Market Update Note



11 September 2019

0.50% S fuel operation 2020

Important service letters and papers on MAN B&W two-stroke engines

Do you have questions about 0.50% sulphur (S) operation? Or do you consider retrofitting a scrubber? MAN Energy Solutions has issued information and recommendations relevant to 0.50% S operation and how to prepare for IMO's global 0.50% sulphur limit. Click on the links below and check it out!

Main 2020-information on 0.50% S fuel operation

The service letter and paper listed below provide information and guidance on 0.50% S fuel operation and how to prepare for the change from operation on high-sulphur fuel to 0.50% S fuel. Attention is drawn to specific fuels properties that should be in focus and how 0.50% S fuels affect the equipment on board. Expectations for the new types of fuels are given, and information on fuel testing, biofuels, and fuels that are not fit for purpose is also included.

- SL2019-670 Operation on fuels with max 0.50% S
- Paper: 0.50% S fuel operation 2020 detailed information on fuels with less than 0.50% sulphur – preparation and operation

Cylinder Iubrication

The cylinder lubrication recommendation has undergone extensive revision. The three most important factors are: 1. cleanliness in the piston ring pack; 2. feed rate and 3. close monitoring of the cylinder condition and appropriate action.

- <u>SL2019-671 Cylinder lubrication update for 0 to 0.50%</u> sulphur fuels
- <u>SL2014-587 Cylinder lubrication update</u> (for vessels with scrubbers and for running-in)

Piston rings

Cermet-coated rings are recommended for VLSFO operation. Cermet coating increases the margin against damage to rings and liners and increases the reliability of the main engine.

• <u>SL2018-659 – Cermet coated piston rings for operation on low-sulphur fuels (0.50% S or lower)</u>

Fuel cleaning

Fuel cleaning and removing cat fines (Al+Si) are and will still be very important.

- SL2019-674 Fuel tank cleaning
- SL2017-638 Cleaning of heavy fuel oil and maximum
 0.10% S fuels How to remove cat fines
- Paper: Cat fines impact on engine wear and how to reduce wear

Scrubbers

MAN PrimeServ offers a ${\rm SO_x}$ scrubber retrofit package with recommendations on the turbocharger re-matching parts.

• <u>SL2018-665 – SO_x scrubber retrofit on two-stroke</u> engines in service

Link to Service Letters (SL):

https://marine.man-es.com/two-stroke/service-letters

Link to Technical Papers:

https://marine.man-es.com/two-stroke/technical-papers

