Photos may include optional equipment.

Operating Weight:
1,658,000–1,713,000 lb
752–777 ton

Shovel Capacity:
55 yd³ 42 m³
SAE 2:1 heaped

Backhoe Capacity:
55 yd³ 42 m³
SAE 1:1 heaped
Photos may include optional equipment.
Komtrax equipped machines can send location, SMR and operation maps to a secure website utilizing wireless technology. Machines also relay error codes, cautions, maintenance items, fuel levels, and much more.

Quality
- Quality management ISO 9001
- Environmental Management ISO 14001
- High consistent quality through continuous investment in personnel, design and manufacturing systems and processes

Reliability and Durability
- Robust structural design developed from field experience and finite element analysis

Undercarriage
- Large diameter rollers, idlers and sprockets
- Large surface area and extensive precision hardening reduce track wear
- Hardened track link pin bores

Productivity
- Powerful digging forces
- Ease of bucket filling
- Proven bucket and front shovel design
- All cylinders mounted in the shadow of the attachment for protection
- Buckets and wear packages to suit all material densities and properties

Advanced Hydraulics
- Precise control
- Comprehensive monitored filtration
- Simple open circuit hydraulic system with high efficiency swing out oil coolers

Large Comfortable Cab
- Gives full shift comfort
- Komatsu low noise cab on multiple viscous mounts for reduced noise and vibration
- Large volume cab with large scale front window
- Comprehensive climate control with pressurized filtered air ventilation and air conditioning
- High specification multi-adjustable air suspension seat
- Well elevated operator position giving good all round view

Powerful Diesel Engine
- Two Komatsu SDA16V160E-2 engines Tier 2 for North America
- Rated (each) 1500 kW 2100 HP at 1800 rpm
- Electronic engine management
- Time saving Engine Oil Management System; Centinel, Engine Reserve Oil Supply and Eliminator Oil Filter system

Easy Maintenance
- Simple, common-sense design provides easy access to all major components
- Generous access to all major service points from machinery house floor level
- Enclosed, walk-in machinery house with partition wall separating engine from pump area
- Automatic central lubrication
- KOMTRAX Plus electronic monitoring system providing real time information about the operating status of the machine
- Ground-level access to hydraulically powered swing down service arm with Wiggins connections
**SPECIFICATIONS**

### DIESEL DRIVE

- **Model**: 2 x Komatsu SDA16V160E-2 Tier 2
- **Type**: Water-cooled, 4-cycle, direct injection, Turbocharged and aftercooled
- **Number of cylinders**: 16
- **Rated power**: 2,100 HP
- **Rated rpm**: 1,800

The power train consists of two main drives. Each of the two gearboxes drives four identical pumps which draw hydraulic oil from an unpressurized hydraulic tank. Open circuit hydraulics provide maximum cooling and filtering efficiency.

### HYDRAULIC SYSTEM

- **Rated flow (total output)**: 2,190 gal/min
- **Relief valve setting**: 310 bar, 4,495 psi
- **Swing flow rate**: 547 gal/min
- **High pressure in line filters**: 200 microns
- **Full flow return line filters (7 elements)**: 10 microns
- **Case drain/by-pass return line filters**: 3 microns

The four-circuit system features a load-limiting governor with oil delivery summation to the working circuits and incorporates pressure cut-off control. Hydropilot prioritizes hydraulic flow throughout platform.

### CRAWLER ASSEMBLY

- **Track adjustment**: Automatic hydraulic type
- **Number of track shoes (each side)**: 49
- **Number of top rollers (each side)**: 3
- **Number of bottom rollers (each side)**: 8

### ELECTRIC SYSTEM (DIESEL VERSION)

- **System**: 24 V
- **Batteries (series/parallel)**: 8 x 12 V
- **Alternator**: 2 x 100 A

### ELECTRIC SYSTEM (ELECTRIC VERSION)

- **System**: 24 V
- **Batteries (series/parallel)**: 4 x 12 V
- **Alternator**: 2 x 100 A
- **Standard working lights**: 14 Xenon lights
- **Standard service lights**: throughout platform

### ELECTRIC DRIVE

- **Type**: 2 x Squirrel-cage induction motor
- **Power output**: 2 x 1450 kW
- **Voltage**: 6,000 – 7,200 V*
- **Frequency standard**: 50 Hz @ 1800 rpm

### AUTOMATIC CENTRALIZED LUBRICATION

Three hydraulically powered Lincoln single line automatic lubrication systems are provided as standard, complete with time and volume variable controls. The two central lubrications and open gear lubricant are supplied by identical pump assemblies from refillable containers which have a capacity of (3 x 300 liters) 3 x 80 U.S. gal. Replenishment of the containers is through the Wiggins connections on the service arm.

### SERVICE CAPACITIES

- **Hydraulic oil tank**: 8350 ltr
- **Hydraulic system**: 11500 ltr
- **Fuel**: 13900 ltr
- **Engine coolant**: 2 x 475 ltr
- **Engine oil**: 2 x 290 ltr

**NOTE**: * Other voltages available on request
The large and comfortable cab is mounted on 18 viscous damping pads and sound insulated. The cab has an automatic climate control and is pressurized. The operator’s seat is air suspended, electrically heated and has a lap seat belt and offers multiple adjustments. The trainer seat is also equipped with a lap seat belt. Low-effort joystick controls are electric over hydraulic with foot controls for front shovel clam, crawler and swing brake. Full instrumentation, KOMTRAX Plus and an AM/FM radio with MP3 ready CD player is fitted. The windshield wash wiper has two speeds and intermittent operation.

Amenities include a refrigerator and storage cabinets. Powered and heated mirrors are adjusted from inside the cab. External metal sun blinds on the cab side window and internal roller blinds on all windows are standard. The right hand window is an emergency exit. All windows are tinted parasol green.

Cab engineering standards are:
- ISO 3449 Falling Objects Protection Structure (FOPS Level II)
- ISO 6396 Noise in operator’s cab is 78 dB(A)
- ISO 2631-1 Whole body vibration and shock below 0.5 m/s²
- ISO 5349-1 Hand-lever vibration lower 2.5 m/s²
- ISO 10263-4 Heating and air conditioning
  second heater and air conditioner as option

KOMTRAX Plus is designed for Komatsu mining equipment to provide real time information about the operating status of the machine via a colored display. The integrated digital storage provides a full event history and trend data, which can be downloaded by laptop and satellite modem, optional W-LAN.

### OPERATING WEIGHT (APPROXIMATE)

**PC8000 Backhoe:**
Operating weight including 11500 mm 37’9” boom, 5500 mm 18’0” stick, 42 m³ 55.0 yd³ backhoe bucket, operator, lubricant, coolant, 1/3 fuel tank and standard equipment.

<table>
<thead>
<tr>
<th>Shoe Width</th>
<th>Operating Weight</th>
<th>Ground Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500 mm</td>
<td>763 t</td>
<td>27.9 N/cm²</td>
</tr>
<tr>
<td>59”</td>
<td>1,671,000 lb</td>
<td>40.4 psi</td>
</tr>
<tr>
<td>1900 mm</td>
<td>777 t</td>
<td>22.4 N/cm²</td>
</tr>
<tr>
<td>75”</td>
<td>1,713,00 lb</td>
<td>32.5 psi</td>
</tr>
</tbody>
</table>

**PC8000 Front Shovel:**
Operating weight including 8150 mm 26’9” boom, 5750 mm 18’9” stick, 42 m³ 55.0 yd³ shovel bucket, operator, lubricant, coolant, 1/3 fuel tank and standard equipment.

<table>
<thead>
<tr>
<th>Shoe Width</th>
<th>Operating Weight</th>
<th>Ground Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500 mm</td>
<td>752 t</td>
<td>27.5 N/cm²</td>
</tr>
<tr>
<td>59”</td>
<td>1,658,000 lb</td>
<td>39.9 psi</td>
</tr>
<tr>
<td>1900 mm</td>
<td>767 t</td>
<td>22.1 N/cm²</td>
</tr>
<tr>
<td>75”</td>
<td>1,681,00 lb</td>
<td>32.0 psi</td>
</tr>
</tbody>
</table>

### Variation for Electric Drive Version

- **2** Electric Motors
- **6** High Voltage Electric Cabinet

**Walkways**
- Lower-Level
- Upper-Level
### PRODUCTIVITY FEATURES

#### BACKHOE ATTACHMENT

<table>
<thead>
<tr>
<th>Bucket Capacity (Heaped 1:1)</th>
<th>Width</th>
<th>Teeth</th>
<th>Wear Package</th>
<th>Weight</th>
<th>Max. Material Density (Loose)</th>
<th>Recommended Mining Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>m³</td>
<td>mm</td>
<td>qty</td>
<td></td>
<td>t</td>
<td>t/m³</td>
<td></td>
</tr>
<tr>
<td>42.0</td>
<td>4575</td>
<td>6</td>
<td>WP 1</td>
<td>48.0</td>
<td>1.8</td>
<td>Standard</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WP 2</td>
<td>105,840</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WP 3</td>
<td></td>
<td></td>
<td>Alternative buckets on request</td>
</tr>
</tbody>
</table>

- **Bucket Capacity (Heaped 1:1)**: 42 m³ (55.0 yd³)
- **Width**: 4575 mm (15'0'')
- **Teeth qty**: 6
- **Wear Package**: WP 1 (Light abrasive), WP 2 (Medium abrasive), WP 3 (Severe abrasive)
- **Weight**: 48.0 t (105,840 lb)
- **Max. Material Density (Loose)**: 1.8 t/m³ (3,000 lb/yd³)
- **Recommended Mining Uses**: Standard

---

**Boom length**: 11500 mm (37'9'')
**Stick length**: 5500 mm (27'7'')
**Break-out force (SAE)**: 2000 kN (449,500 lb)
**Tear-out force (SAE)**: 1800 kN (404,600 lb)

**Max. digging height**: 16900 mm (55'5'')
**Max. dumping height**: 11200 mm (36'9'')
**Max. digging depth**: 8000 mm (26'3'')
**Max. digging reach**: 20700 mm (67'11'')
**Max. digging reach at ground level**: 19600 mm (64'4'')

---

Bucket capacities and material density values are approximate and subject to change based on specific conditions and usage.
## PC8000

**Front Shovel Attachment**

<table>
<thead>
<tr>
<th>Bucket Capacity</th>
<th>Width</th>
<th>Teeth</th>
<th>Wear Package</th>
<th>Weight</th>
<th>Max. Material Density (Loose)</th>
<th>Recommended Mining Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Heaped 1:2) m³</td>
<td>SAE yd³</td>
<td>mm foot/inch</td>
<td>qty</td>
<td>*</td>
<td>t lb</td>
<td>t/m³ lb/yd³</td>
</tr>
<tr>
<td>28.0</td>
<td>37.0</td>
<td>4575 15'0&quot;</td>
<td>6</td>
<td>4</td>
<td>62.3 137,370</td>
<td>2.8 4,700</td>
</tr>
<tr>
<td>36.0</td>
<td>47.0</td>
<td>5375 17'8&quot;</td>
<td>6</td>
<td>4</td>
<td>70.7 155,890</td>
<td>2.0 3,400</td>
</tr>
<tr>
<td>42.0</td>
<td>55.0</td>
<td>5375 17'8&quot;</td>
<td>6</td>
<td>3</td>
<td>69.7 153,690</td>
<td>1.8 3,000</td>
</tr>
</tbody>
</table>

* WP 1: Non abrasive  WP 2: Light abrasive  WP 3: Medium abrasive  WP 4: Severe abrasive  Alternative buckets on request

- Boom length: 8150 mm (26'9")
- Stick length: 5750 mm (18'9")
- Break-out force (SAE): 2320 kN (521,500 lb)
- Tear-out force (SAE): 2320 kN (521,500 lb)
- Max. digging height: 20900 mm (68'7")
- Max. dumping height: 13900 mm (45'7")
- Max. digging depth: 3000 mm (9'10")
- Max. digging reach: 17800 mm (58'5")
- Level crowd at ground level: 5900 mm (19'4")
- Bucket opening width: 3200 mm (10'6")

---

**Bucket Capacity**

- 28.0 m³ (37.0 yd³)
- 36.0 m³ (47.0 yd³)
- 42.0 m³ (55.0 yd³)

---

**Material Density**

- Loose: 2.8 t/m³, 4,700 lb/ft³
- Severe: 2.0 t/m³, 3,400 lb/ft³
- Standard: 1.8 t/m³, 3,000 lb/ft³

---

**Bucket Width**

- 15'0" (4575 mm)
- 17'8" (5375 mm)

---

**Bucket Weight**

- 62.3 t (137,370 lb)
- 70.7 t (155,890 lb)
- 69.7 t (153,690 lb)
STANDARD EQUIPMENT

HYDRAULIC MINING SHOVEL

FRONT SHOVEL ATTACHMENT
- 8.15 m 26° boom
- 5.75 m 18° stick
- Set of cylinders
- 42 m³ 55 yd³ (SAE 2:1) shovel bucket WP3, with hammerless GET system

BACKHOE ATTACHMENT
- 11.5 m 37° boom
- 5.5 m 18° stick
- Set of cylinders
- 42 m³ 55 yd³ (SAE 1:1) bucket WP2, with hammerless GET system

CRAWLER UNDERCARRIAGE
- Heavy-duty shovel type undercarriage
- 2 heavy box-type track frames
- 8 bottom rollers and 3 top rollers each side
- 1500 mm 59" cast steel track shoes
- Hydraulic track adjustment and parking brake

SUPERSTRUCTURE
- Main frame mounted over an externally toothed swing circle carries the drive module
- 2 x Komatsu SDA16V160E-2 diesel engines
- Hydraulic components
- Counterweight

LIGHTING
- 14 Xenon high performance working lights
- Service lights throughout platform

OPERATOR CAB
- Enclosed steel cab mounted on viscous pads
- FOPS according ISO 3449 (Level II)
- Air-conditioning
- Full suspension operator seat
- Trainer seat
- Controls in operator comfort zone
- Joysticks and controls are electric over hydraulic
- 1 large parallel windshield washer wiper
- AM-FM radio with MP3 ready CD player
- All windows tinted parsol green

LUBRICATION AND SERVICE
- LINCOLN central lubrication for basic machine and attachment
- LINCOLN central lubrication for bucket and bucket stick assembly
- LINCOLN automatic pinion lubrication system for swing circle teeth
- WIGGINS service arm carrying fluid receiving connectors for filling of fuel, engine oil and coolant, hydraulic oil, grease, and the evacuation of coolant, hydraulic and engine oils

ACCESSORIES INCLUDED
- Acoustic travel alarm
- Hydraulically actuated ground access ladder
- Electric air horn
- Engine turbo and exhaust pipes cover
- Engine oil management package (Centinel, Reserve & Eliminator systems)
- Service transfer oil pump
- Rails and steps on boom
- Tie off points on boom
- Low temperature package (-40° F to -58° F) incl. KIM hot start

OPTIONAL EQUIPMENT
- 1900 mm 75° track shoes
- Additional lighting
- Fire suppression system
- Electric drive
- Cable reel (Electric version)
- Service crane (Electric version)

DIMENSIONS

Basic Machine with Counterweight

<table>
<thead>
<tr>
<th>A</th>
<th>1500 mm</th>
<th>4'11&quot;</th>
<th>3560 mm</th>
<th>11'8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>1900 mm</td>
<td>6'3&quot;</td>
<td>8950 mm</td>
<td>29'4&quot;</td>
</tr>
<tr>
<td>C</td>
<td>8330 mm</td>
<td>27'4&quot;</td>
<td>9655 mm</td>
<td>31'8&quot;</td>
</tr>
<tr>
<td>Cₐ</td>
<td>8730 mm</td>
<td>28'3&quot;</td>
<td>Mₐ</td>
<td>5480 mm</td>
</tr>
<tr>
<td>D</td>
<td>3055 mm</td>
<td>10'0&quot;</td>
<td>Mₐ</td>
<td>4550 mm</td>
</tr>
<tr>
<td>E</td>
<td>1095 mm</td>
<td>3'7&quot;</td>
<td>N</td>
<td>3750 mm</td>
</tr>
<tr>
<td>F</td>
<td>4050 mm</td>
<td>13'3&quot;</td>
<td>O</td>
<td>10010 mm</td>
</tr>
<tr>
<td>G</td>
<td>8100 mm</td>
<td>26'7&quot;</td>
<td>P</td>
<td>8410 mm</td>
</tr>
<tr>
<td>H</td>
<td>10735 mm</td>
<td>35'3&quot;</td>
<td>Pₕ</td>
<td>8710 mm</td>
</tr>
<tr>
<td>I</td>
<td>3615 mm</td>
<td>11'10&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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