

## PREMIUM "HC" ANTI-WEAR HYDRAULIC OILS

### ISO GRADES 22, 32, 46, 68, 100

ISO Grade	<u>Typical Properties</u>				
	22	32	46	68	100
Color, ASTM D-1500	<0.5	<0.5	<0.5	<0.5	<0.5
Appearance	Water Clear	Water Clear	Water Clear	Water Clear	WaterClear
Viscosity, cSt					
At 40 C	21.5	31.7	46.5	67.2	98.8
At 100 C	4.2	5.3	6.8	8.6	10.9
Viscosity Index	100	100	99	98	95
Flash Point, (COC) Deg F	395	400	415	425	450
Pour Point, Deg F	-30	-25	-25	-20	-5
Neut. No., ASTM D 974	0.55	0.55	0.55	0.55	0.55
Gravity, API @ 60 F	34.4	33.1	32.4	31.6	31.0
Rust Test, ASTM D 665A/B	No Rust	No Rust	No Rust	No Rust	No Rust
Emulsion Test, ASTM D-1401 (40-40-0)	10 Min	10 Min	10 Min	10 Min	10 Min
Dielectric Strength, ASTM D-877	35KV	35KV	35KV	35KV	35KV
Hydraulic Stability, ASTM D-2619					
Cu mass loss, mg/cm <sup>2</sup>	0.13	0.13	0.13	0.13	0.13
Oxidation Life, ASTM D 943					
Hrs	+7000	+7000	+7000	+6500	+6000

The values shown are typical of current production. Some are controlled in the manufacturing process, while others are not. All of them may vary within tolerable ranges.

The five grades are premium-quality anti-wear hydraulic oils with outstanding stability, designed to meet the demanding requirements of most all the major manufacturers and users of hydraulic equipment. These oils are characterized by their clear appearance and clarity retention in operating systems, good rust protection, low deposit formation, rapid release of entrained air, oxidation resistance, low pour points, and good anti-foam properties. They are formulated from highly refined hydrocracked base stocks with an effective anti-wear agent that helps reduce wear in high-speed, high-pressure vane and gear pumps.

### APPLICATIONS

Recommended for critical application of vane and gear pumps operated at elevated pressure levels, i.e. in excess of 6,900 kPa or 1000 psi. For systems incorporating axial piston pumps with pressures in excess of 3500 psi, these oils can be used where the manufacturer specifies anti-wear hydraulic oils. These oils are very effective in reducing pump wear, satisfying lubrication requirements of auxiliary system components, and greatly extending the life of systems operating at high loads, speeds, and temperatures. ISO Grades 32, 46, and 68 comply with requirements of Vickers I-286-S and M-2950-S, DIN 51524-2; Cincinnati Milacron specifications P-68, P69, and P-70. These grades meet Denison HF-0 and HF-2 requirements. Dielectric strength is warranted at the origin and can be maintained providing low moisture contents are sustained and agitation under humid conditions are minimized.