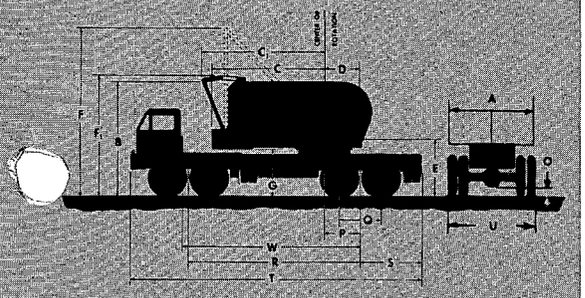
GENERAL DIMENSIONS



A	— Width of cab	9'-6"
B	— Height to top of cab	11'-10⅝"
C	— Radius of rear end (counterweight)	12'-3½"
C_1	— Radius of rear end (gantry lowered)	13'-2½"
D	— Center of rotation to boom foot pin	43"
E	— Height from ground to boom foot pin	5'-10"
F	— Clearance height over gantry (raised)	17'-9¼"
F_1	— Clearance height over gantry (lowered)	12'-9¾"
G	— Counterweight ground clearance	5'-0¼"
O	— Ground clearance (rear axle housing)	1'-0⅜"
P	— Center of rotation to center of rear bogie	3'-4¾"
Q	— Distance between rear axles	4'-6"
R	— Wheelbase	223¾"
S	— Center of rear bogie to rear of carrier	6'-8½"
T	— Overall length of carrier with outriggers	31'-7⅞"
U	— Overall width of carrier (tires)	10'-2"
V	— Turning circle (minimum radius)	44'-6"
W	— Back of carrier cab to center of rear bogie	18'-0½"

P&H 650A-TC

CRANE • DRAGLINE • CLAMSHELL

SPECIFICATIONS

UPPER MACHINERY

POWER:

Diesel: Cummins, H743C, 6 cyl. (with transmission) 135 hp. @ 1800 rpm. (standard)

Cummins, H743C, 6 cyl. (with torque converter) 150 hp. @ 1800 rpm. (optional extra)

Detroit Diesel 6-71, 6 cyl. (with transmission) 135 hp. @ 1800 rpm. (optional extra)

Caterpillar, D-333-C-NA, 6 cyl. (with transmission) 135 hp. @ 2200 rpm. (optional extra)

THROTTLE: Detroit Diesel, Cummins, Caterpillar engines: Twist grip on swing lever (standard). Twist grip on swing lever in combination with foot throttle (optional extra).

TRANSMISSION: Three speed Dana, (standard). Engine clutch and transmission shifter controls at operator's station.

TORQUE CONVERTER: Twin disc 3 stage (optional with Cummins engines only).

FUEL TANK: .....capacity — 75 gallons

CONTROLS: Full flow power hydraulic.

SWING UNITS: Swing motion thru two magnetorque units.

CLUTCHES: Band type, internal expanding, separate clutch for each machine function.

BRAKES: (Hoist and digging) band type, external contracting — full wrap design, with spring set failsafe device. Hydraulic release on swing brake.

DUAL BRAKES (Optional): Additional hydraulic brake with spring set safety device operates in parallel with standard brake. Planetary load lowering option cannot be used with dual brake on same drum.

BOOM HOIST ASSEMBLY: Independent internal expanding band type clutch with automatic brake and planetary lowering. Twin external safety ratchets for locking main drum or planetary drum. Main drum mounted on anti-friction bearings.
Boom hoist line speed — (raising) .....124.7 fpm
(lowering).....76.5 fpm

MAIN DRUMS: Drums in tandem, mounted on anti-friction bearings (see separate sheets covering attachments for further details).

THIRD DRUM: 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. (Optional extra).

GANTRY: High gantry, folding type for use with all attachments.

COUNTERWEIGHT: One piece external, pin connected .....16,000 lbs.
Optional counterweight .....10,000 lbs.
Removable using two hand operated hydraulic jacks for lowering to carrier deck. Power hydraulic removal available — (optional extra).

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

SWING ROLLERS: 28 rollers, live roller circle.

SWING GEAR: Internal cut teeth — 58.8" pitch dia.

ROTATING SPEED: .....5.02 rpm.

SWING BRAKE: External contracting band—spring set, hydraulic release.

P&H 8 x 4 CARRIER
8 Wheel — 4 Wheel Drive — 12 Tires

WEIGHT: Including turret and outriggers with 14:00 x 20 — 18 ply tires .....47,900 lbs.

FRAME: Fabricated front section of 18" - 58 lb. channel, fabricated rear section of 19.38 in. box section, crossbraced and reinforced. Front bumper of 0.38 in. bent plate. High strength low alloy steel plate used extensively. Tow loops front and rear.
Removable rear frame section (optional extra).

OUTRIGGER HOUSINGS: Fabricated independent boxes of high strength low alloy steel plate. Front and rear boxes are pin connected and removable.

OUTRIGGER BEAMS: Fabricated reinforced box section of high strength low alloy steel plate with jackscrew nut at one extreme end. Roller and mechanical stops on manually operated beams.
Maximum extended position from longitudinal center line of carrier to center line of jackscrew nut — 9 ft. - 3 in.

HYDRAULIC OUTRIGGER ASSEMBLY (Optional): Total of eight (8) double acting hydraulic cylinders provide independent horizontal and vertical movement of each beam. Directional valves are electric solenoid operated.

POWER PLANTS (Diesel): Cummins NHF-240, 6 cylinder, 230 hp @ 2300 rpm, 12 volt-62 amp alternator, 24 volt starter, 13.2 c.f.m. air compressor with governor setting of 100 to 120 psi. (standard).

Cummins NHF-265, 6 cylinder, 256 hp @ 2300 rpm, 12 volt-62 amp alternator, 24 volt starter, 13.2 c.f.m. air compressor with governor setting of 100 to 120 psi. (optional extra).

Detroit-Diesel 6-71N, 6 cylinder, 228 hp @ 2100 rpm, 12 volt-62 amp alternator, 12 volt starter, 12 c.f.m. air compressor with governor setting of 100 to 120 psi. (optional extra).

Caterpillar, 1673B, 6 cylinder, 245 hp @ 2200 rpm, 12 volt-62 amp alternator, 24 volt starter, 12 c.f.m. air compressor with governor setting of 100 to 120 psi. (optional extra).

CLUTCH (All Power Plants): Lipe-rollway 14-2 dlb.

TRANSMISSIONS AND PROP. SHAFTS (All Power Plants)
Main — Fuller 5H740T — 5 speeds forward, 1 reverse.
Auxiliary — Fuller 4D75 — 4 speeds.
Prop. Shafts — Spicer 1700 and 1800 series u-joints.

STEERING: Ross TE71 cam and twin lever steering gear, 28.1:1 ratio, 21 in. diameter steering wheel, Garrison power assist.

FRONT AXLES: Shuler DCB34-L4 tubular tandem axle.

REAR AXLES: Clark BD-50-70 planetary drive bogie axle, 90 in. track, 12.241:1 ratio.
Interaxle differential (optional extra).

SUSPENSION: Solid box section bogie beam with torque rods. Self-aligning bearings on both ends of bogie beams and torque rods.

WHEELS: Front — cast spoke with brake drum and rim. Rear — rims and 4.5 in. spacer.
Budd wheel conversion, spare rim (optional extra).

TIRES: Twelve 14:00 x 20 — 18 ply.

BRAKES:

Service: Air brakes on all 8 wheels. Front Linings 17.25 in. diameter x 4 in. wide (500 sq. in. total area), 16 sq. in. air chambers. Rear linings 16.5 in. diameter x 7 in. wide (920 sq. in. total area), 36 sq. in. air chambers controls in carrier cab.

Emergency: Parking — air release, spring set brake chambers on on rear axles controlled from cab. Separate reservoir for release of spring set brakes.
Parking brake — manual lever operated disc brake mounted on output flange of auxiliary transmission (optional extra).

FUEL TANK: I.C.C. approved .....capacity 75 gals. Siphon proof tank (optional extra).

RADIATOR: Vertical tube and fin type core, thermostat temperature control, de-aeration baffle in top tank.

CAB: 32 in. wide one man cab offset to left side of engine compartment, safety glass all windows, air windshield wiper, removable dash panel (with speedometer, air pressure gage, ammeter, coolant temperature gage, engine oil pressure gage, fuel level gage and switches), horn, dome light, seat assembly and left side rear view mirror.

LIGHTING: Dual headlights with foot operated dimmer switch. Stop, tail, directional, clearance and rear license plate lights. In cab-dome light, illuminated gages, indicator lights for hi-beam lights, directional lights, emergency lights and low air pressure warning. Two weather proof sockets provided for upper lighting during transit.

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

MISC. EQUIPMENT: Tire inflation valve and hose, two manual hydraulic jacks* for counterweight removal.
Set of four (4) aluminum outrigger floats.
*Only one manual hydraulic jack is furnished when optional power counterweight removal assembly is specified.

OPTIONAL EQUIPMENT: Hydraulic outriggers, power plant (see "power plant" section), automatically thermostatically controlled radiator shutters, weight reduction package - aluminum front & rear fenders and transmission cover plate, removable rear frame section, interaxle differential, Budd wheel conversion, spare rim, manually operated parking brake, power counterweight assembly, front fifth jackfloat, engine brake, heater & defroster, air horn, electric windshield wipers, hour meter, trailer electric & air connection assy., siphon proof fuel tank, remote control - independent remote control from upper cab to operate carrier and/or hydraulic outriggers.

PERFORMANCE:	**Speed**	**% Grade**
On-hiway	to 39.6 mph	to 14.9
Off-hiway	to 14.5 mph	to 30.0

NOTE: In furtherance of our policy of continual product improvement, all designs and specifications are subject to change without advance notice. Data published 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. The only warranty applicable is our standard written warranty for this machine.

Manufactured and sold in conformance with U. S. Department of Commerce Commercial Standard CS-90-58.

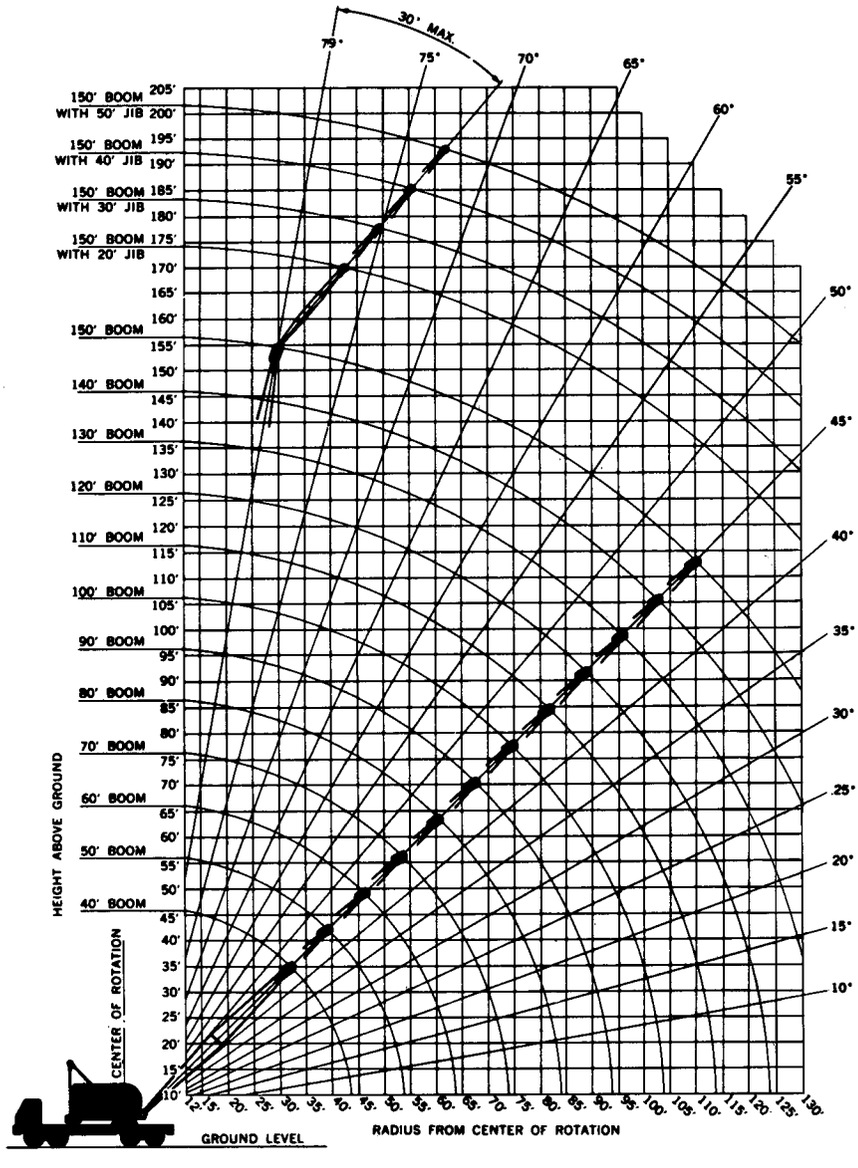
MEMBER PCSA POWER CRANE AND EXCAVATOR ASSOCIATION

Harnischfeger
P&H
milwaukee, wisconsin 53246

M10-572 Litho in U.S.A.

P&H/650A-TC

50-ton Truck Crane
150′ Boom 50′ Jib



THIS P & H MODEL 650A-TC MEETS THE REQUIREMENTS OF ANSI B30.5-1968. BOOM STRUCTURE HAS BEEN TESTED PER SAE J987. MACHINE STABILITY HAS BEEN TESTED PER SAE J765.

P&H/650A-TC

50 Ton Truck Crane

with 10,000 lbs. Counterweight

PCSA Class 12-276

RATED CRANE LOADS IN

Oper. Rad. Ft.	40 Ft. Boom			50 Ft. Boom			60 Ft. Boom			70 Ft. B	
	Angle	Boom Pt. El.	Rating Lbs.	Angle	Boom Pt. El.	Rating Lbs.	Angle	Boom Pt. El.	Rating Lbs.	Angle	Boom Pt. El.
12	79	47.5	100,000						RATINGS ABOVE H LIMITED BY STREN		
15	74	46.8	90,000	77	57.1	89,500					
20	67	45.0	75,000	72	55.7	74,700	75	66.2	74,400	77	76.5
25	58	42.4	56,300	65	53.8	56,200	70	64.6	56,100	73	75.1
30	50	38.7	42,100	59	51.1	42,100	64	62.5	42,000	68	73.4
35	39	33.4	33,500	52	47.6	33,400	59	59.7	33,200	64	71.1
40	25	25.1	28,300	44	42.9	27,600	53	56.3	27,400	59	68.4
45				35	36.6	23,300	47	52.1	23,200	54	65.1
50				23	27.1	20,600	40	46.7	20,000	49	61.1
60							20	28.9	16,200	37	50.1
70										21	32.8
80											
90		WARNING: WHEN BOOM IS EQUIPPED WITH JIB, MAIN HOOK RATING MUST BE REDUCED TO COMPENSATE FOR JIB ATTACHMENT WEIGHT									
100											
110											
120		JIB LENGTH		20 Ft.		30 Ft.		40 Ft.	50 Ft.		
130		DEDUCT—LBS.		1,500		1,500		2,000	2,500		

with 16,000 lbs. Counterweight

PCSA Class 12-306

RATED CRANE LOADS IN

Oper. Rad. Ft.	40 Ft. Boom			50 Ft. Boom			60 Ft. Boom			Ft. Bo	
	Angle	Boom Pt. El.	Rating Lbs.	Angle	Boom Pt. El.	Rating Lbs.	Angle	Boom Pt. El.	Rating Lbs.	Angle	Boom Pt. El.
12	79	47.5	100,000						RATINGS AB LIMITED BY		
15	74	46.8	90,000	77	57.1	89,500					
20	67	45.0	75,000	72	55.7	74,700	75	66.2	74,400	77	76.5
25	58	42.4	59,800	65	53.8	59,750	70	64.6	59,700	73	75.1
30	50	38.7	46,700	59	51.1	46,600	64	62.5	46,500	68	73.4
35	39	33.4	37,100	52	47.6	37,000	59	59.7	36,900	64	71.1
40	25	25.1	30,700*	44	42.9	30,600	53	56.3	30,500	59	68.4
45				35	36.6	26,000	47	52.1	25,800	54	65.1
50				23	27.1	22,900	40	46.7	22,300	49	61.1
60							20	28.9	17,700	37	50.1
70										21	32.8
80											
90		WARNING: WHEN BOOM IS EQUIPPED WITH JIB, MAIN HOOK RATING MUST BE REDUCED TO COMPENSATE FOR JIB ATTACHMENT WEIGHT									
100											
110											
120		JIB LENGTH		20 Ft.		30 Ft.		40 Ft.	50 Ft.		
130		DEDUCT—LBS.		1,500		1,500		2,000	2,500		

Ratings shown are carrier, and outrigge arranged as shown i must be ised p

Ratings shown are ba effect on lifted load, could be detrimental sibility to judge the

On Outriggers

OUNDS—MAIN BOOM (45.5" W. x 40" D.) IN OVER SIDE AND OVER REAR WORK AREAS WITH OUTRIGGERS FULLY EXTENDED AND SET

om Rating Lbs.	80 Ft. Boom Angle	Boom Pt. El.	Rating Lbs.	90 Ft. Boom Angle	Boom Pt. El.	Rating Lbs.	100 Ft. Boom Angle	Boom Pt. El.	Rating Lbs.	110 Ft. Boom Angle	Boom Pt. El.	Rating Lbs.	120 Ft. Boom Angle	Boom Pt. El.	Rating Lbs.	130 Ft. Boom Angle	Boom Pt. El.	Rating Lbs.	140 Ft. Boom Angle	Boom Pt. El.	Rating Lbs.	150 Ft. Boom Angle	Boom Pt. El.	Rating Lbs.	Oper. Rad. Ft.
VY LINE ARE TH OF MATERIALS.																			MID-POINT SUSPENSION (CENTER HITCH) REQUIRED. ATTACH 70 FT. UP BOOM FROM BOOM FOOT PIN.						12
																									15
																									20
74,100																									25
56,000	75	85.5	55,900	77	95.8	55,700	78	106.1	55,500																30
41,800	71	84.0	41,700	73	94.5	41,500	75	104.9	41,300	76	115.2	41,100	78	125.5	40,900	79	135.7	37,200							35
33,100	67	82.1	33,000	70	92.9	32,800	72	103.4	32,700	74	113.9	32,500	75	124.3	32,300	76	134.6	32,100	77	144.8	31,100	78	155.1	26,600	40
27,300	63	79.8	27,100	67	90.9	26,900	69	101.7	26,700	71	112.3	26,600	73	122.8	26,400	74	133.3	26,200	75	143.6	25,900	76	153.9	25,700	45
23,000	59	77.1	22,900	63	88.5	22,700	66	99.6	22,500	68	110.4	22,300	70	121.1	22,100	72	131.7	21,900	73	142.2	21,600	74	152.6	21,400	50
19,800	55	73.8	19,600	59	85.7	19,400	63	97.2	19,200	65	108.3	19,100	68	119.2	18,900	69	130.0	18,600	71	140.6	18,400	72	151.1	18,200	60
15,700	46	65.4	15,500	52	78.8	15,300	56	91.2	15,100	59	103.1	15,000	63	114.9	14,800	65	126.1	14,500	67	137.0	14,300	68	147.8	14,100	70
12,900	35	54.4	12,400	44	70.2	12,200	49	84.1	12,000	54	96.9	11,800	57	109.1	11,600	60	120.8	11,400	62	132.3	11,200	64	143.5	11,000	80
	19	34.5	10,400	33	57.4	9,950	41	74.1	9,750	47	88.5	9,600	51	101.8	9,400	55	114.4	9,150	58	126.4	8,950	60	138.2	8,700	90
				18	36.1	8,550	31	60.2	8,100	39	77.7	7,900	45	92.7	7,700	49	106.5	7,450	53	119.4	7,250	55	131.8	7,000	100
							17	37.6	7,000	30	62.9	6,650	37	81.1	6,400	43	96.7	6,150	47	110.9	5,950	51	124.2	5,700	110
										16	39.1	5,800	29	65.5	5,350	36	84.4	5,150	41	100.5	4,900	45	115.2	4,650	120
													16	40.5	4,700	27	68.0	4,300	35	87.5	4,050	40	104.2	3,800	130
																15	41.8	3,750	26	70.3	3,350	33	90.6	3,100	

OUNDS—MAIN BOOM (45.5" W. x 40" D.) IN OVER SIDE AND OVER REAR WORK AREAS WITH OUTRIGGERS FULLY EXTENDED AND SET

om Rating Lbs.	80 Ft. Boom Angle	Boom Pt. El.	Rating Lbs.	90 Ft. Boom Angle	Boom Pt. El.	Rating Lbs.	100 Ft. Boom Angle	Boom Pt. El.	Rating Lbs.	110 Ft. Boom Angle	Boom Pt. El.	Rating Lbs.	120 Ft. Boom Angle	Boom Pt. El.	Rating Lbs.	130 Ft. Boom Angle	Boom Pt. El.	Rating Lbs.	140 Ft. Boom Angle	Boom Pt. El.	Rating Lbs.	150 Ft. Boom Angle	Boom Pt. El.	Rating Lbs.	Oper. Rad. Ft.
VE HEAVY LINE AND THOSE MARKED * ARE STRENGTH OF MATERIALS.																			MID-POINT SUSPENSION (CENTER HITCH) REQUIRED. ATTACH 70 FT. UP BOOM FROM BOOM FOOT PIN.						12
																									15
																									20
74,100																									25
59,650	75	85.5	59,600	77	95.8	59,550	78	106.1	59,500																30
46,400	71	84.0	46,200	73	94.5	46,000	75	104.9	45,800	76	115.2	45,700	78	125.5	43,500	79	135.7	37,200							35
36,700	67	82.1	36,600	70	92.9	36,400	72	103.4	36,200	74	113.9	36,000	75	124.3	35,800	76	134.6	35,600	77	144.8	31,100	78	155.1	26,600	40
30,300	63	79.8	30,200	67	90.9	30,000	69	101.7	29,800	71	112.3	29,600	73	122.8	29,400	74	133.3	29,200	75	143.6	29,000	76	153.9	25,800	45
25,700	59	77.1	25,500	63	88.5	25,300	66	99.6	25,100	68	110.4	24,900	70	121.1	24,700	72	131.7	24,500	73	142.2	24,300	74	152.6	24,100	50
22,100	55	73.8	22,000	59	85.7	21,800	63	97.2	21,500	65	108.3	21,400	68	119.2	21,200	69	130.0	20,900	71	140.6	20,700	72	151.1	20,500	60
17,200	46	65.4	17,000	52	78.8	16,800	56	91.2	16,600	59	103.1	16,400	63	114.9	16,500	65	126.1	16,400	67	137.0	16,200	68	147.8	16,000	70
14,500	35	54.4	14,000	44	70.2	13,800	49	84.1	13,600	54	96.9	13,400	57	109.1	13,200	60	120.8	13,000	62	132.3	12,700	64	143.5	12,500	80
	19	34.5	11,800	33	57.4	11,300	41	74.1	11,100	47	88.5	10,900	51	101.8	10,700	55	114.4	10,500	58	126.4	10,300	60	138.2	10,000	90
				18	36.1	9,700	31	60.2	9,250	39	77.7	9,100	45	92.7	8,900	49	106.5	8,650	53	119.4	8,400	55	131.8	8,200	100
							17	37.6	8,050	30	62.9	7,650	37	81.1	7,450	43	96.7	7,200	47	110.9	7,000	51	124.2	6,750	110
										16	39.1	6,750	29	65.5	6,300	36	84.4	6,050	41	100.5	5,850	45	115.2	5,600	120
													16	40.5	5,550	27	68.0	5,150	35	87.5	4,900	40	104.2	4,650	130
																15	41.8	4,550	26	70.3	4,150	33	90.6	3,900	

nly for combination of P&H manufactured upper, boom, jib, counterweights, s. Boom backstops are required for all boom lengths. Boom inserts must be the boom make-up chart. Standard boom hoist reeving is 10 part line. Gantry sition for all operating conditions. Refer to diagram for applicable working area.

sed on freely suspended loads and make no allowance for such factors as wind ground conditions, out-of-level, operating speeds or any other condition that to the safe operation of this equipment. The operator, therefore, has the respon- existing conditions and reduce lifted loads and operating speeds accordingly.

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 the main boom or jib rating shown.

Operating radius is the horizontal distance from centerline of rotation to a vertical line through the center of gravity of the load.

P&H Type 4 Wire Rope: 6 x 25 with Filler Wire, Preformed Improved Plow Steel Wire Rope, 7 x 7 I.W.R.C.

Maximum approved boom length for travel is 100 ft. or 90 ft. boom plus 30 ft. jib. Boom must be positioned over the rear of carrier and gantry must be in raised position. All tires must be evenly inflated to 100 P.S.I.

On Rubber

RATED CRANE LOADS IN POUNDS—MAIN BOOM—WITHOUT OUTRIGGERS—TIRES AT 100 P.S.I.

Oper. Rad. Ft.	40 Ft. Boom			50 Ft. Boom			60 Ft. Boom			70 Ft. Boom			80 Ft. Boom			90 Ft. Boom			100 Ft. Boom			Oper. Rad. Ft.
	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	Angle	Over Side	Over Rear	Angle	Over Side	Over Rear	
12	79	53,600	69,200																			12
15	74	39,000	50,800	77	38,900	50,700																15
20	67	26,500	34,800	72	26,400	34,700	75	26,200	34,500	77	26,000	34,300										20
25	58	19,700	26,300	65	19,600	26,100	70	19,400	26,000	73	19,200	25,700	75	19,000	25,500	77	18,800	25,300	78	18,500	25,000	25
30	50	16,100	20,900	59	16,000	20,700	64	15,900	20,600	68	15,700	20,300	71	15,400	20,100	73	15,200	19,900	75	15,000	19,600	30
35	39	13,100	17,200	52	13,000	17,000	59	12,800	16,900	64	12,600	16,600	67	12,400	16,500	70	12,200	16,450	72	12,000	16,400	35
40	25	10,900	14,900	44	10,800	14,800	53	10,600	14,600	59	10,400	14,400	63	10,200	14,200	67	10,000	14,000	69	9,750	13,700	40
45				35	9,150	12,700	47	9,000	12,500	54	8,800	12,300	59	8,550	12,100	63	8,350	11,800	66	8,100	11,600	45
50				23	7,850	11,000	40	7,700	10,800	49	7,500	10,600	55	7,300	10,400	59	7,050	10,200	63	6,800	9,950	50
60							20	5,800	8,400	37	5,600	8,200	46	5,400	7,950	52	5,150	7,750	56	4,950	7,500	60
70	RATINGS SHOWN DO NOT EXCEED MAXIMUM APPROVED TIRE CAPACITY.									21	4,300	6,500	35	4,100	6,250	44	3,850	6,050	49	3,650	5,800	70
80													19	3,150	5,000	33	2,900	4,800	41	2,650	4,550	80

RATED CRANE LOADS IN POUNDS—MAIN BOOM—WITHOUT OUTRIGGERS—TIRES AT 100 P.S.I.

Oper. Rad. Ft.	40 Ft. Boom			50 Ft. Boom			60 Ft. Boom			70 Ft. Boom			80 Ft. Boom			90 Ft. Boom			100 Ft. Boom			Oper. Rad. Ft.
	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	Angle	Over Side	Over Rear	Angle	Over Side	Over Rear	
12	79	57,600	73,200																			12
15	74	44,800	56,500	77	44,700	56,400																15
20	67	30,500	38,800	72	30,400	38,700	75	30,300	38,500	77	30,000	38,300										20
25	58	22,900	29,300	65	22,700	29,200	70	22,600	29,000	73	22,300	28,800	75	22,100	28,600	77	21,900	28,300	78	21,600	28,100	25
30	50	18,100	23,400	59	17,900	23,200	64	17,800	23,000	68	17,500	22,800	71	17,300	22,600	73	17,100	22,400	75	16,800	22,100	30
35	39	15,300	19,300	52	15,200	19,100	59	15,000	19,000	64	14,800	18,700	67	14,600	18,500	70	14,400	18,300	72	14,100	18,000	35
40	25	12,800	16,600	44	12,700	16,600	53	12,500	16,500	59	12,300	16,300	63	12,100	16,100	67	11,900	15,800	69	11,600	15,600	40
45				35	10,800	14,300	47	10,600	14,100	54	10,400	13,900	59	10,200	13,700	63	10,000	13,500	66	9,750	13,200	45
50				23	9,350	12,400	40	9,150	12,300	49	8,950	12,100	55	8,750	11,800	59	8,500	11,600	63	8,300	11,400	50
60							20	7,000	9,550	37	6,800	9,350	46	6,600	9,150	52	6,400	8,950	56	6,150	8,700	60
70	RATINGS SHOWN DO NOT EXCEED MAXIMUM APPROVED TIRE CAPACITY.									21	5,300	7,500	35	5,100	7,250	44	4,900	7,050	49	4,650	6,800	70
80													19	4,000	5,900	33	3,800	5,650	41	3,550	5,450	80

WARNING: Read for Safety

Using this equipment in excess of rated loads, in areas 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 tire deflection. This increase in radius must be compensated for by raising boom, or machine may tip over.

When three-quarter inch dia. P&H Type II Wire Rope (18 x 7 Non-Rotating Preformed Improved Plow Steel Wire Rope Fiber Core) is used for jib line, maximum lifted load including hook and swivel must not exceed 12,000 lbs. Non-rotating rope is approved for single line operation.

Welding or other repair to tubular steel boom may weaken the structure. See your P&H dealer for authorized boom repair service. Unauthorized boom repair service 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 by 25%. We recommend stopping operation when wind is above 30 M.P.H. and tieing off or lowering boom when wind is above 50 M.P.H.