



Synthetic Power Transmission EP Gear Oil GEN2 (PTN-GEN2)



SYNTHETIC EP GEAR OIL

Data Sheet

AMSOIL Industrial **Synthetic Power Transmission EP Gear Oil GEN2** is engineered to provide maximum protection against scuffing wear and micropitting fatigue and superior cold-weather performance in wind turbine and other industrial gearboxes operating under severe conditions, extreme pressures and shock loads. Its next-generation synthetic polyalphaolefin (PAO) base oils and additive technology resist shearing under extreme stress to maintain viscosity and meet the long-oil-life requirements of industrial gearbox manufacturers.

Product Benefits

- Superior EP protection against micropitting and scuffing wear.
- High viscosity index to remain fluid in extreme cold temperatures for improved energy efficiency and startup protection.
- Excellent foam-resistance to promote a strong lubricating film.
- Inhibits rust and corrosion to promote long component life.
- Superior thermal and oxidative stability in high temperatures to minimize sludge, carbon and varnish buildup and extend oil life.
- Excellent demulsibility for improved filterability and filter life.
- Filtered at packaging to 16/14/11 ISO cleanliness.

Applications

Use AMSOIL Industrial **Synthetic Power Transmission EP Gear Oil GEN2** for extreme-pressure protection in heavy-duty wind turbine gear drives to keep wind assets operational and help reduce downtime and maintenance costs. Supports filtration down to 5 microns using full-flow media and 3 microns using bypass filtration. Consult an AMSOIL Industrial Application Engineer to identify the best solutions for your specific applications.

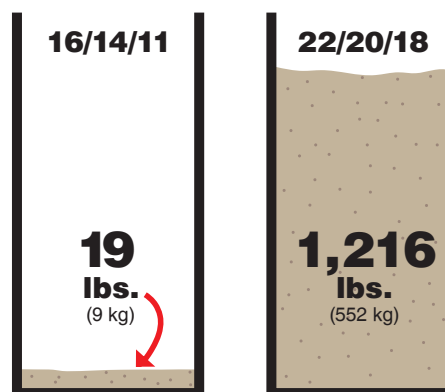
Gear Oil Cleanliness

Oil cleanliness helps prolong gear and bearing life and is measured by the ISO 4406 standard, where each number represents particles of a certain size found in an oil sample.

AMSOIL Industrial **Synthetic Power Transmission EP Gear Oil GEN2** is filtered at packaging to an ISO 4406 cleanliness code of 16/14/11 as measured by laser particle counter, exceeding the cleanliness requirements of all major gearbox manufacturers.

With an ISO 4406 cleanliness code of 16/14/11, AMSOIL Industrial **Synthetic Power Transmission EP Gear Oil GEN2** is 64 times cleaner than oils with a cleanliness code of 22/20/18, which can help extend gearbox life by up to 250%[†] with proper continued filtration and good maintenance practices.

Cleanliness Comparison (ISO 4406)



Contaminants flowing through pump
in one year at 32 gpm for 6,500 hours.

Typical Technical Properties*

AMSOIL Industrial Synthetic Power Transmission EP Gear Oil GEN2

Test		
ISO Viscosity Grade	ASTM D2422	320
Kinematic Viscosity @ 100°C, cSt	ASTM D445	39.4
Kinematic Viscosity @ 40°C, cSt	ASTM D445	316.5
Viscosity Index	ASTM D2270	177
Specific Gravity	ASTM D1298	0.8612
API Gravity	ASTM D1298	32.8
Density, lb/gal	ASTM D1298	8.607
Clarity		Clear
Four-Ball Wear Test	ASTM D4172	
75°C, 1200 rpm, 40 kg, 1hr		0.371
150°C, 1800 rpm, 40 kg, 1hr		0.399
54°C, 1800 rpm, 20 kg, 1hr		0.316
Moisture, ppm	ASTM D6304C	<100
Falex B (Failure), LbF	ASTM D3233	4250
TAN	ASTM D664	0.8
Foam Tendency, ml	ASTM D892	
Seq. I		0/0
Seq. II		0/0
Seq. III		0/0
Copper Corrosion 100°C, 3 hr	ASTM D130	1A
Micropitting	FVA 54	>10
GFT Class	FVA 54	High
FZG Scuffing Load Test [A/8, 3/90] (Pass)	DIN 51354	>14
FAG FE-8 High Load Bearing Wear Test	DIN 51819-3	
7.5 speed, 100kN load, 80 hr		
Roller Wear (Mw50), mg		2.3
Flash Point °C (°F) (COC)	ASTM D92	249 (480)
Fire Point °C (°F) (COC)	ASTM D92	314 (597)
Pour Point °C (°F)	ASTM D97	-48 (-54)

Health & Safety Information

For recommendations on safe handling and use, refer to the Safety Data Sheet (SDS) available at [AMSOILIndustrial.com](https://www.amsoil.com/IndustrialSalesGroup) or upon request at IndustrialSalesGroup@amsoil.com or (715) 399-6305.

**Technical properties are general characteristics of the product and not manufacturing specifications. Variations that do not affect product performance should be expected. Product formulations are subject to change without notice. Customers are responsible for determining product suitability for use with their equipment.*

†Based on Noria Corporation's Equipment Life Extension Chart and ISO 4406:17.