



## Mobil Cylinder Oils

Mobil Industrial , Japan

Gear and Cylinder Oils

### Product Description

Mobil Cylinder oils are high performance high viscosity oils designed for use in enclosed worm gears operating at moderate to high speeds and temperatures, and where heavy loads, slow speeds or high temperatures demand high viscosity oils. They are also intended for use in steam engine cylinder applications. They are formulated from high quality base stocks that are resistant to oxidation and thermal degradation, and the build-up of harmful deposits caused by the high operating temperatures of steam cylinders. They protect against rust and corrosion and provide good film strength and excellent lubricity and they are resistant to water washout.

Mobil 600W™ Cylinder Oil, Mobil 600W™ Super Cylinder Oil and Mobil™ Extra Hecla Super Cylinder Oil are additized to enhance their frictional and load-carrying properties. All four members of the product family are widely used in worm gear applications, couplings and bearings, with viscosity grade depending on operating conditions. In steam applications Mobil 600W Super Cylinder Oil is recommended for saturated and superheated steam up to a temperature of 260°C. Mobil Extra Hecla Super Cylinder Oil and Mobil Extra Hecla Super Cylinder Oil Mineral may be used with superheated steam above 260°C. Mobil Extra Hecla Super Cylinder Oil Mineral has good demulsibility. Mobil Cylinder Oils can be applied both by drip feed cups and force feed mechanical lubricating devices.

### Features and Benefits

Mobil Cylinder Oils offer the following features and potential benefits:

Features	Advantages and Potential Benefits
Excellent film integrity at high temperatures	Excellent equipment protection at high temperatures occasioned by variable load conditions, avoiding unexpected downtime and equipment replacement
	Provision of good sealing film round rods and in glands in steam applications
Excellent resistance to deposit formation at high temperatures	Resistant to deposits on areas subject to high spot temperatures, maintaining cleaner systems, requiring less maintenance
Excellent anti-wear and low friction properties	Additized grades give reduced wear
Very good water separation in absence of additives	Non-additized grade gives ready separation from condensate
High quality and built in performance features	Results in fewer unplanned stoppages and reduced maintenance costs

### Applications

Mobil 600W Cylinder Oil is recommended for the following applications:

- The splash lubrication of enclosed worm gears operating at moderate to high speeds and temperatures. (Mobil 600 W Cylinder Oil)
- Steam cylinders, couplings, bearings, and break-in of compressor cylinders (Mobil 600 W Cylinder Oil)
- Mobil 600W Super Cylinder Oil and Mobil Extra Hecla Super Cylinder Oil are recommended for the above applications but under higher temperature and load conditions
- Mobil Extra Hecla Super Cylinder Mineral is recommended where ready separation from condensate is essential, for example, where exhaust steam is used for process work

- Mobil Extra Hecla Super Cylinder Mineral may also be used as a tempering oil for bath temperatures up to 290°C

### Properties and Specifications

Property	MOBIL 600 W CYLINDER OIL	MOBIL 600 W SUPER CYLINDER OIL	MOBIL EXTRA HECLA SUPER CYLINDER OIL	MOBIL EXTRA HECLA SUPER CYLINDER OIL MINERAL
Grade		ISO 460	ISO 680	ISO 1000
Copper Strip Corrosion, 3 h, 100 C, Rating, ASTM D130	1B	1B	1B	1B
Density @ 15.6 C, kg/l, ASTM D4052	0.90	0.91	0.92	0.92
Flash Point, Cleveland Open Cup, °C, ASTM D92	282	282	282	288
Kinematic Viscosity @ 100 C, mm <sup>2</sup> /s, ASTM D445	28.0	30.5	35.8	42
Kinematic Viscosity @ 40 C, mm <sup>2</sup> /s, ASTM D445	375	460	680	1000
Pour Point, °C, ASTM D97	-9	-6	0	3
Viscosity Index, ASTM D2270	95	95	85	80

### 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.aspx>

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Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit [www.exxonmobil.com](http://www.exxonmobil.com)

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