



Industrial lubricants are oils, fluids, greases and other compounds designed to reduce friction, binding or wear and exclude moisture. Specialized characteristics may enhance thermal conduction across thermal interfaces or reduce electrical resistivity across electrical joints.

**GEO XP** industrial gear oils are a range of premium quality, extreme-pressure (EP) lubricants having excellent thermal stability and high load carrying capacity.

The additive system is based on VORTA'S proven ashless sulphur-phosphorus technology which has many benefits over traditional technologies, especially in the presence of moisture.

The formulation provides excellent corrosion protection, anti-foam characteristics, demulsibility and oxidation resistance. Very good viscosity characteristics ensure that starting torques are not excessive in cold conditions.

The additives are compatible with the ferrous and non-ferrous metals used in industrial gear units.

- Excellent wear protection for a wide range of gear types.
- Attention free operation between standard overhauls even at high temperatures and in adverse conditions.
- Maximum protection against corrosion and wear using ashless technology.
- Good performance even in moist atmospheres.

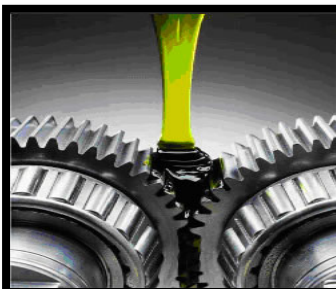
**GEO XP** oils meet the performance requirements of DIN 51 517 Part 3, AGMA 250.04 worm-type industrial gears.

Oil temperatures should not exceed 120°C. In any system that incorporates electric heaters for effecting rapid warm-up, it is important to avoid high rates of heat input.

Heat fluxes in excess of 15 kW/m<sup>2</sup> are likely to cause separation of additives.

*They are approved by:*

- PIV
- David Brown Industries Ltd
- Sew Us come



GRADE	Test Method	Units	GEO XP							
			68	100	150	220	320	460	680	1000
Density @ 15°C	ASTM D1298	Kg/l	0.89	0.90	0.90	0.91	0.91	0.92	0.93	0.94
Flash Point	ASTM D92	°C	224	224	238	241	243	243	246	240
Kin Viscosity @ 40°C	ASTM D445	cSt	65	96	140	210	305	425	630	950
Kin Viscosity @ 100°C	ASTM D445	cSt	9	11	14	18	23	27	34	43
Viscosity Index	ASTM D2270	-	104	100	96	94	92	88	85	82
4-Ball Welding Load		kg	220	230	230	240	240	250	260	260
Timken OK Load		lb								
Pour Point	ASTM D97	°C	-24	-24	-24	-21	-15	-9	-9	-3
FZG Gear Test (A/8.3/90°C)	IP 334		Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Rusting	ASTM D665B									