„Blending-on-Board
Fit-for-Purpose Cylinder Lubrication“

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Marine Fluid technology

Abstract

The system was originally developed by A.P. Moller-Maersk and allows owners to produce a Fit-for Purpose cylinder lubricant onboard, by blending either the in-use system oil with a higher-BN cylinder oil product, which also facilitates the addition of fresh system oil to the engine sump, or by mixing a low BN cylinder oil with a high BN cylinder oil and this can bring a number of benefits:

BENEFITS – Technical

- Flexibility to produce Fit-for-Purpose cylinder oil to meet the operating conditions at any time
- Lower feed rate reduces piston ring deposits
- Continuously renewed system oil in operation
- Reduced friction losses due to correct system oil viscosity
- Improved piston running and hydraulic system reliability

BENEFITS – Financial

- Reduced system oil losses due to fewer operating hours of the purifiers
- Reduced cylinder oil consumption when running minimum feed rate
- Reduced maintenance cost
- Reduced energy consumption

2020

Compliance with 2020 Fuel Sulphur cap brings additional complexity and new characteristics to the future fuel types impacting the cylinder lubrication choices.

To address these challenges, relating to cylinder oil lubricants, Blending-on-Board provides the needed flexibility in terms of cylinder lubrication quality, as the vessels can blend a Fit for-Purpose cylinder oil quality onboard, using the most cost-effective cylinder oil availableat any port, at any time.

Scrubber technologies will be another impacting factor and a good match with Blendingon-Board, due to potential larger fuel Sulphur variance.