

SEA-Mate® Blending-on-Board

Fit-for-Purpose lubrication

THE SYSTEM

Originally developed by A.P. Moller-Maersk, SEA-Mate® Blending-on-Board (BOB) technology 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.

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 and adjustable cylinder oil BN
- Reduced maintenance cost
- Reduced energy consumption

INSTALLATION

- Can be completed during normal operation
- No downtime
- Piping can be carried out by crew

2020

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

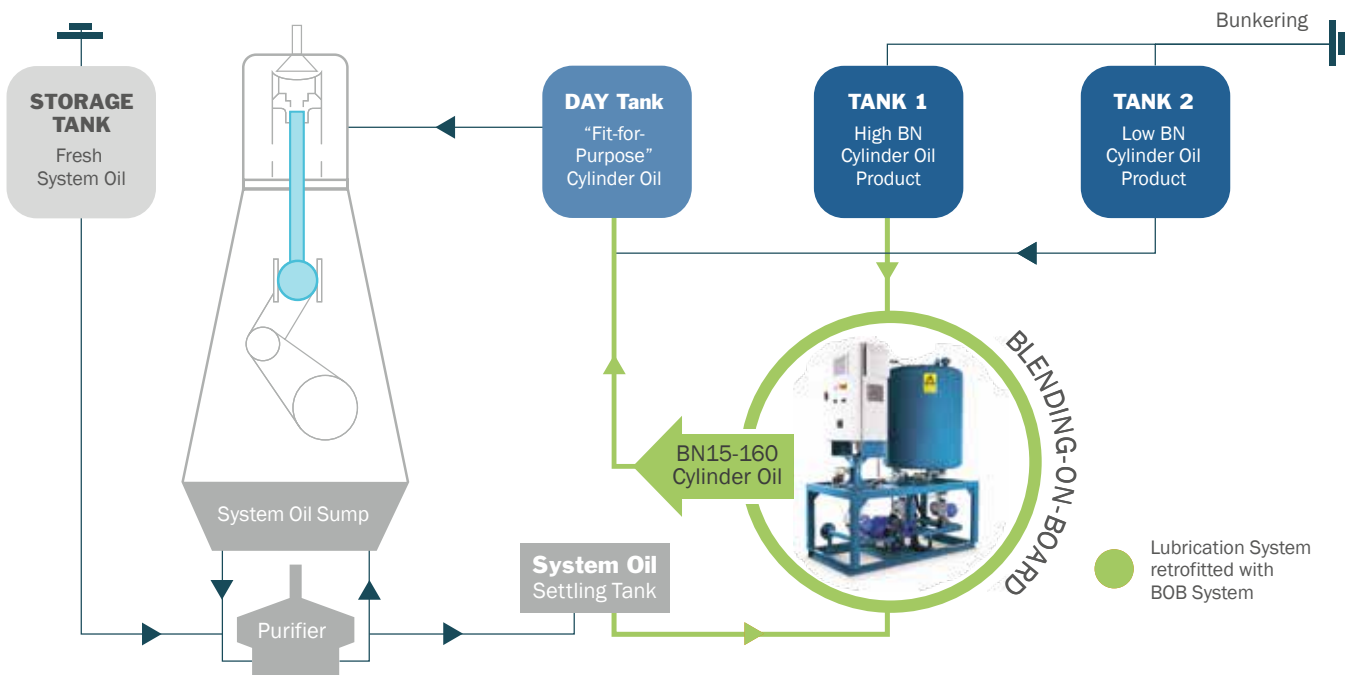
To address these challenges, relating to cylinder oil lubricants, Blending-on-Board provides the needed flexibility in terms of cylinder lubrication quality, as **the vessels can blend a Fit-for-Purpose cylinder oil quality onboard, using the most cost-effective cylinder oil available at any port, at any time.** This is of key importance, in order to address the uncertainties of having the right cylinder oil onboard and to ensure optimum cylinder unit condition and reliable operation of the engine.

Scrubber technologies will be another impacting factor and a perfect match with Blending-on-Board, due to larger fuel Sulphur variance operation.



The BOB Concept

BLENDING-ON-BOARD SET-UP



Product Specifications

The model range consists of three models and was last updated in the spring of 2018.

PERFORMANCE	SEA-Mate® B500Mk2	SEA-Mate® B1000Mk2	SEA-Mate® B3000
Ingoing cylinder oil product range (BN)	15 - 325	15 - 325	15 - 325
Blended cylinder oil output (BN)	15 - 160	15 - 160	15 - 160
Standard deviation range (BN)	+/- 2	+/- 2	+/- 2
Blending capacity (ltr/workingday)	0 - 300	0 - 300	0 - 2000
Streams that can be blended	3	4+	4+
Operation	Semi-automatic	Semi-automatic or automatic with multiple options for signal input	Semi-automatic or automatic with multiple options for signal input

TECHNICAL

Working temperature (°C)	5-50	5-50	5-50
Dimensions L x W x H (cm)	110 x 60 x 85	110 x 60 x 85	130 x 70 x 170
Weight (kg)	170	170	350
Power requirement	3 x 440V / 6A	3 x 440V / 6A	3 x 440V / 10A

SEA-Mate® Blending-on-Board System has been type approved by Lloyd's Register.

For more information and contact details, please visit us at www.marinefluid.dk