IMPROVING RELIABILITY AND PRODUCTIVITY OF HYDRAULIC SYSTEMS
TO HELP CUT TOTAL COST OF OWNERSHIP
WITH SHELL TELLUS HYDRAULIC OILS

CHANGES TO EQUIPMENT TECHNOLOGY AND OPERATION PLACE INCREASING DEMANDS ON HYDRAULIC OILS

<table>
<thead>
<tr>
<th>KEY CAUSES OF OPERATING DIFFICULTIES IN INDUSTRIAL HYDRAULIC SYSTEMS</th>
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<tr>
<td>• Improper hydraulic fluid condition</td>
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<td>• Improper diagnosis of a problem, or lack of knowledge in making repairs</td>
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<td>• Mechanical failures (bearing failures due to misalignment, seal failures due to dirt, etc.)</td>
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<td>• Operating units beyond recommended limits of speed, pressure, or volume</td>
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<td>• Miscellaneous causes</td>
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THE CRITICAL ROLE OF HYDRAULIC OIL

WEAR PROTECTION

- Helps limit wear and corrosion, to guard against breakdown

LONGER EQUIPMENT LIFE

- Greater resistance to oxidation helps equipment operate under higher stresses for longer

SYSTEM EFFICIENCY

- Efficiently transmits power through the system

SHELL TELLUS S2 MX AND VX HYDRAULIC OILS CAN HELP DELIVER COST SAVINGS

INCREASED WEAR PROTECTION

- Helps reduce wear rate even in harsh conditions
- Helps protect against copper corrosion, rust and scuffing
- Shell Tellus S2 MX is among the first to meet new Bosch Rexroth standard for wear protection in extreme conditions

This can help:

- Reduce frequency of breakdown
- Improve reliability of operations
- Lower maintenance costs

LONGER OIL LIFE

- Over 5000 hours TOST life: 3x industry and OEM limits
- Double the oil life of Shell Tellus S2 M and V
- 400 mins in Rotary Pressure Vessel Oxidation Test

MORE EFFICIENT SYSTEM OPERATION

- Thanks to:
  - Excellent friction control
  - Excellent filterability
  - Consistent water separation
  - Improved air release
  - Excellent stick-slip control

This can help:

- Ensure equipment meets or exceeds its design capabilities
- Enhance productivity by extending maintenance cycles

ALL HELPING IMPROVE RELIABILITY AND PRODUCTIVITY OF HYDRAULIC SYSTEMS, CONTRIBUTING TO REDUCED TOTAL COST OF OWNERSHIP

www.shell.com/lubricants

*Source: multiple surveys by industry bodies including additive companies, filter manufacturers, hydraulic equipment manufacturers

1Shell Tellus S2 MX is one of the first hydraulic fluids to appear on Bosch Rexroth Fluid Rating List RDE 90245. New Bosch Rexroth test increases stress factor by 13 times compared with Eaton 35VQ25 pump test. "Compared with ASTM D130- mix of 3h and 168-hour test limit, and rated at 1a. *Compared with ASTM D6658 test limit." FZG performance, up to FLS 12. TOST (Turbine Oil Stability Test) life of over 5000 hours. ASTM D 943 test, twice the life of Tellus S2 M and S2 V, and three times that of typical industry and OEM limits. "ASTM E2277 WPVOT test" with Tellus S2 M and S2 V "Compared to ISO 13355-1 filterability test limit.“ Compared to water separation ASTM D1401 limit. *Compared with IP 313 air release limit