



## Gazpromneft Hydraulic HLP - 32, 46, 68, 100



Hydraulic systems



High anti-wear properties



**Excellent filterability** 



Foaming stability



Corrosion protection



High-quality mineral base oils

Gazpromneft Hydraulic HLP – series of hydraulic oils, designed for use in hydraulic drives of stationary equipment, where good anti-wear properties, effective corrosion protection, excellent filterability and deposits minimization are required. Oils of this series have wide range of approvals from various manufacturers of hydraulic equipment and meet performance requirements of most hydraulic systems.

## **Characteristics/Advantages/Potential benefits**

- Excellent anti-wear properties → wear minimization of coupled hydraulic pump parts → maintaining of equipment service life
- High cleanliness → wear protection of precision pairs of control mechanism → hydraulic equipment resource retaining
- High thermal and thermal-oxidative stability → reducing of formation of corrosive active components and deposits during operation → reliable operation of precision pairs and valves
- Protection against corrosive environment → corrosion inhibitors protect surface of the structural parts from negative effects of acids and water → maintenance costs reduction
- Foaming stability → foam minimization → high performance of hydraulic pump
- Excellent compatibility with seal materials → leakage prevention of hydraulic fluid → lubricants costs reduction

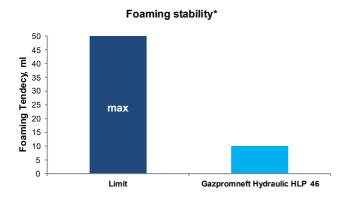
## **Applications**

- For industrial hydraulic systems as a working fluid.
- Hydraulic systems of machine tools (injection molding machines, presses, heavy manipulators, machine tools, robots, plastic molding machines etc.).
- For piston, gear, vane, axial-piston pumps, in accordance with manufacturer's requirements.
- Hydraulic pumps by wide range of manufacturers, including Denison, Cincinnati Machine, Eaton Vickers, Bosch Rexroth, Beltramelli etc.

Specifications	ISO Viscosity Grade					
	32	46	68	100		
DIN 51524 Part 2, ISO 11158 HM	✓	✓	✓	✓		
Denison Hydraulics HF-0,1,2	✓	✓	✓	✓		
Eaton E-FDGN-TB002-E (35VQ25)	✓	✓	✓	✓		
Danieli			✓			
Fives Cincinnati P-68 (ISO 32)/ P-69 (ISO 68)/ P-70 (ISO 46)	✓	✓	✓			
AIST 126	✓	✓	✓	✓		
Bosch Rexroth RDE 90245	✓	✓	✓	✓		
SEB 181222	✓	✓	✓	✓		
Beltramelli	✓	✓	✓			

Typical physical and chemical characteristics

Parameters	Method	ISO Viscosity Grade				
		32	46	68	100	
Kinematic Viscosity at 40 °C, mm <sup>2</sup> /s	ASTM D445	32	46	68	100	
Kinematic Viscosity at 100 °C, mm <sup>2</sup> /s	ASTM D445	5,5	6,8	8,8	11,4	
Viscosity Index	ASTM D2270	104	99	97	95	
Flash Point (COC), °C	ASTM D92	223	243	241	246	
Pour Point, °C	GOST 20287	-41	-38	-35	-31	
Total Acid Number, mg KOH/g	GOST 11362	0,75	0,69	0,73	0,73	
Cleanliness class (*on request)	GOST 17216	12 (*10)	12 (*10)	12 (*10)	12 (*10)	
Density at 20°C, kg/m³	ASTM D4052	872	876	880	886	



Gazpromneft Hydraulic HLP oils series has high foaming stability, retaining high performance of hydraulic system

\*ASTM D 892 test

## The company's management system is certified in accordance with the international standards

**ISO 9001** 



ISO 14001



ISO 45001

