Gulf Harmony HVI

Premium quality high viscosity index hydraulic oil for extreme temperature ranges

Product Description

Gulf Harmony HVI series are premium quality anti-wear hydraulic oils specially developed for applications subjected to wide range of temperature or where small viscosity change with fluctuating temperature is required. They are formulated with high quality paraffinic base oils, a highly shear stable polymer and an advanced additive system to meet the stringent requirements of modern hydraulic systems. These oils provide excellent protection against oxidation degradation, rust & corrosion and wear. They also possess superior foam control, water separation and rapid air release properties. These oils 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. Hitachi, MAG IAS, LLC, Eaton & Denison.

Features & Benefits

- Exceptional anti-wear property results in longer component life reducing costs.
- Extremely high viscosity index assures equipment protection at cold start-up temperatures and at high operating temperatures.
- Excellent shear stability minimises viscosity loss over time and exhibits “stay-in-grade” performance under high shear conditions.
- Excellent thermo-oxidative stability controls the formation of sludge & varnish and improves oil life.
- Superior demulsibility helps in faster separation of water from oil and resists formation of emulsions.
- Special rust & corrosion inhibitors protect multi-metallurgy components even in presence of moisture.
- Rapid air release property minimises chances of pump cavitation leading to trouble free operations.
- Compatible with multi-metals & most sealing materials commonly used in hydraulic systems.

Applications

- Hydraulic and power transmission systems subjected to a wide range of ambient & operating temperatures.
- Critical high accuracy industrial hydraulic systems.
- Hydraulic systems of excavators, cranes and hydrostatic drives subjected to most severe outdoor operating conditions.

Specifications, Approvals & Typical Properties

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ISO Viscosity grades		15	22	32	46	68	100
Meet the following Specifications							
DIN 51524 Part 3 HVLP, AFNOR NFE 48-603 (HV), ISO 11158 HV		x	x	x	x	x	x
Denison HF-0, HF-1, HF-2, Eaton (Vickers) M-2950-S, M-2952-S, I-286-S				x	x	x	
Bosch Rexroth 07 075 for vane, piston & gear pumps, Sauer Danfoss 520L0463, BR 90220				x	x	x	
Hitachi					x		
Typical Properties							
Test Parameters	**ASTM Method**	**Test Values**					
Viscosity @ 40 ºC, cSt	D 445	15	22	32	46	68	100
Viscosity Index	D 2270	152	151	150	152	151	152
Flash Point, ºC	D 92	144	186	218	218	226	238
Pour Point, ºC	D 97	-42	-42	-39	-36	-36	-36
Density @ 15ºC, Kg/l	D 1298	0.843	0.868	0.868	0.874	0.881	0.886
Rust Test	D 665A/B	Pass	Pass	Pass	Pass	Pass	Pass
Emulsion Test 30 minutes max @ 54 ºC	D 1401	Pass	Pass	Pass	Pass	Pass	-
Emulsion Test 30 minutes max @ 82 ºC	D 1401	-	-	-	-	-	Pass
Foam Stability in all three sequences, ml	D 892	Nil	Nil	Nil	Nil	Nil	Nil
Turbine Oil Stability Test, hrs	D 943	-	-	2500+			3000+
FZG, fail load stage, minimum	DIN 51354 Part II	-	-	11	11	11	11

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