

TESTING AND ANALYSIS

OVERVIEW

The BHP Institute of Railway Technology has a wide range of testing facilities and analysis capabilities including –

- high performance servo-hydraulic machines,
- versatile monitoring tools and methods,
- sophisticated materials examination and analysis facilities.

RESOURCES

- Machine capacities up to 60 tonne dynamic to 40Hz and static to 500 tonne.
- Test parameters including force, pressure, deflection, temperature, wear and friction.
- Non Destructive Testing.
- Electronics and process control.
- Monitoring facilities including load, deflection, stress, strain, temperature and acoustic emission.

The Institute also has access to the University's range of test facilities within the mechanical, electrical, civil, materials and other departments



GENERAL TESTING CAPABILITIES

- Metal and metal products
- Major assemblies and large scale components
- Rail and automotive components
- Ballast and formation
- Lifting gear
- Springs and energy absorbing devices
- Tensile, compression and fatigue testing
- Failure Analysis
- Materials examination
- Optical and electron microscopy
- Micro-analysis
- Chemical analysis