

MAK STEEL EP 220

Description

MAK STEEL EP 220 is premium quality heavy duty circulating oils designed for lubricating gears and bearings. This specifically designed to meet the critical performance requirements like for high speed No-Twist Rod Mills (Wire Rod Blocks) or any other gear /bearing system where a very high water separating ability is required along with EP properties. It is formulated with high quality severely hydroprocessed mineral base oils and a high performance ashless additive system designed to provide exceptional equipment protection and reliability under severe operating conditions.

Application

Typical applications include

- No Twist Rod Mills
- Circulating systems for Gear and Bearing lubrication
- Hydraulic systems employing gear, vane, radial and axial piston pumps

Benefits

Features	Advantages and Potential Benefits
Outstanding Oxidation and Thermal Stability	<ul style="list-style-type: none"> • Extends oil service life • Lower maintenance costs
High Load-carrying ability	Protects all machinery parts, e.g. bearings, gears from wear, ensuring lower maintenance cost and trouble free operation
Very good air release and anti-foam properties	Provides rapid air release without excessive foaming to give high levels of system efficiency.
Effective Rust and Corrosion Protection	Ensure protection to all metal surfaces e.g. gears, bearings surfaces from rust and corrosion even under high humid ambient condition
Excellent Water Separability	Less potential for emulsion formation leading to lower sludge and longer oil life.

Technical Specifications

S No	Parameter	Test Method	IPSS (Draft stage)	MAK STEEL EP 220
1	K. Viscosity @ 40°C, cSt	ASTM D445	209 to 231	225
2	Pour point, °C	ASTM D97	-15	-15
3	Flash Point, °C	ASTM D92	260	270
4	Viscosity Index	ASTM D2270	100 min	100
5	Rust Test, Method A & B	ASTM D665	pass	Pass
6	Copper Corrosion (3 hours at 100 ° C)	ASTM D130	1a	1a
7	FZG Gear Test, Failure Stage	DIN 51354	12	12
8	Demulsibility at 82°C, Minutes to 3ml	ASTM D1401	40-40-0(30)	40-40-0 (20)
9	Foaming Characteristics, Tendency/Stability, ml/ml	ASTM D892	10/0 for sequences I,II,III	0/0 for sequences I,II,III

All the mentioned values are typical which may vary from batch to batch.

Storage and Handling

- Indoor Storage is always preferable
- Barrels should be kept horizontally with bunk position at 3 O'clock 9 O'clock position
- Barrels should be kept away from dusty or heated areas.
- During handling any contact with dust must be avoided

Health & Safety

This grade is not hazardous under normal conditions of use. For further guidance Material Safety Data Sheet (MSDS) may be referred.

Advice

For any further advice on applications or otherwise, please contact the nearest Bharat Petroleum territory office or Technical Services department at the address given below.

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