



## Mobil Paper Machine Oil S 220

Mobil Industrial , Austria  
Synthetic Paper Machine Oil

### Product Description

MOBIL PAPER MACHINE OIL S 220 is a high performance synthetic lubricant specifically designed for demanding industrial paper machine circulating system engineered to provide exceptional lubrication characteristics not attainable with conventional premium mineral oil-based fluids. MOBIL PAPER MACHINE OIL S formulated to provide excellent protection of gears and bearings operating under severe conditions. It has a very low pour point and a naturally high viscosity index which helps ensure good low temperature start-up while maintaining excellent viscosity characteristics at very high temperatures. The low traction coefficient and viscosity index can help result in lower energy consumption and reduced component operating temperatures.

MOBIL PAPER MACHINE OIL S 220 is formulated with synthesized hydrocarbon fluid base oil technology and a proprietary additive system carefully balanced to high performance standards. This fluid permits the use of higher steam pressures, temperatures and machine speeds common in high output paper machine calendar rolls. The outstanding hydrolytic stability and filterability assure excellent performance in the presence of water and the ability to retain effective filtration at very fine filtration levels. It readily separates water and retains its colour characteristics for extended periods of operation under severe conditions.

### Features and Benefits

The excellent performance capabilities of Mobil Paper Machine Oil S 220 in the area of wear protection, enhanced oxidation and chemical stability, effective rust corrosion protection, colour stability and filterability not only prolong maintenance service intervals but improve machine performance and increase production capacity. This can result in less required maintenance and longer equipment life.

Features	Advantages and Potential Benefits
Excellent Wide Temperature Performance	Easier start-up and improved lubrication at cold startsVery good protection at elevated temperaturesBetter control of rates
Excellent Wear Protection	Improved bearing and gear performance
Outstanding Oxidation and Thermal Stability	Lower filter replacement costsCleaner systemsReduced system deposits
Effective Water Separation Properties	Allows easier removal of waterReduces formation of undesirable emulsions in systems
Excellent Filtration Properties	Helps to keep oil lines and flow control mechanisms free of depositsImproved oil flow and cooling performanceLowers replacement costs
Excellent Colour Stability	Ensuring flow meters can be easily monitored by eye so that the right flow rate is maintained to the bearings
High Level Rust and Corrosion Protection	Protects gears and bearings in wet environmentsProvides vapour space protection for areas of bearing and gear cavities and normally oil-wetted surfaces

### Applications

- Lubrication of severe industrial paper machine circulating systems
- Application involving circulation systems operating over a wide temperature range
- Circulation systems lubricating gears and bearings
- Mobil Paper Machine Oil S 220 is particularly applicable for machines where it is essential for excellent colour stability to visually monitor the oil flow rate through flow meters

### Specifications and Approvals

Voith Paper VS 108 5.3.6 2021-10 (winder)

Voith Paper VS 108 5.3.5 2021-10 (shoe press)

Voith Paper VS 108 5.3.2 2021-10 (dry end)

**Properties and Specifications**

Property	
Grade	ISO VG 220
Density @ 15.6 C, g/ml, ASTM D4052	0.865
Emulsion, Time to 37 mL Water, 82 C, min, ASTM D1401	20
Flash Point, Cleveland Open Cup, °C, ASTM D92	240
FZG Scuffing, Fail Load Stage, A/8.3/90, ISO 14635-1	12
Kinematic Viscosity @ 100 C, mm <sup>2</sup> /s, ASTM D445	27
Kinematic Viscosity @ 40 C, mm <sup>2</sup> /s, ASTM D445	220
Pour Point, °C, ASTM D97	-39
Viscosity Index, ASTM D2270	157
Foam, Sequence I, Tendency, ml, ASTM D892	0
Foam, Sequence I, Stability, ml, ASTM D892	0
Foam, Sequence II, Tendency, ml, ASTM D892	0
Foam, Sequence II, Stability, ml, ASTM D892	0
Foam, Sequence III, Tendency, ml, ASTM D892	0
Foam, Sequence III, Stability, ml, ASTM D892	0

**Health and safety**

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ <http://www.msds.exxonmobil.com/psims/psims.as>

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POLDERDIJKWEG

B-2030 Antwerpen

Belgium

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