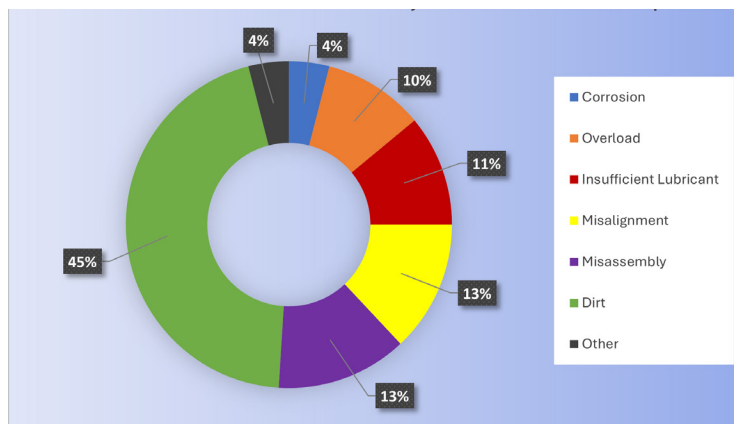


UNIVERSAL TORQUE FLUID – A SUPERIOR & VERSATILE HYDRAULIC FLUID

By Colin Burns.

Texas Refinery Corp's Universal Torque Fluid (UTF) is a foam resisting hydraulic fluid with advanced chemistry that provides superior anti-wear protection, prolongs power take-off life, suppresses brake chatter, and protects your gearbox against rust. There are six variations of UTF that can be used in your equipment, depending on your type of equipment and operating conditions. This article will explore the six diverse kinds of UTF, what makes them different and when to use one over the other.



Modern tractors today are much larger and more complex than tractors made in earlier years and hydraulic systems are no different. Hydraulics nowadays do more than just lift or adjust parts of your equipment but are often connected to vital components like steering and braking. All tractors have a hydraulic system that run in a “loop” around the machine that is constantly pushing hydraulic fluid and pressure. If the loop is briefly interrupted, the hydraulic system will go into “relief” and start pushing all that fluid and pressure into the equipment’s fluid storage reservoir. If the fluid is completely interrupted, that same fluid and pressure can start to clog and potentially blow.

The “loop” is often interrupted when your equipment cannot perform certain tasks, i.e., lifting something too heavy, extending implements too far, or any kind of excessive strain. Continuing to operate your equipment while your hydraulics’ loop is strained can cause excessive heat to your fluid, increasing oxidation, low flow, foaming, and will eventually become unusable. Working any kind of lubricant to the point that it is unusable is never good for expensive equipment. Our UTF is designed to protect your equipment and give you longer lasting service life to hopefully save you money, time, and future headaches on equipment maintenance.

The standard version of **Universal Torque Fluid (UTF)** is a high-performance tractor fluid that is formulated with an enhanced additive package and chemistry that set it apart from the generic fluids. These enhanced additives effectively resist foam, suppress brake chatter, and increase anti-wear protection for gears, clutches, and pumps. All these elements aim to provide superb performance, especially in extreme temperatures and harsh conditions. Without a quality hydraulic fluid in your tractor, increased downtime can occur, its lifespan can be drastically shortened, and can cause an increase in operating costs. **UTF Red** is identical to the standard version with just two differences, the added red color is to help identify leaks and seal damage. While the second difference is a slight tackiness that increases the lubricity throughout the system. The viscosity of UTF is 10W/20, while the UTF Red is 10W/30, both are formulated to provide the desired performance in various pieces of equipment, including Case IH, Caterpillar, John Deere, Komatsu, Kubota, Massey Ferguson Volvo, and others.

UTF RED PLUS takes UTF Red and combines 15% Seal Saver Plus to the mix to slow down or hopefully stop annoying leaks. Seal Saver Plus is a TRC product designed to live up to its name, by saving damaged seals to help equipment avoid further damage to components. UTF RED PLUS does not just slow down and stop leaks with the help of Seal Saver Plus, it also helps to protect your components by expelling contaminants and barring them from entry into your equipment. These could be dirt, dust, air, or moisture. The decreased presence of these contaminants helps the equipment to decrease its oil & fluid consumption.



SPECIAL LOW TEMP UTF is another version of UTF that is designed to be used in equipment that will experience lower than normal operating temperatures. This product can be used in both mobile and stationary hydraulic equipment giving service flexibility and reducing lubricant inventory. With a pour point as low as -50°F, this version of hydraulic fluid gives flexibility for use in a wide variety of temperature ranges. In addition, the high viscosity index (VI of 145) combined with a low pour point (-50°F) helps ensure pump start-up at low temperatures, while maintaining oil viscosity at high ambient temperatures. The added 0.20% Zinc anti-wear additive provides pump protection even in severe service hydraulic applications. While it is an outstanding product for severe cold temperatures it can be used year-round for applications where a 20-weight hydraulic or torque oil is needed.

UTF COMPLETE & UTF RED COMPLETE are two versions of the fluid that are made exclusively for equipment that operate using a CVT (continuous variable transmission) or IVT (Infinitely variable transmission). These transmission types are being implemented into modern equipment in the ag, construction, and forestry industries, and are even included on some modern vehicles. This trend has been driven by a need for fuel efficiency and higher productivity. When speaking with a customer, it is paramount to double check the transmission types that their equipment has. If a piece of equipment has an IVT or CVT, **UTF Complete or UTF Red Complete** are the only versions of the fluid that meet the latest specs, containing an extremely high shear and stability additives to maintain viscosity and promote longer fluid life.

Contaminants like dirt and water can enter the hydraulic loop from either excessive use, operating in harsh conditions, or simply from attaching and detaching implements. Contaminants of any kind that enter the hydraulic systems can build up and clog, causing a severe interruption that if unattended could mean even more catastrophic damage. In hydraulic, tractor transmissions, and even hydrostatic transmission systems, moisture and other contaminants coupled with the increased flow rates in systems can cause foaming and excessive heat. No matter what version of UTF you are using, the anti-foaming chemistry actively decreases the presence of foam, allowing the operating temperatures to be reduced, and response time to increase, all while the equipment life is extended. UTF is truly a fan favorite for TRC and has saved customers time, money, and headaches on tractor maintenance. One customer stated in a testimonial, "My oldest equipment is a 45-year-old tractor that has been running UTF all these years and has experienced ZERO issues with the transmission, hydraulics, or brakes. When transmissions can cost around \$30K, we say there is no reason you should not be using a superior product like Texas Refinery Corp's torque fluid". Talk to your customers about our UTF today!

