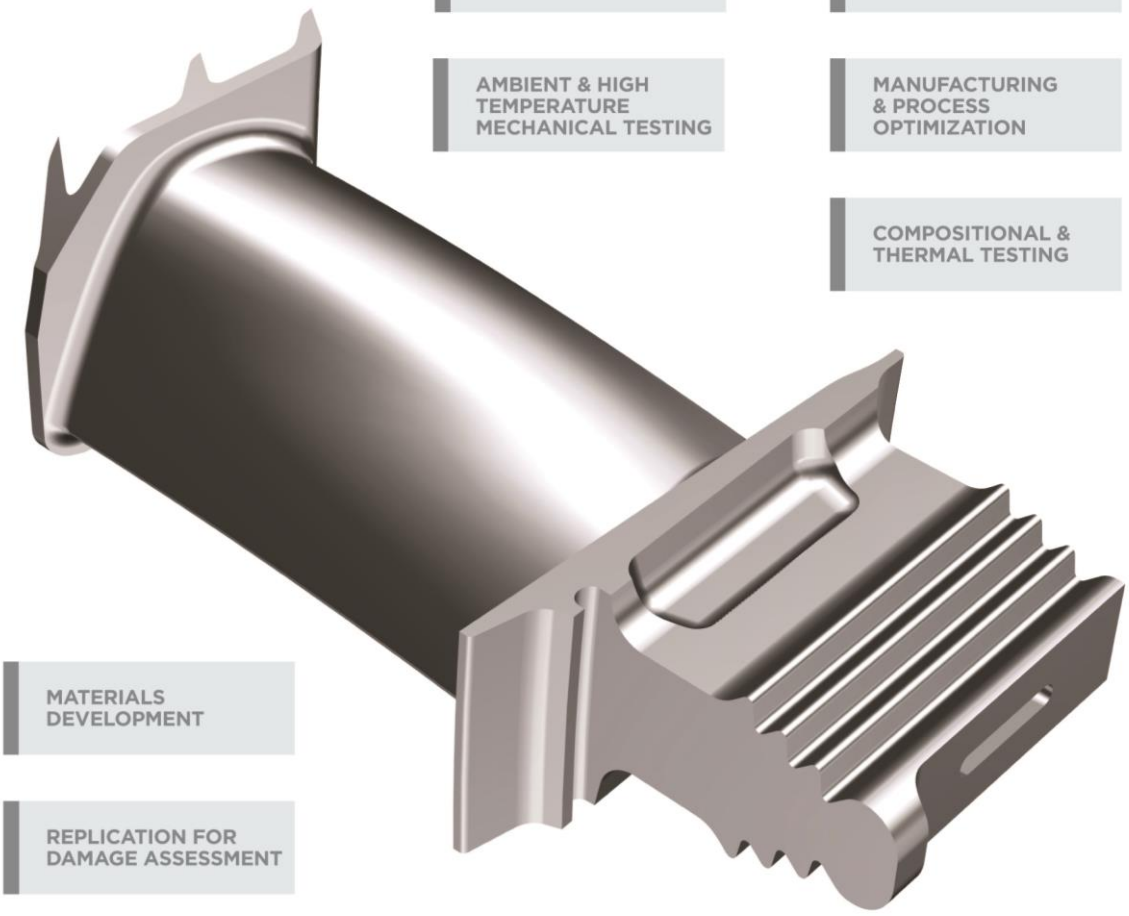
LUCIDEON
insight creating advantage

MATERIALS AND PROCESSES



MICROSTRUCTURAL EVALUATION

Lucideon has broad expertise in the evaluation and qualification of superalloys and thermal barrier coatings (TBC) used throughout the aerospace and energy industries. From evaluation of gamma prime, alpha case and orientation in titanium and superalloys to thickness, chemistry and bond evaluation in TBCs, we have the resources and experience to augment your internal teams.

AMBIENT & HIGH TEMPERATURE MECHANICAL TESTING

At Lucideon, we offer a wide range of ambient and elevated temperature mechanical testing including tensile, fracture toughness, and 3-point bending. Our experience and trained personnel enable us to provide not only test results but answers for when the unexpected occurs.

WEAR EVALUATION & TRIBOLOGY

Our wear testing facilities evaluate the friction, wear and lubrication performance of your products. This is supported by our world-leading surface evaluation, materials characterization, and failure, debris and wear pattern analysis. We work to ISO methods and develop customized protocols when your novel design doesn't quite fit the standard.

REPLICATION FOR DAMAGE ASSESSMENT

Turbine blades can be roughened due to erosion and/or corrosion. At Lucideon we can replicate the blade surface in the field during planned outages and then perform a non-destructive test to measure the extent and location of this roughness. By making replica measurements and comparing the data over time, it is possible to monitor the blade surface.