



HYDRAN

(Antiwear Machine Oils—ISO 100 to 320**)

Every day, more and more demands are being placed on circulating systems and gear boxes - more production, hotter conditions and longer operating hours. All these factors place more stress on the oil used to drive these systems. **HYDRAN** machine oils are more viscous grades of **HYDRAN** that are well suited for today's newest circulating systems and gearboxes. **HYDRAN** machine oils are high performance oils and have the capability to withstand the stress of high temperatures, pressures and constant use.

HYDRAN machine oils are formulated from the finest, high quality base stocks and are further fortified with high performance additives to enhance their capability. Highly effective anti-wear additives minimize wear and prolong fluid life.

Water is a common contaminant in circulating systems and gear boxes. The additives used in some oils react with water forming deposits that hamper performance and plug filters. **HYDRAN** machine oils utilize additives that are specially selected to perform in the presence of water. **HYDRAN** machine oils produced excellent results in rigorous filterability test where the oil is mixed with water and filtered through a 1.2 micron filter.

HYDRAN machine oils contain potent oxidation inhibitors limiting the formation of sludge, varnish and other deposits.

* For grades 22 to 68 please see separate data sheet.

This keeps systems cleaner and extends oil life. Rust inhibitors prevent corrosion even when water is present.

Foaming can cause erratic operation and can also damage pumps. **HYDRAN** machine oils contain foam inhibitors that prevent foaming and provide more reliable operation.

BENEFITS:

- EXCELLENT WEAR AND RUST PROTECTION
- SUPERIOR OXIDATION STABILITY TO REDUCE SLUDGE VARNISH, AND DEPOSITS
- EXCELLENT DEMULSIBILITY
- GOOD ANTIFOAM AND AIR RELEASE PROPERTIES

APPLICATIONS:

HYDRAN machine oils satisfy the requirements set by all major equipment manufacturers.

HYDRAN machine oils are recommended for many bearings, machine tools, chains, light to moderately loaded gears and other areas where general-purpose oil is required.



HYDRAN AW

(Antiwear Machine Oils—ISO 100 to 320*)

TYPICAL CHARACTERISTICS

ISO Viscosity Grade	100	150	220	320
Product Code	15063	15064	15065	15066
API Gravity (ASTM D-1298)	29.6	28.5	28.1	27.5
Pounds/gallon	7.32	7.35	7.38	7.41
Viscosity (ASTM D-445):				
cSt @ 40°C	101	150	220	320
cSt @ 100°C	11.1	14.5	18.9	24.0
SUS @ 100°F	528	798	1164	1705
SUS @ 210°F	64	78	96	119
Viscosity Index (ASTM D-2270)	95	95	95	95
Pour Point (ASTM D-97)				
°F	0	0	+5	+10
(°C)	(-18)	(-18)	(-15)	(-12)
Flash Point (ASTM D-92)				
°F	475	485	529	554
(°C)	(246)	(252)	(276)	(290)
Color (ASTM D-1500)	2.0	4.0	4.5	4.5
Oxidation Test (ASTM D-943) hours	2,000	-	-	-
Rotary Bomb Oxidation Test, minutes	300	-	-	-
Rust Resistance (ASTM D-665)				
Distilled Water	Pass	Pass	Pass	Pass
Synthetic Seawater	Pass	Pass	Pass	Pass

* For ISO grades 22 to 68 please see separate data sheet.
The above data is subject to usual manufacturing variation.
For more information and availability, call 1-800-442-LUBE.
1/23/2007