LOWER MACHINERY

CAR BODY AND AXLES

Car body all-welded construction.



TRACTOR TYPE CRAWLER

Crawler side frames are extendible and retractable by use of hydraulic cylinders to convert from a more stable operating condition to a narrower overall width for travel and transportation. Clawler belt tension main-

tained by automatic spring loaded track tensioner. Crawler frames inserted to axles and fastened to lower frame with 4 braces to support 9 lower rollers in each frame.

CRAWLER DRIVE

Independent hydraulic propel drive built into each crawler side frame. Each drive consists of a hydraulic motor propelling a drive sprocket through a planetary gear box. The propel drive unit is protected within the shoe width to provide a neat undercarriage and eliminate projections.

CRAWLER BRAKES

Disc type, spring set hydraulically released parking brakes are built into each propel drive.

STEERING MECHANISM

The hydraulic propel system provides both skid steering (driving one track only) and counter-rotating steering (driving each track in opposite directions).

TRACK ROLLERS

Sealed track rollers for maintenance-free operation.

CRAWLER SHOES

Total number - both sides	110
Flat cast shoes — standard width	760 mm (29.9'')
TRAVEL SPEED	1.4 km/h (0.87 mph)
GRADEABILITY	40%

CRANE ATTACHMENTS



BASIC BOOM

Two piece, open throat lattice type tubular boom consisting of a tapered base section and a tapered tip section having five offset boom point sheaves 470 mm (18.5") pitch dia. with antifriction bearings. Sections

are pin connected and complete with suspension cable assemblies. High tensile steel chords all welded. Boom extendible to 48.77 m (1801)

(100 /.		
Basic length		9.14 m (30')
Boom base section	•••••	4.57 m (15')
Boom tip section		4.57 m (151)

BOOM INSERT SECTIONS (OPTIONAL)

Boom insert available for extension, with suspension cable assemblies, tubular lattice type, high tensile steel chords, all welded, pin connections.

Available in 3.05 m (10'), 6.10 m (20') and 9.14 m (30') long.

BASIC JIB (OPTIONAL)

Two piece, open throat tubular lattice type, having single jib point sheave, compression strut and guy cables assemblies. Sections are pin connected. High tensile steel chords, all welded. Jib extendible to 15.24 m (50'). For lifts not exceeding 4,500 kg (9,920 lbs).

Basic length	•••••••••••••••••••••••••••••••••••••••	6.10 m (20')
Jib base section		3.05 m (10')
Jib tip section	***************************************	3.05 m (10')

JIB INSERT SECTIONS (OPTIONAL)

Jib insert available for extension, with suspension cable assemblies, tubular lattice type, high tensile steel chords, all welded, pin connections.

Available in 3.05 m (10') and 6.10 m (20') long.



HOOK BLOCKS:

45 metric ton block with four sheaves, swivel hook, safety latch and nine (9) parts hoist line.

15 metric ton block with single sheave, swivel hook, safety latch and three (3) parts hoist line — optional

5 metric ton weighted ball hook with safety latch for jib - optional

DIAMETER OF WIRE ROPE

DIAMETER OF MINE HOLE	
Hoist wire rope20 mm	(0.79")
Jib hoist wire rope - optional20 mm	(0.79")
Boom hoist wire rope14 mm	(0.55")
Boom suspension wire rope - optional28 mm	(1.10")
Jib suspension wire rope — optional 18 mm	(0.71")
Intermediate boom suspension wire rope - optional ··· 14 mm	(0.55")
[Required when boom length is 45.72 m (150') or 48.77 m (160').]

BOOM HOIST REEVING

Twelve (12) parts line.

BOOM BACKSTOP

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

CABLE GUIDE ROLLERS (OPTIONAL)

Use as required to eliminate wire rope interference,

WORKING WEIGHT

GROUND PRESSURE

Machine w/760 mm (29.9") shoes -------Aver, 0.58 kg/cm² (8.2 psi)

DRUM WORKING DATA

			Left Hand Drum	Right Hand Drum	Boom Hoist Drum	
Functio	Function		Main hoist line	Jib hoist line	Boom hoist line	
Pitch d	ia.	mm (in.)	420 (16.54)	420 (16.54)	294 (11.57)	
Drum l	Drum length		300.5 (11.83)			
Wire ro	Wire rope dia.		20 (0.79)	20 (0.79)	14 (0.55)	
Capacity - Total		m (ft.)	240 (787)	240 (787)	140 (459)	
* Line	Hoisting	m/min (fpm)	48/34 (157/112)	48/34 (157/112)	48/34 (157/112)	
speed	Lowering	m/min (fpm)	29/21 (95/69)	29/21 (95/69)	26/18 (85/59)	

Line speed marked with * is based on single line and 1st layer of wire rope.

CLAMSHELL ATTACHMENTS



BASIC BOOM

Two piece, open throat lattice type tubular boom consisting of a tapered base section and a tapered tip section having five offset boom point sheaves 470 mm (18.5") pitch dia. with antifriction bearings. Sections are pin

Boom tip section 9.14 m (30')

Boom tip section 4.57 m (15')

BOOM INSERT SECTIONS (OPTIONAL)

Boom insert available for extension, with suspension cable assemblies, tubular lattice type, high tensile steel chords, all welded, pin connections

Available in 3.05 m (10'), 6.10 m (20') and 9.14 m (30') long.

DIAMETER OF WIRE ROPE

Boom hoist wire rope	14 mm (0.55")
Holding wire rope	20 mm (0.79")
Closing wire rope	20 mm (0.79")
Boom suspension wire rope	28 mm (1.10")

BOOM HOIST REEVING

Twelve (12) parts line.

BOOM BACKSTOP

Telescoping type with spring bumper.

TAGLINE WINDER

Hydraulic motor drive.

BUCKET

Max, allowable bucket capacity		2.0 m ³	(2.62 cu. yd.)
Max, allowable bucket weight	Approx	. 1.800	kg (3.970 lbs.)

WORKING WEIGHT

GROUND PRESSURE

Machine w/760 mm (29.9") shoes ------0.55 kg/cm² (7.8 psi.)

DRUM WORKING DATA

			Left Hand Drum	Right Hand Drum	Boom Hoist Drum
Function			Closing line	Holding line	Boom hoist line
Pitch d	ia.	mm (in.)	420 (16.54)	420 (16.54)	294 (11.57)
Drum length		mm (in.)	300.5 (11.83)	300.5 (11.83)	150 (5.91)
Wire rope dia.		mm (in.)	20 (0.79)	20 (0.79)	14 (0.55)
Capacit	y Total	m (ft.)	240 (787)	240 (787)	140 (459)
*Line speed	Hoisting	m/min (fpm)	48/34 (157/112)	48/34 (157/112)	48/34 (157/112)
	Lowering	m/min (fpm)	29/21 (95/69)	29/21 (95/69)	26/18 (85/59)

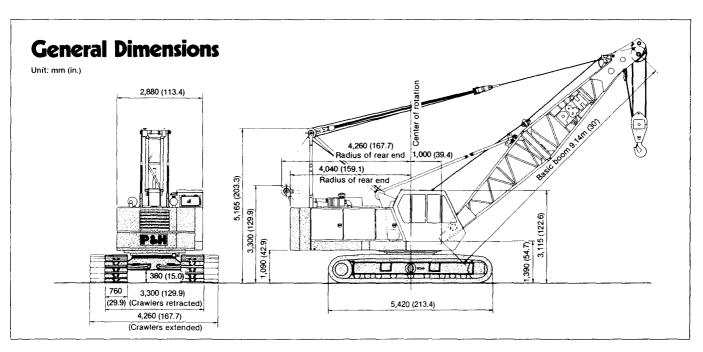
Line speed marked with * is based on single line and 1st layer of wire rope.

LINE PULL OF MAIN DRUMS

Drum	Transmis-		ngine . RPM	At Engine Max. Torque		
	sion Range	Line Pull kg (lbs.)	Line Speed m/min (fpm)	Line Pull kg (lbs.)	Line Speed m/min (fpm)	
Without planetary	High	10,600 (23,370)	48 (157)	11,300 (24,910)	37 (121)	
	Low	15,100 (33,290)	34 (112)	16,000 (35,270)	26 (85)	
With	High	9,900 (21,830)	48 (157)	9,900 (21,830)	37 (121)	
planetary	Low	9,900 (21,830)	34 (112)	9,900 (21,830)	26 (85)	

Left hand and right hand drums have the same dimensions.

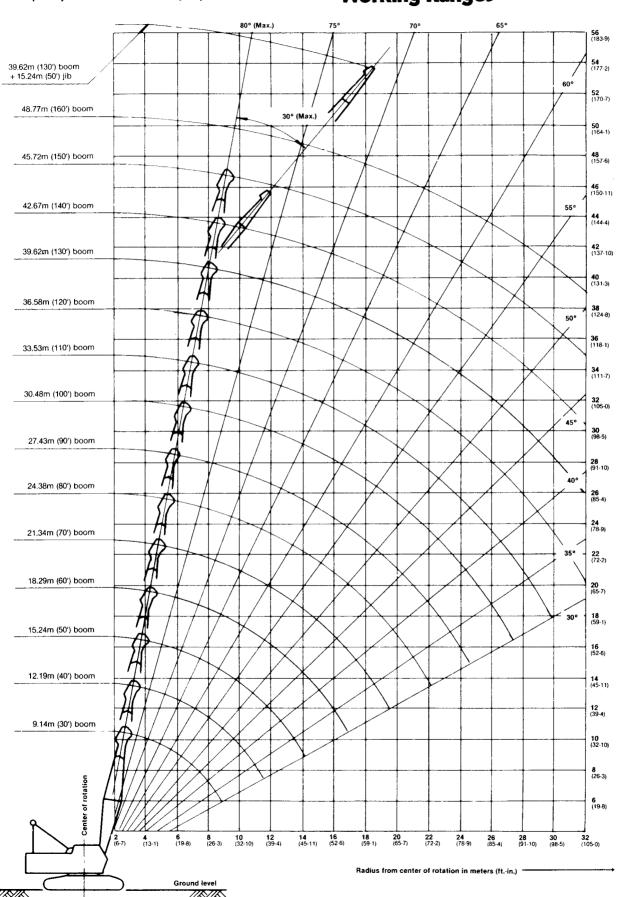
Line pull and line speed are based on single line and 1st layer of wire rope.



45-M ton Crawler Crane

45 metric ton Crane Load 48.77m (160') Boom 39.62m (130') Boom + 15.24m (50') Jib

Working Ranges



Height above ground in meters (ft.-in.)

Lifting Capacities

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

Operating Radius in Meters (FtIn.)	9.14m (30') Boom	12.19m (40') Boom	15.24m (50') Boom	18.29m (60') Boom	21.34m (70') Boom	24.38m (80') Boom	27.43m (90') Boom	30.48m (100') Boom	33.53m (110') Boom	36.58m (120') Boom	39.62m (130') Boom	42.67m (140') Boom	45.72m (150') Boom	48.77m (160') Boom
3.5 (11-6)	45,000 (99,210)	45,000 (99,210)												
4.0 (13-1)	38,600 (85,100)	38,550 (84,990)	38,000 (83,780)											
4.5 (14-9)	32,200 (70,990)	32,150 (70,880)	32,100 (70,770)	32,000 (70,550)										
5.0 (16-5)	27,100 (59,750)	27,000 (59,520)	26,950 (59,410)	26,850 (59,190)	26,750 (58,970)									
5.5 (18-1)	23,350 (51,480)	23,250 (51,260)	23,200 (51,150)	23,100 (50,930)	23,000 (50,710)	22,900 (50,490)								
6.0 (19-8)	20,500 (45,190)	20,400 (44,970)	20,350 (44,860)	20,250 (44,640)	20,150 (44,420)	20,100 (44,310)	20,000 (44,090)							
7.0 (23-0)	16,450 (36,270)	16,350 (36,050)	16,300 (35,940)	16,200 (35,710)	16,100 (35,490)	16,100 (35,490)	16,050 (35,380)	15,900 (35,050)						
8.0 (26-3)	13,700 (30,200)	13,600 (29,980)	13,550 (29,870)	13,450 (29,650)	13,350 (29,430)	13,350 (29,430)	13,300 (29,320)	13,200 (29,100)	13,000 (28,660)	12,900 (28,440)				
9.0 (29-6)	11,750 (25,900)	11,600 (25,570)	11,550 (25,460)	11,450 (25,240)	11,350 (25,020)	11,350 (25,020)	11,300 (24,910)	11,200 (24,690)	11,050 (24,360)	10,950 (24,140)	10,900 (24,030)	10,800 (23,810)		
10.0 (32-10)		10,100 (22,270)	10,050 (22,160)	9,950 (21,940)	9,850 (21,720)	9,800 (21,610)	9,800 (21,610)	9,700 (21,380)	9,500 (20,940)	9,450 (20,830)	9,400 (20,720)	9,300 (20,500)	9,150 (20,170)	9,100 (20,060)
12.0 (39-4)		8,000 (17,640)	7,950 (17,530)	7,850 (17,310)	7,700 (16,980)	7,650 (16,870)	7,600 (16,760)	7,550 (16,640)	7,400 (16,310)	7,300 (16,090)	7,250 (15,980)	7,150 (15,760)	7,050 (15,540)	7,000 (15,430)
14.0 (45-11)			6,500 (14,330)	6,400 (14,110)	6,250 (13,780)	6,200 (13,670)	6,100 (13,450)	6,050 (13,340)	5,900 (13,010)	5,850 (12,900)	5,800 (12,790)	5,700 (12,570)	5,600 (12,350)	5,550 (12,240)
16.0 (52-6)				5,400 (11,900)	5,250 (11,570)	5,100 (11,240)	5,050 (11,130)	5,000 (11,020)	4,850 (10,690)	4,800 (10,580)	4,750 (10,470)	4,650 (10,250)	4,450 (9,810)	4,500 (9,920)
18.0 (59-1)					4,450 (9,810)	4,350 (9,590)	4,200 (9,260)	4,150 (9,150)	4,050 (8,930)	4,000 (8,820)	3,950 (8,710)	3,850 (8,490)	3,750 (8,270)	3,700 (8,160)
20.0 (65-7)						3,700 (8,160)	3,600 (7,940)	3,550 (7,830)	3,450 (7,610)	3,350 (7,39 0)	3,300 (7,280)	3,200 (7,050)	3,100 (6,830)	3,050 (6,720)
22.0 (72-2)						3,200 (7,050)	3,050 (6,720)	3,000 (6,610)	2,950 (6,500)	2,850 (6,280)	2,800 (6,170)	2,700 (5,950)	2,600 (5,730)	2,550 (5,620)
2 4.0 (78-9)							2,650 (5,840)	2,600 (5,730)	2,550 (5,620)	2,400 (5,290)	2,350 (5,180)	2,250 (4,960)	2,200 (4,850)	2,150 (4,740)
26.0 (85-4)								2,250 (4,960)	2,200 (4,850)	2,050 (4,520)	2,000 (4,410)	1,900 (4,190)	1,850 (4,080)	1,800 (3,970)
28.0 (91-10)									1,900 (4,190)	1,800 (3,970)	1,750 (3,860)	1,650 (3,640)	1,550 (3,420)	1,500 (3,310)
30.0 (98-5)									1,650 (3,640)	1,500 (3,310)	1,450 (3,200)	1,350 (2,980)	1,250 (2,760)	1,200 (2,650)
32.0 (105-0)										1,300 (2,870)	1,250 (2,760)	1,150 (2,540)	1,050 (2,310)	1,000 (2,200)

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATED LOADS OR DISREGARD OF INSTRUCTIONS VOIDS THE WARRANTY.

- Operating radius is the horizontal distance from centerline of rotation to a vertical line through the center of gravity of the load.
- Ratings do not exceed 75% of tipping load. Deduct weight of hook block(s), slings and all other load handling accessories from main boom or jib ratings shown.
- 3. Ratings shown are based on freely suspended loads and make no allowance for such factors as wind effect on lifted load, ground conditions out-of-level, operating speeds or any other condition that could be detrimental to the safe operation of this equipment. The operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speeds accordingly.
- At radii and boom length where no ratings are shown on chart, operation is not intended or approved.
- Ratings are contingent upon the machine being equipped with the proper P&H KOBELCO boom.
- 6. Boom backstop is required for all boom lengths.
- Boom inserts and guy cables must be arranged as shown in the "Owner and Operator's Manual."
- 8. Ratings are based on crawler extended to a fulcrum point. Crawler frames must be fully extended for all crane operations.
- 9. Gantry must be in raised position for all conditions.
- 10. Ratings are based on counterweight of 12,600 Kg (27,780 lbs.).
- 11. Jib or auxiliary sheave crane ratings at any radius from center of rotation are the same as crane ratings shown in table for main boom when operated at the same radius, but do not exceed maximum ratings shown in table for jib or auxiliary sheave.
- 12. When boom is equipped with jib or auxiliary sheave, main hook

- ratings must be reduced by 800 kg (1,760 lbs.) for 6.10 m (20') jib, 900 kg (1,980 lbs.) for 9.14 m (30') jib, 1,000 kg (2,200 lbs.) for 12.19 m (40') jib, 1,100 kg (2,430 lbs.) for 15.24 m (50') jib and 200 kg (440 lbs.) for auxiliary sheave. To obtain actual hoistable loads, deduct weight of main hook block, slings, and all other load handling accessories from ratings shown.
- 3. Boom length for jib mounting is 27.43 m (90') to 39.62 m (130').
- 14. Boom length for auxiliary sheave mounting is 9.14 m (30') to 45.72 m (150').
- Mid-point suspension (centerhitch) is required when boom length is 45.72 m (150') and 48.77 m (160').
- 16. Generally booms must be erected over end of crawlers.

NOTE:

This P&H KOBELCO model 5045 meets the requirements of Japanese Mobile Construction Type Crane Safety Code.

WARNING:

- Welding or other repair to tubular steel booms may weaken the structure. See your P&H dealer for authorized boom repair service. Unauthorized repair will yold 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, derste chart 25%. We recommend stopping operation when wind is above 10 m/sec. (20 mph) and tieing off, or lowering, boom when wind is above 16 m/sec. (35 mph)