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## **Eatonite Laser Coating for Piston Rods is the First Anti-Corrosion Technology To Earn JIP Certification from DNV for use on Offshore Platforms**

**EDEN PRAIRIE, Minn.** ... Diversified industrial manufacturer Eaton Corporation today announced that its proprietary Eatonite™ Laser Clad coating technology was certified by independent test services company DNV after fulfilling requirements stated in the “*Guideline for qualification of wear and corrosion protection surface materials for piston rods*” developed as part of a Joint Industry Project (JIP).

“Eaton is the first, and to date the only, cylinder manufacturing company that has passed the JIP test requirements,” said Dr. Luis F. Garfias, director of Testing & Qualification for DNV’s Materials & Corrosion Technology Center in Columbus, Ohio.

“DNV-certified Eatonite laser coating technology is a significant breakthrough for upstream, offshore applications in the oil and gas industry,” said Astrid Mozes, vice president and general manager of Eaton’s Controls Division. “It will also provide new solutions in key industries like Hydropower and virtually anywhere else piston rods are exposed to severe environmental corrosion.”

Piston rod samples made of SAE 4130 steel coated with Eatonite were tested at DNV laboratories in Høvik, Norway, and Columbus, Ohio, for a wide range of physical, mechanical, and electrochemical properties to evaluate the performance of the Eatonite coating against the JIP standard.

“Controlling corrosion is an ongoing challenge for the offshore oil industry,” said Dr.

Alexander Bogicevic, senior technology manager of Eaton's Innovation Center in Southfield, Mich. "We developed the Eatonite laser coating technology to extend the life of piston rods used in hydraulic riser tensioning systems on offshore platforms. Many materials and processes were tested and the result of this multi-year development program was the Eatonite technology.

"After proprietary processing, the Eatonite material is twice as hard as conventional Inconel 625, a well known corrosion resistant alloy (CRA), but also has good cladding homogeneity due to the novel laser technology developed to deposit the Eatonite. As confirmed by the DNV certification testing, Eatonite-clad rods deliver the mechanical performance of traditional SAE 4130 steel piston rods, along with the corrosion resistance expected for CRA materials like Inconel 625. It really does give customers the best of both worlds"

Eatonite testing is the subject of a technical paper being prepared for the 2010 Offshore Technology Conference (OTC).

DNV is a global provider of services for managing risk, helping customers to safely and responsibly improve their business performance. DNV is an independent foundation with presence in more than 100 countries. The DNV Columbus office (formerly CC Technologies) provides expertise in materials testing, corrosion, fitness for service, structural and pipeline integrity, as well as materials, certification and new technology qualification for industry. For more information on DNV's services, visit [www.dnvcolumbus.com](http://www.dnvcolumbus.com).

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