated above or crane may tip or collapse.
- Arrange boom insert pendant lengths to match insert lengths. Tip pendants are 24 feet 1 inch long. For pendant information, refer to Parts Book.
- Mid point suspension pendant is required for 210, 220 and 230 foot boom. Refer to Parts Book.
- Jibs are not permitted on 220 and 230 foot booms.

# Information

## JIB MAKE-UP ARRANGEMENT CHART

JIB LENGTH (FEET)	JIB INSERT ARRANGEMENT
20	Base (10') + Tip (10')
30	Base + 10' + Tip
40	Base + 20' + Tip
50	Base + 10' + 20' + Tip
60	Base + 20' + 20' + Tip

### WARNINGS

- Jib inserts must be arranged as indicated above or crane may tip or collapse.
- Jib strut must divide the angle between jib and boom into two equal parts.

## WIRE ROPE DATA

### MAIN HOIST ROPE

7/8 inch diameter P&H type 25 (6 x 25 filler wire preformed extra improved plow steel with independent wire rope core)					
● 79,600 pound minimum breaking strength					
PARTS OF LINE	1	2	3	4	5
Total Maximum Lifted Load (Lbs.)	20,000	40,000	60,000	80,000	100,000

PARTS OF LINE	6	7	8	9	10
Total Maximum Lifted Load (Lbs.)	120,000	140,000	160,000	180,000	200,000

### JIB HOIST ROPE — STANDARD

7/8 inch diameter P&H type 25 (6 x 25 filler wire preformed extra improved plow steel independent wire rope core)		
● 79,600 pound minimum breaking strength		
PARTS OF LINE	1	2
Total Maximum Lifted Load (Lbs.)	20,000	22,000

### JIB HOIST ROPE — OPTIONAL (NON-ROTATING)

7/8 inch diameter P&H type 11 (18 x 7 Non-rotating preformed improved plow steel with fibre core)	
● 58,000 pound minimum breaking strength	
● use of swivel is not approved with this rope	
● not approved for more than single part of line	
PARTS OF LINE	1
Total Maximum Lifted Load (Lbs.)	11,800

### WARNING

Do not attempt to lift more than rated loads shown in shaded areas — a machine failure may occur.

### BOOM HOIST ROPE

3/4 inch diameter type 27D (6 x 26 Warrington Seale preformed extra improved plow steel right alternate lay with independent wire rope core)
● 58,800 pound minimum breaking strength
● Boom hoist reaving is 10 parts reaved as shown in the Operators Manual

### BOOM PENDANTS

1-3/8 inch diameter P&H type 25 (6 x 25 filler wire preformed extra improved plow steel with independent wire rope core)
● 182,000 pound minimum breaking strength.
● Must be replaced in matched pairs. Refer to Parts Book.

### MIDPOINT SUSPENSION PENDANTS

3/4 inch diameter P&H type 25 (6 x 25 filler wire preformed extra improved plow steel with independent wire rope core)
● 58,800 pound minimum breaking strength
● Matched sets. 83 feet 4 inches long between centerlines of sockets. Refer to Parts Book.

# Information

## JIB PENDANTS

- 3/4 inch diameter P&H type 25 (6 x 25 filler wire preformed extra improved plow steel with independent wire rope core)
- 58,800 pound minimum breaking strength
  - Various lengths depending on boom and jib lengths

## WIRE ROPE LENGTH CHART

(For LIT Crane Service)

USE	BOOM LENGTH	ROPE		ROPE LENGTH (FEET)									
		P&H TYPE	DIA. IN.	PARTS OF LINE									
				1	2	3	4	5	6	7	8	9	10
BOOM HOIST	ALL BOOM LENGTHS	27D	3/4	465' (10 PART REEVING)									
HOIST LINE (FRONT DRUM)	50	25	7/8	125	180	235	290	345	400	455	510	565	620
	60	25	7/8	145	210	275	340	405	470	535	600		
	70	25	7/8	165	240	315	390	455	540	615	680		
	80	25	7/8	185	270	355	440	525	610				
	90	25	7/8	205	300	385	490	585	680				
	100	25	7/8	225	330	435	540	645					
	110	25	7/8	245	360	475	590	705					
	120	25	7/8	265	390	515	640						
	130	25	7/8	285	420	555	690						
	140	25	7/8	305	450	595	740						
	150	25	7/8	325	480	635							
	160	25	7/8	345	510	675							
	170	25	7/8	365	540	715							
	180	25	7/8	385	570	755							
	190	25	7/8	405	600								
200	25	7/8	425	630									
210	25	7/8	445	660									
220	25	7/8	465	690									
230	25	7/8	485	720									

Extra Rope Length is Required for Operating Below Ground Level

USE	BOOM LENGTH	ROPE		ROPE LENGTH (FEET)									
		P&H TYPE	DIA. IN.	PARTS OF LINE									
				20' JIB		30' JIB		40' JIB		50' JIB		60' JIB	
JIB HOIST LINE (REAR DRUM)	50	25	7/8	165	240	185		205		225		245	
	60	25	7/8	185	270	205		225		245		265	
	70	25	7/8	205	300	225		245		265		280	
	80	25	7/8	225	330	245		265		280		300	
	90	25	7/8	245	360	265		280		300		320	
	100	25	7/8	265	390	280		300		320		340	
	110	25	7/8	285	420	300		320		340		360	
	120	25	7/8	305	445	320		340		360		380	
	130	25	7/8	320	475	340		360		380		400	
	140	25	7/8	340	505	360		380		400		420	
	150	25	7/8	360	535	380		400		420		440	
	160	25	7/8	380	565	400		420		440		460	
	170	25	7/8	400	595	420		440		460		480	
	180	25	7/8	420	625	440		460		480		500	
	190	25	7/8	440	655	460		480		500		520	
200	25	7/8	460	685	480		500		520		540		
210	25	7/8	480	715	500		520		540		560		
PENDANT JIB TO STRUT	50'-210'	25	3/4	50'		70'		90'		110'		130'	
PENDANT STRUT TO BOOM	50'	25	3/4			65'							
	60'	25	3/4			85'							
	70'	25	3/4			105'							
	80'	25	3/4			125'							
	90'	25	3/4			145'							

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## HOIST TACKLE DATA

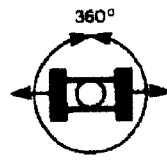
HOOK BLOCKS			Weight (Pounds)	
Capacity	Number of Sheaves	Tons	Johnson Blocks	Miller Blocks
			Pounds	
100	5	200,000	1887	1600
70	3	140,000	1288	1450
30	1	80,000	583	765
9.5	Ball Hook	19,000	451	—



# RATINGS

## CLAMSHELL SERVICE

### (Clamshell, Magnet, Grapple)



one counterweight

62" x 62" boom

crawlers fully extended

67.5% Stability

rated loads in pounds				
Boom Length Ft.	Load Radius Ft.	Boom Angle Δ°	Dual Brakes	Single Brakes
50	25	67°	17,000	13,500
	30	60°	17,000	13,500
	35	53°	17,000	13,500
	40	45°	17,000	13,500
	45	36°	17,000	13,500
60	30	65°	17,000	13,500
	35	60°	17,000	13,500
	40	54°	17,000	13,500
	45	48°	17,000	13,500
	50	41°	17,000	13,500
70	35	65°	17,000	13,500
	40	60°	17,000	13,500
	45	55°	17,000	13,500
	50	50°	17,000	13,500
	55	44°	16,700	13,500
80	35	65°	17,000	13,500
	40	60°	17,000	13,500
	45	56°	17,000	13,500
	50	51°	16,500	13,500
	55	46°	14,400	13,500
Max. Length	60	41°	12,900	12,900
	65	35°	11,500	11,500
	70	31°	13,100	13,100
	60	38°	14,500	13,500
	65	31°	13,100	13,100

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**WARNING**

Rated loads shown are gross allowable, freely suspended loads that include weight of material and the load handling bucket, magnet, chains, etc. and apply to all Material Handling Operations (Clamshell, Magnet, Grapple, etc.) except Dragline.

Do not attempt to lift more than rated load at load radius shown or lift where no radius is listed, as crane may tip or collapse.

Do not attempt to lift more than rated loads shown in shaded areas — a machine failure may occur.

This machine is to be equipped as follows for this service:

1. Maximum boom length must not exceed 80 feet.
2. Crawlers must be locked-in the extended position.
3. Maximum counterweight must not exceed 30,500 lbs
4. Load drum laggings must be 18-3/8" pitch dia. by 13-7/8" long with spiral grooving for 7/8" dia wire rope for proper operation.
5. Planetary pintons (if machine is furnished with planetary power load lowering) must be removed from both load drums for proper operation.
6. The following wire rope should be used for proper operation

**MAIN HOIST ROPE (CLOSING AND HOLDING)**

7/8 inch diameter P&H type 25 (6 x 25 filler wire preformed extra improved plow steel with independent wire rope core)  
 ● 79,600 pound minimum breaking strength.

**TAGLINE ROPE**

3/8 inch diameter P&H type 12 (6 x 37 filler wire preformed improved plow steel with fiber core)  
 ● 11,540 pound minimum breaking strength.

**BOOM HOIST ROPE**

3/4 inch diameter type 27D (6 x 26 Warrington Seale preformed extra improved plow steel right alternate lay with independent wire rope cord)  
 ● 58,800 pound minimum breaking strength.  
 ● Boom hoist reeving is 10 parts reeved as shown in the Operators Manual.

**BOOM PENDANTS**

1-3/8 inch diameter P&H type 25 (6 x 25 filler wire preformed extra improved plow steel with independent wire rope core)  
 ● 192,000 pound minimum breaking strength.  
 ● Must be replaced in matched pairs. Refer to Parts Book.

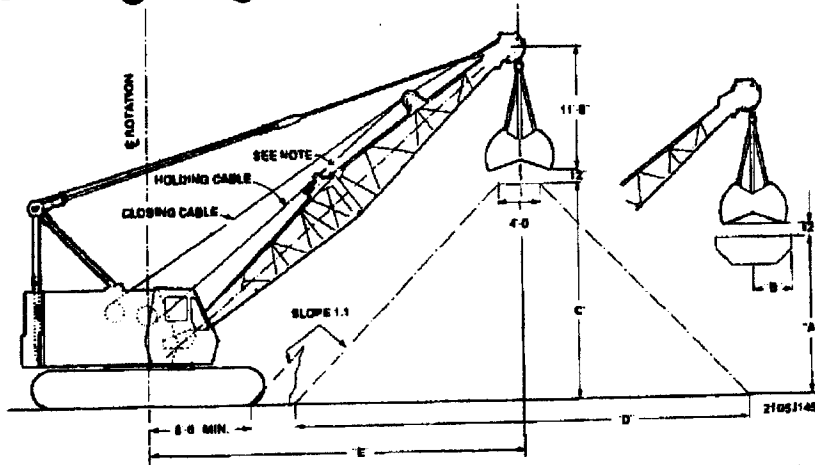


## WIRE ROPE LENGTH CHART (FOR CLAMSHELL SERVICE)

USE	BOOM LENGTH	ROPE		ROPE LENGTH (FT.)		
		P&H TYPE	DIA. IN.	FIRST LAYER	SECOND LAYER	
CLOSING LINE (REAR DRUM)	50'	25	7/8	108'	—	EXTRA ROPE LENGTH REQUIRED FOR OPERATING BELOW GROUND LEVEL
	60'	25	7/8	—	128'	
	70'	25	7/8	—	147'	
	80'	25	7/8	—	171'	
HOLDING LINE (FRONT DRUM)	50'	25	7/8	102'	—	
	60'	25	7/8	—	121'	
	70'	25	7/8	—	141'	
	80'	25	7/8	—	164'	
TAGLINE	50'	12	3/8	70'	70'	
	60'	12	3/8	70'	70'	
	70'	12	3/8	70'	70'	
	80'	12	3/8	70'	70'	

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### working ranges



BOOM LENGTH FT.	LOAD RADIUS IN FEET	HEIGHT & HALF WIDTH OF BIN		HEIGHT & WIDTH OF STOCKPILE		RADIUS "E"
		"A"	"B"	"C"	"D"	
50	25	38'-3"	4'-7"	26'-6"	57'	38'-6"
	30	35'-7"	6'-4"			
	35	31'-8"	8'-4"			
	40	27'-4"	11'-3"			
	45	21'-7"	15'-6"			
60	30	46'-11"	4'-9"	33'-7"	71'-2"	46'-7"
	35	43'-9"	6'-2"			
	40	40'-11"	7'-11"			
	45	36'-5"	10'-0"			
	50	31'-8"	12'-11"			
	55	24'-9"	17'-4"			
70	35	55'-1"	4'-10"	41'-8"	87'-4"	54'-8"
	40	52'-11"	6'-2"			
	45	49'-2"	7'-8"			
	50	45'-9"	9'-4"			
	55	40'-7"	11'-5"			
	60	35'-0"	14'-5"			
	65	27'-7"	19'-0"			
80	35	68'-0"	3'-11"	47'-9"	98'-8"	60'-9"
	40	64'-4"	4'-11"			
	45	61'-0"	6'-0"			
	50	58'-5"	7'-3"			
	55	54'-2"	8'-9"			
	60	49'-10"	10'-2"			
	65	44'-8"	12'-7"			
	70	38'-3"	15'-7"			

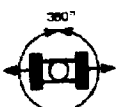
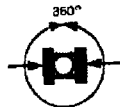
Note:  
Remove standard idler sheave  
assy for clamshell operation

AVERAGE GROUND PRESSURE	SHOE WIDTH	
	38" FLAT FORGED	42" FLAT FORGED
Machine Weight* (Less Bucket) — Pounds	142,571	151,421
Ground Bearing Area (Sq. Inches)	16,870	19,681
Ground Pressure (Ave.) — Lb/Sq. In.	8.45	7.69

\*Based on 50 foot boom

one counterweight

# RATINGS DRAGLINE SERVICE 62" x 62" boom

75% stability		rated loads in pounds			
	Front and Rear Drums Equipped With			Dual Load Brakes	Single Load Brakes
	Boom Length Ft.	Load Radius Ft.	Boom Angle Δ°		
<b>crawlers fully extended</b> 	50	35	53°	14,500	11,500
		40	45°	14,500	11,500
		45	36°	14,500	11,500
		50	25°	14,500	11,500
	60	40	54°	14,500	11,500
		45	48°	14,500	11,500
		50	41°	14,500	11,500
		55	33°	14,500	11,500
	70	50	50°	14,500	11,500
		55	44°	14,500	11,500
		60	38°	14,500	11,500
		65	31°	14,500	11,500
80	55	51°	14,500	11,500	
	60	46°	14,500	11,500	
	65	41°	14,500	11,500	
	70	35°	12,800	11,500	
	75	28°	11,600	11,500	
<b>crawlers retracted</b> 	50	35	53°	14,500	11,500
		40	45°	14,500	11,500
		45	36°	14,800	11,500
		50	25°	14,500	11,500
	60	40	54°	14,500	11,500
		45	48°	14,500	11,500
		50	41°	14,200	11,500
		55	33°	12,500	11,500
	70	50	50°	14,500	11,500
		55	44°	12,400	11,500
		60	38°	10,800	10,800
		65	31°	9,700	9,700
	80	55	51°	12,200	11,500
		60	46°	10,600	10,800
		65	41°	9,400	9,400
		70	35°	8,300	8,300
75		28°	7,000	7,000	

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**WARNING** 

Rated loads shown are gross allowable, freely suspended loads that include weight of material and the load handling bucket, chains, etc.  
 Do not attempt to lift more than rated load at load radius shown, or lift where no radius or load is listed, as crane may tip or collapse.  
 Do not attempt to lift more than rated loads shown in shaded areas — a machine failure may occur.

This machine is to be equipped as follows for this service:

1. Maximum boom length must not exceed 80 feet.
2. Crawlers must be locked.
3. Maximum counterweight must not exceed 30,500 lbs.
4. Load drum laggings must be as follows for proper operation —  
 Front (Digging) — 18-1/2" pitch dia. by 13-7/8" long with spiral grooving for 1" dia. wire rope  
 Rear (Hoisting) — 18-3/8" pitch dia. by 13-7/8" long with spiral grooving for 7/8" dia. wire rope
5. Planetary pinions (if machine is furnished with planetary power load lowering) must be removed from both load drums for proper operation.
6. The following wire rope should be used for proper operation.

**DIGGING ROPE**

One inch diameter P&H type 21A (6 x 21 with filler wire, right-langle, preformed extra improved plow steel with independent wire rope core.)  
 ● 103,400 pound minimum breaking strength.

**HOIST ROPE**

7/8 inch diameter P&H type 25 (6 x 25 filler wire preformed extra improved plow steel with independent wire rope core.)  
 ● 79,600 pound minimum breaking strength.

**BOOM HOIST ROPE**

3/4 inch diameter type 27D (6 x 26 Warrington Seale performed extra improved plow steel right alternate lay with independent wire rope cord)  
 ● 56,900 pound minimum breaking strength.  
 ● Boom hoist reeving is 10 parts reeved as shown in the Operators Manual.

**BOOM PENDANTS**

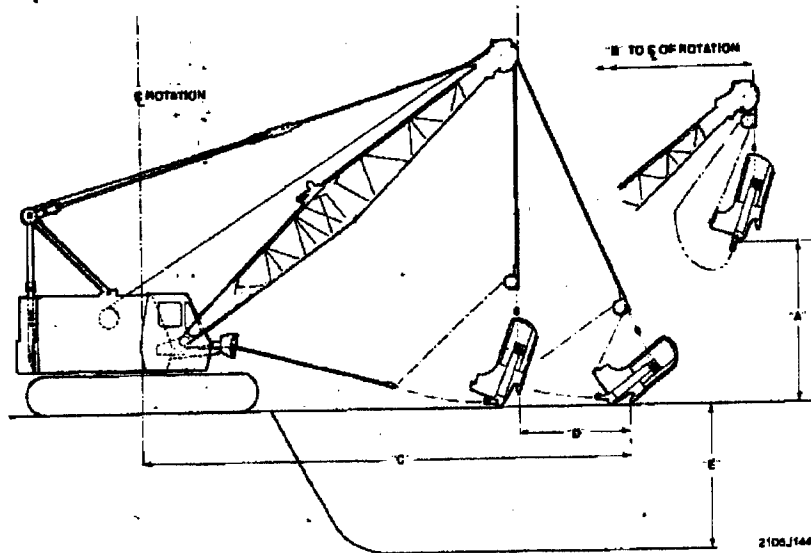
1-3/8 inch diameter P&H type 25 (6 x 25 filler wire preformed extra improved plow steel with independent wire rope core)  
 ● 192,000 pound minimum breaking strength.  
 ● Must be replaced in matched pairs. Refer to Parts Book.

**WIRE ROPE LENGTH CHART  
(FOR DRAGLINE SERVICE)**

USE	BOOM LENGTH	ROPE		ROPE LENGTH (FT.)	
		P&H TYPE	DIA. IN.	FIRST LAYER	SECOND LAYER
HOIST LINE (REAR DRUM)	50'	25	7/8	118'	134'
	60'	25	7/8	128'	163'
	70'	25	7/8	—	183'
	80'	25	7/8	—	213'
DIGGING LINE (FRONT DRUM)	50'	21A	1	64'	74'
	60'	21A	1	64'	91'
	70'	21A	1	—	108'
	80'	21A	1	—	112'

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**working ranges**



BOOM LENGTH FT.	LOAD RADIUS IN FEET	ALLOW DOUBLE WRAPPING ON HOIST DIGGING DRUM									
		"A" DUMPING HEIGHT	"B" DUMPING RADIUS	"C" DIGGING REACH	"D" CASTING DISTANCE	"E" MAX. DIGGING DEPTH					
50	35	30'-8"	38	48-10	14-10	22-0	"A" DUMPING HEIGHT	"B" DUMPING RADIUS	"C" DIGGING REACH	"D" CASTING DISTANCE	"E" MAX. DIGGING DEPTH
	40	28	41	53-4	13-4	28-1					
	45	19-10'	48	56-3	11-3	31-4					
	50	10'-4"	51	58-2	8-2	34-2					
60	40	28-5	41	57-10'	17-10	20-3	"A" DUMPING HEIGHT	"B" DUMPING RADIUS	"C" DIGGING REACH	"D" CASTING DISTANCE	"E" MAX. DIGGING DEPTH
	45	35-2	48	61-5"	18-9	24-8					
	50	29-10'	51	64-7	14-7	30-0					
	55	22-8	55	67-3"	12-3"	36-0					
70	50	44-2	51	69-3"	17-3"	19-8	"A" DUMPING HEIGHT	"B" DUMPING RADIUS	"C" DIGGING REACH	"D" CASTING DISTANCE	"E" MAX. DIGGING DEPTH
	55	38-3	58	72-4"	17-4"	20-4					
	60	33-3	61	72-4"	12-4"	28-8					
	65	25-3	65	72-4"	9-4"	34-2					
80	55	53	56	72-4"	17-4"	8-8	"A" DUMPING HEIGHT	"B" DUMPING RADIUS	"C" DIGGING REACH	"D" CASTING DISTANCE	"E" MAX. DIGGING DEPTH
	60	48-8	61	72-4"	12-4"	11-0					
	65	43-0	66	72-4"	9-4"	15-6					
	70	36-4	71	72-4"	6-4"	23-0					
	75	27-8"	76	72-4"	3-0"	32-0					

\*Casting Distance limited by Digging Drum Cable Capacity  
 #Requires Double Wrapping on Digging Drum

AVERAGE GROUND PRESSURE	SHOE WIDTH	
	36" FLAT FORGED	42" FLAT FORGED
Machine Weight* (Less Bucket) — Pounds	143,246	152,096
Ground Bearing Area (Sq. inches)	16,870	18,661
Ground Pressure (Ave.) — Lb/Sq. In.	8.49	7.73

\*Based on 50 Foot Boom