



SYNTHETIC BASED HYDRAULIC OILS

A range of premium quality **synthetic-based hydraulic** oils using **vorta'S** proven ashless **sulphur-phosphorus** additive technology.

This unique additive system has many benefits over traditional zinc containing products, especially when the oils operate in moist conditions.

HYDO SYN range of oils exceed the requirements of the German DIN 51524 part 2, CETOP RP 47H and American Vickers 1.286.S specifications for anti-wear hydraulic oils and are classified as ISO type HV.

The oils have been formulated to minimize oxidation and foaming and to ensure long machinery life by reducing wear to a minimum and preventing corrosion. The oils are compatible with the seal materials used in modern hydraulic systems.

HYDO SYN is primarily for use in hydraulic equipment, but is also suitable for other duties in which

- Unique ashless additive technology for premium performance.
- Very low rates of wear; therefore extended life for hydraulic components; Excellent filterability; no tendency to block fine filters when water contamination is present; therefore trouble free operation of hydraulic systems.
- High chemical stability, excellent corrosion inhibition, low foaming and seal compatibility chemical stability; resists breakdown of the oil, and there by preventing deposition of sludge and lacquers in both the system and the reservoir; so there are fewer shutdowns for maintenance and long life for the hydraulic oil it self
- Sperry-Vickers 1-286-S and M-2950-S specifications.
- DIN 51 524 specification
- Approved for Frank Mohn (Framo) marine cargo-handling systems.
- Sigma-Rexroth gear pumps.
- Rexnord-Racine vane pumps.
- Mannesmann Rexroth Hydromatik piston pumps.



GRADE	Test	Units	HYDO SYN									
	Method		10	15	22	32	46	68	100	150	220	320
Density @ 15°C	ASTM D1298	kg/l	0.86	0.865	0.87	0.87	0.87	0.88	0.89	0.89	0.89	0.9
Flash Point	ASTM D92	°C	248	249	252	255	258	260	262	267	270	270
Kin Viscosity @ 40°C	ASTM D445	cSt	9.5	15	21	32	46	68	105	160	220	320
Kin Viscosity @ 100°C	ASTM D445	cSt	2.5	3.32	4.19	5.4	6.9	10	13	16	21	28
Viscosity Index	ASTM D2270		126	132	134	134	136	140	140	135	125	127
Pour Point	ASTM D97	°C	-45	34	-33	-30	-30	28	-24	-24	-24	22
4-Ball Welding Load		Kg	180/200						200/220			
Neutralization Value	ASTM D664	mgKOH/g							0.1			