

## 76 XD Circulating Oil

76 Lubricants XD Circulating Oil is a high-quality, rust and oxidation (R&O)-inhibited circulating oil specifically developed for the lubrication of backup roll bearings manufactured by Morgan Construction Company. It meets the performance requirements for “super demulsibility” as defined by Morgan’s Advanced Lubricant Specification (Revision 2.3) for use in hot and cold rolling mill operations.

XD Circulating Oil is available in one grade: Light (ISO VG 100). It is formulated with high-quality paraffinic base oils and select additives to provide rapid water separation, good oxidation resistance, protection against rust and corrosion, and resistance to foaming. It has excellent water-separating properties to minimize the formation of emulsions in circulating systems subject to contamination with large quantities of water, rolling solutions, dirt and scale. It has good oxidation resistance and thermal stability at high temperatures to minimize sludge and varnish formation and provide long service life. It protects system components against rust and corrosion, and is resistant to excessive foam buildup that can interfere with proper lubrication.

### **Applications**

- Backup roll bearings manufactured by Morgan Construction Company
- Backup roll bearings in hot and cold rolling mills
- Circulating systems where water contamination is a problem
- Large, slow-speed gears in mixers and mills

XD Circulating Oil meets the performance requirements of:

- U.S. Steel 135, Mill Circulating Oil

### **Features/Benefits**

- Excellent water-separating properties
- Good oxidation resistance and thermal stability
- Protects against rust and corrosion
- Good foam resistance

**Inhibited “Super  
Demulsibility”  
Rolling Mill  
Circulating Oil**

**Customer Service  
Number:  
1-888-766-7676**

**Technical Hot Line:  
1-800-435-7761**

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## 76 XD Circulating Oil

### Typical Properties

Grade	Light
<b>ISO Grade</b>	<b>100</b>
Density, g/cm <sup>3</sup> @ 15.6°C (60°F)	0.874
Density, lbs/gal @ 15.6°C (60°F)	7.28
Color, ASTM D1500	0.5
Flash Point (COC), °C (°F)	265 (509)
Pour Point, °C (°F)	-35 (-31)
Viscosity,	
cSt @ 40°C	97.8
cSt @ 100°C	11.4
SUS @ 100°F	509
SUS @ 210°F	69.4
Viscosity Index	103
Acid Number, ASTM D974, mg KOH/g	0.05
Copper Corrosion, ASTM D130	1a
Demulsibility, ASTM D1401, minutes to pass	<20
Demulsibility, Free Water @ 52°C, ASTM D2711, ml	<30
Demulsibility, Water in Oil, UEC Dynamic Endurance Test, %	<10
Foam Test, ASTM D892	Pass
Oxidation Stability, RPVOT, ASTM D2272, minutes	770
Rust Test, ASTM D665 A	Pass

### Health and Safety Information

For recommendations on safe handling and use of this product, please refer to the Material Safety Data Sheet via <http://w3.conocophillips.com/NetMSDS>.

Due to continual product research and development, the information contained herein is subject to change without notification.

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