

MUN2016-01-06

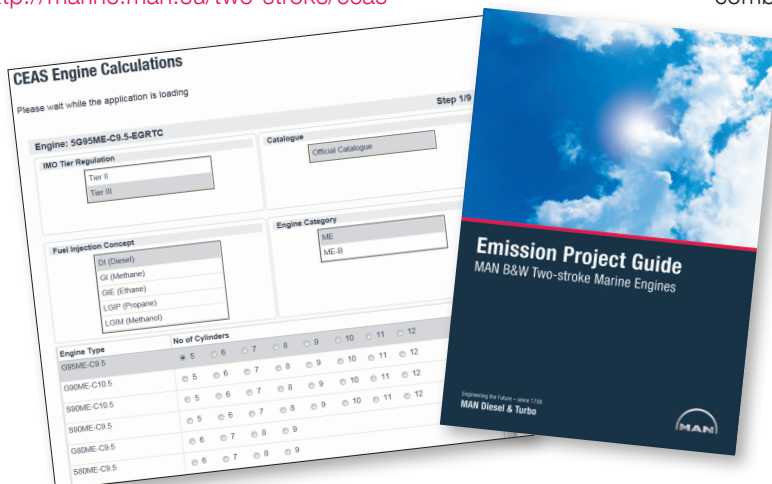
MAN B&W Tier III two-stroke marine diesel engines with SCR

MAN Diesel & Turbo has developed a Tier III engine programme for operation with high-pressure and low-pressure selective catalytic reduction (HP- and LP-SCR) systems. These are two of the options used to reduce NO_x emissions on MAN B&W two-stroke marine diesel engines. The Tier III tuned engines are designed by MAN Diesel & Turbo and built by a licensee, and the SCR system is built by an approved supplier.

The Tier III SCR engines include an additional emission reduction control system (ERCS) designed by MAN Diesel & Turbo, which controls the temperature of the SCR system as well as the supply of reducing agent.

Information about the Tier III engine programme can be found in the MAN Diesel & Turbo Computerized Engine Application System (CEAS) which is available at:

<http://marine.man.eu/two-stroke/ceas>



Approved SCR system suppliers

When combining an Tier III tuned MAN B&W two-stroke diesel engine with either an HP- or an LP-SCR exhaust gas treatment system, this must only be carried out with SCR systems from an MAN Diesel & Turbo approved supplier. The approval ensures compliance with MAN Diesel & Turbo's defined requirements to functionality, quality and reliability. In the approval process a distinction is made between:

1. HP-SCR systems (any sulphur content up to 3.5 %)
2. HP low-sulphur SCR systems
3. LP low-sulphur SCR systems

The owner will have to acquire the approved SCR system, which MAN Diesel & Turbo does not supply. It is important to note that it is not possible to obtain a Tier III tuned system by purchasing an MAN Diesel & Turbo Tier II engine and combine it with a random choice of SCR supplier.

Further Information

MAN Diesel & Turbo has issued an emission project guide that provides additional information on the Tier III technologies for emission reduction. Besides the HP- and LP-SCR systems, MAN Diesel & Turbo also offers an exhaust gas recirculation (EGR) solution. The most current version of the project guide can be found by clicking the menu »Other Guides« at:

<http://marine.man.eu/two-stroke/project-guides>

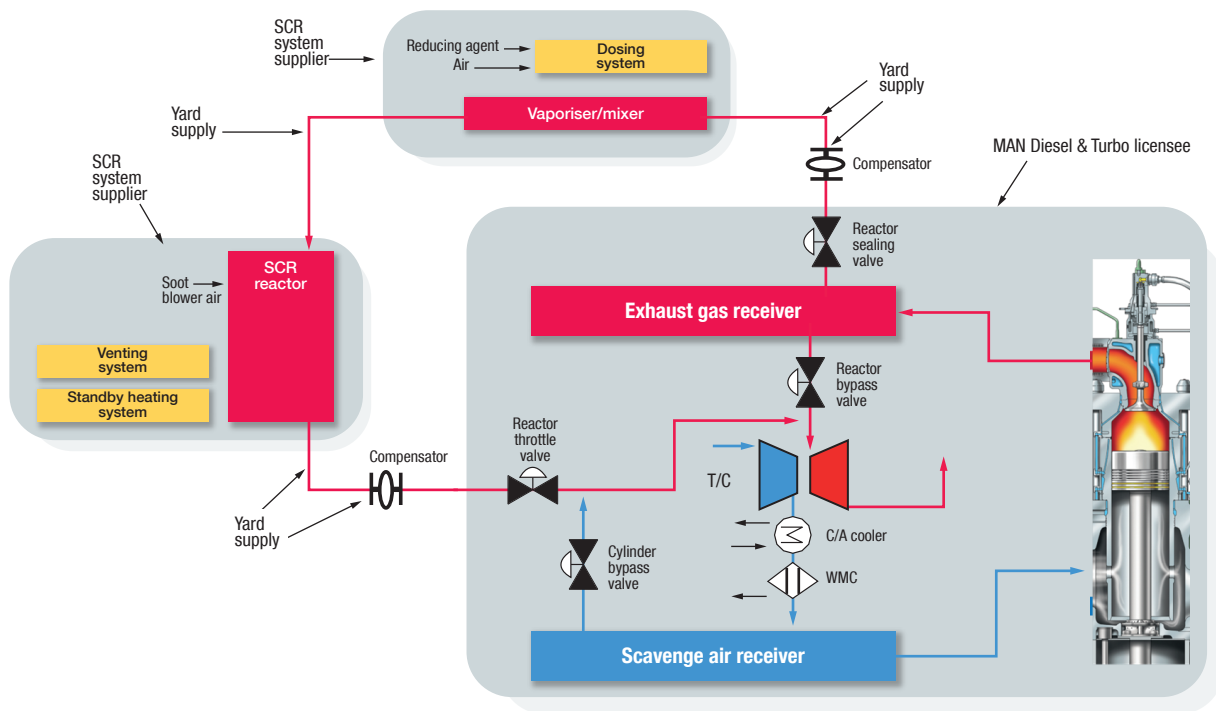


Fig. 1: The scope of supply for the HP-SCR supplier, the yard and the MAN Diesel & Turbo licensee.

Scope of Supply

The figures 1 and 2 provide a schematic presentation of the HP- and LP-SCR systems, respectively, and the scope of supply for the:

1. HP-SCR and LP-SCR system supplier
2. MAN Diesel & Turbo licensee
3. Yard

The yard is responsible for installing the SCR system, electrical cabling, piping and supports as well as compensators. For further information on the specific deliveries and responsibilities of the SCR system supplier, the yard or the licensee please contact: lsp@mandieselturbo.com

Market Update Note

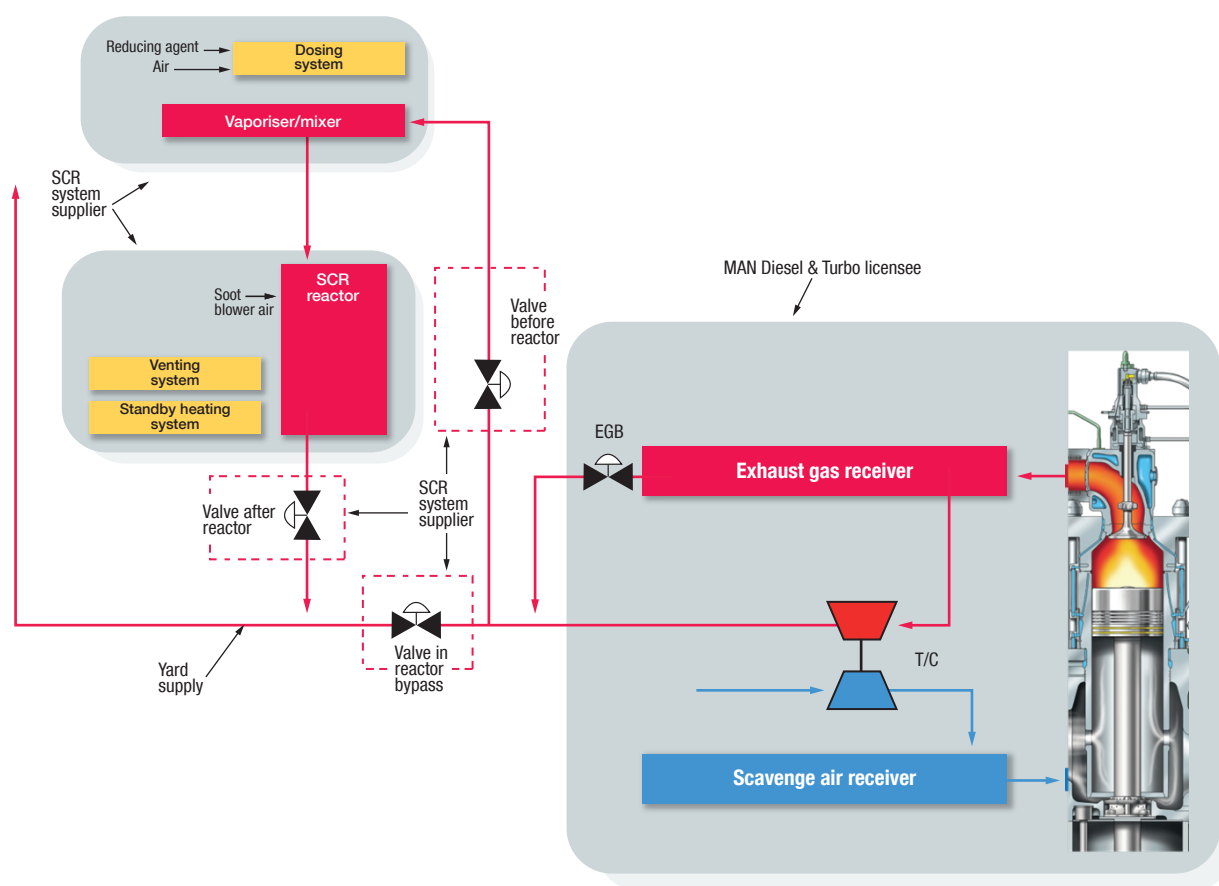


Fig. 2: The scope of supply for the LP-SCR supplier, the yard and the MAN Diesel & Turbo licensee.

For more details:

MAN Diesel & Turbo

Teglholmegade 4, 2450

Copenhagen SV, Denmark

Phone +45 33 85 11 00

Fax +45 33 85 10 30

info-cph@mandieselturbo.com

www.mandieselturbo.com