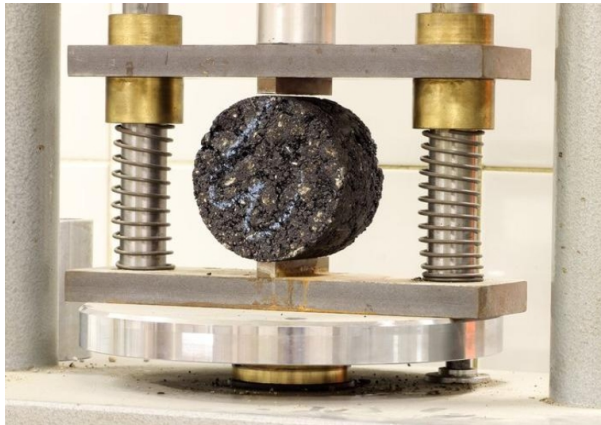


# Materials Testing and Characterization

Materials testing is an important component in any function of the building and operating equipment. Knowing the properties of materials can influence the design of systems and how they may be operated. Various methods of non-destructive and destructive testing of materials exist to help compile the data to ensure products are manufactured to specified performance levels. Through effective implementation and use of materials testing and materials characterization, clients can gather the data required to ensure suitability for service and/or identify areas of concern within a given system.



## THE Applus+ SOLUTION

Applus+, through its long history of dealing with both non-destructive and destructive material testing methods, provides clients with the information needed to properly assess their systems and components.

The overall goal of Applus+ is to provide material-characteristics and component data required by the operator to ensure minimal system upsets over the course of the asset's life. Through the use of internal and/or external data-management software, results may be recorded and reported, trending previous data-points with a view to building predictive models and estimating potential asset life.

## Target customers

All industries benefit from the use of an effective materials testing and inspection programmes. By verifying the material and characteristics of the component, confirming the material's functional properties or investigating for potential defects, our programmes for materials testing and inspection can help to ensure the function, quality and safety of an asset.



## Key customer benefits

Benefits of materials testing include:

- Understanding the mechanical properties of the materials used
- Assessing system integrity
- Verifying the materials used throughout construction
- Identifying potential areas of concern
- Proving through destructive means a model of expected exposure
- Enhancing product quality
- Ensuring the safety of those working in areas of potential energy release