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INFORMATION BULLETIN

HYDRAULIC FLUIDS / HYDRAULIC OILS

PURPOSE

- Dual function product that is designed to both transmit power AND provide lubrication throughout the entire hydraulic system; it is the life blood of both mobile & stations machines
- Functions as a heat transfer to keep the equipment cool during high heat operation
- Help prevent friction wear (AW) and rust & corrosion (R&O)
- Resist foaming and trapped air gasses plus remove contaminants from sensitive components

TYPES

- Common ***ISO VG*** grades are 32, 46, 68 *(International Standards Organization Viscosity Grade)*
- ISO 32 is equivalent to SAE 10 and typically used in vane, piston or gear type pumps, and light reciprocating compressors, plus cold weather applications like snow plows
- ISO 46 is equivalent to SAE 20 and typically used in applications such as garbage trucks, excavators, back hoes, boats, elevators, pneumatic tools, construction equipment and wenches, car lifts, forklifts, log splitter, skid-steers, tractors, and other mobile or stationary engines
- ISO 68 is equivalent to SAE 20 & typically used in vane pumps, gear pumps and piston pumps
- AW (anti-wear) hydraulic fluids provide protection against wear to extend equipment life
- R&O fluids provide protection against rust and oxidation

CONSIDERATIONS WHEN CHOOSING A HYDRAULIC FLUID

- Hydraulic fluids formulated with refined paraffinic base oil stocks and additives are for use in a wide range of agricultural, industrial, construction and mining equipment
- These fluids are used in a wide range of temperatures and help reduce wear, rust and corrosion
- Hydraulic fluids formulated with other components (such as water-oil emulsions) are for use in applications such as transmissions, power steering systems and brake systems
- Both hydraulic fluid & hydraulic oil are commonly listed on product labels
- Discuss formulation properties with the brand supplier to confirm the fluid that meets the required equipment specifications and operating conditions
- Viscosity, pour point and viscosity index are important when choosing a hydraulic fluid
- Both ambient and operating temperatures are important when choosing viscosity and a higher viscosity index will help maintain critical thermal stability
- Follow the fluid & maintenance recommendations in the owner manual