



MACHINE OILS MP

PRODUCT DESCRIPTION

Hi-Tec Machine Oils MP are premium micro-pitting resistant industrial extreme pressure gear and bearing oils with Flender approved performance especially suitable where high loads and slow speeds and high temperatures are encountered.

Hi-Tec Machine Oils MP use a unique blend of ashless extreme pressure and anti-wear additive technology to produce a range of gear oils with Flender performance. They provide strong wear, corrosion and oxidation protection, and clean gear performance whilst exhibiting low deposit formation and retaining high phosphorus levels throughout the life of the oil, thus providing long term protection.

Hi-Tec Machine Oils MP have excellent anti-friction characteristics for use in bearings, steel transmissions and gear units.

Hi-Tec Machine Oils MP are especially suitable for helical, bevel and planetary gear units.

BENEFITS

Hi-Tec Machine Oils MP provide:

- High micro-pitting resistance as per the FVA 54/7 test
- High bearing protection as per the FZG and FE-8 tests
- Clean gear performance with excellent thermal and oxidative stability providing an expanded temperature operating window
- Low sludging and deposit formation
- Low chlorine content
- Excellent foam control as per the Flender oil foaming test
- Proven paint and elastomer compatibility in static and dynamic tests vs P22-8050, Nuvopur Aqua Primer 510.1.6.1400, Loctite 128068, 72 NBR 902 and 75 FKM 585
- Excellent phosphorus retention, ensuring extended wear protection
- Very strong demulsibility performance
- Ashless

APPLICATIONS

Hi-Tec Machine Oils MP are recommended where high loads, low speeds and/or high temperature conditions occur such as in:

- Wind turbines
- Steel production and paper making
- Heavy duty industrial journals, plain and anti-friction bearings, chain drives and slide guides
- Industrial enclosed gear drives lubricated by splash or circulation methods.

SPECIFICATIONS

Hi-Tec Machine Oils MP meet many international and equipment manufacturers' specifications including:

- Flender Revision 13 for helical, bevel and planetary gear units
- DIN 51517 Part 3
- AGMA 9005-E02
- AGMA 9005-D94
- AGMA 251.02
- AGMA 250.04
- US Steel 224
- SEB 181226

Hi-Tec suggests that the equipment manufacturers' recommendations for viscosity grade, performance requirements and general operating conditions should be checked prior to use.

TYPICAL PROPERTIES

Property	Typical Results					
ISO Viscosity Grade	68	100	150	220	320	460
Product Code (HI6-)	2639	2641	2642	2643	2644	2645
Density (kg/Lt) @ 15°C	0.863	0.863	0.871	0.882	0.892	0.902
Viscosity (cSt)@ 40°C	66.2	101	145	210	302	436
@ 100°C	8.59	11.3	14.3	18.4	23.3	29.5
Viscosity Index	97	96	97	96	96	96
Flash Point, COC (°C)	230	241	252	266	277	290
Pour Point (°C)	-40	-38	-38	-34	-30	-31
Foam All Sequences after Settling	Nil	Nil	Nil	Nil	Nil	Nil
Nitrogen (% wt)	0.015	0.015	0.015	0.015	0.015	0.015
Sulphur (% wt)	0.89	0.98	1.19	0.95	1.15	1.15
Phosphorus (% wt)	0.031	0.031	0.031	0.030	0.031	0.031
Boron (ppm)	10	10	10	10	10	10