



The primary function of a hydraulic fluid is to convey power. In use, however, there are other important functions of hydraulic fluid such as protection of the hydraulic machine components. The table below lists the major functions of a hydraulic fluid and the properties of a fluid that affect its ability to perform that function:

Having good low temperature characteristics and offering a wide choice of Viscosities The properties of their solvent refined base oils are enhanced by full additive treatment 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 in modern **Hydraulic Systems**.

Proper viscosity to minimize internal leakage
High viscosity index.

Hydraulics is used for the generation, control, and transmission of power by the use of pressurized liquids.

Hydraulic topics range through most science and engineering disciplines, and cover concepts such as pipe flow, dam design, fluidics and fluid control circuitry, pumps, turbines, hydropower, computational fluid dynamics, flow measurement, river channel behavior and erosion

Very low rates of wear ; therefore extended life for hydraulic components;
High 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

Excellent filterability; no tendency to block fine filter when water contamination is present; therefore trouble free operation of hydraulic systems.

HYDO AWS is primarily for use in hydraulic equipment, but is also suitable for other duties in which lubricants of high oxidation stability and lubrication performance are required.

- Viscosity for film maintenance
- Low temperature fluidity
- Thermal and oxidative stability
- Hydrolytic stability / water tolerance
- Cleanliness and filterability
- Demulsibility
- Antiwear characteristics
- Corrosion control



GRADE	Test Method	Units	HYDO AWS										
			10	22	32	46	68	100	150	220	320		
Density @ 15°C	ASTM D1298	kg/l	0.861	0.875	0.876	0.879	0.882	0.886	0.888	0.893	0.896		
Flash Point	ASTM D92	°C	162	192	216	225	240	240	267	270	270		
Kin Viscosity @ 40°C	ASTM D445	cSt	9.4	21	32	46	68	105	160	220	320		
Kin Viscosity @ 100°C	ASTM D445	cSt	2.5	4.19	5.4	6.9	9	12	16	20	25		
Viscosity Index	ASTM D2270		110	108	105	104	103	105	107	110	107		
Pour Point	ASTM D97	°C	-45	-30	-30	-30	-30	-24	-24	-24	-24		
4-Ball Welding Load		Kg	180/200				200/220						
Neutralization Value	ASTM D664	mgKOH/g							0.2				