



XD Bearing Oil

Conoco XD Bearing Oil is a high performance antiwear circulating oil specifically developed for use in Morgan Construction No-Twist[®] rod mills. It meets the performance requirements of Morgan specification MMC40003.

XD Bearing Oil is available in four viscosity grades: ISO 100, 150, 320 and 460. It is formulated with high purity paraffinic base oils and fortified with additives that provide excellent rust and corrosion protection plus exceptional antiwear properties to help prevent distortion of the round, flat or square bar stocks during the extrusion process. It also has good oxidation resistance, good foam resistance, and excellent water-separating characteristics to resist the formation of emulsions in circulating systems subject to contamination with water.

Applications

- Morgan, Danieli and Demag No-Twist rod and bar mills
- Circulating oil for ferrous and non-ferrous rolling mills
- Circulating systems where contamination with water is a problem
- Large, slow speed gears in mixers and mills
- Hot and cold strip mills

Outstanding Features

- Excellent wear-protection for the coils, bars and wires
- Excellent water-separating characteristics to minimize the formation of emulsions
- Good oxidation resistance to minimize sludge and varnish formation
- Excellent rust and corrosion protection
- Good foam resistance

**High Performance,
Heavy Duty
Circulating Oil For
Morgan High
Speed No-Twist[®]
Rod Mills**

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XD Bearing Oil
Typical Properties

ISO Grade	100	150	320	460
Specific Gravity @ 15.6°C (60°F)	0.877	0.882	0.892	0.897
Density, lbs/gal	7.32	7.36	7.44	7.48
Color, ASTM D1500	1.0	3.0	5.0	5.0
Flash Point (COC), °C (°F)	267 (513)	273 (523)	282 (540)	270 (518)
Pour Point, °C (°F)	-32 (-26)	-21 (-6)	-15 (5)	-12 (10)
Viscosity,				
cSt @ 40°C	97.8	150	320	460
cSt @ 100°C	11.4	14.7	24.3	30.4
SUS @ 100°F	509	788	1,703	2,466
SUS @ 210°F	65	79	121	149
Viscosity Index	103	98	97	95
Acid Number, ASTM D974, mg KOH/g	0.65	0.65	0.65	0.65
Copper Corrosion, ASTM D130	1b	1b	1b	1b
Demulsibility, ASTM D1401, minutes to pass	25	25	25	25
Demulsibility, ASTM D2711,				
Free Water @ 82°C, ml	36	36	36	36
Emulsion @ 82°C, ml	0	0	0	0
Water in Oil @ 82°C, %	0.4	0.4	0.4	0.4
Foam Test, ASTM D892	Pass	Pass	Pass	Pass
Four-Ball Wear, ASTM D4172,				
Scar Diameter, mm	0.36	0.35	0.33	0.33
FZG Gear Test, ASTM D5182, Pass Stage	11	11	11	11
Oxidation Stability,				
RPVOT, ASTM D2272, minutes	211	211	211	211
Rust Test, ASTM D665 A&B	Pass	Pass	Pass	Pass

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