



Rexnord Innovation Center Services Overview

- Independent, ISO/IEC 17025:2005, A2LA accredited test and analysis laboratory
- More than 30 years of product testing and application expertise
- Experience in mechanical, materials, chemical and metallurgical engineering
- Component testing
- Product performance test to industry standards
- State-of-the-art equipment and processes
- Failure & metallurgical analysis

Field Test Applications:

- Strain gauging machinery
- Failure analysis
- Vibration analysis and testing of electronic components
- Thermal evaluation of equipment
- Sound pressure measurements
- Equipment alignments

Contact one of our experts to schedule a complimentary consultation and learn more about our capabilities.

Contact Information

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Rexnord Innovation Center Field Testing

The Rexnord Innovation Center has decades of experience measuring strain, vibration, temperature and torque loads in the field to diagnose failures, and verify mathematical calculations, for industrial equipment, metals, and more. You can find us supporting the automotive, construction, energy, food & beverage, manufacturing and mining industries throughout the world.

We can create custom instrumented transducers using your components, which are then calibrated in our lab. These instrumented components, once installed in the field, measure actual service conditions, providing clients with insight through the performance of their equipment and avoiding unplanned downtime.

Our experts will travel to your location to understand and observe your unique situation, acquire and evaluate data, and implement improvements. We perform on-site testing and analysis around the world, including locations with extreme cold, heat and humidity.

Accreditation makes a difference

The Rexnord Innovation Center is differentiated from competitors because our A2LA accredited engineers and technicians will travel to customer locations and take real-time data on a piece of machinery while in its actual working conditions. This method of on-site testing allows for far more accurate results than simple simulations or sample tests. See the reverse side of this product sheet for global customer field testing success stories.

A recent customer says ...

"We have been utilizing the Rexnord Innovation Center because of their price competitiveness and ability to get the work done on time and with confidence."

— Project manager at an agricultural equipment manufacturer



Above is an example of a customer field testing application in the construction industry. The Rexnord Innovation Center was enlisted to explore column failures in a forest products processing plant.

Global customer field testing success stories



Strain gauging of rock crushing equipment

A mining equipment manufacturer asked if the Rexnord Innovation Center could determine the maximum and minimum material strains experienced by one of their rock crushers during different operating conditions. The Rexnord Innovation Center engineers traveled to the client's mine site, instrumented the equipment and recorded the strain measurements. Once the data was analyzed, Rexnord was able to provide a detailed report summarizing the exact amount of strain experienced by the crusher at various locations in the machine, giving the customer a much deeper understanding of the loads and stresses experienced by the equipment.



Failure analysis

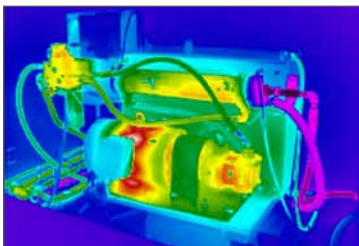
A law firm called the Rexnord Innovation Center to render an expert opinion in a case involving several hundred feet (in excess of 30 m) of conveyor chain. Rexnord engineering professionals traveled to the claimant's facility to inspect and analyze the chain to determine the root cause for failure. After initial inspection, the chain was shipped back to the Rexnord Innovation Center for further analysis. Upon conclusion of the analysis, Rexnord engineers testified in court to substantiate the claims.



Field measurement and vibration testing of electronic equipment

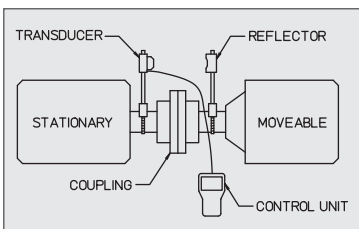
An aggregate processing machinery manufacturer wanted to know whether an electrical cabinet would be able to withstand the vibrational loads sustained in the field. Rexnord Innovation Center engineers traveled to the customer's site and collected vibration data on the machine. Then they were able to replicate in the lab what was experienced during operation. Next, Rexnord accurately predicted component failures, allowing for redesign before deployment of the equipment into the field.

The Rexnord Innovation Center has five electro-dynamic shakers, each capable of generating up to 6,000 pounds force (27 kN). Random, shock and drop, and wind milling tests are typical. Professionals can also perform "at altitude" tests in the environmental chamber while the shaker is running, which means customers save money because the equipment stays in its same location.



Thermal evaluations of equipment

An industrial equipment manufacturer required that a piece of their equipment pass a foreign specification for temperature rise during operation. The Rexnord Innovation Center was contracted to conduct a preliminary thermal test to ensure that the equipment could pass the specification before spending time and money shipping the product overseas. In addition to thermal temperature data, Rexnord was able to provide real-time thermal images of the product via a thermal imaging camera system.



Equipment shaft alignments

An industrial equipment company contracted the Rexnord Innovation Center to align two shafts of a hoist trolley within a specified tolerance of angular and parallel alignment. Rexnord engineers used a precision laser alignment system to ensure that the customer requirements were met. This solution ensured proper operation of the connected equipment, saving the customer unplanned downtime.