

CAT[®] PRECISION SEALS

Thorough Testing For Highest Quality

Cat Precision Seals is equipped with a quality and test laboratory in Franklin, North Carolina. Cat Seals employs this lab for customer support and the development and validation of new seal designs. The lab equipment is specially designed to evaluate the operating variables that impact the performance of metal face seals in real world applications. A number of different tests are available.

Reliability Testing

The initial formation of a sealing band is critical for the survival of the seal group. Reliability testing is used to evaluate the operating conditions of the specific application the seal is intended to perform in, and evaluate the performance of the seal during the initial formation of a sealing band. This test method also determines the maximum speed at which the seal group can perform under the intended design criteria, before failure will occur.

Load Testing

Load tests evaluate the loading characteristics of the elastomeric ring for a given size at a given operating gap. This information is used to determine the load ring compression required to obtain optimal loading on the metal seal faces.

Abrasive Wear Test

Abrasive wear testing exercises unique equipment to evaluate a metal seal ring material's resistance to abrasive wear. Seals are submerged in a unique mud slurry with properties known to accelerate the wear process. Wear is quantified by the amount of progression of the sealing band during the test.

Oil Compatibility Testing

Cat Seals has access to internal labs that can perform oil compatibility testing to evaluate the elastomeric load ring material's compatibility with lubricants that may be used in your application under industry standard evaluation criteria.

Quality Assurance

Cat Seals has a Quality Assurance laboratory. Test equipment includes multiple Coordinate Measuring Machines (CMMs) for full dimensional analysis, load frames for rubber load measurements and seal face profile evaluation equipment.

BUILT FOR IT.[™]