The Fracture Mechanics Lab at Laboratory Testing Inc. provides highly reliable Fatigue Crack Growth and Fracture Toughness Testing. LTI is NADCAP and A2LA accredited, ISO/IEC 17025 certified, and has been in the materials testing business since 1984.

The Lab’s engineering group routinely performs testing to the following standards: ASTM E647, ASTM E399 and ASTM E1820. They also work closely with clients to develop custom test procedures for unique requirements.

LTI’s Fracture Mechanics Lab has the technical expertise, years of experience and equipment to handle your testing needs.

Fully Equipped to Provide Testing Solutions

The Lab is equipped with nine computer-controlled servo hydraulic load frames that provide loads ranging from 40 lbf. to as high as 100,000 lbf., cycling at a rate of up to 40 hertz.

Our temperature chambers, furnaces and instrumentation can perform tests at temperatures between -150°F and 2000°F.

Aluminum, steel, titanium and nickel super alloy specimens, in a full range of geometries and sizes, can be prepared and tested at LTI.

SPECIMEN MACHINING FOR FRACTURE MECHANICS

Preparing Specimens and Fixtures for Testing

LTI’s in-house machine shop is equipped with the latest CNC equipment for machining fixtures and test specimens. CNC Cylindrical Grinding is used for cylindrical and out of round grinding, and is performed using C-axis technology.

Specimens are prepared as required by ASTM specifications and include the following for Fracture Mechanics Testing:

- C(T)
- M(T)
- Surface Flaw

We also prepare specimens for customers who do their own in-house testing.

Email, call or visit our website for more information, accreditation certificates and pricing.