MORGOIL® Series Oils

Mobil Industrial , Canada

Premium circulating oils

Product description

MORGOIL® series oils are a family of heavy duty circulating oils specifically designed for the lubrication of plain bearings in metal rolling mills made by Primetals Technologies. They are particularly effective in systems subjected to water contamination such as back-up roll bearings. In addition, MORGOIL products meet the Morgan "super demulsibility" advanced lubricant specification.
The strong performance record of MORGOIL® series oils in Primetals Technologies equipment owes to their balanced formulation which provides for excellent water separation even under severe water contamination conditions. Their formulation also provides excellent resistance to thermal oxidation and degradation while protecting metal surfaces against rust and corrosion. The high viscosity indices of MORGOIL series oils ensure robust fluid film hydrodynamic lubrication even at elevated temperatures.

By resisting the formation of emulsion and sludge, MORGOIL® series oils help keep circulating systems clean and reduce filter loading. Solid contaminants are readily separated, enabling high oil cleanliness levels to be maintained via centrifuge, filtration or reservoir settling methods. MORGOIL series oils are recommended for both single and dual tank circulation systems.

Features and benefitsMORGOIL® series oils utilize the same technology found in Mobil Vacuoline 100 series oils, whose proven performance has made them the primary choice of Primetals Technologies equipment owners worldwide. MORGOIL® series are the primary recommendation by Primetals Technologies for their rolling mill equipment and are supported with the joint expertise and field technical services offered by Mobil and Primetal Technologies.

Applications

MORGOIL® series oils are primarily recommended and are used almost exclusively for rolling mill applications, including:

- Back-up roll bearings of rolling mills, particularly bearing systems, where either a single or dual tank is employed
- Other full fluid film plain bearing systems and similar applications in other industries, particularly bearings subjected to heavy water contamination

Specifications and Approvals

Features	Advantages and potential benefits
Outstanding demulsibility	Ready separation from water and contaminants throughout the life of the oil for trouble-free operation and reduced downtime
Good resistance to oxidative degradation	Extended oil charge life and reduced oil replacement costs Cleaner system and filters and reduced maintenance costs
Excellent rust and corrosion protection	Enhanced equipment protection and equipment life

Typical Properties

Morgoil series oils	150	220	320	460	680
ISO Viscosity Grade	150	220	320	460	680
Viscosity, ASTM D 445					
cSt @ 40°C	150	220	320	460	680
cSt@ 100°C	14.8	18.8	23.9	30.1	36.7

Morgoil series oils	150	220	320	460	680
Viscosity Index, ASTM D 2270	96	95	95	95	91
Pour Point, °C, ASTM D 97	-9	-6	-9	-6	-6
Flash Point, °C, ASTM D 92	280	288	286	296	318
Specific Gravity @15.6°C, kg/l, ASTM D 4052	0.89	0.89	0.9	0.9	0.91
Demulsibility for non-EP oils, ASTM D2711, ml water	40	36	39	41	40
Demulsibility at 82°C, ASTM D 1401 Minutes to 3ml Emulsion	15	20	25	30	35
Rust Protection, ASTM D665 Distilled Water	Pass	Pass	Pass	Pass	Pass
Copper Corrosion, ASTM D130 3 hours @ 100°C	1B	1B	1B	1B	1B
Foam Test, ASTM D 892, Seq I Tendency / Stability, ml/ml	0/0	0/0	0/0	0/0	0/0

Health and Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Safety Data Sheet (SDS) are followed. SDS's are available upon request through your sales contract office, or via the Internet on www.mobil.com/industrial. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

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Imperial Oil

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Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit www.exxonmobil.com
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