



Product Data

Magna CTX

Circulating oil

Description

Castrol Magna® CTX 100 is a premium quality heavy duty circulating oil designed specifically to meet the critical lubrication requirements of Primetals (formerly Morgan Construction Company) No-Twist™ Mills as well as Danieli Wire Rod Mills. This oil is manufactured from the highest quality base oils and is formulated with an advanced technology anti-wear additive system designed to extend service life in rod mills, wire mills, primary mills and mini-mills operating under high impact and high shock loading.

Magna CTX is designed to provide maximum rust and oxidation resistance while allowing the oil to rapidly separate from water, providing exceptional demulsibility characteristics. This lubricant also has exceptional air separation characteristics to protect contact points such as pumps, bearings, gears and other components from damage due to entrained air

Application

Magna CTX has been specifically engineered to lubricate circulating oil systems of high speed rod and wire mills such as those designed by Primetals (formerly Morgan Construction) and Danieli.

This lubricant meets and exceeds:

- Primetals (formerly Morgan Construction) No-Twist Oil Specification, MMC40003 (12/10/2008)
- Danieli Standard 0.000.001 - rev.16

Magna CTX is also suitable for use on other primary mill and mini-mill circulating oil systems.

Advantages

- Advanced technology anti-wear package: Passes 12+ stages of FZG and provides non-corrosive anti-wear protection in high impact and high shock load applications.
- Excellent demulsibility: Rapid water separation and hydrolytic stability means increased corrosion protection and reduced down time through prolonged lubricant life and increased equipment reliability.
- Excellent air separability: Helps protect pumps, bearings and contact points from damage associated with foam and cavitations.
- Superior thermal and oxidative stability: Provides reliable performance and extends oil life in severe applications.
- Minimal deposit formation: Cleaner system and reduced filter change frequency.
- Protection against rust and corrosion: Prevents corrosive activity on bearings and metal surfaces.

Typical Characteristics

Name	Method	Units	CTX 100
ISO Viscosity Grade	-	-	100
Density @ 15°C / 59°F	ISO 12185/ASTM D4052	kg/m³	870
Gravity, API	ASTM D287	-	30.64
Specific Gravity @ 15.5°C / 60°F	ISO 3675 /ASTM D1298	kg/m³	873
Kinematic Viscosity @ 40°C / 104°F	ISO 3104/ASTM D445	mm²/s	98
Kinematic Viscosity @ 100°C / 212°F	ISO 3104/ASTM D445	mm²/s	11.2
Viscosity Index	ISO 2909/ASTM D2270	-	99
Colour	ASTM D1500	-	<0.5
Pour Point	ISO 3016/ASTM D97	°C/°F	-18/0
Flash Point - open cup method	ISO 2592/ASTM D92	°C/°F	251/484
Water Separation @ 54°C / 129°F @ 82°C / 180°F	ISO 6614/ASTM D1401	minutes	7 2
Water Separation - total free water	ASTM D2711	mls	41.5
Rust test - distilled water (24 hrs)	ISO 7210/ASTM D665A	Rating	Pass
Rust test - synthetic seawater (24 hrs)	ISO 7210/ASTM D665B	Rating	Pass
Copper Corrosion (3 hrs @ 100°C/212°F)	ISO 2160/ASTM D130	Class	1b
Air Release Value @ 50°C / 122°F @ 75°C / 167°F	ISO 9120/ASTM D3427	minutes	6.0 3.1
Foam Sequence I - tendency / stability Foam Sequence II - tendency / stability Foam Sequence III - tendency / stability	ISO 6247/ASTM D892	mls/mls	0/0 0/0 0/0
Four Ball Weld Load test - Weld Point	ASTM D2783	kg	160
Four Ball Wear test - Wear Scar Diameter (20Kg, 1800 rpm, 130°F, 1Hr)	ASTM D2266	mm	0.36
Oxidation Stability - Rotating Pressure Vessel test (RPVOT)	ISO 7624/ASTM D2272	minutes	931
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1	Failure Load Stage	>12

Subject to usual manufacturing tolerances.

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