

Selective catalytic reduction process with marine emission monitoring

Yanmar, global provider of marine diesel engines, has throughout a long-term partnership, tested NO_x, SO₂ and NH₃ analyzer, MES 1001, in a closed loop application for its Selective Catalytic Reduction (SCR) technology.

The traditional approach to controlling the SCR is by means of the engine load signal, where the amount of urea injected into the SCR is controlled as a function of the load. The closed loop application is an alternative and cost efficient integration of analyzer technology in the SCR. In this application, a marine emission analyzer is installed after the SCR, and feed back the NO_x signal to the urea dosing controller. The dosing of urea is more accurately controlled and a better transient performance is obtained, as the regulation is based on the exhaust out of the SCR.

A signing ceremony in September 2018, with Yanmar extended partnership, with a supply agreement of NO_x, SO₂, NH₃ analyzer, MES 1001 to Yanmar's Selective Catalytic Reduction solutions. With this, Danfoss IXA will be provider of emission measurement- and control equipment for Yanmar's closed loop application of its Selective Catalytic Reduction technology, which contributes to cost efficiency in the Selective Catalytic Reduction process.

MES 1001 will support Yanmar's production of sustainable solutions for the maritime industry.

