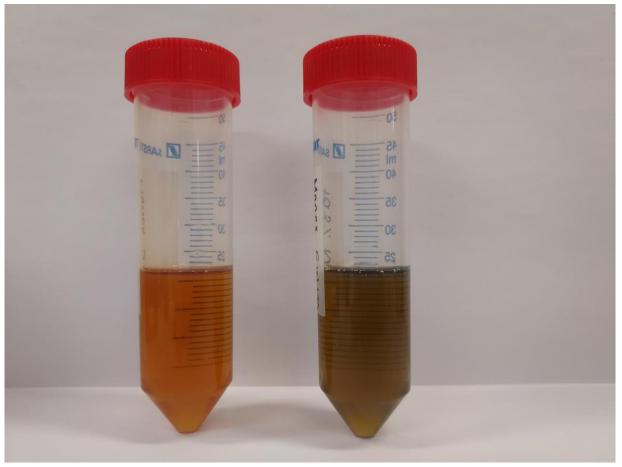


Nano Power LTD STI

Monex Master Tech 5W30



- Fully formulated oil was tested with 0.3% Nanol
- Good solubility observed
- Light colour change towards brown with a greenish tint with Nanol



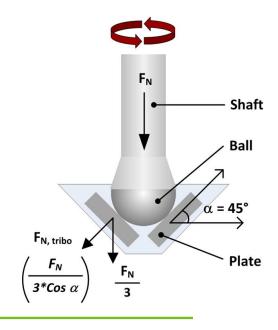
Monex Master Tech 5W30

Monex Master Tech 5W30 + 0.3% Nanol

Test method



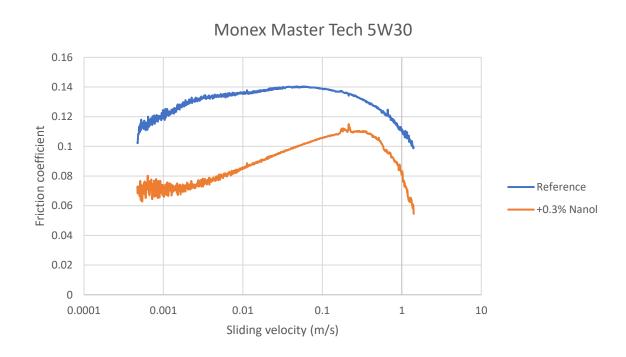
- Tribology test, Anton Paar MCR 302 with tribometer module, ball on 3 pins/plates –setup with 1.4401 grade steel balls and steel plates
- The test setup simulates the boundary lubrication and mixed lubrication regime in an engine
- Running in period: 30 min, 1200 rpm, 6 N normal force, 100 °C, maximum Hertzian contact pressure ~545 MPa
- Stribeck curve: 10 min, 0-3000 rpm, 6 N normal force, 100 °C, maximum Hertzian contact pressure ~545 MPa
- Reference run without Nanol, then with Nanol



Results



Monex Master Tech 5W30



Sliding speed	COF reference	COF 0.3% Nanol	Difference (%)
0.001 m/s	0.1226	0.0723	-41.0
0.01 m/s	0.1366	0.0852	-37.6
0.1 m/s	0.1388	0.1057	-23.8
1 m/s	0.1099	0.0833	-24.2

- Significant reduction in friction with Nanol during boundary and mixed lubrication regime
- System moves faster towards mixed lubrication regime with Nanol

Conclusions



- Nanol reduces friction significantly with Monex Master Tech 5W30 oil
- Light colour change towards brown with a greenish tint with Nanol
- Compatibility testing (4 weeks) ongoing in 60 °C, no sedimentation or solubility issues observed
- Compatibility testing will be ready in 3/2023