

SEA-Mate[®] Blending-on-Board

Fit-for-Purpose lubrication

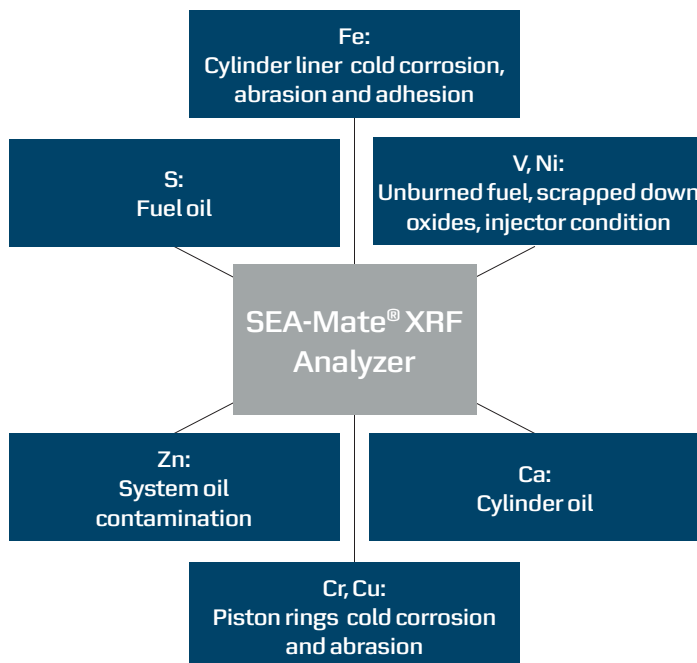


SEA-Mate[®] M5000 ANALYZER

The SEA-Mate[®] M5000 Analyzer based on XRF technology. It is an accurate and easy-to-use on-board or on-site lubricant analysis tool, to help streamline maintenance management and reduce the net cost of operation and Total Cost of Ownership of your engine.

Designed specifically for the maritime and power generation industries, the SEA-Mate[®] M5000 Analyzer delivers results in minutes, rather than the standard two weeks - putting critical diagnostic process control firmly back into your hands.

*SEA-Mate[®] M5000 Analyzer
measures the true and total iron content
– abrasive and corrosive*



SEA-Mate® M5000 BENEFITS:

The accuracy and speed of the SEA-Mate® M5000 Analyzer enables you to identify issues before they become a problem:

- X-ray spectrometer allows precise quantification of wear elements inside the piston, reducing engine damage and cylinder oil feed rate by enabling immediate crew action
- The SEA-Mate® M5000 Analyzer allows the measurement of iron originating from cold corrosion, abrasion or adhesion. Unlike many other onboard devices that only measure magnetic iron.
- Tools to control the effective sulfur content of the fuel oil in use
- System oil condition monitoring capabilities including the condition of specific components (bearings, gears, camshaft, etc.)
- On-the-spot analysis of how your engine is behaving helps reducing cylinder lube oil consumption and optimize Time Between Overhauls (TBO)
- Mapping of the engine's actual response to fuel sulfur and operational conditions to enable safe setting of optimal cylinder oil feed rate

ELEMENTS MEASURED AND RANGES:

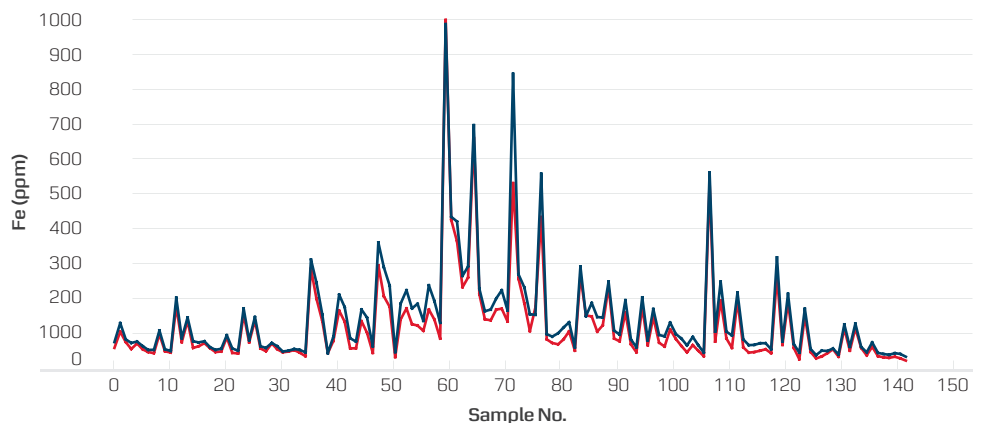
	S	Fe	Pb	Cu	V	Ni	Cr	Zn	Ca
M4000	100-6,000	0-5,000	0-1,000	0-1,000	0-1,000	0-1,000	0-1,000	0-5,000	100-50,000
M5000	10-30,000	0-5,000	0-1,000	0-1,000	0-2,000	0-2,000	0-2,000	0-10,000	100-60,000

FIELD DATA

Marine Fluid Technology has carried out extensive field tests on several vessels and power plants. As the graphs show, there is excellent correlation between SEA-Mate® XRF Analyzer results and those from the same sample run at a land-based laboratory.

- SEA-Mate®
- DNV Norway

Scrape-down oil from MAN B+W 12K90MC - Iron analysis, High Wear Regime



System Specification	SEA-Mate® M4000	SEA-Mate® M5000
Dimensions	65 x 39 x 39 cm	41 x 65 x 37 cm
Weight	27 kg	15 kg
Ambient temperature	5-40 °C	5-45 °C
Sample size	125 ml	50 ml

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