



Magna™ SW DX Range

Slideway oil

Description

Castrol Magna™ SW DX Range is specially formulated for the lubrication of slideways on machine tools. It is based on a powerful extreme pressure and lubricity additive package in highly refined mineral oil offering constant glide behaviour, excellent adhesion and wear protection as well as excellent corrosion protection and ageing resistance.

Application

The Magna SW DX range of products is designed to be used on all horizontal and vertical slideways where a high quality demulsifying lubricant is required for slideway protection and to maximize coolant life.

Magna SW DX slideway oils are noted for their usual ability to overcome the stick-slip motion ordinarily associated with slow moving tool parts. They reduce machine tool carriage chatter and possess the necessary adhesive characteristics to prevent squeezing out of the lubricant.

Magna SW DX covers the exacting demands in the following applications: planers, grinders, horizontal boring machines, shapers, jig borers, and milling machines.

It is especially suitable for plastic coated guideways. Possible swelling of the plastics won't occur like it can with the use of conventional, non-demulsifying slideway oils.

The Magna SW DX range meets the requirements of:

- Cincinnati Lamb (Milacron) P-47, P-50 and P-53 (depending on viscosity grade)
- DIN 51 517-3, CLP
- DIN 51524-2, HLP

The Magna SW DX range is classified as:

- CGLP according DIN 51502
- ISO-L-G according to ISO 6743-13

Advantages

- Excellent demulsifying and adhesive properties help preventing mixing with water miscible cutting fluids and also minimise extrusion and/or washing off of the lubricating film during use with water miscible cutting fluids. This avoids downtime and expensive slideway repair or replacement
- Exceptional frictional characteristics prevents stick-slip even with high loads, providing high tool slide working accuracy and repeatable machining so that high quality surface finish and tolerances are maintained at low rejection rate levels.
- Reliable metal protection against staining and corrosion keeps oil-wetted surfaces remain in good condition
- Very good filtration property keeps filters in oil supply unblocked

Typical Characteristics

Description	Test Method	Unit	SW DX 68	SW DX 220
ISO Viscosity Grade	ISO 3448	-	68	220
Colour - Saybolt	ASTM D156 / ISO 2049	-	2.5	2.5
Density @ 15°C / 59°F	ASTM D4052 / ISO 12185	g/ml	0.88	0.89
Kinematic Viscosity @ 40°C / 104°F	ASTM D445 / ISO 3104	mm ² /s	68	219
Kinematic Viscosity @ 100°C / 212°F	ASTM D445 / ISO 3104	mm ² /s	8.9	18.8
Viscosity Index	DIN ISO 2909	-	107	96
Flash Point - open cup method	ASTM D92 / ISO 2592	°C/°F	236/457	260/500
Pour Point	ASTM D97 / ISO 3016	°C/°F	-12/+10	-12/+10
Neutralisation Number	ASTM D974 / ISO 6618	mgKOH/g	0.5	0.5
Copper corrosion (3 hrs@100°C/212°F)	ASTM D130 / ISO 2160	-	1b	1b
Rust test - distilled water (24 hrs)	ASTM D665A / ISO 7120	-	0 - A	0 - A
Wear Protection FZG A/8.3/90	ISO 14635-1	Load Stage	> 12	> 12

Subject to usual manufacturing tolerances.

Storage

To avoid product deterioration always keep the container/drum tightly sealed. Store the product in a cool, dry place away from direct sunlight. Prevent exposure to frost and avoid water ingress. For optimum product stability, it is preferable to store the product indoors between 5°C and 45 °C / 41°F and 113°F.

For more details, please refer to the product safety data sheet.

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