

# MAK ROLLUBE 22

Superior cold rolling oil for slow speed steel rolling mills

MAK Rollube 22 is a neat oil formulated from premium quality low carbon residue base oils fortified with special additives to meet the demanding performance requirements of cold steel rolling applications. The heavy duty additive system imparts the resistance to oxidation and thermal stress, improves frictional performance and allows greater reduction per pass. It also enhances surface finish of rolled parts. It has excellent burn off characteristics and leaves no stain during subsequent annealing. Special antiwear additive package offers exceptional equipment protection and reliability under severe operating conditions.

### Applications:

MAK Rollube 22 is recommended for use in cold rolling of stainless steel of various grades in Sendzimir mill. It is used for slow speed operation. It has been specially developed for M/s. Salem Steel Plant.

### Performance/ Benefits:

**Outstanding Oxidation Stability** – outstanding resistance to the effects of oxidising agents. Resists sludge and deposit formation. Ensures reliability, longer operating life and less maintenance.

**Excellent Thermal Stability** – provides resistance to thermal break-down and capability to work under varied operating temperatures to offer optimum life and performance. Offers longer oil life.

**Antiwear Property** – helps minimise wear of machine components. Reduces the friction coefficient and withstands high rolling pressures between the strip and roll. Enhances roll life. Offers reliability.

**Strong Rust & Corrosion Protection** – prevents rusting and corrosion. Fewer unscheduled stoppages and lower maintenance costs.

**Excellent Surface Finish** – provides the cold rolled strip with surface smoothness, gloss and spot free finish.

**Excellent Cooling** – low viscosity of the oil helps removal of heat generated by friction between strip and roll surface.

**No Carbon Residue** – clean evaporation in the annealing process prevents any carbon residues/ deposits.

**Non-Staining Characteristics** – does not cause any stain on the strips rolled.

### Specification:

- Proprietary Grade

### Typical Physico-Chemical Data: MAK Rollube 22

Characteristics	Method	Value
Appearance	Visual	Clear fluid
Colour	ASTM D1500	0.5
Density, g/cc @15°C	ASTM D1298	0.840
Kinematic Viscosity @40°C, cSt	ASTM D445	19.01
Kinematic Viscosity @100°C, cSt	ASTM D445	3.98
Viscosity Index	ASTM D2270	105
Flash Point, COC, °C	ASTM D92	200
Copper Corrosion, 100°C, 3 hrs.	ASTM D130	1a
Rust Test	ASTM D665	Pass
Total Acid No., mg KOH/ g	ASTM D664	0.10
Micro Carbon Residue, %wt	ASTM D4530	0.01

### Storage & Handling:

The product should be stored inside. Keep it properly sealed to avoid contamination. Avoid freezing. Shelf life is 3 yrs. under protected storage conditions.

### Health & Safety:

It is unlikely to be hazardous when properly used in recommended applications. Contamination of the coolant from other oils, greases, chemicals, dirty water etc. can occur during the use. It should be avoided. Regular monitoring of the in-use product is recommended.