

Gazpromneft Reductor PAO Synth – 150, 220, 320, 460, 680

Gazpromneft Reductor PAO Synth have excellent load-bearing capacity, protect against micropitting and fatigue wear, even under impact load conditions, and provide extended service life for gears and bearings.



Reducers



Fully synthetic oils
(PAO)



High thermal
oxidation stability



High demulsifying
properties



Stability to foaming



Excellent extreme
pressure properties

Gazpromneft Reductor PAO Synth is a series of fully synthetic gear oils developed for use in modern industrial gearboxes operating under the most severe operating conditions. Synthetic polyalphaolefin (PAO) base oils enables Gazpromneft Reductor PAO Synth to operate at both low and high operating temperatures, with significantly extended drain intervals (compared to mineral based oils). The oils provide high cleanliness of gearbox working surfaces, excellent wear protection, superior demulsifying, and anti-foaming properties. Gazpromneft Reductor PAO Synth have excellent load-bearing capacity, protect against micropitting and fatigue wear, even under impact load conditions, and provide extended service life for gears and bearings.

Gazpromneft Reductor PAO Synth are recommended for use in equipment with long service intervals.

Characteristics/Benefits/Potential gains

- Excellent viscosity-temperature properties → maintains strong oil film at high temperatures and stable pumping at low temperatures → can be used in an extended temperature range.
- High stability against oxidation → Longer drain intervals and lower lubricant costs.
- Fully synthetic base oils increase gearbox performance with more efficient fluid friction → reduced friction energy losses → reduced power consumption.
- High EP properties → reliable protection against wear, pitting and scuffing of the gears → minimisation of maintenance costs and dependable operation of the equipment.
- Stability to foaming → the oil does not produce foam and retains all its operational properties → able to operate at high rotational speeds.
- Seal compatibility → no adverse effects on elastomers and gearbox internal surfaces → reduced consumption of additional spare parts.

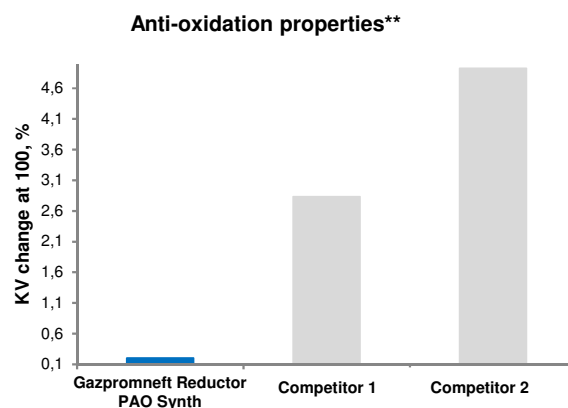
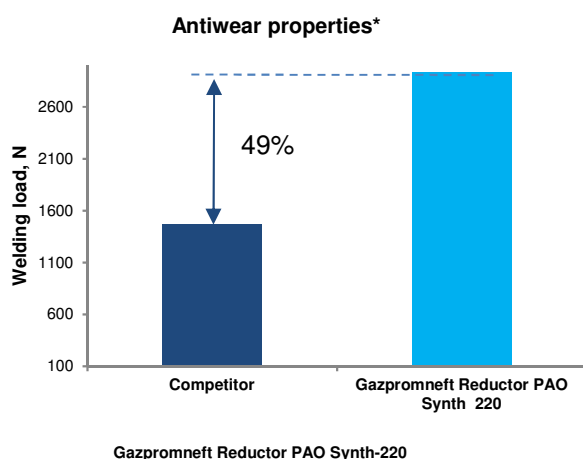
Application

- Modern industrial reducers used in the mining, machine building, metallurgical, power generation, construction, oil, and other industries.
- Gearboxes with spur and helical spur, bevel, chevron, and planetary gears.
- Industrial gearboxes with circulating or splash lubrication systems.

Specifications	ISO viscosity class				
	150	220	320	460	680
DIN 51517 Part 3 (CLP-HC)	✓	✓	✓	✓	✓
Flender	✓	✓	✓	✓	✓
AGMA 9005-E02	✓	✓	✓	✓	✓
ISO 12925-1 (CKD)	✓	✓	✓	✓	✓
AIST 224	✓	✓	✓	✓	✓

Typical physic-chemical characteristics

Properties	Method	ISO viscosity class				
		150	220	320	460	680
Kinematic viscosity at 40°C, mm²/s	ASTM D 445	157,4	221,6	327,0	460	684,1
at 100°C, mm²/s	ASTM D 445	20,7	26,7	36,8	49,2	68,2
Viscosity index	ASTM D 2270	154	154	161	167	174
Pour point, °C	ГОСТ 20287	-49	-40	-38	-37	-29
Density at 15 °C, kg/m³	ASTM D 4052	855,5	857,9	857,6	856,5	855,4
Flash point, COC	ASTM D 92	253	255	261	264	267
FZG anti scuffing test (A/8,3/90)	DIN ISO 14635-1	>14	>14	>14	>14	>14
FZG anti scuffing test (A/8,3/90)	DIN ISO 14635-1	>12	>12	>12	>12	>12
FZG micro pitting test (A/16,9/90)	10	10	10	10	10	10
Demulsibility test (37 ml at 82 °C), min	ASTM D 1401	20	20	20	20	-
Rust preventing test, 60 °C	ASTM D 665 method A	Pass	Pass	Pass	Pass	Pass
Foaming tendency/foam stability, cm³: Sequence 1 Sequence 2 Sequence 3	ASTM D892	0/0 30/0 10/0	00/0 20/0 0/0	0/0 30/0 0/0	0/0 20/0 0/0	0/0 20/0 0/0



*GOST 9490, **Oxidation test DKA (312h, 120°C)

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

ISO 9001



ISO 14001



ISO 45001

