



## ANTIWEAR HYDRAULIC OIL

PREMIUM ANTIWEAR HYDRAULIC OIL MEETING ALL MAJOR EQUIPMENT MANUFACTURERS' SPECIFICATIONS AND INDUSTRY REQUIREMENTS FOR EXTENDED SERVICE IN CRITICAL HYDRAULIC APPLICATIONS.

**Product Description:** ANTI-WEAR HYDRAULIC OIL is manufactured from highly refined paraffinic base oils and is fortified with an inhibitor system to provide a product which insures maximum performance in all aspects of hydraulic service. Anti-wear agents keep wear rates low on critical pump parts and rust and corrosion problems are eliminated by the rust inhibitor. A foam suppression additive eliminates concerns over operating problems due to foam buildup in the hydraulic storage tank even in high circulation rate systems with low residence times.

### Features:

- Low wear in severe industry OEM pump specification tests means long equipment life in even the most severe service.
- High resistance to oxidation gives long oil service life and reduced maintenance expenses due to less frequent oil changes.
- Excellent air-line oil with minimum stray mist.
- Highly machined surfaces of hydraulic system components are protected from rust and corrosion.
- Foam inhibition prevents formation of excessive amounts of foam and reduces the danger of pump failure due to cavitation.
- Excellent demulsibility means any water present separates from the oil quickly allowing the water to settle out and be drained from the system.
- A versatile product which can be widely used in many different industrial applications to reduce inventory, prevent equipment damage due to use of the wrong oil and reduce overall maintenance costs.
- Specifically designed for hydraulic systems operating over 1000 psi which require antiwear protection for pump parts.
- Recommended for all hydraulic pump designs including vane, gear, and axial and radial piston pumps.
- Widely used in machine tools, presses, die casting machines, machines, circulating systems and hydraulic control systems.
- Used in lubrication of plain and anti-friction bearings, airline lubricators, reciprocating air compressors, moderately loaded gear sets.
- Meets the requirements of all the major hydraulic pump manufacturers: including Vickers I-286-S and M-2950-S, Haglund-Denison HF-0, HF-1 and HF-2, Oligear, Delaval, Pesco, Racine, Hydreco, Sunstrand, Dynex, John Barnes & Bellows and Valvair.
- Meets the industrial specifications of Cincinnati Milacron P-68, P-69, and P-70, General Motors LH-04-1, LH-061, and LH 15-1, Lee Norse 100-1, Jeffrey No. 87, Ford M-6C32, U.S. Steel 136, Bosch Rexroth and B.F. Goodrich 0152.
- Meets DIN 51524 Part-2 (HLP), ISO Grades 22-100.
- Meets AFNOR E48-603 requirements

### Typical Uses:

- Recommended for all hydraulic systems regardless of the operating pressure.

### Typical Specifications:

GRADE, ISO	ASTM TEST	22	32	46	68	100	150	220
Gravity °API	D-287	32.8	31.8	31.0	30.3	29.0	27.7	26.7
Flash Point, °F.	D-92	365	375	395	425	440	465	475
Fire Point, °F.	D-92	410	420	440	470	485	510	520
Pour Point, °F.	D-97	0	-20	-20	-15	10	15	15
Viscosity:								
SUS @ 100° F.	D-2161	115	165	237	352	522	789	1165
SUS @ 210° F.	D-2161	40.8	44.2	48.8	55.3	64.1	78.1	95
cSt. @ 40° C.	D-445	22	32	46	68	100	150	220
cSt. @ 100° C.	D-445	4.32	5.36	6.74	8.62	11.01	14.6	18.6
Viscosity Index	D-2270	102	99	99	97	95	95	94
Color, D-1500	D-1500	1.5	2.0	2.0	2.5	3.5	4.0	4.0
Zinc, Wt. %		.043	.043	.043	.043	.043	.043	.043
Phosphorus Wt. %		.033	.033	.033	.033	.033	.033	.033

OTHER ISO GRADES AVAILABLE.  
VALUES SHOWN HERE ARE TYPICAL AND MAY VARY.