

## Industrial Gear Oils

### Industrial Gear Oils (Mineral Oil Base) - Industrial Gear Oils (Synthetic Base)

(10/25/11 edition)

**Value Tech Industrial Gear Oils (Mineral Oil Base)** are compounded lubricants containing extreme pressure (EP), anti-wear (AW), anti-rust, antioxidant, yellow metal protection, water separation, and foam inhibition. Primary specifications which are met with these mineral gear oils include US Steel, American Gear Manufacturers Association (AGMA), and Cincinnati Machine. Value Tech Industrial Gear Oils (Mineral Oil Base) are ashless, lead-free, low-chlorine, and thermally stable. They have good filtration properties and are extremely resistant to gear wear and scuffing.

**Value Tech Industrial Gear Oils (Synthetic Base)** are fully synthetic oils compounded to contain extreme pressure (EP), anti-wear (AW), anti-rust, antioxidant, yellow metal protection, water separation, and foam inhibition. These Synthetic Based gear oils are formulated with fully synthetic base stocks designed to bring higher levels of oxidation performance. Drain intervals using Value Tech Industrial Gear Oils (Synthetic Base) are typically significantly longer than industrial mineral based gear oils. Primary specifications which are met with these synthetic gear oils include US Steel, American Gear Manufacturers Association (AGMA), and Cincinnati Machine. Value Tech Industrial Gear Oils (Synthetic Base) are ashless, lead-free, low-chlorine, and thermally stable. They have good filtration properties and are extremely resistant to gear wear and scuffing. Value Tech Industrial Synthetic Gear Oils contain an EP agent and chemical components to control wear, oxidation, sludge, corrosion and foaming. These products are formulated in various ISO viscosity grades, with varying high and low temperature properties depending on ambient conditions.

*Some performance levels are limited by viscosity grades. Please consult the Value Tech Performance Application Chart, the Value Tech Inspection Data Table for the appropriate Value Tech product or contact your Value Tech District Manager for more complete information and recommendations. Consult your Value Tech District Manager for specific pack sizes and product availability.*

## TYPICAL INSPECTION DATA

	ISO grade	Cincinnati Machine	AGMA grade	API Gravity	Flash Pt. C.	Viscosity cSt@40C	Viscosity cSt@100C	Viscosity Index	Pour Pt.C.
	46	-	1EP	30.4	200	44.5	7.3	100	-18
<b>Industrial</b>	68	P-63	2EP	30.5	210	68.0	8.7	100	-15
<b>Gear Oil</b>	100	P-76	3EP	30.0	220	100	11.2	100	-15
<b>(Mineral</b>	220	P-74	5EP	28.0	240	220	19.0	100	-12
<b>Oil</b>	320	P-59	6EP	27.0	250	330	24.5	100	-12
<b>Base)</b>	460	P-35	7EP	27.0	260	460	32.0	100	-9
	680	P-34	8EP	26.5	270	680	45.0	100	-9
	1000	P-78	8AEP	26.8	280	1000	80.0	100	-9
	1500	-	9EP	27.0	285	1500	120.0	100	-9
	220	P-74	5S	34.8	200	220	30.0	160	-18
<b>Industrial</b>	320	P-59	6S	34.6	210	330	42.0	160	-18
<b>Gear Oil</b>	460	P-35	7S	34.5	210	460	54.0	160	-18
<b>(Synthetic</b>	680	P-34	8S	34.2	220	680	80.0	160	-18
<b>Base)</b>	1000	P-78	-	34.1	220	1000	105.0	180	-18
	3200	-	10S	33.7	230	3200	286.0	190	-18
	6800	-	12S	33.3	240	6800	521.5	200	-18

## PERFORMANCE APPLICATION CHART

SPECIFICATIONS	Industrial Gear Oils (Mineral Oil Base)	Industrial Gear Oils (Synthetic Oil Base)
AGMA 9005-D94		
EP	√*	-
S	-	√*
API GL-4	√	√
Cincinnati Machine	√*	√*
Bijur	√	√
DIN 51517	√	√
GM LS-2	√	√
US STEEL 224	√	√
Rust Test Pass, ASTM D 665b	√	√
Timkin, OK load, 60 lb min	√	√
FZG Load Stage Pass, (12 pass)	√	√
Demulsibility, ASTM D 2711(pass)	√	√
Oxidation, S-200 (pass)	√	√
Foam Inhibition, ASTM D 892 (pass)	√	√
LEAD-FREE	√	√

\* Viscosity specific, see specification page