



Trane Building Advantage
Oil Analysis

Trane Building Advantage customized service solutions for building owners address operating performance, energy efficiency and environmental concerns. Oil analysis is an essential aid in maintaining your compressor at the highest level of reliability.



Keep your compressor working longer

High oil quality ensures the longest possible lifecycle for the compressor. Regular oil analysis helps reduce the risk of premature damage and can cut the cost and frequency of oil changes.

Oil quality can be affected by three main factors:

- **Wear:** solid particles in the oil can wear components, reducing compressor life.
- **Chemistry:** Abnormal viscosity due to oil temperature changes caused by moisture or high acidity [TAN] resulting from internal chemical reactions (refrigerant alteration or oil hydrolysis)
- **Contamination:** moisture in the refrigerant circuit.

These problems are caused by oil overheating, bad vacuums, water, refrigerant or air leaks, and additives.

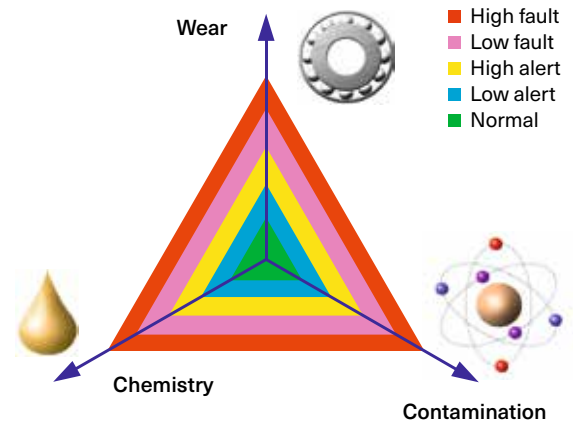
The Trane Oil Laboratory – expert analysis at your service:

Thanks to our own new state-of-the-art laboratory, combined with 40 years' experience, Trane experts are on hand to identify these issues by employing the very best HVAC oil analysis, conducted using the latest technology and equipment.

Predictive maintenance for reduced operating costs

Trane Oil Analysis is a predictive tool used to detect minor issues before they become major problems. It also reduces failure detection time and allows planning for appropriate maintenance.

Oil changes can be reduced by half, resulting in lower operating costs and a lower impact on the environment.



Trivector reporting for clearer results

Trane Oil Analysis is based around a range of tests which measure both oil characteristics and compressor wear. A detailed technical report is presented using the Trivector concept for easy understanding. The tests concentrate on:

- **Wear:**
 - Spectrometric analysis to identify wear amount
 - Quantity of particles (ppm)
 - Nature of particles (additive, wear, pollution)
- **Chemistry:**
 - Total Acid Number (TAN)
 - Viscosity
- **Contamination:**
 - Moisture presence

Then, according to the compressor technology and original oil characteristics, the analysis determines 5 alarm levels on each of the three axes.

Depending on the results of the oil analysis we may recommend to do a vibration analysis to give you further peace of mind.

Trane recommends one yearly analysis per refrigerant circuit.

Trane Oil Analysis:

- is available for all compressor technologies and brands
- is available for any HVAC oil
- provides fast results (within 5 working days)
- includes comments and corrective recommendations
- includes comparisons with previous analyses, enabling tracking of oil change evolution



To perform Trane Oil Analysis, simply contact your local Trane representative to order an analysis kit.

Various types of defects may occur due to poor oil quality



HIGH LEVEL OF OIL ACIDITY
Corrosion on the motor windings resulting in motor burn out



COMPONENTS WEAR
High wear on bearing causing compressor failure



MOISTURE PRESENCE
Moisture in oil considerably decreases the lifecycle roller bearings, can lead to corrosion and big damages





Trane Services

The real expertise of a manufacturer



- Systems approach
- Dependable installations
- Energy saving solutions
- Operating cost optimization
- Chiller plant management solutions
- Chilled water production solutions.

At Trane, we are committed to providing a comprehensive portfolio of HVAC solutions throughout your system lifecycle.



Breakdown resolution

No one plans for breakdowns, but when they happen you need the right partner. Our expert Service Engineers use the latest diagnostic tools to guide you through your options to Repair, Renew, Replace or ReThink.



Secure operations

At every point during the lifetime of your equipment - installation, commissioning, maintenance or breakdown - Trane can offer an effective solution with commissioning, first-aid kits and service agreements.



System upgrade

Trane Building Advantage

Trane is committed to bringing the latest technological advantages to our customers through a wide portfolio of solutions which increase the Efficiency, Reliability and Sustainability of their HVAC plants. Our Service Engineers use their expertise together with the latest diagnostic tools to future-proof your system and make it "better than before".



Equipment rental

For special events, exceptional needs or when you want to ReThink HVAC management, Trane Rental Services have the right solution. With our extensive fleet of equipment, we can perfectly match your temporary heating and cooling requirements.



Contact us

With over 1000 of the best trained sales engineers and service technicians in the industry, Trane is in the best position to serve your needs. Just call us and we will help you configure the Trane Free Cooling solution for your HVAC system.



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit trane.eu or tranetechnologies.com.