



Power-Syn HD EP Gear Oil

DESCRIPTION: Power-Syn HD EP Gear Oils are synthetic extreme pressure (EP) gear oils designed to provide extra protection and very long service life in highly loaded gear boxes that may be operated over a very wide temperature range.

BENEFITS: Power-Syn HD EP Gear Oils are designed to protect heavily loaded gears and bearings in extreme pressure service that includes sustained high temperatures. Based on PAO synthetic technology, these lubricants enable lower fluid friction in the gear tooth, high load zones to improve efficiency. They also enable much longer drain interval service than conventional industrial gear oils and usually eliminate the need for seasonal changes due to their very good low temperature flow characteristics. Other benefits include:

- **Excellent EP protection**
- **Excellent rust and corrosion protection**
- **Excellent oxidation resistance and thermal stability**
- **Very good water separation, foam resistance and air release properties**
- **Excellent lubrication flow characteristics over very wide temperature ranges**

APPLICATION: Power-Syn HD EP Gear Oils are recommended for heavily loaded industrial gear boxes where excellent lubrication is required over a wide range of operating temperatures and extended drain intervals are essential. Power-Syn HD EP Gear Oils have been formulated to meet the following recognized industrial gear oil requirements in the appropriate viscosity:

- DIN 51517-Part 3 CLP
- US Steel 224
- ISO 12925-1 CKC/CKD
- Cincinnati Machine (Gear C Series)
- AGMA 9005-E02 EP
- GM LS-2

Typical applications are steel mills, rubber mills, and similar heavy industries where ambient conditions may include water, dirt, and scale.



40 South Fifth Street Waterbury CT 06708
247 Northampton Street Easthampton MA 01027

PRODUCT INFORMATION



Power-Syn HD EP Gear Oil

Typical Properties

ISO Viscosity Grade		68	100	150	220	320	460	680
Product Code	Test Method	343901	343902	343903	343904	343905	343906	343907
AGMA Number		2EP	3EP	4EP	5EP	6EP	7EP	8EP
Viscosity, cSt @ 40°C	ASTM D-445	67	97	152	215	325	455	635
Viscosity, cSt @ 100°C	ASTM D-445	11.6	13.5	18.9	26	38	45	57
Viscosity Index	ASTM D-2270	145	150	150	160	160	160	160
Flash Point, COC, °F (°C)	ASTM D-92	473(245)	473(245)	482(250)	482(250)	482(250)	482(250)	482(250)
Pour Point, °F (°C)	ASTM D-97	-49(-45)	-54(-48)	-54(-48)	-54(-48)	-49(-45)	-44(-42)	-38(-39)
Timken OK Load, lb.	ASTM D-2782	65	65	75	75	75	75	75
4-Ball EP Test, Load-wear index, kg Weld Point, kgD-2783	ASTM D-2783	57 400	57 400	57 400	57 400	57 400	57 400	47 250
4-Ball Wear Test, 20kg, 1 hr., 1800 rpm, 54°C Wear scar diameter, mm	ASTM D-2266	0.31	0.31	0.31	0.29	0.29	0.29	0.29
FZG Gear Test, Stages	FZG	12	12	12	12	12	12	12
Rust Test	ASTM D-665A	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Copper Strip Corrosion	ASTM D-130	1B	1B	1B	1B	1B	1B	1B
API Gravity		34.7	34.7	33.8	33.6	32.2	32.2	32

Note: Values shown are typical only and do not constitute a specification. Minor variations in product are to be expected in normal manufacturing. Always confirm with the original manufacturer's recommendation for proper equipment operating requirements.



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