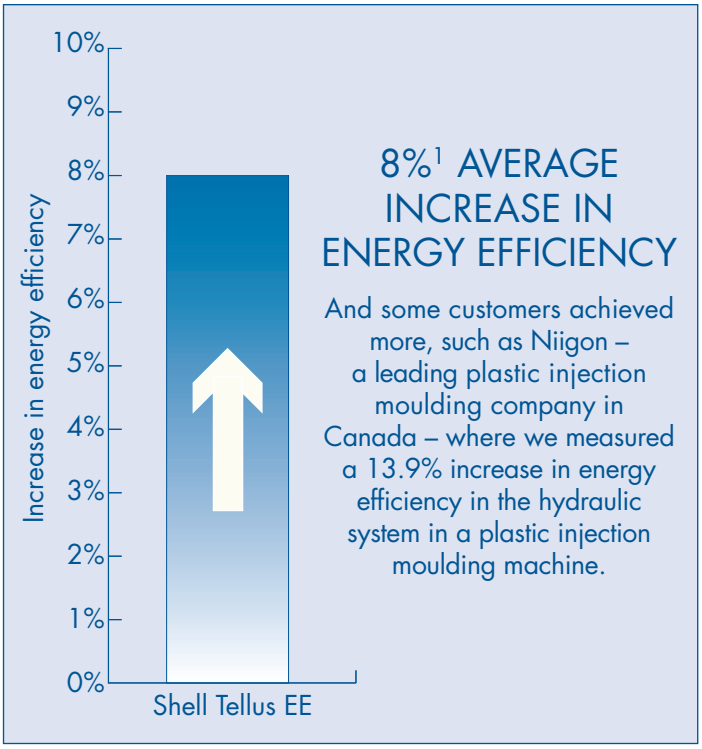
Shell
TELLUS EE
Hydraulic Fluid for Energy Efficiency

GREATER EFFICIENCY
OUTSTANDING PROTECTION
HELPING TO REDUCE COSTS

DESIGNED TO MEET CHALLENGES

How Shell Tellus EE can help the efficiency of your business

If your business relies on the intensive use of hydraulic power, Shell Tellus EE could improve the way your systems work. Designed by our technologists using sophisticated modelling and testing processes, it's one of the first hydraulic fluids that can help increase the energy efficiency of your systems while offering excellent protection that prolongs the life of your machinery. Its ability to help save energy in hydraulic system applications, such as injection moulding and metal pressing operations, by an average of 8%[1] has been proven by our customers on three continents.



8%[1] AVERAGE INCREASE IN ENERGY EFFICIENCY

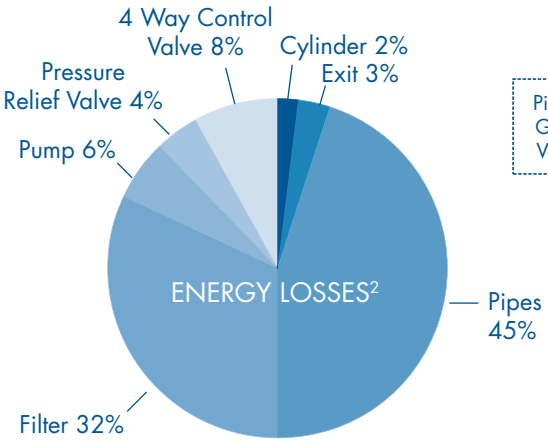
And some customers achieved more, such as Niigon – a leading plastic injection moulding company in Canada – where we measured a 13.9% increase in energy efficiency in the hydraulic system in a plastic injection moulding machine.

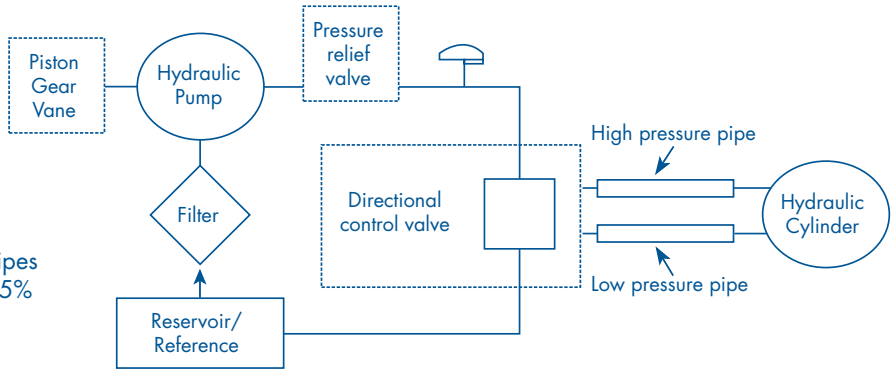
1) Actual energy savings may vary depending on application, current oil used, maintenance procedures, condition of equipment, operating conditions and intensity of hydraulic power usage

Designing a more effective hydraulic fluid – introducing the advanced technology of Shell Tellus EE

While many other companies design their fluids to work best on individual components of a hydraulic system, we look at the system more broadly. So rather than focus on, typically, pump wear, Shell Tellus EE has been designed to benefit the complete system without compromising on the operational effectiveness of your machinery or the protection of your equipment. With our three-way approach to delivering value through enhancing operations, protection and energy efficiency, your maintenance costs can be lowered, your machinery can enjoy outstanding protection and your system can benefit from lower operating costs.

Shell Tellus EE – designed to enhance the performance and protection of the entire system including key components such as: valves, actuator seals and pumps.





While many other companies typically focus on individual elements of a system, Shell has used sophisticated modelling to understand the different sources of energy loss, see chart above, to develop a fluid that can help you experience greater operational efficiency

2) Calculated Energy Losses ISO VG 46 Hydraulic Fluid

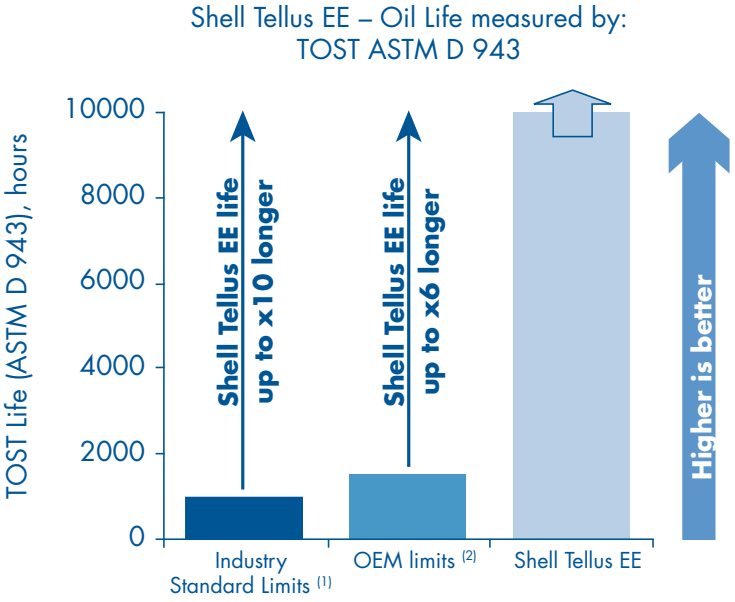
Achieving superior performance with Shell Tellus EE

A hydraulic system's energy efficiency can be maintained or improved by optimising the physical and chemical properties of the fluid it uses. As a latest generation hydraulic fluid, Shell Tellus EE can offer you a range of benefits. For example, it has superior air release properties. It releases trapped air up to 95% faster than required by industry specs. This helps to minimise the effective compressibility of fluid and increases the transmission of power. It also helps to control oxidation, and this leads to longer oil life and protection against soot and particles.

Increased oil life can mean that your systems will work longer between oil changes, which helps lower maintenance costs. In fact, Shell Tellus EE exceeds the maximum duration allowed in the industry Turbine Oil Stability Test (TOST) without reaching the pass/fail limit and has been shown to have significantly better TOST life than conventional mineral hydraulic fluids[3].

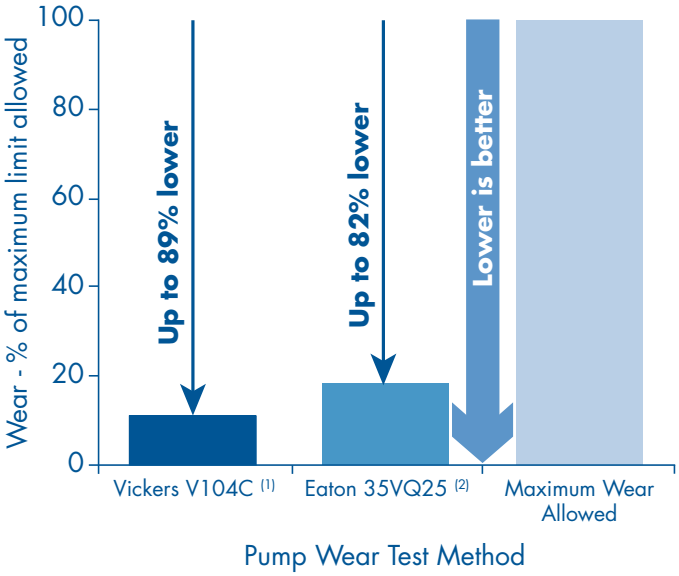
3) Comparison based on Shell conventional hydraulic fluids vs Shell Tellus EE.

Exceptional Oil Life to help reduce maintenance costs



(1) e.g. ASTM D 6158, ISO 11158, DIN 51524 standards
(2) e.g. GM LS/2

Superior Pump Wear Protection to help give Long Service Life



(1) DIN 51524-2-HLP SS 15 54 35 AM specifications
(2) Eaton 1-286-S, M-2950-S specifications

The flow characteristics of a hydraulic fluid are another important factor in its effectiveness. If it's too thick, your machinery will use too much energy. A thin fluid does not provide the necessary protection to keep your system running for the optimum amount of time. Wear protection is crucial when trying to ensure fewer breakdowns and avoid the high cost of repairs, and Shell Tellus EE's unique additive technology is specially formulated to help deliver our best protection against hydraulic pump wear and hence help increase the service life of your system.

Superior pump wear protection can help to ensure longer service life for your machinery.

Shell Tellus EE – responding to the hydraulic fluid needs of your business

Shell Tellus EE is an extensively researched, developed and tested hydraulic fluid, proven by our customers to deliver significant savings. To find out more about how we can help reduce your equipment operating costs and prolong the life of your systems, contact your Shell representative.

The Shell industrial lubricants range

Shell has over 50 years' experience of producing industrial and automotive lubricants, and as the world's leading lubricants marketer[4] we're investing heavily in research and development of new and innovative lubricants technology.

In addition to Shell Tellus EE, we can offer you an extensive range of products. Whether you are looking for the latest value-added products or reliable lubrication solutions, our selection of industrial lubricants is designed to help meet your operational needs.

ADVANCED TECHNOLOGY LUBRICANTS FOR: • System efficiency • Wear Protection • Reduced Maintenance

HYDRAULIC SYSTEMS	INDUSTRIAL GEARS	AIR COMPRESSORS	TURBINES	GREASES
Shell Tellus EE Energy saving capability Long-life, maintenance saving Wide operating temperature range	**Shell Omala HD (Industrial Gear)** Low friction formulation Long-life, maintenance saving Enhanced high temperature protection **Shell Tivela S (Worm gears)** Energy saving capability Long-life, maintenance saving Enhanced wear and micropitting protection	**Shell Corena AS** Maintains system efficiency Long-life, 8000hr maintenance interval capability Excellent air and water separation	**Shell Turbo GT** Severe service gas turbines Long oil life Resists thermal breakdown	**Shell Stamina** Polyurea Greases Exceptional performance Long lasting Outstanding resistance to thermal degradation

MAINLINE INDUSTRIAL LUBRICANTS RANGE: • Reliable Operation • Wear Protection • Reduced Maintenance

HYDRAULIC SYSTEMS	INDUSTRIAL GEARS	COMPRESSORS & REFRIGERATOR	TURBINES	GREASES
Shell Tellus High performance hydraulic fluid For most hydraulic applications **Shell Tellus T** High performance multigrade hydraulic fluid For mobile and static hydraulic applications	**Shell Omala** High performance gear oils For most industrial gear applications	**Shell Corena** High quality compressor oils Range of products for rotary (screw) and reciprocating compressor applications **Shell Clavus** High quality refrigerator compressor oils	**Shell Turbo** High performance turbine oils Range of products for combined cycle, steam and gas turbine applications	**Shell Albida** High performance lithium complex greases **Shell Alvania** High performance lithium soap greases

SPECIALITY RANGE:

Shell Naturelle	A full range of oils and greases where environmentally considerate products are required
Shell Cassida	High performance oils and greases for use in the food and beverage industry

4) Source – Kline & Company 2008

Shell Representative:

www.shell.com