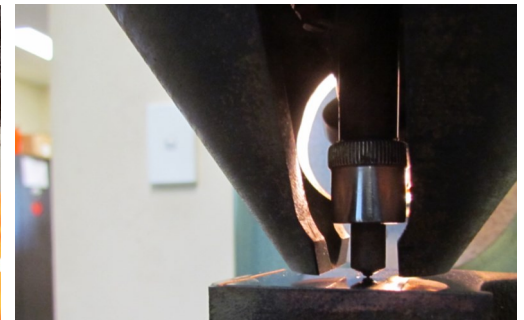
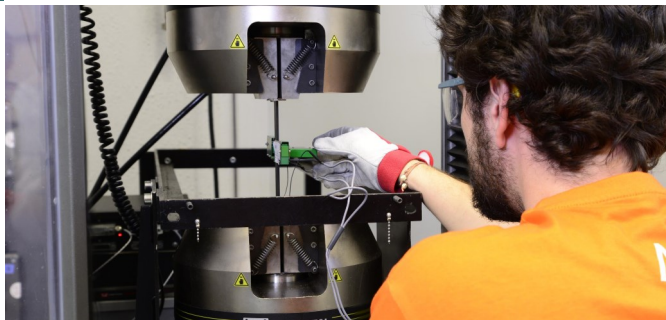


Materials Centre

Mechanical Testing



The **Applus+** Materials Centre operates a full mechanical testing facility for destructive testing of various materials.

The types of mechanical tests and associated equipment available include :

- 60 tonne servo-hydraulic Universal Testing Machine for tensile, compression, flexural/bend, fracture toughness, low cycle fatigue testing with full computer control
- 500kg electro-mechanical Universal Testing Machine for the testing of polymers and composites
- Charpy Impact tester
- Vickers Hardness tester with 5kg to 250kg test load range
- Vickers Micro-Hardness tester with 15gram to 500gram test load range
- Full machining workshop

Each test is generally conducted in accordance to either Australian or related international standards. Testing can generally be conducted with client witness as required.

Also essential to each investigation are understanding the client applications, structures, equipment, processes and understanding and relating manufacturing processes for the materials in relation to the failure modes observed.

Expertise

The Materials Centre is currently managed and operated by a team of dedicated professionals with key expertise in materials science and technology. Our personnel have worked in the Oil & Gas, Mining and manufacturing industries for over 30 years, specializing in failure analysis of equipment, materials analysis and characterization.

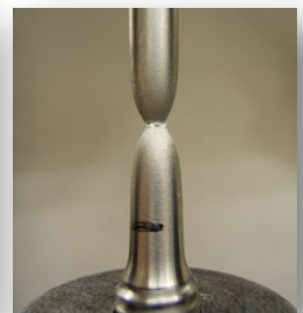
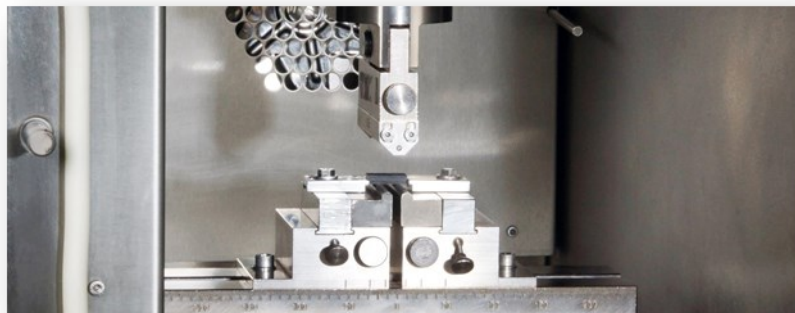
Mechanical Testing Applications

Various mechanical tests can be conducted to provide:

- Comparison of supplied materials to standards
- Quality Control
- Weld procedure qualification
- Certification of materials
- Product development
- Residual life measurement for structural components

Our test equipment is routinely calibrated in accordance to standards and guidelines established by NATA.

Specific test arrangements and procedures can also be developed in discussion with our clients to meet specific test conditions that improve the correlation to real world applications.



Additional Services

Applus+ provides the following services as individual packages or combined to provide a total Asset Integrity Management programme.

- Advanced (non-intrusive) Inspection Services.
- Sub-sea Inspection Services.
- Engineering Design Solutions.
- Risk Based Inspection Planning.
- Inspection Management Services.
- In Service Inspection.
- Plant Life Management.
- Metallurgical Services.

Importantly, **Applus+** can also call upon extensive in-house expertise and resources for advanced inspection and conventional NDT, providing a total capability for management of through life plant integrity.

Applus+, in collaboration with our local and international partners, has extensive experience in the application of these services to a wide range of industries including:

- Oil & Gas.
- Petrochemical.
- Refining.
- Ore Processing and Handling.
- Power Generation.