Gulf Harmony HVI Plus Super Clean

Supreme quality high viscosity index super clean hydraulic oil for extreme temperature ranges

Product Description

Gulf Harmony HVI Plus Super Clean series are supreme quality anti-wear hydraulic oils specially developed for applications requiring super clean oils and subjected to wide range of temperature or where small viscosity change with fluctuating temperature is needed. They are formulated with severely hydroprocessed Group II base oils, a highly shear stable polymer and an advanced additive system to meet the stringent requirements of modern hydraulic systems. Their outstanding thermo-oxidative stability and low & high temperature performance allows for extended service life. They provide excellent anti-wear property, rust & corrosion protection, water separation & air-release properties and hydrolytic stability to reduce breakdowns and help improve production capacity. They exceed the performance requirements of global industry standards viz. DIN 51524 Part 3 HVLP, AFNOR NFE 48-603 (HV) & ISO 11158 HV and majority of the international OEMs viz. Poclain, Hitachi, Cincinnati Lamb, Eaton & Denison

Features & Benefits

- Outstanding thermo-oxidative stability reduces deposit formation, improves pump performance and gives extended oil and filter change intervals
- Extremely high viscosity index assures equipment protection at cold start-up as well as at high operating temperatures
- smoother & trouble-free operation of hydraulic systems with close clearance servo valves
- Excellent demulsibility helps in faster separation of water from oil and resists formation of emulsions
- Special rust & corrosion inhibitors protect multi-metallurgy components against negative effects of moisture presence in the system
- Rapid air release property minimises chances of pump cavitation and thus prevents component damage, reduces vibration and maintains efficiency especially in modern hydraulic systems where sump sizes are becoming smaller
- Offers long term hydrolytic stability and yellow metal compatibility in presence of water
- Compatible with multi-metals & most sealing materials used in hydraulic systems

Applications

- Hydraulic and power transmission systems subjected to a wide range of ambient & operating temperatures requiring super clean oils
- Applications requiring extended oil change intervals
- Critical hydraulic systems such as high accuracy numerically controlled machine tools and those employing close clearance servo valves
- Hydraulic systems of excavators, cranes and hydrostatic drives subjected to most severe outdoor operating conditions
- Hydraulic systems operating under high pressures and requiring high degree of load carrying capability and anti-wear protection

Specifications, Approvals & Typical Properties

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ISO Viscosity grades			46	68	100
Meet the following Specifications					
DIN 51524 Part 3 HVLP			**X**	**X**	**X**
AFNOR NFE 48-603 (HV)			**X**	**X**	**X**
ISO 11158 HV			**X**	**X**	**X**
Denison HF-0, HF-1, HF-2			**X**	**X**	
FIVES CINCINNATI (Former MAG IAS, LLC)			**P-70**	**P-69**	
Eaton (Vickers) M-2950-S, M-2952-S			**X**	**X**	
Eaton (Vickers) I-286-S			**X**	**X**	
Bosch Rexroth 07 075 for vane, piston & gear pumps, Sauer Danfoss 520L0463, BR 90220			**X**	**X**	
Hitachi			**X**		
Typical Properties					
Test Parameters		**ASTM Method**	**Test Values**		
Viscosity @ 40 ºC, cSt		D 445	46.9	69.9	99.3
Viscosity Index		D 2270	151	152	152
Flash Point, ºC		D 92	222	232	242
Pour Point, ºC		D 97	-36	-36	-27
Density @ 15ºC, Kg/l		D 1298	0.855	0.858	0.861
Rust Test		D 665A/B	Pass	Pass	Pass
Emulsion Test 30 minutes max	@ 54 oC	D 1401	Pass	Pass	-
	@ 82 oC		-	-	Pass
Foam Test, foam after 10 minutes of settling for all sequences		D 892	Nil	Nil	Nil
Turbine Oil Stability Test, hrs		D 943	5000+	5000+	4000+
FZG, fail load stage, minimum		DIN 51354 Part II	11	11	11
Cleanliness level (at filling stage)		NAS 1638	6	6	6

April 2022