

INDUSTRIAL GEAR SYN 150 **INDUSTRIAL GEAR SYN 220** **INDUSTRIAL GEAR SYN 320**

A high performance synthetic oil designed with a high viscosity index combine polyalphaolefin (PAO) base oil and Ester fluids to provide outstanding protection to a wide variety of gear and bearing applications, plus trouble free oil life in high and low temperatures, beyond the capabilities of mineral oils.

This oil has superior resistance to oxidation and sludging, especially at high temperatures, with exceptional resistance to rust and corrosion. It has good anti-wear, demulsibility, foam control, air release and multi-metal compatibility properties.

ADVANTAGES

- Excellent high temperature thermal oxidation resistance extends equipment high temperature operating capability.
- High viscosity index maintains viscosity and film thickness at high temperatures.
- Low traction coefficient reduces overall friction, increasing efficiency of gearing.
- Full extreme pressure (EP) High load carrying capability to protect against shock loading.
- Very high shear stability under heavily loaded, high speed conditions.
- Extended oil life and drain intervals.
- Compatible with mineral oils.
- Rapid Air Release.
- Good Water Separation.

INDUSTRIAL GEAR SYN 460 **INDUSTRIAL GEAR SYN 680**

APPLICATIONS

These include:-

- Filled for life gear boxes, especially high ratio, low efficiency worm gears.
- Remote location gear-boxes where oil changes are difficult.
- Heavy duty industrial journals, plain and anti-friction bearings, chain drives, slide guides, etc.
- Extreme environments like mining, marine and paper milling

Meets the following requirements:

- US Steel 224
- David Brown S1.53.101 Type E
- Cincinnati EP gear oils
- AGMA 9005 – E02
- DIN 51517 Part 3: 2004-01
- ISO 12925-1 CKC/D

TYPICAL CHARACTERISTICS

Property	Method	Typical value				
ISO Viscosity Grade		150	220	320	460	680
Viscosity cSt @ 40°C	ASTM D445	150	220	320	460	680
Viscosity cSt @ 100°C	ASTM D445	19.1	25.6	35.1	47.6	63.7
Viscosity Index	ASTM D2270	145	148	155	162	164
Pour point °C	ASTM D97	-42	-42	-39	-39	-39
Flash point °C	ASTM D92	235	235	245	255	265
Density at 15°C	ASTM D4052	0.865	0.871	0.86	0.876	0.861
FZG Load Stage	DIN 51534	12	12	12	12	12
Copper Corrosion 24 hrs @ 121 °C	ASTM D130	1B	1B	1B	1B	1B
Rust Protection	ASTM D665	Pass	Pass	Pass	Pass	Pass
Timken OK Load kg	ASTM D2782	34 min	34 min	34 min	34 min	34 min
4 Ball Weld Load, kg	ASTM D2783	250 min	250 min	250 min	250 min	250 min
4 Ball Wear, 20kg/1800rpm (mm)	ASTM D2266	0.29	0.29	0.29	0.29	0.29

Package Sizes

1000 litre IBC's

205 litre steel drums

20 litre plastic drums

The information contained herein is accurate at the time of this review. However specifications change from time to time. Ensure specifications meet equipment manufacture requirements.