Cat®
7495 HF
with HydraCrowd™
ELECTRIC ROPE SHOVEL

Specifications

Dimensions

- Dipper payload (Available dipper payloads up to 109 tonnes [120 tons] when specified)
  - 109 tonnes 120 tons
- Dipper capacity
  - 30.6-62.7 m³ 40-82 yd³

  • Dependent on application and material density.

Weights*

- Working weight, with dipper and standard links
  - 1 435 156 kg 3,164,000 lb
- Ballast (furnished by customer)
  - 302 614 kg 667,150 lb

  • These weights will vary slightly depending upon dipper and optional equipment selection.

  * All specifications are based on a 45 m³ (59 yd³) dipper and standard 317.5 cm (125 in) treads.

Main Structures

- Upper works overall width (including standard walkways)
  - 12.8 m 41 ft 11 in

Crawler Dimensions

- Overall width 317.5 cm (125 in) treads, standard
  - 12.7 m 41 ft 9 in

Ground Bearing Pressure

- Total effective bearing area
  - 57 m² 614 ft²
- 317.5 cm (125 in) treads
  - 248 kPa 36 psi

  • Ground bearing pressure is dependent upon many factors.

Planetary Propel

• Dual-motor independent drive.

Swing

• Two planetary gearboxes, each driven by a vertically mounted motor, are located on either side of the revolving frame. Dual-output pinion shafts from each gearbox engage the swing rack.

Hoist

• A planetary gearbox with dual-output pinions provides the hoist torque transfer from the electric motor to the hoist drum gear.

Lube System

• Automatic, single-line system for open gear lubricant and grease.
• Six pumps (four for open gear lubricant and two for grease) located in an insulated, heated, double-walled lube room.
• External fast fill from lower level.

Electrical

Drive

• IGBT Acutrol drive system.

Power Requirements

- Voltage
  - 3 phase, 50/60 Hz, 7,200V
  - 50 Hz 6,000V, 6,600V, 7,200V, 11,000V
  - 60 Hz 7,200V, 13,800V
- Average power demand
  - 945-1322 kW
- Peak power
  - 3778 kW

  • Other voltage options available to suit customer requirements.

Front End

• One piece, forged, seamless tubular dipper handle and wide-spread boom point sheaves equipped with hoist ropes and dipper padlocks to stabilize dipper handle.

Rope Data

<table>
<thead>
<tr>
<th>No.</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hoist</td>
<td>70 mm (2.75 in)</td>
</tr>
<tr>
<td>Boom suspension</td>
<td>83 mm (3.25 in)</td>
</tr>
<tr>
<td>Dipper trip</td>
<td>19 mm (0.75 in)</td>
</tr>
</tbody>
</table>

• High impact ropes available as an option.

Crowd

• HydraCrowd™, hydraulic power skid, located at the front center of the revolving frame deck, powers a large hydraulic cylinder to move the dipper handle fore and aft.
• (Optional) Rope Crowd, the crowd machinery is located at the front center of the revolving frame, consisting of motor, brake, drum and gearing. Plastic-impregnated crowd and retract ropes are used to move the dipper handle fore and aft.
### Dimensions (All dimensions are approximate.)

<table>
<thead>
<tr>
<th>Optimal Working Ranges*</th>
<th>Meters</th>
<th>Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Dumping height – with clearance to open dipper door</td>
<td>9.0 m</td>
<td>29 ft 7 in</td>
</tr>
<tr>
<td>2 Cutting height (maximum)</td>
<td>16.8 m</td>
<td>55 ft 0 in</td>
</tr>
<tr>
<td>3 Cutting radius (maximum)</td>
<td>24.3 m</td>
<td>79 ft 8 in</td>
</tr>
<tr>
<td>4 Radius of level floor</td>
<td>17.0 m</td>
<td>55 ft 11 in</td>
</tr>
<tr>
<td>5 Revolving frame tail swing radius</td>
<td>9.3 m</td>
<td>30 ft 8 in</td>
</tr>
</tbody>
</table>

Optimal working ranges based on loading a Cat® 797F truck.

*All specifications are based on a 45 m³ (59 yd³) dipper and standard 317.5 cm (125 in) treads.