

ADVANCED CERAMICS SERVICES

PROCESS OPTIMIZATION

- Forming
- Sintering
- Powder Processing
- Drying
- Casting

FAILURE ANALYSIS

- Surface Science
- Contamination
- Fractography
- Forensic

MATERIALS CHARACTERIZATION

- Physical
- Microstructural
- Chemical
- Mechanical



MATERIALS DEVELOPMENT

MATERIALS SELECTION

QUALITY ASSURANCE

INNOVATION

- Nanomaterials
- CMCs

PROCESS OPTIMIZATION

Optimizing or reorganizing existing processes, or implementing new ones, provides the ideal opportunity to ensure that systems and processes are running at their most efficient. Our processing experts can visit sites, audit production processes and recommend how to optimize processing facilities. Optimization encompasses all stages of the manufacturing process, from raw materials selection through to decorating.

FAILURE ANALYSIS

Failure in engineering or advanced ceramics can cause serious problems for the operation of safety critical equipment, so, on the rare occasions that failure occurs, it is important to understand the what, how and why. Our experts use state-of-the-art testing and analysis capabilities to diagnose the root cause of a failure and provide corrective actions to stop them happening again.

MATERIALS SELECTION

With a large array of materials available choosing the most appropriate for your application can be a difficult and lengthy process. Lucideon's material selection service uses multiple data sources, materials analysis and our extensive application knowledge to provide the best choice of coating for your application.

MATERIALS DEVELOPMENT

We develop new coatings and improve existing ones through the application of materials knowledge, our expertise and commercial know-how. Using comprehensive analytical capabilities and pilot scale facilities, we can quickly turn an idea into a product ready for market, by working closely with your team to develop materials with the required properties for the required applications.

QUALITY ASSURANCE

Using our extensive analytical capabilities, our experts provide regulatory testing to EU and international standards to ensure your product meet the latest production standards and regulatory requirements. We also offer auditing of product processes and management certification systems to, e.g. ISO 9001 etc., to ensure compliance.

MATERIALS CHARACTERIZATION

Do you know what all your materials are composed of? Do you know how your materials perform under extreme conditions? Whether benchmarking your products against those of your competitor, or simply measuring performance for data sheets or marketing purposes, Lucideon provides qualitative, quantitative and visual data to support a full understanding of your materials.

NANO MATERIALS AND COMPOSITES

The capabilities of high performance materials can potentially be improved by the application of nanomaterial or composite technologies. Lucideon can develop, analyze and commercialize the use of both technologies to optimize current materials and products and develop those of the future.