Product Data

Magna SW Range

Slideway oils

Description

Castrol Magna® SW Range (previously called Castrol Magna®BD 68 and CF 220) are specially formulated slideway lubricants to provide all-round performance with good stick-slip and load carrying performance. They combine controlled frictional characteristics with high film- strength and high load carrying properties to eliminate 'stick-slip'.

Application

Magna SW 68 is a medium viscosity slideway lubricant suitable for use in most machine tool lubrication systems specifying an ISO VG 68 oil. It meets Cincinnati Milacron P47 specification.

Magna SW 220 is formulated for use with heavily loaded slideway applications or where there is a vertical or inclined slideway. It meets Cincinnati Milacron P50 specification.

Advantages

- Good lubricity – prevents stick-slip of slideways.
- High load carrying capacity – prevents wear of highly loaded slideways.
- Good demulsification and cutting fluid compatibility – can be used in the presence of water or water based metalworking fluids.

Typical Characteristics

Description	Test Method	Unit	SW 68	SW 220
Appearance	Visual	-	Clear amber fluid	Clear amber fluid
ISO viscosity grade	ISO 3448	-	68	220
Density @ 20°C / 68°F	ASTM D4052 / ISO 12185	g/ml	0.88	0.89
Kinematic Viscosity @ 100°C / 212°F	ASTM D445 / ISO 3104	mm^2/s	9.2	19.5
Kinematic Viscosity @ 40°C / 104°F	ASTM D445 / ISO 3104	mm^2/s	68	220
Viscosity Index	ASTM D2270	None	110	100
Pour point	ASTM D97 / ISO 3016	°C / °F	-11 / 12	-10 / 14
Flash Point - open cup method	ASTM D92 / ISO 2592	°C / °F	218 / 424	254 / 489
Rust test - distilled water (24 hrs)	ASTM D665A / ISO 7210	Rating	Pass	Pass
Rust test - synthetic seawater (24 hrs)	ASTM D665B / ISO 7210	Rating	Pass	Pass
Copper corrosion (3 hrs@100°C/212°F)	ASTM D130 / ISO 2160	Rating	1b	1b
Four ball wear test (400N, 75°C, 1200 rpm, 1 hr), scar diameter	ASTM D2266	mm	0.35	
Stick-slip ratio	Cincinnati Machine	-	< 0.8	
Cincinnati Machine specification		-	P-47	P-50

Subject to usual manufacturing tolerances.

Storage

All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing condition.

This product was previously called Magna BD 68 and Magna CF 220. The name was changed in 2015.

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