



Shell Lubricants AUTOMOTIVE COMPONENTS

Yarnapund saves a reported
US\$71,300 by changing to
Shell Tellus hydraulic oil

Total, reported,
annual customer
saving

US\$71,300



Company: Yarnapund Public
Company Limited

Country: Thailand

Application: Hydraulic systems

Saving: US\$71,300 total, reported,
annual customer saving

Key edges: Shell Tellus 46, Shell
LubeAnalyst

Yarnapund Public Company Limited of Thailand is proud of its high-quality automotive components and excellent delivery record. Its plant produces around 500 exhaust pipe sets every day for Hino Trucks, a Toyota Group company. Over its 50-year history, Yarnapund has invested in first-class machinery. However, after only a year of operation, a critical pipe-bending machine was out of action for about a month for repair, set-up and testing. The machine had a worn hydraulic piston liner, and damaged seals and gaskets, which Yarnapund suspected were related to the hydraulic oil being used.

Yarnapund wanted to prevent further downtime, lost production and unplanned maintenance costs, and so it switched to Shell Tellus 46 high-performance hydraulic oil. The company also opted for the Shell LubeAnalyst service, a state-of-the-art health check for oils and equipment. This service helps to give Yarnapund peace of mind by providing oil-condition monitoring, which shows that the oil and equipment are operating within acceptable limits.

Since the company changed to Shell Tellus 46 oil, the pipe-bending machine has not required any unplanned maintenance. Yarnapund reports that it is saving over US\$71,300 per year by avoiding lost production and unplanned maintenance costs.

JCA0075



DESIGNED TO MEET CHALLENGES





1 Challenge

Yarnapund's pipe-bending machine was damaged and out of action for about a month for repair, set-up and testing. The company suspected that the hydraulic oil was responsible for the wear to the piston liner, and the damage to the seals and gaskets. The downtime resulted in lost production and unplanned maintenance costs.

3 Outcome

Since using Shell Tellus 46 hydraulic oil, Yarnapund's pipe-bending machine has not required any unscheduled maintenance. The company also has the peace of mind that the Shell LubeAnalyst oil condition monitoring service provides.

2 Solution

Following technical advice, the company now uses Shell Tellus 46 high-performance hydraulic oil and the Shell LubeAnalyst condition monitoring service.

4 Value

Yarnapund reports that with Shell Tellus 46 hydraulic oil it is avoiding lost production and reducing its maintenance costs, which has saved it over US\$71,300.

Shell Tellus

High-performance hydraulic oils

Shell Tellus oils are premium-quality, high-viscosity-index mineral-oil-based fluids, which are generally acknowledged to set high standards in industrial hydraulic and fluid-power lubrication.



Applications

Shell Tellus oils are specifically designed for:

- industrial hydraulic systems;
- mobile hydraulic fluid-power transmission systems; and
- marine hydraulic systems.

Performance features and benefits

- Shell Tellus oils are highly resistant to degradation and sludge formation, which improves system cleanliness and reliability.
- Oil stability tests show that Shell Tellus oils have outstanding performance, with low acidity, low sludge formation and low copper loss, which means that oil-drain intervals can be extended and maintenance costs can be minimised.
- Shell Tellus oils have good chemical stability in the presence of moisture, which helps to ensure long oil life and reduce the risk of corrosion.
- Outstanding anti-wear performance that helps system components last longer, demonstrated in piston and vane-pump tests, including the tough Denison T6C (dry and wet versions) and Vickers 35VQ25 tests.
- Shell Tellus oils are suitable for ultra-fine filtration, an essential requirement in today's hydraulic systems, and do not produce deposits that block filters through contamination with water and calcium.

- Excellent lubrication properties and good low-friction characteristics in hydraulic systems operating at low or high speeds. Shell Tellus oils prevent stick-slip problems in critical applications to provide fine machinery control.
- Balanced selection of additives helps to ensure quick air release without excessive foaming, which helps to minimise cavitation and oxidation.
- Good water separation properties (demulsibility), thus preventing hydraulic system and pump damage.

Specifications and approvals

Cincinnati P-68 (ISO 32), P-70 (ISO 46) and P-69 (ISO 68)

Denison HF-0, HF-1 and HF-2

Eaton (Vickers) M-2950 S and I-286 S

DIN 51524 Part 2

ISO 11158

GM LS/2

AFNOR NFE 48-603

Mannesmann Rexroth RE 90 220-1

Swedish Standard SS 15 54 34 AM

Compatibility

Shell Tellus oils are compatible with most pumps. Please consult your Shell representative before using the oils in pumps containing silver-plated components. Shell Tellus oils are compatible with all the seal materials and paints normally specified for use with mineral oils.



Shell Lubricants

WWW.SHELL.COM/AUTOCOMP