

Eaton solutions for draglines
Line card

Rebuild and repair

Solutions for draglines and shovels



Electrical systems and products



Aftermarket Hydraulics



Brake systems and pneumatics

Energizing a world that demands more.

Eaton is energizing the world to maximize uptime and energy efficiency and to lower costs, while keeping people and property safe.

Shovels and draglines are the primary excavating tools used in today's surface mining operations. Eaton combines electrical systems upgrades and aftermarket hydraulic solutions to support your application requirements for a 24/7 uptime operation. Augmenting upgraded systems with predictive diagnostic tools offers enhanced reliability and advanced warning to schedule maintenance and prevent downtime. With over 100 years of market experience, Eaton has the expertise to see beyond the needs of today to help you build a more sustainable business.

EATON

Powering Business Worldwide

Power distribution, motor control, backup power protection and services

PH: (877) ETN-CARE
trc@eaton.com

Associated product lines

- Integrated power assemblies
- Medium and low voltage switchgear
- Medium and low voltage motor control centers
- Capacitor banks, filters and voltage regulators
- Medium and low voltage drives
- Power and distribution transformers/busway
- Uninterruptible power supplies
- Meters and relays
- Electrical and engineering services
- Wireless solutions

Eaton's Cooper Power series solutions

PH: (877) 277-4636

Associated product lines

- Medium voltage switchgear
- Overhead distribution equipment
- Capacitor banks and filters
- Voltage regulators
- Arresters
- Medium voltage transformers
- Cable accessories
- Controls and relays
- Smart fault indicators
- Medium voltage fusing

Eaton's Crouse-Hinds series solutions

PH: (866) 764-5454

crousecustomerctr@eaton.com

Associated product lines

- Lighting
- Plugs, receptacles and connectors
- Power connectors
- Cable, conduit and wiring solutions
- Hazardous area communications
- Signals and alarms
- Conveyor controls and pushbutton stations
- Mechanical solutions
- Design tools and services
- Local control stations
- Instrumentation

For more information about our solutions, visit:

Eaton.com/Mining



Medium and low voltage drives

- 2400 V up to 2500 hp and 4160 V to 6000 hp standard and arc-resistant
- 600 V to 2000 hp
- 24-pulse 2.4 kV and 4.1 kV to 6000 hp (ANSI)
- 6-pulse 480 V and 575 V to 2000 hp (ANSI and IEC)
- IEEE® 519 harmonic compliance



Low voltage distribution

- Panels (ANSI and IEC)
- Safety switches (ANSI and IEC)
- Dry-type distribution transformers (ANSI)
- Control power transformers (ANSI and IEC)



Hydraulic and pneumatic control

- Hydraulic power units
- Pneumatic cylinders
- Hydraulic cylinders
- Complete air tank solutions



Display and control

- Electronic switch modules and vehicle display
- Multiplexed vehicle electrical center
- Cam switches and pushbuttons



Motor protective relays

- LED indicator provides predictive indication
- Accurately identifies excessive current or phase loss
- Easy integration into plant management systems for remote monitoring and control
- Integral ground fault protection



Circuit breakers

- Vacuum to 38 kV
- Low voltage power circuit breakers
- Molded case industrial breakers
- Medium voltage mining breakers



Fluid conveyance and management

- Hydraulic hoses and fittings
- Hydraulic hose assemblies
- Airbrake hoses
- Hydraulic filters
- Connectors/couplings
- Grease lines—nylon tubing



Legacy—disc brakes

- A full suite of air-cooled disc brakes suitable for swing, propel, hoist and drag functions
- DBA
- DBBS
- Completely packaged air-cooled systems



Medium and low voltage motor control centers

- Medium voltage motor control centers to 15,000 V and 3000 A main bus
- Low voltage motor control centers to 600 V and 3200 A main bus
- ANSI and IEC certified
- Standard and arc-resistant available



Power and control fuses

- Medium voltage expulsion and current limiting
- Low voltage power
- Control
- ANSI and IEC configurations



Pumps, motors and valves

- Mobile and proportional valves
- Open and closed circuit pumps
- Fixed and variable motors
- High-speed low-torque motors



Revolutionary—disc brakes

- New disc brake technology—Floating Hose Brake—offers a rapid friction replacement capability
- Taper shaft lock
- Zero spline/gear wear
- Quick friction replacement
- Completely packaged air-cooled systems



Lighting

- LED, HID, incandescent and fluorescent
- Types: Flood, task, high bay, wall pack and area
- Application: Indoor, outdoor, industrial, harsh, hazardous areas
- ANSI and IEC configurations



Mechanical and structural solutions

- Aluminum, stainless steel, galvanized steel and FA series fiberglass material options
- Strut systems, fittings and accessories
- GripStrut® slip-resistant walkways



Plugs, receptacles and connectors

- Welding receptacles
- Industrial, harsh, hazardous areas
- Molded to cable
- Passive connectivity
- ANSI and IEC configurations



Electrical services

- Arc flash studies
- Power system studies
- Life cycle extension services
- Energy management services
- Site testing and commissioning
- Turn-key project services



Wireless and instrumentation

- Wireless I/O systems
- Isolation barriers
- Surge suppression
- Controls/software



Meters and relays

- Revenue grade energy monitors
- Panel meters
- Motor and feeder protective relays
- InsulGard™ partial discharge relays



Power connectors

- IEC 309 industrial pin and sleeve devices
- Medium voltage load-break and dead-break connectors (ANSI and IEC)
- Industrial, harsh, hazardous areas



Hydraulic services

- Field technical service and support
- Distribution services
- Turn-key project services



Enclosures

- Junction boxes and enclosures
- Stainless steel, aluminum, fiberglass, steel iron
- Instrument housings
- Industrial- and commercial-grade enclosures
- ANSI and IEC configurations



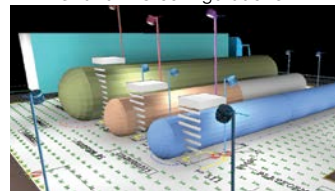
Signals and alarms

- Beacons and strobes
- Fire detection and alarms
- Mass notification systems
- ANSI and IEC configurations



Cable and conduit wiring solutions

- Industrial fittings
- Cable glands
- Hub reducers, adapters and accessories
- Industrial, harsh, hazardous areas
- ANSI and IEC configurations



Design tools and services

- Lighting layout and design services
- Custom SKU-level 2D and 3D models for integration into design software
- Custom SKU-level specification sheets
- CYME™ power engineering software

Eaton's B-Line series solutions

PH: (800) 851-7415
blineus@eaton.com

Associated product lines

- Cable ladder systems
- Struts and fasteners
- Enclosures
- Safety walkway grating
- Design tools and services

Lighting solutions

PH: (770) 486-4800

Associated product lines

- Industrial lighting
- Indoor and outdoor fixtures
- Design tools and services

Eaton's Bussmann series solutions

PH: (636) 394-2877
fusebox@eaton.com

Associated Product Lines

- Power and control fuses

Hydraulics

PH: (952) 937-9800
fpgproductsupport@eaton.com

Associated product lines

- Accumulators
- Electronic controls/software
- Hydraulic power units
- Hydraulic pumps and motors
- Steering solutions
- Variable speed drive pump solutions
- Hydraulic hoses and fittings
- Hydraulic hose assemblies
- Filtration
- Industrial and mobile valves
- Hydraulic cylinders
- Hose condition monitoring systems
- Radial piston motors
- Air-cooled disc brakes
- Constructing drum clutch/brakes
- Pneumatic controls
- Field service support

For more information about our solutions, visit:

Eaton.com/Mining



Energizing a world that demands more.

We deliver:

- **Electrical solutions** that use less energy, improve power reliability and make the places we live and work safer and more comfortable
- **Hydraulic and electrical solutions** that enable machines to deliver more productivity without wasting power
- **Aerospace solutions** that make aircraft lighter, safer and less costly to operate, and help airports operate more efficiently
- **Vehicle drivetrain and powertrain solutions** that deliver more power to cars, trucks and buses, while reducing fuel consumption and emissions

Discover today's Eaton.

Powering business worldwide

As a global power management company, we help customers worldwide manage the power needed for buildings, aircraft, trucks, cars, machinery and businesses.

Eaton's innovative technologies help customers manage electrical, hydraulic and mechanical power more reliably, efficiently, safely and sustainably.

We provide integrated solutions that help make energy, in all its forms, more practical and accessible.

With 2014 sales of \$22.6 billion, Eaton has approximately 100,000 employees around the world and sells products in more than 175 countries.

Eaton.com

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

© 2015 Eaton
All Rights Reserved
Printed in USA
Publication No. SA083058EN / Z16948
September 2015

Eaton is a registered trademark.

All other trademarks are property
of their respective owners.

Follow us on social media to get the
latest product and support information.

