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Water handling system

MAN Energy Solutions has decided to update the water handling system (WHS) for EGR engines according to the new IMO guidelines on the discharge of EGR bleed-off water. The guidelines, adopted by IMO resolution MEPC.307 (73), apply to EGR engines for which the EIAPP Certificate is first issued on or after 1 June 2019.

The updated WHS will be available in two different configurations: one for low-sulphur fuel (LS WHS) and one for high-sulphur fuel (HS WHS).

**LS WHS**
The LS WHS will be applicable to EGR systems designed for fuels of max 0.5% sulphur.

The main differences between the new LS WHS compared to the previous system are:
- cleaning of water for the EGR process is not required
- the LS WHS is simplified, only handling the bleed-off water from the EGR
- MAN Energy Solutions will not require approval of the LS WHS
- certificates for type approval of oil content meters will be required on board, including operating and maintenance manuals
- buffer tank is specified by MAN Energy Solutions and can be delivered by any maker: licensee, yard or external supplier.

Fig. 1 shows a layout diagram of the LS WHS.

**Fig. 1: Low-sulphur water handling system (LS WHS)**
HS WHS
The high-sulphur water treatment system (HS WHS) will be applicable to EGR systems designed for high-sulphur fuels, i.e. fuels that do not comply with the fuel sulphur limits and, therefore, requires installation of a SO\textsubscript{2} scrubber on board.

The main differences between the new HS WHS compared to the previous system are:
• lower amount of water being circulated to the buffer tank and returned to the engine
• HS WTS is simplified, operating only to maintain the water quality in the EGR circuit
• bleed-off water from the EGR process, which is sent to the EGR drain tank, can be discharged by the exhaust gas cleaning system (EGCS)
• buffer tank is specified by MAN Energy Solutions and can be delivered by any maker: licensee, yard or external supplier.

Fig. 2 shows a layout diagram of the HS WHS.

Further information on EGR WHS can be found in our “Emission Project Guide”, which is available on our web site: marine.man-es.com/two-stroke/project-guides.

EGR
Based on IMO’s new guidelines for the discharge of EGR bleed-off water, a simplified EGR water handling system can now be offered on both low-sulphur and high-sulphur EGR engines.

Questions regarding this Market Update Note should be directed to our Marine Installation department, EEEEE4, at LEE4@man-es.com.

For more details:
MAN Energy Solutions
Teglholmsgade 41
2450 Copenhagen SV, Denmark
Phone  +45 33 85 11 00
www.marine.man-es.com