



Molub-Alloy MWO 50 A LP

High-performance Slideway oil

Description

Castrol Molub-Alloy™ MWO 50 A LP Lubricant is a high performance slide and way lubricant. It was developed specifically to lubricate the rails of travelling pallets and the ways of work stations in automatic transfer machines used in high precision, high volume manufacturing.

Automatic transfer machines have been widely adopted by the automotive industry for machining automatic transmission housings and similar components. Demands for increased production have led to the design of higher and higher speed automatic transfer machines. Increased operating speeds have also spawned new metal cutting fluids and coolants which are highly surface active to enable an increase in the speed of tool wetting and the removal of heat. The surfactant additives used in these modern coolants have a detergent and cleansing action on oil and can rapidly displace lubricants used to protect the pallet guide rails and the ways at work stations. The special formulation of Molub-Alloy MWO 50 A LP lubricant resists the cleansing action of surface-active coolants so that wear on the rails and way is minimized and pallet motion is smooth and accurate.

Molub-Alloy MWO 50 A LP lubricant delivers positive lubrication to control wear and promote machining accuracy without excessive re-application or high lubricant consumption. The base oils used to blend MWO 50 A LP lubricant are high quality and selected for their ability to sustain a lubricating film despite sudden changes in load or shearing forces. The formulation includes selected polymer additives for both adhesive and cohesive characteristics. A select blend of Molub-Alloy lubricating solids is uniformly dispersed throughout the oil in a very stable suspension. Under extreme operating conditions, the lubricating solids provide lubrication even when the film is reduced to minimum thickness or where boundary conditions prevail. The value of the lubricating solids is reflected in the antiwear performance of this product. A carefully balanced treat rate of rust and oxidation inhibitors offers maximum rust protection for parts and long service life from the oil. Molub-Alloy MWO 50 A LP Lubricant is not corrosive to ferrous or nonferrous metals.

Application

Molub-Alloy MWO 50 A LP lubricant was developed primarily to lubricate the pallet guide rails and guide-ways at work stations of automatic transfer machines.

Advantages

- Effectively controls stick-slip and is ideally suited for the lubrication of sliding way tables of most machine tools.
- Highly resistant to the water wash-off - can be used as an effective chain lubricant in car wash lines, wire ropes and other applications exposed to water spray containing detergents.

Typical Characteristics

Name	Method	Units	Molub-Alloy MWO 50 A LP
Specific Gravity @ 15.6°C / 60°F	ISO 3675 / ASTM D1298	-	0.9153
API Gravity @ 15.6°C / 60°F	ASTM D287	°API	23.1
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm ² /s	406
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm ² /s	26.3
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	227 / 440
Pour Point	ISO 3016 / ASTM D97	°C/°F	-15 / 5
Rust test - distilled water (24 hrs)	ISO 7120 / ASTM D665A	-	Pass
Rust test - synthetic seawater (24 hrs)	ISO 7120 / ASTM D665B	-	Pass
Carbon residue - Conradson test	ISO 6615 / ASTM D189	%wt	0.08
Timken OK Load test	ASTM D2782	kg/lb	27 / 60
Four Ball Wear test - Wear Scar Diameter (40 kgf / 75°C / 1200 rpm / 1 hr)	ASTM D4172	mm	0.40
Four Ball Weld Load test - Load Wear Index	ASTM D2783	kgf	55
Four Ball Weld Load test - Weld Point	ASTM D2783	kgf	315
Antiwear test - Falex Pin & V-Block	ASTM D 2670	Teeth Wear (number)	<8

Subject to usual manufacturing tolerances.

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