BUCKET CAPACITY:
BACKHOE (SAE HEAPED 1:1): 4.4 - 12.0 m³ (5.8 - 15.7 cu. yd.)
SHOVEL (SAE HEAPED 2:1): 8.8 - 12.0 m³ (11.5 - 15.7 cu. yd.)

OPERATING WEIGHT:
BACKHOE: 192,000 kg (423,288 lb.)
SHOVEL: 191,000 kg (421,083 lb.)

RATED POWER:
810 kW (1,086 hp)
It’s no coincidence that over one-third of all hydraulic mining excavators working across the world are Hitachi. All of our excavators, like the EX1900-6, are engineered to give you efficiency, reliability and durability for all kinds of jobs. You get strong horsepower, efficient engines, comfortable cabs, advanced hydraulics, tough frames, powerful arm and bucket-digging forces and more. When you choose the EX1900-6, you get a...
SPECIALISTS
## Bucket Passes to Dump Trucks

<table>
<thead>
<tr>
<th>Truck</th>
<th>Nominal Payload</th>
<th>Bucket Capacity</th>
<th>Passes to Fill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shovel</td>
<td><strong>EH1700-3</strong></td>
<td>95.2 tonnes (106.6 tons)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>11 m³ (14.4 cu. yd.) Bucket</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>Backhoe</td>
<td><strong>EH1700-3</strong></td>
<td>95.2 tonnes (106.6 tons)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12 m³ (15.7 cu. yd.) Bucket</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>
The EX1900-6 is built to tackle your tough jobs. A fuel-efficient, Cummins QSKTA38–CE engine provides powerful performance with an Engine-Pump Control (E-P Control) system that efficiently adjusts power to your load demand. The advanced hydraulic system tops the industry for smooth, efficient combined operations of the front attachment and swing, delivering quick cycle times. This system, combined with the Hitachi-patented auto-leveling mechanism and large bucket capacities, contributes to efficient production. The EX1900-6 pairs well with the EHI700-3 truck and is available in a backhoe or front-shovel configuration. Add the EX1900-6 to your fleet, and you get...

---

**PROVEN PRODUCTIVITY.**

- **Powerful Engine.** A Cummins QSKTA38–CE diesel engine meets U.S. EPA Tier 2 emission regulations.
- **Efficient E-P Control.** The computer-aided Engine-Pump Control (E-P Control) system senses load demand and adjusts power to the work being performed.
- **Large, Efficient Bucket.** The large bucket is shaped specifically to enhance digging and loading operations. Its sharp tilt angle helps boost operating efficiency by allowing the operator better use of the bucket digging forces, and after digging, keeping more of the material in the bucket while loading the haul truck.
- **Auto-Level Mechanism.** An exclusive Hitachi feature available on front shovel attachments, the one-lever leveling control boosts productivity through efficient operation of the bucket through the dig cycle.
The EX1900-6 is designed and built with strength you can count on. Toughness is built-in with the rigid box design and integrated cast steel structures into the center track frame. High-mounted travel motors are guarded against rock damage, and a strategically positioned oil cooler is designed to give you more uptime. Add it all up, and the EX1900-6 is...

- The rigid box design resists bending and twisting forces, giving you stability and strength on any job.
- High-mounted compact travel motors are protected from rock damage. Optional travel motor guards provide an even higher level of protection from damage.
- The cast steel structures, integrated into the center track frame, assist in avoiding stress concentration and increase reliability.
- The oil cooler is strategically positioned far from the engine radiator for even better cooling potential.
The sturdy cab protects operators from falling objects. The cab’s top guard meets OPG Level II (ISO) standards. The entire cab sits on a package of fluid-filled elastic mounts that absorb vibration for a more comfortable ride.

The six-meter high, forward-sloping cab provides a clear view of the work site – even when loading trucks.

The air suspension, multi-position seat can be customized to the operator’s needs and adjusted according to operator weight.

The well-insulated, pressurized cab keeps out dust and is air conditioned.
The EX1900-6 cab is designed to keep operators as comfortable, efficient and productive as possible. The well-insulated, pressurized cab keeps dust out while maintaining a comfortable temperature thanks to a highly efficient heating/air conditioning system. Operators of all sizes have plenty of legroom and storage space with the cab’s ergonomic design, which helps operators stay productive even on long work shifts. With the EX1900-6, you get:

**COMFORTABLE CAB, EXTENDED PRODUCTIVITY.**

**SAFE AND EFFICIENT SPACE.**


- Electric joystick control levers provide precise and almost effortless operation.
- The multi-display, color LCD monitor provides machine data, operating status and alerts at a glance. The monitor can be preset to indicate replacement intervals for engine oil, hydraulic oil and filters.
- Four optional outside cameras can be mounted around the machine for enhanced visibility and help eliminate blind spots.

**MORE COMFORT, MORE PRODUCTIVITY.**
MINING EXCAVATOR

EX1900-6

HIGHER UPTIME, LOWER OPERATING COSTS.

When it comes to maintenance, the EX1900-6 provides big advantages. The simple servicing, inspection and cleaning of the EX1900-6 reduces costs and allows you to focus on finishing jobs. This excavator features easy-to-check sight gauges and fluid reservoirs, quick-change remote-mounted filters, advanced self-diagnostics and extended filter replacement intervals. When you’re operating an EX1900-6, you save time and money while getting...

MORE PRODUCTIVITY. LESS MAINTENANCE.

- Optional folding stairs with wide steps allow for easy accessibility, servicing and maintenance.
- The centralized filter system makes inspection and maintenance quicker and more convenient.
- A contamination sensor alerts the operator before it’s too late of accumulated contaminants in the oil that could cause damage.
- A walkway around the entire counterweight provides easy access to rear areas for faster, safer inspections and maintenance.
MAINTENANCE

- An ejector automatically expels dust from the air cleaner, giving you one less maintenance task.
- Located at the center of the machine, a wide-open service area gives you access to the engine as well as hydraulic and electrical systems.
- The compartment floor slides down to lower a grease drum can for quick replacement.
- The auto-lubrication system for the front joint pins and swing circle saves you time.
WHAT YOU NEED, WHEN YOU NEED IT.

QUICK SUPPORT. NO HASSLE.

At Hitachi, we specialize in excavators and trucks. So you can count on us to respond rapidly when you need support. You’ll get the parts you need, the service you want and the customer support you deserve. We stand behind you with a strong dealer network; a skilled factory support team; trained mechanics; and one of the best, most comprehensive warranty and maintenance programs available. We focus on supporting you and...

YOUR BOTTOM LINE.

Remote Machine Management with Global e-Service.
This online machine management system allows you to access each on-site machine from a PC in your office. You can get its operating information and location to increase productivity. Operating data and log are sent to a Hitachi server for processing, and then to customer and dealers. This system is available 24/7/365.

Note: In some regions, the Satellite Communication Device is not available by local regulations; the GPRS (mobile) communication device is an option for these regions.

* DTU (Data Transfer Unit) (optional) is required for connection to fleet management systems.
** WIU (Wireless Interface Unit) transmits operating data via wireless connection for downloading data.
**EX1900-6 SPECS**

**MINING EXCAVATOR**

### Diesel Engine **EX1900-6**
- **Manufacturer and Model:** Cummins QSKTA38-CE
- **Type:** 4 cycle
- **Aspiration:** Water-cooled, 12-cylinder, turbocharged and aftercooled, direct-injection chamber-type diesel engine
- **Emission certification:** U.S. EPA Tier 2
- **Rated power:**
  - Gross (SAE J1995) 775 kW (1,039 hp) @ 1,800 min⁻¹ (rpm)
  - Net 708 kW (953 hp) @ 1,800 min⁻¹ (rpm)
- **Piston displacement:** 37.8 L (2,307 cu. in.)
- **Starting system:** 24 V electric motor
- **Batteries:** 4 x 12 V, 4 x 220 AH
- **Cold starting:** Ether aided

### Electric Motor **EX1900E-6**
- **Manufacturer and Model:** HITACHI TFOA-KK
- **Type:** High voltage, three-phase, squirrel cage induction motor, totally enclosed air-to-air-cooled (TEAAC).
- **Rating**
  - Rated continuous output 610 kW
  - Voltage: AC 6,000 - 6,600 V / 50 Hz
  - AC 6,600 - 6,900 V / 60 Hz
- **Number of poles:** 4
- **Synchronous RPM:** 1,800 min⁻¹ / 50 Hz
  - I 800 min⁻¹ / 60 Hz
- **Rated current:** 69 A @ 6,600 V
- **Insulation class:** F class B raise
- **Space heater included**
- **Thermo-guard (temperature detector):** Ether aided
- **Starting condition:** Reactor 50% tap

### Hydraulic System

*Hitachi’s ETS (Electronic Total control System) can achieve maximum job efficiency by reducing fuel consumption and noise levels, while maximizing productivity through the optimization of engine-pump functions with excellent controllability increasing operator comfort.*

**Computer-Aided Engine-Pump Control System (E-P Control)**

Main pumps regulated by electric engine speed sensing control system.

**Optimum Hydraulic System (OHS)**

Three tandem-axial piston pump groups (six pumps in total), supply a three-valve hydraulic system enabling both independent and combined operations of all functions.

**Additional Features**

- Fuel-saving Pump System (FPS) minimizes energy loss with superior performance in fine control
- Auto-idle system saves fuel and reduces noise
- Hydraulic drive cooling-fan system for oil cooler
- Forced-lubrication and forced-cooling pump drive system

### Main Pumps

- 6 variable-displacement, axial piston pumps for front attachment, travel and swing
- Maximum oil flow 6 x 335 L/min (6 x 88.5 gal./min.)

### Pilot Pump

- Gear pump
- Maximum oil flow 110 L/min (29.06 gal./min.)

### Relief Valve Settings

- Implement circuit 29.4 MPa (300 kgf/cm²) (4,264 psi)
- Travel circuit 29.4 MPa (300 kgf/cm²) (4,264 psi)
- Swing circuit 29.4 MPa (300 kgf/cm²) (4,264 psi)
- Pilot circuit 4.4 MPa (65 kgf/cm²) (640 psi)

### Hydraulic Cylinders

High-strength piston rods and tubes adopted. Cylinder cushion mechanisms are provided for boom, arm, bucket and dump cylinders. Bucket cylinders of loading shovel are provided with protector.
Controls

Two Implement Levers
Electric joystick control levers. Right lever is for boom and bucket control, left lever for swing and arm control.
2 pedals provided for opening/closing the bottom dump bucket.

Two Travel Levers with Pedals
Remote-controlled hydraulic servo system. Independent drive at each track allows counter rotation of tracks.

Cylinder Dimensions (Backhoe)

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Bore</th>
<th>Rod Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom</td>
<td>2</td>
<td>280 mm (11 in.)</td>
</tr>
<tr>
<td>Arm</td>
<td>2</td>
<td>250 mm (9.8 in.)</td>
</tr>
<tr>
<td>Bucket</td>
<td>2</td>
<td>200 mm (7.9 in.)</td>
</tr>
</tbody>
</table>

Cylinder Dimensions (Loading Shovel)

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Bore</th>
<th>Rod Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom</td>
<td>2</td>
<td>280 mm (11 in.)</td>
</tr>
<tr>
<td>Arm</td>
<td>1</td>
<td>240 mm (9.4 in.)</td>
</tr>
<tr>
<td>Bucket</td>
<td>2</td>
<td>225 mm (8.9 in.)</td>
</tr>
<tr>
<td>Dump</td>
<td>2</td>
<td>190 mm (7.5 in.)</td>
</tr>
<tr>
<td>Level</td>
<td>1</td>
<td>280 mm (11 in.)</td>
</tr>
</tbody>
</table>

Hydraulic Filters
All hydraulic circuits have high-quality hydraulic filters for protection against oil contamination and longer life of hydraulic components. Filters are centralized for convenient maintenance.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Bore</th>
<th>Rod Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-flow filter</td>
<td>3</td>
<td>10 µm</td>
</tr>
<tr>
<td>High-pressure strainer (in main and swing pump line)</td>
<td>3</td>
<td>120 µm</td>
</tr>
<tr>
<td>Drain filter (for all plunger-type pumps and motors)</td>
<td>1</td>
<td>10 µm</td>
</tr>
<tr>
<td>Bypass filter (in oil cooler by-pass line)</td>
<td>1</td>
<td>5 µm</td>
</tr>
<tr>
<td>Pilot filter</td>
<td>1</td>
<td>10 µm</td>
</tr>
</tbody>
</table>
**Upperstructure**

**EX1900-6**

**Revolving Frame**
Deep, full-reinforced box section. Heavy-gauge steel plates used for ruggedness.

**Deck Machinery**
Maintenance accessibility is the major feature in the layout of deck machinery. Sidewalks provide easy access to engine, hydraulic, and electrical components.

1. Engine
2. Pump-Drive Unit
3. Hydraulic Pump x 6 (3 pump groups)
4. Hydraulic Oil Cooling-Fan Motor
5. Hydraulic Oil Cooler
6. Engine Radiator
7. LTA Radiator
8. Fuel Cooler
9. Transmission Pump Oil Cooler
10. Engine-Pump Bulkhead
11. Control Valve x 3
12. Swing Device x 2
13. Center Joint
14. Hydraulic Tank
15. Fuel Tank
16. Battery Unit
17. Lubricator
18. High-Pressure Strainer x 3
19. Reserve Tank (coolant)
20. Air Filter x 2 (Outer/Inner)
21. Muffler
22. Fuel Filter (water separator)
23. Cab
24. Ladder
25. Retractable-Type Ladder

---

**Upperstructure**

**EX1900E-6**

**Revolving Frame**
Deep, full-reinforced box section. Heavy-gauge steel plates used for ruggedness.

**Deck Machinery**
Maintenance accessibility is the major feature in the layout of deck machinery. Sidewalks provide easy access to engine, hydraulic, and electrical components.

1. Main Motor
2. Coupler
3. Pump Drive Unit
4. Hydraulic Pump x 6
5. Hydraulic Oil Cooling Fan Motor
6. Hydraulic Oil Cooler x 2
7. Lubricator
8. Pump Transmission Oil Cooler
9. Motor-Pump Bulkhead
10. Hydraulic Oil Tank
11. Cubicle
12. Control Valve x 3
13. Swing Device x 2
14. Slip Ring
15. Center Joint
16. High-Pressure Strainer x 6
17. Battery x 2
18. Cab
19. Retractable-Type Ladder
20. Ladder
21. Cab Heater Unit
## Swing Device

Two high-torque, axial-piston motors with planetary reduction gear bathed in oil. Swing circle with dirt seals is a heavy-duty, single-row, shear-type ball bearing. Induction-hardened internal swing circle gear and pinion immersed in lubricant. Parking brake of springset/hydraulic-released disc type. This parking brake is manually releasable.

| Swing speed | 4.7 min⁻¹ (rpm) |

## Operator's Cab

The sturdy cab, with the top guard conforming to OPG Level II (ISO), helps protect the operator from falling objects. 1800-mm (5 ft. 11 in.) width, 1938-mm (6 ft. 4 in.) length, 2150-mm (7 ft. 1 in.) height, roomy cab with tinted-glass windows features all-around visibility. Multi-display (267-mm [10.5 in.] LCD) for centralized information of machine status. Color monitor cameras for rear, right side and left lower views. Three separate pressurized air-conditioning systems.

| Noise level | 72 dB(A) in the cab at maximum engine speed under no-load condition |
| Eye-level height | 6030 mm (19 ft. 9 in.) |

## Undercarriage

### Tracks


### Tractor-Type Undercarriage

- Triple grouser shoes specially heat treated cast steel
  - Shoe width: 800 mm (32 in.)
- Number of Rollers and Shoes (each side)
  - Upper rollers: 3
  - Lower rollers: 8
  - Track shoes: 49

## Travel Device

Each track driven by high-torque, axial piston motors, allowing counter rotation of tracks. Two-stage planetary gear plus spur gears reduction device. Dual-support-type traction device. Parking brake of springset/hydraulic-released disc type. This parking brake is manually releasable.

| Travel speeds | Low: 0 – 2.1 km/h (0 – 1.3 mph) |
| High: 0 – 2.8 km/h (0 – 1.7 mph) |
| Maximum traction force | 941.5 kN / 96 000 kgf (211,644 lbf.) |
| Gradeability | 58% (30°) maximum |

## Weights and Ground Pressure

### Loading Shovel

- Equipped with 11.0 m³ (14.4 cu. yd.) (SAE heaped 2:1) bottom-dump bucket.

<table>
<thead>
<tr>
<th>Shoe Type</th>
<th>Shoe Width</th>
<th>Operating Weight</th>
<th>Ground Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel Engine</td>
<td>Triple Grousers</td>
<td>800 mm (32 in.)</td>
<td>191 000 kg (421,083 lb.)</td>
</tr>
<tr>
<td>Electric Motor</td>
<td>Triple Grousers</td>
<td>800 mm (32 in.)</td>
<td>190 000 kg (418,878 lb.)</td>
</tr>
</tbody>
</table>

### Backhoe

- Equipped with 8.3-m (27 ft. 3 in.) boom, 3.6-m (11 ft. 10 in.) arm, and 12.0-m³ (15.7 cu. yd.) (SAE heaped 1:1) bucket.

<table>
<thead>
<tr>
<th>Shoe Type</th>
<th>Shoe Width</th>
<th>Operating Weight</th>
<th>Ground Pressure</th>
</tr>
</thead>
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<tr>
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<td>800 mm (32 in.)</td>
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</tr>
<tr>
<td>Electric Motor</td>
<td>Triple Grousers</td>
<td>800 mm (32 in.)</td>
<td>191 000 kg (418,878 lb.)</td>
</tr>
</tbody>
</table>

## Service Refill Capabilities

| Fuel tank | 4140 L (1,094 gal.) |
| Engine coolant | 395 L (104 gal.) |
| Engine oil | 166 L (44 gal.) |
| Pump transmission device | 26 L (7 gal.) |
| Swing device | 2 x 67 L (2 x 17 gal.) |
| Travel device | 2 x 70 L (2 x 18 gal.) |
| Hydraulic system | 2200 L (581 gal.) |
| Hydraulic oil tank | 1050 L (277 gal.) |
Boom and arm are of all-welded, low-stress, high-tensile strength steel full-box section design.

Bucket Capacity (SAE Heaped 2:1) 11.0 m³ (14.4 cu. yd.)
A Min digging distance 5550 mm (18 ft. 3 in.)
B Min level crowding distance 7650 mm (25 ft. 1 in.)
C Level crowding distance 4820 mm (15 ft. 10 in.)
D Max digging reach 13 430 mm (44 ft. 1 in.)
E Max cutting height 14 610 mm (47 ft. 11 in.)
E' Max dumping height 10 440 mm (34 ft. 3 in.)
F Max digging depth 5920 mm (19 ft. 5 in.)
G Working radius at max dumping height 6890 mm (22 ft. 7 in.)
H Max bucket opening width 2100 mm (6 ft. 11 in.)

Bucket digging force 754 kN / 76 890 kgf (169,506 lbf.)
Arm crowding force 720 kN / 73 420 kgf (161,862 lbf.)

Working Ranges

Bucket and arm are of all-welded, low-stress, high-tensile strength steel full-box section design.

Note: These buckets do not include any type of wear protection for sides, bottom, and inside the bucket. Please consult your local Hitachi dealer for a proper wear protection system for your application. Please do not use the buckets without proper wear protection for your application.
Bucket Boom and arm are of all-welded, low-stress, full-box section design. Bucket of all-welded, high-strength steel structure. Bucket/arm and arm/boom joint pins are floating type.

Replaceable thrust plates are provided with bucket/arm joint part. Auto-lubrication system for all pins is standard.

### Working Ranges

<table>
<thead>
<tr>
<th>Working Ranges</th>
<th>BE-boom length</th>
<th>A Max digging reach</th>
<th>A' Max digging reach (on ground)</th>
<th>B Max digging depth</th>
<th>B' Max digging depth (2.5 m level)</th>
<th>C Max cutting height</th>
<th>D Max dumping height</th>
<th>D' Min dumping height</th>
<th>E Min swing radius</th>
<th>F Max vertical wall</th>
<th>G Min level crowding distance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8.3 m (27 ft. 3 in.)</td>
<td>15 250 mm (50 ft.)</td>
<td>14 770 mm (48 ft. 6 in.)</td>
<td>8180 mm (26 ft. 10 in.)</td>
<td>8070 mm (26 ft. 6 in.)</td>
<td>14 140 mm (46 ft. 5 in.)</td>
<td>9060 mm (29 ft. 9 in.)</td>
<td>4060 mm (13 ft. 4 in.)</td>
<td>7440 mm (23 ft. 5 in.)</td>
<td>5520 mm (18 ft. 1 in.)</td>
<td>4480 mm (14 ft. 8 in.)</td>
</tr>
</tbody>
</table>

**Bucket digging force**

- **SAE** 617 kN / 62 900 kgf (138,707 lbf.)
- **ISO** 671 kN / 68 400 kgf (150,847 lbf.)

**Arm crowding force**

- **SAE** 609 kN / 62 100 kgf (136,909 lbf.)
- **ISO** 620 kN / 63 200 kgf (139,382 lbf.)

### Bucket

Boom and arm are of all-welded, low-stress, full-box section design. Bucket of all-welded, high-strength steel structure. Bucket/arm and arm/boom joint pins are floating type. Replaceable thrust plates are provided with bucket/arm joint part. Auto-lubrication system for all pins is standard.

<table>
<thead>
<tr>
<th>Capacity (SAE heaped 1:1)</th>
<th>Width (without side cutters)</th>
<th>Number of Teeth</th>
<th>Weight</th>
<th>Type</th>
<th>Materials density</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.0 m³ (15.7 cu. yd.)</td>
<td>3050 mm (10 ft.)</td>
<td>6</td>
<td>13 200 kg (29,101 lb.)</td>
<td>General purpose</td>
<td>1800 kg/m³ (3.034 lb./cu. yd.) or less</td>
</tr>
</tbody>
</table>

Note: These buckets do not include any type of wear protection for sides, bottom, and inside the bucket. Please consult your local Hitachi dealer for a proper wear protection system for your application. Please do not use the buckets without proper wear protection for your application.
Upperstructure (continued) EX1900-6

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRACKET</td>
<td>15 kg</td>
<td>55 mm</td>
</tr>
<tr>
<td>AIR CLEANER AND MUFFLER</td>
<td>83 kg</td>
<td>1200 mm</td>
</tr>
<tr>
<td>BRACKET</td>
<td>9 kg</td>
<td>55 mm</td>
</tr>
<tr>
<td>FENDER</td>
<td>9 kg</td>
<td>55 mm</td>
</tr>
<tr>
<td>HOSE REEL</td>
<td>9 kg</td>
<td>55 mm</td>
</tr>
<tr>
<td>COUNTERWEIGHT</td>
<td>25300 kg</td>
<td>1220 mm</td>
</tr>
</tbody>
</table>
| Upperstructure (continued) EX1900-6

TRANSPORTATION
## Upperstructure (continued)

### EX1900-6 SPECTS

### TRANSPORTATION

<table>
<thead>
<tr>
<th>Content</th>
<th>Quantity</th>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td>1</td>
<td>1590 mm (5 ft. 3 in.)</td>
<td>634 mm (25 in.)</td>
<td>3020 mm (9 ft. 11 in.)</td>
<td>147 kg (324 lb.)</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td>1</td>
<td>1070 mm (3 ft. 6 in.)</td>
<td>819 mm (32 in.)</td>
<td>70 kg (154 lb.)</td>
<td></td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td>1</td>
<td>31 mm (1 in.)</td>
<td>693 mm (27 in.)</td>
<td>25 kg (55 lb.)</td>
<td></td>
</tr>
<tr>
<td><strong>Sidewalk 1</strong></td>
<td>1</td>
<td>1850 mm (6 ft. 1 in.)</td>
<td>1250 mm (4 ft. 1 in.)</td>
<td>660 mm (26 in.)</td>
<td>74 kg (163 lb.)</td>
</tr>
<tr>
<td><strong>Sidewalk 2</strong></td>
<td>1</td>
<td>1770 mm (5 ft. 10 in.)</td>
<td>1250 mm (4 ft. 1 in.)</td>
<td>612 mm (24 in.)</td>
<td>70 kg (154 lb.)</td>
</tr>
<tr>
<td><strong>Sidewalk 3</strong></td>
<td>1</td>
<td>1810 mm (5 ft. 11 in.)</td>
<td>1290 mm (4 ft. 3 in.)</td>
<td>711 mm (27.8 in.)</td>
<td>77 kg (170 lb.)</td>
</tr>
<tr>
<td><strong>Sidewalk 4</strong></td>
<td>1</td>
<td>2080 mm (6 ft. 10 in.)</td>
<td>1550 mm (5 ft. 9 in.)</td>
<td>700 mm (2 ft. 7 in.)</td>
<td>357 kg (770 lb.)</td>
</tr>
<tr>
<td><strong>Sidewalk 5</strong></td>
<td>1</td>
<td>2240 mm (7 ft. 4 in.)</td>
<td>695 mm (27 in.)</td>
<td>2260 mm (7 ft. 5 in.)</td>
<td>153 kg (337 lb.)</td>
</tr>
<tr>
<td><strong>Sidewalk 6</strong></td>
<td>1</td>
<td>2300 mm (7 ft. 7 in.)</td>
<td>944 mm (3 ft. 1 in.)</td>
<td>1700 mm (5 ft. 7 in.)</td>
<td>272 kg (600 lb.)</td>
</tr>
<tr>
<td><strong>Sidewalk 7</strong></td>
<td>1</td>
<td>1770 mm (5 ft. 10 in.)</td>
<td>950 mm (3 ft. 1 in.)</td>
<td>1700 mm (5 ft. 7 in.)</td>
<td>209 kg (461 lb.)</td>
</tr>
<tr>
<td><strong>Sidewalk 8</strong></td>
<td>1</td>
<td>1350 mm (4 ft. 5 in.)</td>
<td>965 mm (3 ft. 2 in.)</td>
<td>1710 mm (5 ft. 7 in.)</td>
<td>157 kg (346 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 1</strong></td>
<td>1</td>
<td>240 mm (7 ft.)</td>
<td>322 mm (13 in.)</td>
<td>1190 mm (3 ft. 11 in.)</td>
<td>33 kg (73 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 2</strong></td>
<td>1</td>
<td>1390 mm (4 ft. 7 in.)</td>
<td>374 mm (15 in.)</td>
<td>1160 mm (3 ft. 10 in.)</td>
<td>32 kg (71 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 3</strong></td>
<td>1</td>
<td>2050 mm (6 ft. 9 in.)</td>
<td>413 mm (16.2 in.)</td>
<td>1020 mm (3 ft. 4 in.)</td>
<td>37 kg (82 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 4</strong></td>
<td>1</td>
<td>2960 mm (9 ft. 9 in.)</td>
<td>281 mm (9 in.)</td>
<td>1020 mm (3 ft. 4 in.)</td>
<td>47 kg (104 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 5</strong></td>
<td>1</td>
<td>763 mm (30 in.)</td>
<td>373 mm (15 in.)</td>
<td>1020 mm (3 ft. 4 in.)</td>
<td>20 kg (44 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 6</strong></td>
<td>1</td>
<td>509 mm (20 in.)</td>
<td>373 mm (15 in.)</td>
<td>1640 mm (5 ft. 5 in.)</td>
<td>18 kg (40 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 7</strong></td>
<td>1</td>
<td>1190 mm (3 ft. 11 in.)</td>
<td>233 mm (9 in.)</td>
<td>1020 mm (3 ft. 4 in.)</td>
<td>16 kg (35 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 8</strong></td>
<td>1</td>
<td>957 mm (3 ft. 2 in.)</td>
<td>469 mm (19 in.)</td>
<td>1180 mm (3 ft. 10 in.)</td>
<td>46 kg (101 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 9</strong></td>
<td>1</td>
<td>2100 mm (7 ft.)</td>
<td>223 mm (9 in.)</td>
<td>1020 mm (3 ft. 4 in.)</td>
<td>27 kg (60 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 10</strong></td>
<td>1</td>
<td>755 mm (20 in.)</td>
<td>851 mm (34 in.)</td>
<td>1440 mm (4 ft. 9 in.)</td>
<td>70 kg (154 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 11</strong></td>
<td>1</td>
<td>832 mm (33 in.)</td>
<td>55 mm (2 in.)</td>
<td>1020 mm (3 ft. 4 in.)</td>
<td>13 kg (29 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 12</strong></td>
<td>1</td>
<td>1950 mm (6 ft. 5 in.)</td>
<td>461 mm (18 in.)</td>
<td>1320 mm (4 ft. 4 in.)</td>
<td>83 kg (183 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 13</strong></td>
<td>1</td>
<td>870 mm (34 in.)</td>
<td>55 mm (2 in.)</td>
<td>1020 mm (3 ft. 4 in.)</td>
<td>14 kg (31 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 14</strong></td>
<td>1</td>
<td>755 mm (30 in.)</td>
<td>887 mm (35 in.)</td>
<td>1336 mm (4 ft. 5 in.)</td>
<td>65 kg (143 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 15</strong></td>
<td>1</td>
<td>1670 mm (5 ft. 6 in.)</td>
<td>517 mm (21 in.)</td>
<td>1190 mm (3 ft. 11 in.)</td>
<td>31 kg (68 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 16</strong></td>
<td>1</td>
<td>687 mm (27 in.)</td>
<td>637 mm (25 in.)</td>
<td>1010 mm (3 ft. 4 in.)</td>
<td>18 kg (40 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 17</strong></td>
<td>1</td>
<td>618 mm (24 in.)</td>
<td>339 mm (13 in.)</td>
<td>1550 mm (5 ft. 1 in.)</td>
<td>18 kg (40 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 18</strong></td>
<td>1</td>
<td>650 mm (26 in.)</td>
<td>268 mm (10 in.)</td>
<td>1100 mm (3 ft. 7 in.)</td>
<td>16 kg (35 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 19</strong></td>
<td>1</td>
<td>618 mm (24 in.)</td>
<td>339 mm (13 in.)</td>
<td>1550 mm (5 ft. 1 in.)</td>
<td>18 kg (40 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 20</strong></td>
<td>1</td>
<td>500 mm (20 in.)</td>
<td>240 mm (9 in.)</td>
<td>1280 mm (4 ft. 2 in.)</td>
<td>24 kg (53 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 21</strong></td>
<td>1</td>
<td>2780 mm (9 ft. 1 in.)</td>
<td>1260 mm (4 ft. 2 in.)</td>
<td>1010 mm (3 ft. 4 in.)</td>
<td>36 kg (79 lb.)</td>
</tr>
<tr>
<td><strong>Handrail 22</strong></td>
<td>1</td>
<td>2350 mm (9 ft. 8 in.)</td>
<td>855 mm (34 in.)</td>
<td>1010 mm (3 ft. 4 in.)</td>
<td>36 kg (79 lb.)</td>
</tr>
</tbody>
</table>
**Loader Attachments**

**EX1900-6**

**Boom and Arm Assembly**
- Weight: 25,260 kg (55,689 lb.)
- Width: 2,160 mm (7 ft. 1 in.)

**Boom Cylinder**
- Weight: 2,270 kg (5,004 lb.)

**Center Cover**
- Weight: 60 kg (132 lb.)
- Width: 440 mm (1 ft. 5 in.)

**Side Cover**
- Weight: 156 kg (344 lb.)
- Width: 380 mm (1 ft. 3 in.)

**Stay**
- Weight: 79 kg (174 lb.)
- Width: 100 mm (4 in.)

**Step**
- Weight: 14 kg (31 lb.)
- Width: 530 mm (1 ft. 9 in.)

**Track Side Frame Assembly**
- Weight: 44,200 kg (97,220 lb.)
- Width: 1,630 mm (5 ft. 4 in.)

**Bucket Assembly**
- Weight: 3,300 kg (7,315 lb.)
- Width: 1,550 mm (5 ft. 1 in.)

**Transportation**

**Loader Assembly**

<table>
<thead>
<tr>
<th>Bucket Capacity</th>
<th>A</th>
<th>B</th>
<th>Max. Width</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.8 m³ (11.5 cu. yd.)</td>
<td>3,380 mm (11 ft. 1 in.)</td>
<td>3,140 mm (10 ft. 4 in.)</td>
<td>2,900 mm (9 ft. 6 in.)</td>
<td>6,300 kg (13,935 lb.)*</td>
</tr>
<tr>
<td>11.0 m³ (14.4 cu. yd.)</td>
<td>3,480 mm (11 ft. 5 in.)</td>
<td>3,130 mm (10 ft. 3 in.)</td>
<td>3,440 mm (11 ft. 3 in.)</td>
<td>5,100 kg (11,290 lb.)</td>
</tr>
<tr>
<td>12.0 m³ (15.7 cu. yd.)</td>
<td>3,730 mm (12 ft. 3 in.)</td>
<td>3,130 mm (10 ft. 3 in.)</td>
<td>3,440 mm (11 ft. 3 in.)</td>
<td>5,520 kg (12,216 lb.)</td>
</tr>
</tbody>
</table>

*With wear plate

---

**MINING EXCAVATOR EX1900-6 SPECS**

**Loader Attachments**

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**Loader Assembly**

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<th>Weight</th>
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<td>3,730 mm (12 ft. 3 in.)</td>
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<td>3,440 mm (11 ft. 3 in.)</td>
<td>5,520 kg (12,216 lb.)</td>
</tr>
</tbody>
</table>

*With wear plate
## Backhoe Attachments EX1900-6

### Boom Assembly Dimensions

<table>
<thead>
<tr>
<th>Boom Length</th>
<th>A (mm)</th>
<th>B (mm)</th>
<th>Width (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.30 m (27 ft. 3 in.)</td>
<td>8720</td>
<td>3400</td>
<td>2050 (6 ft. 9 in.)</td>
<td>18700 (41,226 lb.)</td>
</tr>
<tr>
<td>9.70 m (28 ft. 6 in.)</td>
<td>9120</td>
<td>3500</td>
<td>2050 (6 ft. 9 in.)</td>
<td>19100 (42,108 lb.)</td>
</tr>
<tr>
<td>11.80 m (38 ft. 9 in.)</td>
<td>12220</td>
<td>3700</td>
<td>2050 (6 ft. 9 in.)</td>
<td>22700 (50,044 lb.)</td>
</tr>
</tbody>
</table>

### Backhoe Assembly Dimensions

<table>
<thead>
<tr>
<th>Capacity (SAE heaped 1:1)</th>
<th>A (mm)</th>
<th>B (mm)</th>
<th>Width (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.4 m³ (5.8 cu. yd.)</td>
<td>2630</td>
<td>2180</td>
<td>2070 (6 ft. 10 in.)</td>
<td>4830 (10,648 lb.)</td>
</tr>
<tr>
<td>4.8 m³ (6.5 cu. yd.)</td>
<td>2590</td>
<td>2470</td>
<td>1650 (5 ft. 5 in.)</td>
<td>5180 (11,420 lb.)</td>
</tr>
<tr>
<td>6.0 m³ (7.8 cu. yd.)</td>
<td>2950</td>
<td>2470</td>
<td>1950 (6 ft. 5 in.)</td>
<td>5390 (11,980 lb.)</td>
</tr>
<tr>
<td>8.0 m³ (10.5 cu. yd.)</td>
<td>3090</td>
<td>2480</td>
<td>2325 (7 ft. 8 in.)</td>
<td>7430 (16,380 lb.)</td>
</tr>
<tr>
<td>9.6 m³ (12.6 cu. yd.)</td>
<td>3090</td>
<td>2480</td>
<td>2710 (8 ft. 11 in.)</td>
<td>8080 (17,813 lb.)</td>
</tr>
<tr>
<td>12.0 m³ (15.7 cu. yd.)</td>
<td>3410</td>
<td>2680</td>
<td>3050 (8 ft. 0 in.)</td>
<td>12900 (28,440 lb.)</td>
</tr>
</tbody>
</table>

### Arm Assembly Dimensions

<table>
<thead>
<tr>
<th>Arm Length</th>
<th>A (mm)</th>
<th>B (mm)</th>
<th>Width (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6 m (11 ft. 10 in.)</td>
<td>5000</td>
<td>2060</td>
<td>1720 (5 ft. 8 in.)</td>
<td>10600 (23,369 lb.)</td>
</tr>
<tr>
<td>4.0 m (13 ft. 2 in.)</td>
<td>5280</td>
<td>1950</td>
<td>1720 (5 ft. 8 in.)</td>
<td>10500 (23,149 lb.)</td>
</tr>
<tr>
<td>5.5 m (18 ft. 1 in.)</td>
<td>6780</td>
<td>1700</td>
<td>1720 (5 ft. 8 in.)</td>
<td>11500 (25,353 lb.)</td>
</tr>
<tr>
<td>7.0 m (23 ft.)</td>
<td>8370</td>
<td>2440</td>
<td>1780 (5 ft. 10 in.)</td>
<td>10900 (24,030 lb.)</td>
</tr>
</tbody>
</table>
## EX1900-6 SPECS

**MINING EXCAVATOR**

### LIFTING CAPACITIES

#### EX1900-6 BE

<table>
<thead>
<tr>
<th>Load Point Height</th>
<th>6.0 m (19 ft. 6 in.)</th>
<th>8.0 m (26 ft. 3 in.)</th>
<th>10.0 m (32 ft. 10 in.)</th>
<th>12.0 m (39 ft. 4 in.)</th>
<th>14.0 m (45 ft. 11 in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Horizontal Distance from Centerline of Rotation</strong></td>
<td>Over</td>
<td>Over</td>
<td>Over</td>
<td>Over</td>
<td>Over</td>
</tr>
<tr>
<td><strong>Load Point Height</strong></td>
<td>Front</td>
<td>Side</td>
<td>Front</td>
<td>Side</td>
<td>Front</td>
</tr>
<tr>
<td>8.0 m (26 ft. 3 in.)</td>
<td>*25.5 *25.5</td>
<td>*22.1 *22.1</td>
<td>*14.5 *14.5</td>
<td>(*56.2) (*56.2)</td>
<td>(*48.7) (*48.7)</td>
</tr>
<tr>
<td>6.0 m (19 ft. 8 in.)</td>
<td>*23.7 *23.7</td>
<td>*23.7 *23.7</td>
<td>*8.9 *8.9</td>
<td>(*59.4) (*59.4)</td>
<td>(*52.3) (*52.3)</td>
</tr>
<tr>
<td>4.0 m (13 ft. 1 in.)</td>
<td>*29.4 *29.4</td>
<td>*25.4 *25.4</td>
<td></td>
<td>(*64.8) (*64.8)</td>
<td>(*52.3) (*52.3)</td>
</tr>
<tr>
<td>2.0 m (6 ft. 7 in.)</td>
<td>*22.9 *22.9</td>
<td></td>
<td></td>
<td>(*72.5) (*72.5)</td>
<td>(*50.5) (*50.5)</td>
</tr>
<tr>
<td>Ground Line</td>
<td>*34.8</td>
<td>*31.1</td>
<td>*25.3 *25.3</td>
<td></td>
<td>*10.5</td>
</tr>
<tr>
<td>–2.0 m (~6 ft. 7 in.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>–4.0 m (~13 ft. 1 in.)</td>
<td>*53.1 *53.1</td>
<td>*53.1 *53.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>–6.0 m (~19 ft. 8 in.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Indicates hydraulically limited capacity; numbers without * indicate stability-limited capacities, in kg. The load point is a hook (not standard equipment) loaded on the back of the bucket.

Lifting capacity of the EX Series does not exceed 70% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity. Ratings are based on SAE J1097.

---

* Load Radius
* Load Point Height
* Lifting Capacity

---

**Unit: 1000 kg (1,000 lbs.)**
# STANDARD / OPTIONAL EQUIPMENT

For the EX1900-6 equipped with a diesel engine.

Key:  ● Standard  ▲ Optional or special kit

## 1900 Engine
- 440 A alternator
- Heavy-duty type air cleaner with dust ejector
- Cartridge-type engine oil filter
- Cartridge-type engine oil bypass filter
- Cartridge-type fuel filter
- Water filter
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Pre-lubrication system
- Auto-idle engine
- Emergency engine stop system
- Engine oil reserve system

## Hydraulic System
- Engine Pump control system (EP)
- Optimum Hydraulic System (OHS)
- Fuel-saving Pump System (FPS)
- Hydraulic drive cooling-fan system
- Forced-lubrication and forced cooling pump drive system
- Control valve with main relief valve
- Suction filter
- Full-flow filter
- Bypass filter
- Pilot filter
- Drain filter
- High-pressure strainer

## Undercarriage
- Travel parking brake
- Travel motion alarm device
- Hydraulic track adjuster with N2 gas accumulator and relief valve
- 800 mm (32 in.) triple grouser shoes

## Upperstructure
- Lockable machine covers
- 25 300 kg (55,777 lbs.) counterweight
- Hydraulic drive grease gun with hose reel
- Retractable ladder with spring-type balancer
- Swing parking brake

## Cab
- OPG top guard level II (ISO) helps protect the operator from falling objects
- All-weather sound-suppressed steel integrated cab
- Fluid-filled elastic mounts
- Laminated glass windshield
- Reinforced/tinted (bronze color) side and rear windows
- Parallel-link-type intermittent windshield wiper
- Front windshield washer
- LCD monitor display with various meters, pilot indicators, and warning indicators
- Air-suspension seat with automatic weight-adjusting function
- Wrist-control-type electric lever with height-adjusting function

## 1900 Monitor Systems (continued)

### Monitor Systems

**Meters**
- Hour meter
- Fuel gauge
- Hydraulic oil temperature gauge
- Engine coolant temperature gauge
- Tachometer
- Engine oil pressure gauge
- Engine oil temperature gauge
- Battery voltage gauge
- Ambient temperature

**Pilot indicators (red)**
- Electric lever fault
- Stop valve for transport and reassembly
- Lincoln auto-lubrication system for front-attachment pins, swing bearing, and center joint

**Warning indicators (yellow)**
- Exhaust temperature
- Fuel temperature
- Engine warning
- Hydraulic oil overheat
- Stairway position
- Electrical equipment box
- Pump contamination
- Air cleaner restriction

**Alarm buzzers**
- Overheat
- Engine coolant pressure

**Connection Kit**
- 4 cameras and 2 color monitors

**Data Logging System**
- Data-Logging Unit (DLU) continuously records the performance of the engine and the hydraulic system; data can be downloaded by PC
- Satellite data-transmitting system
- WIU (Wireless Interface Unit)

**Communication system**
- Standard  ▲ Optional or special kit

**Lights**
- 3 maintenance lights
- 2 cab lights

**Miscellaneous**
- ISO conforming stairs and handrails
- Recirculation air filter for air conditioner
- Ventilation air filter for air conditioner
- I2-V power terminal board
- Stop valve for transport and reassembly
- Lincoln auto-lubrication system for front-attachment pins, swing bearing, and center joint
- Fast-fill fixed panel with Wiggins coupler for fuel, engine oil, engine coolant, grease, pump transmission oil, and swing device oil
- Camera monitor system

**Optional Equipment**
- Cold-weather package
- Travel motor guard
- Travel device guard
- 3rd Party Fleet Management Interface Connection Kit
- Folding stairs
- Full length track guard
- Wide Pad Shoes for soft ground conditions only
- High elevation application

*Engineered on request.
**The availability of the system depends on licensing regulations in each country.
See your Hitachi dealer for further information.