**Specifications**

**Dimensions**

Dipper payload (Available dipper payloads up to 109 tonnes [120 tons] when specified) 100 tonnes 110 tons
Dipper capacity 30.6-61.2 m³ 40-80 yd³
Length of boom 20.4 m 67 ft
Effective length of dipper handle 10.9 m 35 ft 10 in
Overall length of dipper handle 14.3 m 47 ft

**Weights**

Working weight, with dipper and standard links 1 369 246 kg 3,018,670 lb
Net weight, domestic, without ballast or dipper 988 100 kg 2,173,820 lb
General purpose dipper 56 m³ (73 yd³) 80 603 kg 177,700 lb
Ballast (furnished by customer) 302 614 kg 667,150 lb

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

**Main Structures**

**Crawler Mounting**

Overall width 200.7 cm 79 in treads, standard 11 m 36 ft
Overall length of mounting 11.43 m 37 ft 6 in
Overall width 259.1 cm (102 in) treads 13.5 m 44 ft 3 in
Total effective bearing area (200.7 cm/79 in treads) 36.1 m² 388.6 ft²
Total effective bearing area (259.1 cm/102 in treads) 46.6 m² 501.7 ft²
Number and diameter of rollers
  - Lower (16) 78 cm 30.7 in
  - Lower rear (2) 106.7 cm 42 in
  - Upper Slides
  - Take-up tumblers diameter 162 cm 63.8 in
  - Number and pitch of treads (94) 50.8 cm 20 in

**Planetary Propel**

- Dual-motor independent drive.

**Revolving Frame (Center Section)**

Welded, impact-resistant steel
Length 8.38 m 27 ft 6 in
Width 3.68 m 12 ft 1 in

**Main Structures (cont’d)**

**Turntable**

Forged rim, alloy steel swing rack pitch diameter 5.26 m 17 ft 3 in
Teeth external cut (face) 24.13 cm 9.5 in
Tapered, forged alloy steel roller rails diameter 4.52 m 14 ft 10 in
Number of tapered rollers 50
Tapered rollers diameter 27.31 cm 10.75 in

**Swing**

- Two planetary gearboxes, each driven by a vertically mounted motor, are mounted on either side of the revolving frame. Dual-output pinion shafts from each gearbox engage the swing rack.
- A planetary gearbox with dual-output pinions provides the hoist torque transfer from the electric motor to the hoist drum gear.

**Lube System**

- Single-line system applies lubricant and grease via the PLC.
- 6 pumps (4 for lubricant and 2 for grease) located in an insulated, double-walled lube room.

**Electrical**

**Drive**

- IGBT Acutrol drive system.

**Power Requirements**

Voltage 3 phase, 50/60 Hz, 7,200V
Average 15-minute demand 926-1297 kW
Peak power 3706 kW

- Other voltage options available to suit customer requirements.

**Distribution System Requirements**

Machine on separate system 4000 kVA
Main Electrical Systems

- System voltage (nominal) 50/60 Hz, 7,200V
- Trail cable (furnished by customer) SHD-3-#1/0 at 8,000V
- Transformer, auxiliary 350 kVA, 7,200V primary
- Lighting transformer 25 kVA, 120/240V secondary
7495 with Rope Crowd Electric Rope Shovel

Lights
- HPS lights on boom feet, top of A-frame, machinery house, lube room, control room, and utility room.
- Incandescent lights for ground lights and on walkways.

Front End

Boom
- Welded, impact-resistant steel
- Boom point sheaves: twin-grooved, flame-hardened
- Boom point sheave diameters: 243.84 cm (96 in)
- Handle diameter: 86.36 cm (34 in)
- Wall thickness (nominal): 7.62 cm (3 in)

Rope Data

<table>
<thead>
<tr>
<th>No.</th>
<th>Diameter</th>
<th>Type</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hoist</td>
<td>2</td>
<td>69.8 mm (2.75 in)</td>
<td>twin dual</td>
</tr>
<tr>
<td>Crowd</td>
<td>1</td>
<td>63.5 mm (2.5 in)</td>
<td>single dual</td>
</tr>
<tr>
<td>Retract</td>
<td>1</td>
<td>63.5 mm (2.5 in)</td>
<td>single dual</td>
</tr>
<tr>
<td>Boom susp.</td>
<td>4</td>
<td>82.6 mm (3.25 in)</td>
<td>equalized</td>
</tr>
<tr>
<td>Dipper trip</td>
<td>1</td>
<td>19.1 mm (0.75 in)</td>
<td>single</td>
</tr>
</tbody>
</table>

Crowd
- Rope Crowd with the crowd machinery is located at the front center of the revolving frame, consisting of motor, brake, drum and gearing. Plastic-coated crowd and retract ropes are used to move the dipper handle fore and aft.

Optimal Working Ranges

<table>
<thead>
<tr>
<th>No.</th>
<th>Measurement</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dumping height</td>
<td>10.06 m (33 ft 0 in)</td>
</tr>
<tr>
<td>2</td>
<td>Dumping height at maximum electric crowd limit</td>
<td>8.61 m (28 ft 3 in)</td>
</tr>
<tr>
<td>3</td>
<td>Dumping radius (maximum)</td>
<td>21.64 m (71 ft 0 in)</td>
</tr>
<tr>
<td>4</td>
<td>Cutting height (maximum)</td>
<td>17.8 m (58 ft 5 in)</td>
</tr>
<tr>
<td>5</td>
<td>Cutting radius (maximum)</td>
<td>25.2 m (82 ft 8 in)</td>
</tr>
<tr>
<td>6</td>
<td>Radius of level floor</td>
<td>17.47 m (57 ft 4 in)</td>
</tr>
<tr>
<td>7</td>
<td>Clearance height (boom point sheaves)</td>
<td>20.87 m (68 ft 6 in)</td>
</tr>
<tr>
<td>8</td>
<td>Clearance radius (boom point sheaves)</td>
<td>19.65 m (64 ft 5 in)</td>
</tr>
<tr>
<td>9</td>
<td>Clearance radius (revolving frame) (max.)</td>
<td>9.34 m (30 ft 8 in)</td>
</tr>
<tr>
<td>10</td>
<td>Clearance under frame (to ground)</td>
<td>3.76 m (12 ft 4 in)</td>
</tr>
<tr>
<td>11</td>
<td>Height of A-frame</td>
<td>14 m (46 ft 0 in)</td>
</tr>
<tr>
<td>12</td>
<td>Overall width</td>
<td>13.11 m (43 ft 0 in)</td>
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<tr>
<td>13</td>
<td>Clearance under lowest point in truck frame/propel gearcase</td>
<td>0.90 m (2 ft 11.5 in)</td>
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<tr>
<td>14</td>
<td>Operator’s eye level</td>
<td>10.61 m (34 ft 10 in)</td>
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</tbody>
</table>