

All-Syn Heavy Gear

Synthetic Heavy Gear Lube

No. 228

ISO 32 to 1000

DESCRIPTION:

All-Syn Heavy Gear industrial gear lubricants are formulated using synthesized hydrocarbon fluid and select additives to enhance oxidation resistance and provide maximum protection against wear, rust, corrosion and foaming. These synthesized hydrocarbon fluids provide significantly better thermal and oxidation stability, as well as increased protection against the loss of viscosity, than do conventional mineral oils. The high inherent viscosity index of these oils provides higher viscosities and therefore greater film thickness at higher temperatures and lower viscosities for easy start-up and minimal internal friction at lower temperatures. The low coefficient of friction of **All-Syn Heavy Gear** substantially reduces power consumption and gearbox operating temperature, further prolonging the useable life of the lubricant and the equipment. Due to its high oxidation stability **All-Syn Heavy Gear** is an excellent lubricant choice for extended drain intervals.

COMPOSITION:

All-Syn Heavy Gear contains a technically advanced additive system designed to reduce friction, wear and corrosion.

Consisting of:

PAO Synthetic Oil
Oxidation Inhibitors
Anti-Wear Additives

Anti-Foam Additives
Pour Point Depressants
Rust Inhibitors

Demulsibility Additive
Oiliness Additives
Corrosion Inhibitors

USES:

Ring Gears
Hypoid Gears
Spur Gears
Industrial Gears

Worm Gears
Spiral-Bevel Gears
Speed Reducers
Straight Bevel Gears

Helical Gears
Power Drivers
Angular Gears
Bevel Gears

TYPICAL APPLICATIONS:

All-Syn Heavy Gear is recommended for use in all types of enclosed gearing as well as plain and roller element bearings. These lubricants are ideal for heavily loaded low speed gears and bearings where boundary or elasto-hydrodynamic lubrication conditions exist. They are particularly recommended for gear boxes which operate under excessively high temperatures where conventional oils rapidly oxidize.

All-Syn Heavy Gear is recommended for use in applications where the corrosion of yellow metals is a concern as it does not contain additives that attack metals such as bronze or copper.

All-Syn Heavy Gear gear lubricants are compatible with most seal materials, paint and plastics, including nitrile Buna N, neoprene, viton, Teflon, polyethylene, polyurethane ether, fluorocarbon, polyacrylate, polysulfide, ethylene acrylic, epoxy, plastisol, PVC, acrylic paint and lacquer.

PERFORMANCE CAPABILITIES:

All-Syn Heavy Gear meets and exceeds the rugged requirements of:

API GL-4 Gear Service Category

AGMA 9005-D94

U. S. Steel 224

TYPICAL SPECIFICATIONS:

ISO Grade	32	46	68	100	150	220	320	460	680	1000
Specific Gravity	.849	.851	.857	.859	.865	.889	.874	.881	.885	.890
AGMA Number	-	-	2	3	4	5	6	7	8	8A
Viscosity										
cSt @ 40°C	31.6	46.0	64.6	91.8	142.7	206.2	320.6	440.0	654.3	937.0
cSt @ 100°C	5.80	7.8	10.1	13.1	18.0	23.4	31.0	40.9	55.3	68.0
SUS @ 100F	514	662	329	470	750	1086	1619	2326	3451	5065
SUS @ 210F	45.7	52.4	60.4	71.9	91	116	150	191	267	338
Viscosity Index	128	138	143	142	140	140	141	142	146	144
Pour Point °F	-65	-60	-60	-60	-60	-45	-40	-35	-30	-20
°C	-54	-51	-51	-51	-51	-43	-40	-37	-34	-29
Flash Point °F	450	475	460	475	475	475	475	475	520	520
°C	232	246	274	24)	246	246	246	246	271	271
Copper Strip										
Corrosion	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A
Rust	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Values shown here are typical, and may vary.