

COMPRESSOR



“Manufacturing, refrigeration and compression lines of gas are based on uptime therefore, increasing compressor reliability is vital to the entire operation. Our TRIBOLAB[®], test, shows contamination and mechanical wear through particles found in the fluid. With this study, predictive measures will be taken to reduce the maintenance cost and increase the equipment useful life.”

There are several types of compressors: Rotary, reciprocating, axial flow, centrifugal, screw, etc. Its purpose is increase the pressure of a gas, reducing its volume. Manufacturing, refrigeration and gas compression lines are based on the compressor operating time, therefore, increasing compressor reliability is vital for the entire operation.

Compressors absorb a large amount of air and all kinds of dust particles and water droplets. Compressors lubrication must have a strong resistance to oxidation due to high discharge temperatures and continuous presence of heated air. Air pollution is the biggest concern from manufacturing processes, dirt, and water, which usually affects viscosity and causes oxidation.

Compressors used in refrigeration also facing problems of reduced viscosity, due to gas entrainment.

The oil analysis, recommended for these applications is the **TRIBO 1** test package as a routine basic test, or the **TRIBO 2**, which measures moisture by Karl Fischer and gives more accurate values. These tests give us a view of the lubricant to take predictive actions or perform secondary tests such as the MPC (Membrane Patch Colorimetry ASTM D7843), which will identify the presence of varnishes. All these tests show contamination and mechanical wear through the particles found in the fluid. With this study, predictive measures will be taken to reduce maintenance costs and increase the equipment useful life.

“Increase
Compressor Reliability,
it’s vital to improve
Production.”



Take a sample of the fluid, with the system operating in normal conditions.



Fill in the Tribolab[®] form corresponding to the Test it belongs to.



Send sample to Tribolab[®] to be analyzed.



Tribolab[®] records and analysis the sample, generating an e-report.



Tribolab[®] sends you an email report with the results. Customer evaluates recommendations.



Response time is 24 to 48 hr. Once the sample is registered in our laboratories.

TRIBO 1: Basic Industrial Oil Analysis Test.

Sample Volume: 100 ml

- 24 Metals by ICP (ASTM D5185)
- % Water by Crackle (Internal Method Tribolab)
- Viscosity @ 40°C or 100°C (ASTM D445)
- Acid Number (ASTM D664)
- Oxidation / Nitration (ASTM E2412)
- ISO Particle Count (ISO4406.99)

TRIBO 2: Advanced Industrial Oil Analysis Test. Sample Volume: 100 ml

- 24 Metals by ICP (ASTM D5185)
- % Water by Karl Fischer (IASTM D6304C)
- Viscosity @ 40°C or 100°C (ASTM D445)
- Acid Number (ASTM D664)
- Oxidation / Nitration (ASTM E2412)
- ISO Particle Count (ISO4406.99)

Standard Monitoring Frequency

The following is the standard monitoring frequency for screw, centrifugal, reciprocating, turbocharger and lobe compressors.

Compressors: Every 500 hr.

“Experts recommend the ideal monitoring frequencies, depending on the industry and application. In general, the frequency shown above is set as a standard parameter”.

For more information you can contact us through the phones:

North America
Phone

+1- (786) 497.61.00
(786) 537.49.71

Fax: +1 (786) 441.44.08

South America
Phone

+58(414) 439.53.03 | (424) 473.04.59
(414) 342.51.61

Europe
Phone

+34- (658) 94.80.60
(911) 84.59.96



www.tribo-labs.com