

# **Cat**<sup>®</sup> 7395

ELECTRIC ROPE SHOVEL

# **Specifications**

#### **Dimensions**

Dipper payload	63.5 tonnes	70 tons
Dipper capacity	19.1-61.2 m <sup>3</sup>	25-80 yd <sup>3</sup>
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	1 288 656 kg	2,841,000 lb
Net weight, domestic, without ballast or dipper	966 832 kg	2,131,500 lb
General purpose dipper 32.1 m³ (42 yd³)	61 462 kg	135,500 lb
Ballast (furnished by customer)	260 362 kg	574,000 lb

 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/84 in treads)	32 m² 395 kPa	344 ft² 57.4 psi
Total effective bearing area (274.32 cm/108 in treads)	41 m² 308 kPa	442.3 ft² 44.6 psi
Number and diameter of rollers		
Upper (10)	60.96 cm	24 in
Lower (8)	139.70 cm	55 in
Take-up tumblers diameter	157.48 cm	62 in
Number and pitch of treads (74)	61.91 cm	24.375 in
Planetary Propel		
<ul> <li>Dual motor independent drive.</li> </ul>		
Revolving Frame (Center Section)		
Welded, impact-resistant steel		
Length	8.38 m	27 ft 6 in
Width	4.29 m	14 ft 1 in

#### Main Structures (cont'd)

urntable		
Forged rim alloy steel swing rack pitch diameter	5.18 m	17 ft
Teeth external cut (face)	24.13 cm	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.

## **Electrical**

#### Drive

· IGBT Acutrol drive system.

## **Power Requirements**

Voltage	3 phase, 50/60 Hz, 7,200V
Average 15-minute demand	777-1087 kW
Peak power	3106 kW

• Other voltages available to suit customer requirements.

# **Distribution System Requirements**

Machine on separate system	3500 kVA
Machine on large system	2000 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



# 7395 Electric Rope Shovel

# 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.

#### **Front End**

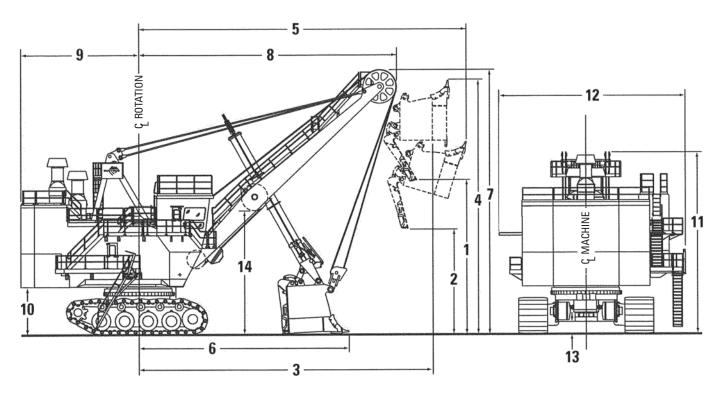
#### Boom

Boomwelded, impact-resistant steelBoom point sheavestwin-grooved, flame-hardenedBoom point sheave diameters2.43 m8 ftHandle diameter86.36 cm34 inWall thickness (nominal)7.62 cm3 in

## Front End (cont'd)

## **Rope Data**

	No.	Diameter	Туре	Construction
Hoist	2	69.8 mm (2.75 in)	twin dual	8 × 37
Crowd	1	63.5 mm (2.5 in)	single dual	8 × 37
Retract	1	63.5 mm (2.5 in)	single dual	8 × 37
Boom susp.	4	82.6 mm (3.25 in)	equalized	struct. strand
Dipper trip	1	15.9 mm (0.625 in)	single	7 × 25



# **Optimal Working Ranges**

1 Dumping height	10.0 m	32 ft 11 in
2 Dumping height at maximum electric crowd limit	7.91 m	25 ft 11 in
3 Dumping radius (maximum)	20.5 m	67 ft 2 in
4 Cutting height (maximum)	16.7 m	54 ft 11 in
5 Cutting radius (maximum)	23.3 m	76 ft 5 in
6 Radius of level floor	15.4 m	50 ft 6 in
7 Clearance height (boom point sheaves)	19.5 m	63 ft 11 in

8 Clearance radius (boom point sheaves)	19.05 m	62 ft 6 in
9 Clearance radius (revolving frame)	8.67 m	28 ft 5 in
10 Clearance under frame (to ground)	3.45 m	11 ft 4 in
11 Height of A-frame	13.3 m	43 ft 8 in
12 Overall width	13.01 m	42 ft 8 in
13 Clearance under lowest point in truck		
frame/propel gearcase	0.86 m	2 ft 10 in
14 Operator's eye level	8.64 m	28 ft 4 in

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

© 2013 Caterpillar All Rights Reserved Printed in U.S.A.

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

AEHQ6515-01 (02-13) Replaces AEHQ6515

