### LOWER ROLLERS

Bushed type, heat treated steel forgings with double rolling surfaces and center guide, bolted to crawler frame. Floating type seals provided for bearings.

# **CRAWLER SHOES**

Total number – both sides 112
Forged flat shoes - standard width 760 mm (30")
TRAVEL SPEED
High range (max.) 1.2 km/h (0.74 mph)
Low range (max.)
Speed range changed in operator's cab by means of change lever.
GRADEABILITY

# 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 400 mm (15.75") pitch dia, on antifriction bearings. Sections are pin connected. High tensile steel chords all welded. Boom extendible

to 51.82 m (170')

Boom length	12.19 m (40')
Boom base section	6.10 m (20')
Boom tip section	6.10 m (20')

### BOOM INSERT SECTIONS (OPTIONAL)

Boom insert available for extension, 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 on antifriction bearing, high tensile steel chords, all welded, pin connections. Jib extendible to 15.24 m (50').

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

### JIB INSERT SECTION (OPTIONAL)

'ib insert available for extension, tubular lattice type high tensile steel hords, all welded, pin connections,

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

## HOOK BLOCKS

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

13 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

Hoist wire rope	20 mm (0.79'')
Jib hoist wire rope (optional)	20 mm (0.79'')
Boom hoist wire rope	14 mm (0.55'')
Boom suspension wire rope	28 mm (1.10'')
Jib suspension wire rope (optional)	18 mm (0.71")

#### BOOM HOIST REEVING

Twelve (12) parts line.

### BOOM BACKSTOPS

Telescoping type with spring bumper.

### CABLE GUIDE ROLLERS (OPTIONAL)

Use as required to eliminate wire rope interference.

### WORKING WEIGHT

Working weight .....approx. 45,000 kg (99,200 lbs.) Including 12.19 m (40') boom, 760 mm (30') shoes, 50 metric ton hook blockand 14,000 kg (30,900 lbs.) counterweights.

# **GROUND PRESSURES**

Machine w/760 mm (30") shoes	••••••	0.60 kg/cm <sup>2</sup>	(8.5 psi)
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# TOWER CRANE ATTACHMENTS

#### TOWER BOOM



L.

Lattice type tubular boom consisting of a tapered base section, two inserts (or three inserts) and a cap section. Sections are pin connected. High tensile steel chords all welded. Tower boom extendible to 38.71 m (127').

ength in four sections	17.37 m (57′)
Base section	6.10 m (20')
1-insert	· 1.52 m (5')
1-insert	6.10 m (20')
Cap section	3.66 m (12′)

### TOWER INSERT SECTIONS (OPTIONAL)

Tower insert available for extension. Available in 3.05 m (10') and 9.14 m (30') long.

# JIB

## Basic Jib:

Four piece, open throat tubular lattice type, having single jib point sheave on antifriction bearing, high tensile steel chords, all welded, pin connections.

Length in four sections	13.72 m (45')
Base section	3.05 m (10')
1-insert ·····	6.10 m (20′)
1-insert ·····	·· 1.52 m (5')
Tip section	3.05 m (10′)
Optional Jib:	
Max. jib length with 32.61 m (107') tower	25.91 m (85')

Max, jib length with 38.71 m (127') tower ..... 22.86 m (75')

### JIB INSERT SECTIONS (OPTIONAL)

Jib insert available for extension. Available in 3.05 m (10') and 6.10 m (20') long.

### HOOK BLOCK

13 metric ton block with single sheave, swivel hook, safety latch and two (2) parts hoist line.

### DIAMETER OF WIRE LINE

Hoist wire rope	20 mm (0.79")
Tower hoist wire rope	14 mm (0.55'')
Jib hoist wire rope	14 mm (0.55")
Tower suspension wire rope	28 mm (1.10")
Jib suspension wire rope	26 mm (1.02")

#### BOOM HOIST REEVING

Tower: Twelve (12) parts line, Jib: Twelve (12) parts line.

# TOWER BOOM BACKSTOP

Telescoping type with spring bumper.

### WORKING WEIGHT

Including 38.71 m (127') tower boom, 19.81 m (65') jib, 760 mm (30") shoes, 13 metric ton hook block and 14,000 kg (30,900 lbs.) counterweight.

### GROUND PRESSURES

Machine w/760 mm (30") shoes ..... 0.68 kg/cm<sup>2</sup> (9.7 psi)

# 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 400 mm (15.75") pitch dia. on antifriction bearings. Sections are pin connected. High tensile steel chords all welded. Boom ex-

tendible to 18.29 m (60').	
Boom length	12.19 m (40')
Boom base section	6.10 m (20')
Boom tip section	6.10 m (20')

### BOOM INSERT SECTIONS (OPTIONAL)

Boom insert available for extension, tubular lattice type, high tensile steel chords, all welded, pin connections. Available in 3.05 m (10') and 6.10 m (20') 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 BACKSTOPS

Telescoping type with spring bumper.

### TAGLINE WINDER

Spring type.

### BUCKET

Max. allowable bucket capacity ..... 1.0 m<sup>3</sup> (1.31 cu.yd.) Max. allowable bucket weight (approx.) ...... 2,200 kg (4,850 lbs.)

# WORKING WEIGHT

Working weight ...... approx. 46,800 kg (103,200 lbs.) Including 12.19 m (40') boom, 760 mm (30'') shoes, 1.0 m<sup>3</sup> (1.31 cn.yd.) bucket and 14,000 kg (30,900 lbs.) counterweight,

### GROUND PRESSURES

Machine w/760 mm shoes	••••••	0.62 kg/cm <sup>2</sup>	(8.8 psi)
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# PILE DRIVER 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 400 mm (15.75")pitch dia. on antifriction bearings. Sections are pin connected. High tensile steel chords all welded. Boom extendible

to 21.34 m (70'). Boom length ..... 12.19 m (40') 

### BOOM INSERT SECTIONS (OPTIONAL)

Boom insert available for extension, 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.

# BOOM HOIST REEVING

Twelve (12) parts line.

### BOOM BACKSTOPS

Telescoping type with spring bumper.

### LEADER (OPTIONAL)

KOBELCO Model LA45A Leader.

High tensile steel tubes, splice type leader with top sheaves on antifriction bearings. The leader has ladders on both sides of it, and has an angle indicator on the lower part of it.

(This leader is to be equipped on the boom of the P&H Model 550A-S Crawler Crane.)

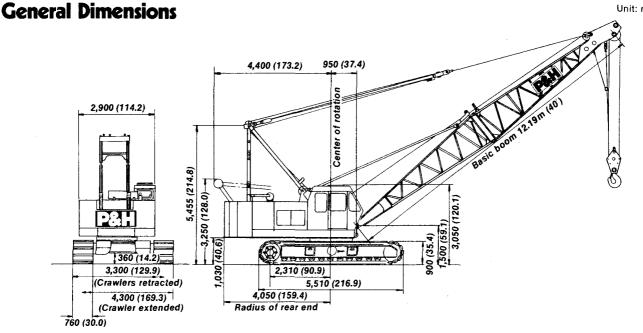
### DIESEL PILE HAMMER

To serve for the efficient pile-driving work of the KOBELCO Model K25, K35 or K45 Diesel Pile Hammer.

# DRUM FUNCTIONS WHEN EQUIPPED WITH EACH ATTACHMENTS

Attach- ments Drum type	Crane	Tower Crane	Clamshell	Pile Driver
Front Drum	Main hoist line	Load line	Closing line	Hammer hoist line
Rear Drum	Jib hoist line	Tower hoist line	Holding line	Pile hoist line
Boom hoist Drum	Boom hoist line	Jib hoist line	Boom hoist line	Boom hoist line (Leader hoist line)

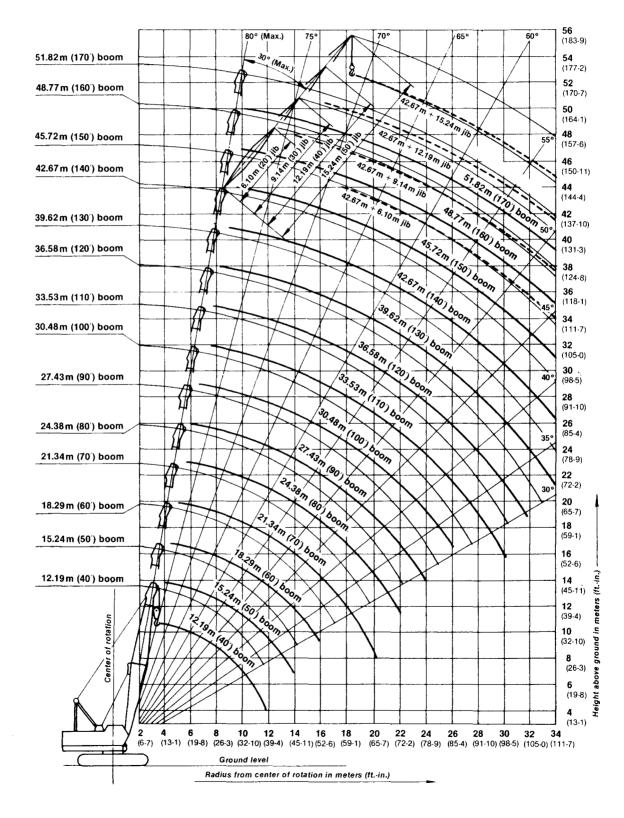
Unit: mm (in.)





50 metric ton Crane Load 51.82m Boom 42.67m Boom + 15.24m Jib

# **Working Ranges**



550A-S 8

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

Operating Radius in Meters	12.19 m (40') Boom	15.24 m (50') Boom	18.29 m (60') Boom	21.34 m (70') Boom	24.38 m (80') Boom	27.43 m (90') Boom	30.48 m (100') Boom	33.53 m (110') Boom	36.58 m (120') Boom	39.62 m (130') Boom	42.67 m (140') Boom	45.72 m (150') Boom	48.77 m (160') Boom	51.82 m (170′) Boom
(FtIn.) 3.7 (12-2)	50,000 (110,230)													
4.0 (13-1)	45,000 (99,210)	44,950 (99,100)												
4.5 (14- <u>9)</u>	37,200 (82,010)	37,150 (81,900)	37,100 (81,790)											
5.0 (16-5)	31,250 (68,890)	31,200 (68,780)	31,150 (68,670)	31,100 (68,560)										
5.5 (18-1)	26,800 (59,080)	26,750 (58,970)	26,700 (58,860)	26,650 (58,750)	26,600 (58,640)									
6.0 (19-8)	23,500 (51,810)	23,400 (51,590)	23,350 (51,480)	23,300 (51,370)	23,250 (51,260)	23,200 (51,150)								
7.0 (23-0)	18,700 (41,230)	18,600 (41,010)	18,550 (40,900)	18,500 (40,790)	18,450 (40,680)	18,400 (40,570)		18,300 (40,340)						
8.0 (26-3)	15,500 (34,170)	15, <b>40</b> 0 (33,950)	15,350 (33,840)	15,300 (33,730)	15,200 (33,510)	15,150 (33,400)	15,100 (33,290)	15,000 (33,070)	14,900 (32,850)	14,700 (32,410)				
9.0 (29-6)	13,200 (29,100)	13,100 (28,880)	13,000 (28,660)	12,950 (28,550)	12,900 (28,440)	12,850 (28,330)	12,800 (28,220)	12,700 (28,000)	12,600 (27,780)	12,550 (27,670)	12,500 (27,560)			
10.0 (32-10)	11,450 (25,240)	11,350 (25,020)	11,300 (24,910)	11,200 (24,690)	11,100 (24,470)	11,050 (24,360)	11,000 (24,250)	10,900 (24,030)	10,850 (23,920)	10,800 (23,810)	10,700 (23,590)	10,600 (23,370)	9,600 (21,160)	
12.0 (39-4)	9,000 (19,840)			8,750 (19,290)	8,700 (19,180)	8,650 (19,070)	8,600 (18,960)	8,500 (18,740)	8,400 (18,520)	8,350 (18,410)			8,100 (17,8 <u>6</u> 0)	7,700 (16,980)
14.0 (45-11)		7,300 (16,090)					6,900 (15,210)			6,700 (14,770)	6,600 (14,550)	6,500 (14,330)	6,400 (14,110)	
16.0 (52-6)			6,000 (13,230)							5,500 (12,130)				
18.0 _(59-1)	<u></u>				5,000 (11,020)					·	4,500 (9,920)	4,450 (9,810)	4,400 (9,700)	4,300 (9,48 <u>0)</u>
20.0 (65-7)				4,400 (9,700)	4,300 (9,480)	4,200 (9,260)	4,150 (9,150)	4,050 (8,930)	3,950 (8,710)	3,900 (8,600)	3,800 (8,380)	3,700 (8,160)	3,650 (8,050)	3,600 (7,940)
22.0 (72-2)					3,700 (8,160)	3,650 (8,050)	3,550 (7,830)	3,500 (7,720)	3,400 (7,500)	3,350 (7,390)	3,250 (7,170)	3,200 (7,050)	3,100 (6,830)	3,000 (6,610)
24.0 (78-9)						3,200 (7,050)	3,100 (6,830)	3,000 (6,610)	2,950 (6,500)	2,900 (6,390)	2,800 (6,170)	2,700 (5,950)	2,600 (5,730)	2,500 (5,510)
26.0 (85-4)							2,750 (6,060)	2,650 (5,840)	2,600 (5,730)	2,500 (5,510)	2,400 (5,290)	2,300 (5,070)	2,250 (4,960)	2,150 (4,740)
28.0 (91-10)								2,350 (5,180)	2,250 (4,960)	2,200 (4,850)	2,100 (4,630)	2,000 (4,410)	1,900 (4,190)	1,800 (3,970)
30.0 (98-5)								2,100 (4,630)	2,000 (4,410)	1,900 (4,190)	1,850 (4,080)	1,750 (3,860)	1,650 (3,640)	1,550 (3,420)
32.0 (105-0)									1,750 (3,860)	1,700 (3,750)	1,600 (3,530)	1,500 (3,310)	1,400 (3,090)	1,300 (2,870)
34.0 (111-7)										1,450 (3,200)	1,350 (2,980)	1,250 (2,760)	1,150 (2,540)	1,050 (2,310)

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

- 1. Operating radius is the horizontal distance from centerline of rotation to a vertical line through the centerline of gravity of the load.
- Ratings shown are only for combination of P&H manufactured upper, crawler, boom, jib and counterweights [14,000 kg (30,900 lbs.)].
- 3. Ratings do not exceed 78% of tipping load. Deduct weight of hook block(s), slings, cement bucket and all other load handling accessories from main boom or jib rating shown.
- 4. Boom backstops are required for all boom lengths. Boom inserts must be arranged as shown in the "Owner and Operator's Manual".
- Standard boom hoist reeving is 12 part line. Gantry must be in raised position for all "Crawlers extended" ratings.
- When boom is equipped with jib, 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.
- 7. Ratings shown are based on freely suspended loads and make no allowance for such factors as wind effect on lifted load, ground conditions, out-of-level, operating speeds or any other condition that could be detrimental to the safe operation of this equipment. The operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speeds accordingly.
- 8. Crawler frames must be fully extended for all crane operations.

## NOTE:

This P&H model 550A-S 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 void all warranties.
- The wind effect on the lifted load can cause sufficient side load to overstress boom or jib structure. When suspended load will not remain in line with boom, derate chart 25%. We recommend stopping operation when wind is above 10 m/sec. (22 mph) and tieing off, or lowering, boom when wind is above 16 m/sec. (35 mph).

# DRUM WORKING DATA

			Front Drum	Rear Drum	Boom Hoist Drum	
Function			Main hoist	Jib hoist	Boom hoist	
			line	line	line	
Pitch di	а.	(in.)	400 (15.75)	400 (15.75)	294 (11.57)	
Drum length		mm 541		541	158	
		(in.) (21.30)		(21.30)	(6.22)	
Wire rope dia.		mm	20	20	14	
		(in.)	(0.79)	(0.79)	(0.55)	
* Line speed	Hoisting	m/min (fpm)	60/30 (197/98)	60/30 (197/98)	45 (148)	
	Lowering	m/min (fpm)	60/30 (197/98)	60/30 (197/98)	45 (148)	
* Line pull		kg	9,200	9,200	6,080	
		(Ibs.)	(20,300)	(20,300)	(13,400)	