

Gazpromneft Hydraulic HVZF – 22, 32, 46 and 68

Zinc-free high VI Hydraulic Oils



Hydraulic systems



Wide application temperature range



Antiwear properties



Oxidation and thermal stability



Corrosion protection



Synthetic technology base oils

Gazpromneft Hydraulic HVZF series are premium high performance anti-wear hydraulic oils designed to satisfy a wide range of hydraulic equipment requirements. Formulated with high quality base oils and selected additives they provide very good anti-wear properties, rust and corrosion protection, oxidation resistance and antifoam properties. The high viscosity indexes provide excellent low and high temperature properties for equipment that is subjected to a wide range of start-up and operating temperatures. Zinc free anti-wear additive system provides a high degree of protection in gear, vane and piston pumps using various metallurgy while also minimizing deposit formation.

Applications

- Wide variety of industrial and mobile applications
- Systems where cold start-up and high operating temperatures are typical
- Hydraulic systems subject to deposit build-up where close clearance servo-valves are used such as sophisticated computer controlled machines
- Systems employing multi-metal designs in system components

Features	Advantages and Potential Benefits
High viscosity index and good shear stability	High VI helps improve system operation over a wide temperature range and maintains excellent viscosity characteristics for long periods of time for long equipment life
Zinc-free anti-wear additives	Reduced wear for systems using various metallurgy for excellent performance of components. Providing non contaminated waste water for environmentally friendly disposal
Outstanding thermal and oxidation stability	Reduced deposits and sludge formation to provide long oil and equipment life. Extends filter life
Excellent corrosion protection	Prevents internal hydraulic system corrosion, reduces negative effects of moisture in systems for reduced maintenance costs.
Fast air release and low foaming	Provide efficient hydraulic power transfer and minimize cavitation to prolong equipment life
Multi metal compatibility	Helps ensure excellent performance and protection with a wide variety of component metallurgy

Gazpromneft Hydraulic HVZF series meets the requirements of

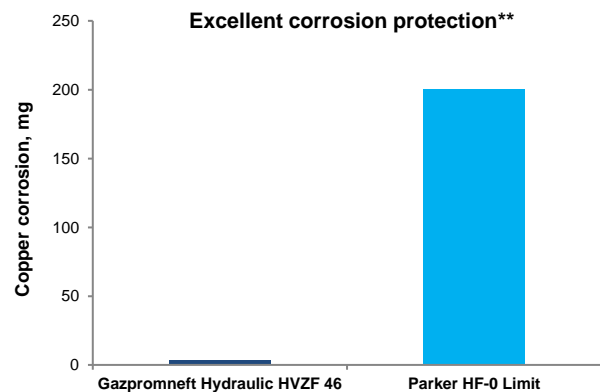
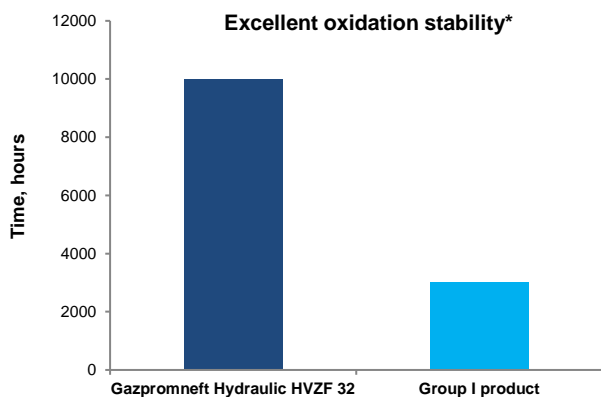
	Gazpromneft Hydraulic HVZF			
	22	32	46	68
DIN 51524 Part 3	✓	✓	✓	✓
Bosch Rexroth RE 90220-01		✓	✓	✓
Bosch Rexroth RDE 90235		✓	✓	✓
Eaton Vickers 35VQ25		✓	✓	✓

Gazpromneft Hydraulic HVZF series has the following builder approvals

	Gazpromneft Hydraulic HVZF			
	22	32	46	68
Denison HF-0,1,2		✓	✓	✓
Fives Cincinnati		P-68	P-70	P-69

Typical Characteristics

Properties	Method	Gazpromneft Hydraulic HVZF			
		22	32	46	68
ISO Viscosity Grade		22	32	46	68
Kinematic Viscosity @40°C, mm²/s	ASTM D445	22,3	32,7	46,8	68,2
Kinematic Viscosity @100°C, mm²/s	ASTM D445	5,1	7,0	8,8	11,8
Kinematic Viscosity @low temperatures, mm²/s	ASTM D445	725 (-20)	1198 (-20)	869 (-10)	-
Viscosity Index	ASTM D2270	164	183	169	171
Flash Point (COC), °C	ASTM D92	210	228	240	254
Pour Point, °C	ASTM D97	-54	-50	-46	-39
Cleanliness class, max	ISO 4406	12	12	12	12
Density @15°C, kg/m³	ASTM D4052	845	849	852	857
Copper Strip Corrosion, 3 hrs @ 100°C	ASTM D130	1A	1A	1A	1A



*ASTM D943; **ASTM D4310

Health, Safety & Environment

Information is provided for products in the relevant Safety Data Sheet (SDS). This provides guidance on potential hazards, precautions and first-aid measures, together with environmental effects and disposal of used products. SDS's are available upon request through your sales contract office. This product should not be used for purposes other than its intended use.