



Industrial Refrigeration Commercial AC Heating & Controls

Vibration and Oil Analysis The Key to Long-Lasting Equipment

A wise man once said, "Prevention is better than cure." Vibration analysis and oil analysis are prime examples of small services that play a major role in protecting your refrigeration equipment.

Vibration Analysis

Some facility managers incorrectly assume that if they can't feel or hear their equipment vibrating, then there isn't a problem. In fact, when your equipment reaches that point you're well beyond the scope of preventative maintenance and have a major issue on your hands.

[TDI Refrigeration's vibration analysis](#) detects movements so minute they can only be discovered by measuring a unit's internal frequencies with an accelerometer. Why hunt for something so small? Because vibration on any scale indicates a problem, but catch it early and you can often prevent a minor problem from becoming a major one.



TDI's vibration analysis shows the 'vitals' of your equipment.

Vibration is commonly created by small issues, such as a dented bearing. But if left unaddressed, vibration can create significant imbalances throughout the system. You could go from needing a new bearing to replacing the entire compressor, which is expensive and generally involves at least a week of downtime.

[Click here](#) to view a sample TDI Refrigeration Vibration Analysis Report.

Oil Analysis

Vibration analysis prevents small issues from becoming major ones. Oil analysis can reveal potential issues *before they even occur*.

Unlike oil in cars, compressor oil doesn't just get dirty and need replacing. Your equipment can run on the same oil as long as it doesn't get contaminated, which only happens when there is overheating or foreign substances entering the system.

TDI's oil analysis service provides important details about your equipment—analyzing it is like getting lab work from your doctor. Testing may indicate a clean bill of health or reveal a problem that a corrective course of action can alleviate.

Sometimes our analysis shows that your oil is good to go. Other times we need to perform moisture removal or replace the oil. Oil analysis is better than systematically replacing the oil because it's 'greener', often cheaper, and when you toss the oil you lose valuable information.

Contact TDI Refrigeration

The vibration analysis should be performed based on manufacture recommendations, typically 1-2 times per year. Only two oil analyses are needed per year to keep your system happy. TDI's experienced techs conduct these tests the right way, at the right price.

Contact TDI Refrigeration today
to schedule an analysis

Summer is Coming - Time to Review the HVAC Checklist

Is your air conditioning system ready to blast cool air all summer long? [TDI's commercial refrigeration technicians](#) have developed an HVAC checklist to help you verify your system is operating as it should.

- Check and replace filters.
- Make sure condenser and evaporator coils are not dirty, icy, or in any other abnormal condition.
- Verify there is not any bearing play in the fan motors.
- Ensure fan motors are not emitting excessive heat.
- Verify fan blades are spinning and with the correct rotation.
- Verify there is a 20 degree difference in air split between supply and return.
- Ensure there are not burns or overheating on the legible wiring.



[Contact TDI Refrigeration](#) if you find any issues or would like our expert technicians to ensure your HVAC system is ready for peak season.