

Eaton XL cylinders

Exceptional
performance
in the world's
harshest
environments



EATON

Powering Business Worldwide



Eaton XL cylinders keep the world moving

For decades, Eaton has engineered extra-large hydraulic cylinders for the most demanding operating conditions. From offshore oil rigs to bridges, dam gates and flood control, Eaton XL cylinders keep the world's critical infrastructure moving and its communities thriving.

Eaton cylinders are known for their unmatched quality and long-lasting reliability. Our application engineering team custom designs each cylinder, accounting for overall loading and kinematics, mounting configurations, seal system design, embedded sensor requirements, corrosion protection needs, installation and maintenance practices, and other application considerations. From design and manufacturing to installation and testing, our project management team will be there to support your project with expertise you can count on.

XL cylinder applications

Civil and energy

- Movable bridges
- Flood control
- Locks and canals
- Dam gates
- Ocean wave power

Discrete manufacturing

- Forging presses
- Press brakes
- Material handling
- Casting

Marine

- Naval vessels
- Salvage equipment
- Dredging and dump scowls
- Piling and split barges

Oil and gas

- Heave compensation
- Riser tensioner systems
- Pipe laying equipment
- Mooring systems
- BOP handling
- Cantilever skidding systems
- Cranes
- Chain jack systems

XL cylinder features

- **Maximum bore size:** 1500 millimeters/60 inches
- **Maximum stroke length:** 20 meters/750 inches
- **Engineered to order:** Complete cylinders and replacement components
- **Testing capabilities:** Up to 660 bar
- **Third-party certifications:** DNV, ABS, DIN, Lloyd's Register, Bureau Veritas and others



Eaton cylinder coatings increase operational reliability

The right rod coating will keep your cylinders operating longer in extreme conditions. Within our comprehensive range, you'll find a coating that provides the perfect balance of wear and corrosion resistance for your application. We can help you select the best coating from our portfolio or recommend a custom solution.

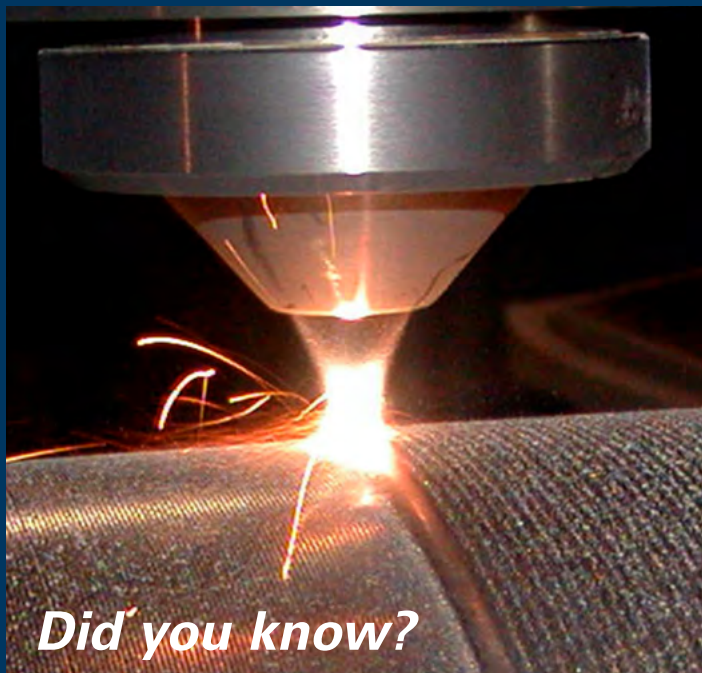
Piston rod coating options

- Chrome
- Nickel chrome
- Ceramic*
- High velocity oxygen fuel (HVOF)*
- Eatonite™ laser cladding*
- Custom coatings

*Can be supplied in combination with Eaton Hypos integrated stroke measurement system

Discover Eatonite

Eatonite anti-corrosion laser cladding is a field repairable, third-party certified cylinder rod coating for the harshest operating environments. This high-performance coating extends the life of hydraulic cylinders and reduces the costs of unplanned maintenance and equipment downtime. Originally developed for hydraulic riser tensioning systems on offshore platforms, Eatonite is ideal for any cylinder application in which the piston rods are exposed to severe environmental corrosion.



Did you know?

*Eatonite laser cladding was the first anti-corrosion coating technology to earn joint industry project (JIP) certification from DNV for use on offshore platforms. Its **optimized wear, scratch and impact resistance** plus **premier corrosion resistance** is why Eatonite is written into so many cylinder specifications.*



Eaton piston accumulators improve hydraulic system efficiency

Eaton engineers and manufactures custom hydraulic piston accumulators that can improve energy efficiency and reaction time in hydraulic circuits. Accumulators maintain pressure and reduce pressure peaks; dampen shock, vibration and pulsations; and store and recapture energy. With high operating reliability and long service life, you can count on our accumulators to meet the demands of your application.

Hydraulic piston accumulator features

- **Minimum bore size:** 300 millimeters/12 inches
- **Minimum volume:** 200 liters
- **Maximum stroke length:** 20 meters/750 inches
- **Temperature range*:** -10°C to 70°C/15°F to 150°F
- **Coating options:** Inside chrome plating, inside chemical nickel plating
- **Position sensors*:** End position, full-stroke measurement system
- **Certifications:** PED, ASME, DNV, Lloyd's Register and others

*Extended temperature ratings and custom sensor options available upon request

Accumulator applications

- Offshore
- Marine
- Steel mills
- Large composite presses
- Vertical lathes
- Others





Eaton XL cylinder services maximize system uptime

When your cylinders aren't working as they should be, time is of the essence. That's why our certified service technicians are available anytime and anywhere you need them. Whether evaluating performance or inspecting damage, our global repair team will quickly assess the condition of your cylinders and recommend the best solution.

We don't just fix worn or broken parts. Drawing on a world-class suite of tools and decades of application know-how, we'll determine why a cylinder failed, predict future failure and design a solution to prevent a recurrence.

XL cylinder services

- Cylinder installation
- Cylinder inspection and maintenance by certified service engineers
- Piston rod coating analysis, including condition check and ECP testing
- Upgrade and refurbishment of any brand cylinder
- Recommissioning and recertification
- Spare-part management
- Damage assessment
- Fluid analysis

Local resources for global operations

Eaton provides local engineering, project management, service, repair and support where and when you need it. Our XL cylinders and piston accumulators are manufactured in ISO-certified facilities to ensure consistency in quality and environmental practices.

Plant locations

Eindhoven, The Netherlands

Certifications: ISO 9001:2015, ISO 14001

Products: Cylinders & Accumulators

Jackson, Michigan, U.S.

Certifications: ISO 9001:2015, ISO 14001

Products: Cylinders & Servos

Pune, India

Certifications: ISO 9001:2015, ISO 14001, GreenCo Gold

Products: Cylinders, Power Units, Pumps, Motors, Valves, Steering Control Units, Hoses & Fittings

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