



## Castrol Magnaglide D Range

Slideway oils

### Description

Castrol Magnaglide™ D is specially formulated for the lubrication of slideways on machine tools. These oils are fortified with selected oiliness, extreme pressure additives and a special material to impart tackiness and adhesiveness. Magnaglide D lubricants 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.

### Application

- Magnaglide D can be used on all horizontal and vertical slideways where a high quality demulsifying lubricant is required for slideway protection and to maximize coolant life; the outstanding frictional characteristics of the products prevents stick-slip, improving surface finish and tolerances of machined components and reducing rejection rates.
- Magnaglide D meets the exacting demands in the following applications; planers, grinders, horizontal boring machines, shapers, jig borers, and milling machines.
- Magnaglide D 32 can be used as a combined hydraulic and slideway oil.

The Magnaglide D range meets the requirements of:

- Cincinnati Lamb (Milacron) P-47, P-50 and P-53 (depending on viscosity grade)
- DIN 51502 – CGLP
- DIN 51524 Part II (July 2004) – including ISO 13357-1/-2 filtration test
- Suitable for Müller Weingarten equipment as hydraulic oil

### Advantages

- Outstanding demulsifying properties – helps prevent soluble oil emulsions on plastic slideway surfaces.
- Avoids downtime and expensive slideway repair or replacement.
- Exceptional resistance to stick slip – helps to ensure highly accurate and repeatable machining. High quality output is maintained.
- Protects metals against staining and corrosion.
- Oil-wetted surfaces remain in good condition. Avoids downtime and expensive slideway repair or replacement.
- Highly filterable – filters in oil supply remain unblocked.

## Typical Characteristics

Name	Method	Units	D 32	D 68	D 100	D 150	D 220
ISO Viscosity Grade	-	-	32	68	100	150	220
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m <sup>3</sup>	870	880	890	890	890
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	34	68	100	150	220
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	5.4	8.7	11.1	14.5	19.2
Viscosity Index	ISO 2909 / ASTM D2270	-	102	99	98	98	98
Pour Point	ISO 3016 / ASTM D97	°C/°F	-15/5	-12/10	-12/10	-12/10	-9/15
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	206/ 403	232/ 450	232/ 450	232/ 450	249/ 480
Rust test - distilled water (24 hrs)	ISO 7120 / ASTM D665A	-	Pass	Pass	Pass	Pass	Pass
Rust test - synthetic seawater (24 hrs)	ISO 7120 / ASTM D665B	-	Pass	Pass	Pass	Pass	Pass
Copper corrosion (3 hrs@100°C/ 212°F)	ISO 2160 / ASTM D130	Rating	1b	1b	1b	1b	1b
Brugger test	DIN 51347	N/mm <sup>2</sup>	-	44	-	-	-
Four Ball Wear test - Wear Scar Diameter (40 kgf / 75°C / 1200 rpm / 1 hr)	ASTM D2266	mm	0.3	0.3	0.3	0.3	0.32
Four Ball Weld Load test - Weld Point	ASTM D2783	kgf	170	180	180	190	200
Stick-slip ratio - Cincinatti Lamb test	Cincinatti Lamb test	Ratio	0.74	0.74	0.74	0.74	0.74
Cincinatti Lamb Specification	-	-	P-53	P-47	-	-	P-50

Subject to usual manufacturing tolerances.

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25 Jun 2012

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