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. Crawler belt tension main­tained 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 (160').

Basic length ............................................. 9.14 m (30')
Boom base 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.

BASIC JIB (OPTIONAL)
Two piece, open throat tubular lattice type, having single jib point sheave, compression struts 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
Hoist wire rope ........................................ 20 mm (0.79")
Jib hoist wire rope — optional .................. 20 mm (0.79")
Boom hoist wire rope — optional ............ 14 mm (0.55")
Boom suspension wire rope — optional ... 28 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
Working weight ................................. Approx. 43,000 kg (94,800 lbs.)
Including 9.14 m (30') boom, 760 mm (29.9") shoes, 45 metric ton hook block and 12,600 kg (27,780 lbs.) counterweight.

GROUND PRESSURE
Machine w/760 mm (29.9") shoes ............ Aver. 0.58 kg/cm² (8.2 psi)

DRUM WORKING DATA

<table>
<thead>
<tr>
<th>Function</th>
<th>Left Hand Drum</th>
<th>Right Hand Drum</th>
<th>Boom Hoist Drum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pitch dia. mm (in.)</td>
<td>420 (16.54)</td>
<td>420 (16.54)</td>
<td>294 (11.57)</td>
</tr>
<tr>
<td>Drum length mm (in.)</td>
<td>300.5 (11.83)</td>
<td>300.5 (11.83)</td>
<td>150 (5.91)</td>
</tr>
<tr>
<td>Wire rope dia. mm (in.)</td>
<td>20 (0.79)</td>
<td>20 (0.79)</td>
<td>14 (0.55)</td>
</tr>
<tr>
<td>Capacity — Total m (ft.)</td>
<td>240 (787)</td>
<td>240 (787)</td>
<td>140 (469)</td>
</tr>
</tbody>
</table>

* 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 connected and complete with suspension cable assemblies. High tensile steel chords all welded. Boom extendible to 18.29 m (60').

Basic length ........................................ 9.14 m (30')
Boom base section ----------------------------- 4.57 m (15')
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 m³ (2.62 cu. yd.)
Max. allowable bucket weight ...................... Approx. 1,800 kg (3,970 lbs.)

WORKING WEIGHT
Working weight ........................................ Approx. 40,300 kg (88,840 lbs.)
Including 9.14 m (30') boom, 760 mm (29.9") shoes, 0.8 m³ (1.05 cu. yd.) bucket and 8,600 kg (18,960 lbs.) counterweight.

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

DRUM WORKING DATA

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<td>Wire rope dia.</td>
<td>20 (0.79)</td>
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<td>14 (0.55)</td>
</tr>
<tr>
<td>Capacity — Total</td>
<td>240 (787)</td>
<td>240 (787)</td>
<td>140 (459)</td>
</tr>
</tbody>
</table>

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

LINE PULL OF MAIN DRUMS

<table>
<thead>
<tr>
<th>Drum</th>
<th>Transmission Range</th>
<th>At Engine Max. RPM</th>
<th>At Engine Max. Torque</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Line Pull kg (lbs.)</td>
<td>Line Speed m/min (fpm)</td>
<td>Line Pull kg (lbs.)</td>
</tr>
<tr>
<td>Without planetary</td>
<td>High</td>
<td>10,600 (23,370)</td>
<td>48 (157)</td>
</tr>
<tr>
<td>Low</td>
<td>16,100 (35,270)</td>
<td>34 (112)</td>
<td>16,000 (35,270)</td>
</tr>
<tr>
<td>With planetary</td>
<td>High</td>
<td>9,900 (21,830)</td>
<td>48 (157)</td>
</tr>
<tr>
<td>Low</td>
<td>9,900 (21,830)</td>
<td>34 (112)</td>
<td>9,900 (21,830)</td>
</tr>
</tbody>
</table>

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.

GENERAL DIMENSIONS

Unit: mm (in.)
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. lin.)

Radius from center of rotation in meters (ft.-lin.)
1. Operating radius is the horizontal distance from centerline of rotation to a vertical line through the center of gravity of the load.
2. Ratings 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.
4. At radii and boom length where no ratings are shown on chart, ratings are contingent upon the machine being equipped with the proper P&H KOBELCO boom.
5. Boom backstop is required for all boom lengths.
6. Ratings are based on crawler extended to a fulcrum point. Crawler frames must be fully extended for all crane operations.
7. Boom inserts and guy cables must be arranged as shown in the "Owner and Operator's Manual".
8. Ratings are contingent upon the machine being equipped with the proper P&H KOBELCO boom.
9. Welding or other repair to tubular steel booms may weaken the structure. See your P& H dealer for authorized boom repair service.
10. Mid-point suspension (center hitch) is required when boom length is 45.72 m (150') and 48.77 m (160').
11. Boom length for auxiliary sheave mounting is 27.43 m (90') to 39.62 m (130').
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.
13. 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').
15. Mid-point suspension (center hitch) 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 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. (20 mph) and tying off, or lowering, boom when wind is above 16 m/sec. (35 mph).