



Gulf Way H

Premium quality multifunctional oils for lubrication of slideways, hydraulic systems and gear boxes of machine tools

Product Description

Gulf Way H series are premium quality multifunctional oils developed for lubrication of slideways, hydraulic systems and gear boxes of machine tools. Their outstanding frictional properties and ability to readily separate from aqueous cutting fluids reduce "stick-slip" problems and lead to improved surface finish and dimensional accuracy of workpieces. They also possess excellent anti-wear and EP characteristics, adhesiveness filterability and also provide superior protection against oil degradation and corrosion of machine tool surfaces even in presence of aqueous cutting fluids. Their multifunctional performance characteristics combined with their high thermal and oxidative stability and load carrying ability reduces the potential of misapplication and assures excellent equipment performance. They are available in four viscosity grades viz. ISO VG 32, 68, 100 and 220 and exceed the performance requirements of FIVES CINCINNATI (Former MAG IAS, LLC), DIN 51524 part 2, AFNOR NFE 48-603 (HM), DIN 51517 part 3 and US Steel 224.

Features & Benefits

- Low frictional properties reduce chatter and stick-slip of slides and ways and lead to improved surface finish and dimensional accuracy of workpieces
- Excellent protection against rust and corrosion even in the presence of aqueous cutting fluids
- Good filterability provides easy circulation through filters and reduces stick-slip, chatter and wear
- Excellent demulsibility provides ready separation from soluble cutting fluids and leads to prolonged coolant life and reduced cost of replacement and disposal
- Superior thermal and oxidative stability reduces deposit and sludge formation and provide long lubricant life
- Excellent anti-wear and EP properties provide high level of protection for slideways, gears, bearings and hydraulic system components
- Multifunctional performance characteristics reduces the potential of misapplication and assures excellent equipment performance

Applications

- Machine tool slides and ways, tables and feed mechanism of lathes, shapers, grinders and milling machines. Gulf Way H 32, 68 or 100 are recommended for horizontal slide lubrication and Gulf Way H 220 is recommended for vertical or inclined slides and ways
- Machine tool hydraulic systems particularly for machines having combined hydraulic and slideway lubrication system
- Machine tool gearboxes

Properties mentioned above are typical only and minor variations, which do not affect the product performances, are to be expected in normal manufacturing. The above information is based on past history of the grade only and must not be construed as a guarantee of performance. Follow equipment manufacturer's recommendations for performance level and viscosity grade. The Material Safety Data Sheet for this product is available from your nearest Gulf Distributor.

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Specifications, Approvals & Typical Properties

ISO Viscosity grades		32	68	100	220
Meets the following Specifications					
FIVES CINCINNATI (Former MAG IAS, LLC)		P-53	P-47		P-50
DIN 51524 Part 2-HLP,		X	X		
ISO 11158 HM		X	X	X	
DIN 51517 part 3					X
US Steel 224					X
Typical Properties					
Test Parameters	ASTM Method	Test Values			
Viscosity @ 40 °C, cSt	D 445	31.2	68.3	98.3	221
Viscosity Index	D 2270	100	99	97	96
Flash Point, °C	D 92	202	218	230	256
Pour Point, °C	D 97	-21	-15	-12	-6
Density @ 15°C, Kg/l	D 1298	0.87	0.881	0.886	0.894
Rust Test	D 665A/B	Pass	Pass	Pass	Pass
Copper Corrosion	D 130	1b	1b	1b	1b
Stick-Slip, Ratio	CM	0.76	0.76	-	0.73
Thermal Stability	CM	Pass	Pass	-	Pass
Acid Number, mg KOH/g	D 974	0.4	0.41	0.42	0.44
Emulsion Test 30 minutes max	@ 54 °C	D 1401	Pass	Pass	-
	@ 82 °C		-	-	Pass
FZG EP Gear, pass stage	D 5182	12	12	12	12

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