



Cat[®] 7395

Electric Rope Shovel

Specifications

Dimensions

Dipper payload	63.5 tonnes (70 tons)
Dipper capacity	19.1-61.2 m ³ (25-80 yd ³)
Length of boom	19.51 m (64 ft 0 in)
Effective length of dipper handle	10.9 m (35 ft 10 in)
Overall length of dipper handle	14.3 m (47 ft 0 in)

Weights

Working weight, with dipper and standard links	1 179 340 kg (2,600,000 lbs)
Net weight, domestic, without ballast or dipper	857 516 kg (1,890,500 lbs)
General purpose dipper 32.1 m ³ (42 yd ³)	61 462 kg (135,500 lbs)
Ballast (furnished by customer)	260 362 kg (574,000 lbs)

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

Main Structures

Crawler Mounting

Overall width 213.36 cm (84 in) treads, standard	9.98 m (32 ft 9 in)
Overall width 274.32 cm (108 in) treads	10.44 m (34 ft 3 in)
Overall length of mounting	10.41 m (34 ft 2 in)
Total effective bearing area (213.36 cm treads)	32 m ² (344 ft ²) 362 kPa (52.5 Psi)
Total effective bearing area (274.32 cm treads)	41 m ² (442.3 ft ²) 311 kPa (45.2 Psi)

Number and diameter of rollers	Upper: 8, 139.70 cm (55 in) Lower: 10, 60.96 cm (24 in)
Take-up tumblers diameter	157.48 cm (62 in)
Number and pitch of treads	74, 61.91 cm (24.375 in)

Planetary Propel

Dual motor independent drive

Revolving Frame (Center Section)

Welded impact-resistant steel	Length: 8.38 m (27 ft 6 in) Width: 4.29 m (14 ft 1 in)
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Turntable

Forged rim alloy steel swing rack pitch diameter	5.18 m (17 ft)
Teeth external cut	24.13 cm face (9.5 in)
Tapered, forged alloy steel roller rails diameter	4.5 m (14 ft 9 in)
Number of tapered rollers	56
Tapered rollers diameter	20.96 cm (8.25 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.

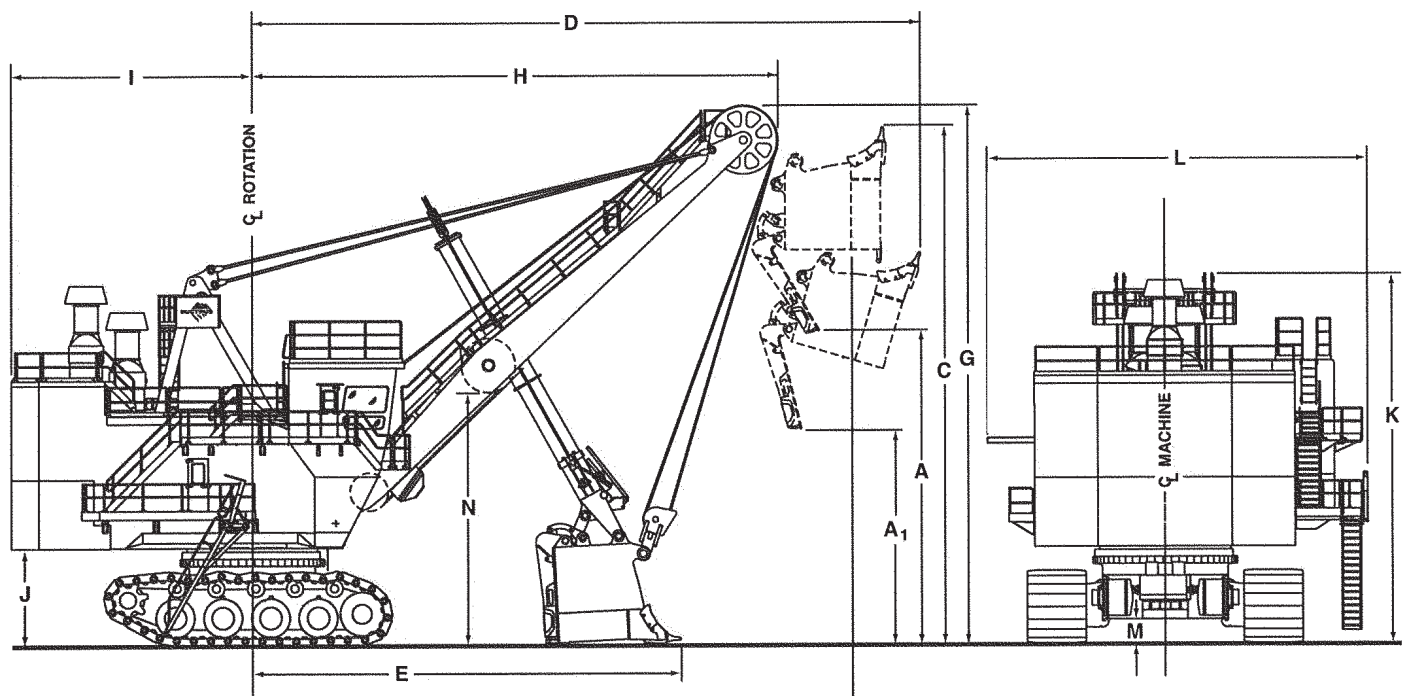
Hoist

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

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Optimal Working Ranges

A	Dumping height	10.0 m (32 ft 11 in)
A ₁	Dumping height at maximum electric crowd limit	7.91m (25 ft 11 in)
B	Dumping radius (maximum)	20.5 m (67 ft 2 in)
C	Cutting height (maximum)	16.7 m (54 ft 11 in)
D	Cutting radius (maximum)	23.3 m (76 ft 5 in)
E	Radius of level floor	15.4 m (50 ft 6 in)
G	Clearance height (boom point sheaves)	19.5 m (63 ft 11 in)
H	Clearance radius (boom point sheaves)	19.05 m (62 ft 6 in)
I	Clearance radius (revolving frame)	8.67 m (28 ft 5 in)
J	Clearance under frame (to ground)	3.45 m (11 ft 4 in)
K	Height of A-frame	13.3 m (43 ft 8 in)
L	Overall width	13.01 m (42 ft 8 in)
M	Clearance under lowest point in truck frame/propel gearcase	0.86 m (2 ft 10 in)
N	Operator's eye level	8.64 m (28 ft 4 in)

Electrical

Drive

IGBT Acutrol drive system

Power Requirements

Voltage	3 phase, 50/60 Hz, 7200 V
Average 15 minute demand	777-1 087 kW
Peak power	3 106 kW

- Other voltage options available to suit customer requirements

Distribution System Requirements

Machine on separate system	3 500 kva
Machine on large system	2 000 kva

Main Electrical Systems

System voltage (nominal)	50/60 Hz, 7200 V
Trail cable (furnished by customer)	SHD-3-#1/0 at 8000 V
Transformer, auxiliary	350 kva, 7200 V primary
Lighting transformer	25 kva 120/240 V secondary

Lights

- HPS lights on boom feet, top of A-frame, machinery house, lube room, control room, utility room and flood lights
- Incandescent lights on ground lights, walkways and operator's cab

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Front End

Boom

Boom	welded, impact-resistant steel
Boom point sheaves	twin-grooved, flame-hardened
Boom point sheave diameters	2.43 m (8 ft)
Handle diameter	86.36 cm (34 in)
Wall thickness (nominal)	7.62 cm (3 in)

Rope Data

	No.	Diameter	Type	Construction
Hoist	2	69.8 mm (2.75 in)	twin dual	6 x 37
Crowd	1	63.5 mm (2.5 in)	single dual	6 x 37
Retract	1	63.5 mm (2.5 in)	single dual	6 x 37
Boom susp.	4	82.6 mm (3.25 in)	equalized	struct. strand
Dipper trip	1	15.9 mm (.625 in)	single	6 x 37

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