LUCIDEON
insight creating advantage

CRYOGENIC AND HIGH TEMPERATURE MECHANICAL TESTING

INTRODUCTION

Cryogenic and high temperature mechanical testing is a key technique used to understand the behavior of materials and assess mechanical properties in real-life operating conditions.

Our knowledge and experience of cryogenic and high temperature mechanical testing means we understand the challenges and complexities of simulating complex real-life loading scenarios. The extreme temperature environments in which materials are required to perform can present a wide range of issues relating to property evaluation. Our years of expertise, coupled with state-of-the-art ISO 17025 and Nadcap compliant facilities, enables us test your materials under standard and product-specific loading configurations.

WHAT MAKES US DIFFERENT?

We:

- have extensive material science expertise which allows us to provide solutions, not just test results
- have over 70 years of experience assessing mechanical properties of materials through standardized and custom test programs
- work with you to develop test plans and act as an extension of your internal capabilities, thus complementing your knowledge and solving any problems that may exist – saving you time, money and resources.

We have a wide range of mechanical testing capabilities including:

CRYOGENIC (-196°C TO AMBIENT)

- Tensile
- Low Cycle Fatigue (LCF) and High Cycle Fatigue (HCF)
- Facture toughness

ELEVATED (AMBIENT TO 1,650°C)

- Tensile
- LCF and HCF
- Thermo Mechanical Fatigue (TMF)
- Facture toughness
- Charpy impact
- Bend testing
- Compression
- Creep
- Flexural strength
- Shear strength
- Stress rupture
- Poisson's Ratio.