

Powertrain analysis



- This service monitors transmission, differential and final drive oils for premature wear, contamination and oil condition

Description

Powertrain analysis helps detect gear or transmission problems and lubricant contamination before they can result in costly downtime or repairs. The analysis is applicable to transmission, differential or final drive (gear) components in all types of mobile equipment, and includes testing to help you ensure long equipment life and optimal performance.

Potential benefits



Improved equipment reliability by identifying potential failures before they occur



Increased productivity through reduction of unscheduled downtime




Reduced parts replacement and labor costs



Reduced lubricant consumption and disposal with optimized drain interval

Analysis options – Powertrain

|  | Essential ◆ | Enhanced ◆◆ | Elite ◆◆◆ |
|-------------------------------------------------------------------------------------|----------------|----------------|--------------|
| Metals | ✓ | ✓ | ✓ |
| Nitration | | | ✓ |
| Oxidation | ✓ ★ | ✓ ★ | ✓ ★ |
| Particle Count | | ✓ | ✓ |
| Particle Quantifier (PQ) Index | | ✓ | ✓ |
| Total Acid Number (TAN) | ★ | ★ | ★ |
| Viscosity* at 40°C or 100°C | ✓ | ✓ | |
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| Viscosity Index | | | ✓ |
| Water | ✓ | ✓ | ✓ |

Key



Included test



TAN in lieu of oxidation for select synthetic products

*Viscosity reported at 40°C or 100°C, based on oil type or service level. Analysis may vary by laboratory, product supplied or oil condition.

Sample frequency

Sample at OEM recommended frequency or, for general guidance, begin with:

- Off-highway transmission: **500 hours**
- Off-highway final drive: **1,000 hours**
- On-highway transmission: **500 hours, 40,000 km or 25,000 miles**

Adjust frequency based on asset's economic impact, operating environment, machine age, oil age or sample results trend.