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Alfa Laval PureNOx approved for MAN Diesel & Turbo EGR system

Alfa Laval has become the first company in the world to be approved by MAN Diesel & Turbo to supply a water treatment system, PureNOx, for MAN's exhaust gas recirculation (EGR) scrubber. The approval comes with less than a year to go before the International Maritime Organization (IMO) Tier III NOx standards take effect on January 1, 2016.

A comprehensive NOx abatement technology, the EGR will be used with the MAN's two-stroke marine engines to reduce NOx emissions. The EGR is an alternative to selective catalytic reduction (SCR) technology; both EGR and SCR are compliant with the IMO NOx Technical Code.

Long-term cooperation paves the way to approval

In 2012, Alfa Laval signed a cooperation agreement with MAN to develop the water treatment system for cleaning scrubber water in their EGR system. PureNOx not only prevents soot and compounds derived from the exhaust gas from accumulating in the EGR scrubber and corroding the engine, but also enables the bleed-off of clean water overboard in compliance with IMO criteria.

"From the start, we have worked closely with MAN to develop and refine the water treatment system," says Kristina Effler, Global Business Manager, Water Treatment Exhaust Gas Emissions. "Receiving the MAN Certificate of Approval for PureNOx is proof positive that close cooperation really pays off."

Advantages for ship owners

What do ship owners gain by choosing MAN's EGR with PureNOx? Modular in design, PureNOx is compact and easy to install so it can be positioned anywhere in the engine room; the EGR system itself is integrated with the engine. This simplifies ship design and reduces installation time and costs.

Commercialization on the horizon

MAN is now moving quickly towards EGR system commercialization. And Alfa Laval is keeping pace, introducing the next-generation PureNOx Prime water treatment system, which minimizes the amount of sludge for onshore disposal.

"By yearend, we will launch the PureNOx Prime, which is smaller and less complex than the original, but also far less expensive," says Kristina.

This bodes well for the introduction of MAN's EGR system with PureNOx Prime to the market.

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Editor's notes

About Alfa Laval

Alfa Laval is a leading global provider of specialized products and engineering solutions based on its key technologies of heat transfer, separation and fluid handling.

The company's equipment, systems and services are dedicated to assisting customers in optimizing the performance of their processes. The solutions help them to heat, cool, separate and transport products in industries that produce food and beverages, chemicals and petrochemicals, pharmaceuticals, starch, sugar and ethanol.

Alfa Laval's products are also used in power plants, aboard ships, in oil and gas exploration, in the mechanical engineering industry, in the mining industry and for wastewater treatment, as well as for comfort climate and refrigeration applications.

Alfa Laval's worldwide organization works closely with customers in nearly 100 countries to help them stay ahead in the global arena.

Alfa Laval is listed on Nasdaq OMX, and, in 2014, posted annual sales of about SEK 35.1 billion (approx. 3.85 billion Euros). The company has about 18 000 employees.

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