PRODUCT DATA SHEET

EKO CIRCULATING RM OIL

Lubricants for heavy duty circulating oil lubrication systems

DESCRIPTION

The EKO CIRCULATING RM OIL series includes high performance mineral oils designed to lubricate no twist rod mills in the steel industry. The special ash-free additive package the EKO CIRCULATING RM OIL lubricants contain combines excellent lubricant - water separation characteristics with excellent wear protection (FZG failure load> 12), that makes the lubricants of the series the appropriate choice for industrial circulating systems that lubricate bearings and gears.

EKO CIRCULATING RM OIL 100 complies with Morgan No-Twist Rod Mill and Danieli 0.000.001 Type 21, so it is suitable for lubricating the high-speed and no twist rod mills of Morgan Construction and the rod mills of Danieli.

SPECIFICATIONS

Morgan No-Twist Rod Mill Lubricant, Danieli 0.000.001 Type 21	EKO CIRCULATING RM OIL 100
DIN 51524 part 1 (HL), DIN 51517 part 2 (CL), AFNOR NF E 48-603 (HL), ISO 1158 HL, Schuler Pressem GmbH Hydraulic Oils DT55005.	EKO CIRCULATING RM OIL 100, 150, 220, 320, 460

APPLICATIONS

- Circulating oil systems that lubricate bearings and gears.
- The high-speed and no twist rod mills rollers of Morgan Construction, and the rod mills of Danieli and of other companies.
- Gear units operating in moderate duty applications in industry and shipping.
- Hydraulic systems with pumps and gears, which require high viscosity hydraulic lubricants with anti-wear additives.
- Industrial lubrication systems that require lubricants with mild EP additives to protect against wear.

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ADVANTAGES

- Excellent protection against wear on gears and bearings as described by the results of FZG A / 8.3 / 90, Brugger test, and FE-8 bearing test in the lubricants of the series.
- Excellent demulsification characteristics, resulting in trouble-free operation and reduced downtime.
- Excellent air release characteristics, resulting in the protection of pumps, gears and bearings against air trapping.
- Excellent protection against corrosion and rust, resulting in longer equipment life and lower maintenance costs.
- High resistance to oxidation and thermal degradation, which helps increase the life of both lubricant and equipment.
- Compatibility with all commonly used seal materials.

TYPICAL CHARASTERISTICS

			EKO CIRCULATING RM		
Properties	**Methods**	**Units**	**OIL 100**	**OIL 150**	**OIL 220**
ISO Viscosity Grade	-	-	100	150	220
Density, 15°C	ASTM D4052	g/ml	0.88	0.89	0.90
Kinematic Viscosity, 40°C	ASTM D445	cSt	100	150	220
Viscosity Index (VI)	ASTM D2270	-	100	97	96
Pour Point	ASTM D5950	°C	-24	-24	-24
Flash Point, COC	ASTM D92	°C	250	258	264
Water Separability, time to 40-40-0 (ml)	ASTM D1401	min	10	10	20
Copper Corrosion, 3 hours @ 100°C	ASTM D130	Rating	1b	1b	1b
Rust-preventing Characteristics	ASTM D665 A/B	-	Pass/Pass	Pass/Pass	Pass/Pass
Foaming Characteristics, Tension/Stability, Seq. I, II, III	ASTM D892	ml	0/0	0/0	0/0
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1.	Failure Load Stage	12+	12+	12+
Oxidation Stability	ISO 4263-1	hours	3900	>3500	>3500

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TYPICAL CHARASTERISTICS

			EKO CIRCULATING RM	
Properties	**Methods**	**Units**	**OIL 320**	**OIL 460**
ISO Viscosity Grade	-	-	320	460
Density, 15°C	ASTM D4052	g/ml	0.91	0.91
Kinematic Viscosity, 40°C	ASTM D445	cSt	320	460
Viscosity Index (VI)	ASTM D2270	-	96	95
Pour Point	ASTM D5950	°C	-21	-21
Flash Point, COC	ASTM D92	°C	270	274
Water Separability, time to 40-40-0 (ml)	ASTM D1401	min	20	20
Copper Corrosion, 3 hours @ 100°C	ASTM D130	Rating	1b	1b
Rust-reventing Characteristics	ASTM D665 A/B	-	Pass/Pass	Pass/Pass
Foaming Characteristics, Tension/Stability, Seq. I, II, III	ASTM D892	ml	0/0	0/0
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1	Failure Load Stage	12+	12+
Oxidation Stability	ISO 4263-1	hours	>3500	>3500

HEALTH AND SAFETY

Protect the environment while disposing of used product. Used lubricants should be collected at specific points to ensure they do not pollute the environment. Do not mix with solvents, brake fluids, antifreeze fluids and water, to allow for proper handling.

Issue 4, 31 October 2022