

*Advanced NDT including Rope Access  
Pressure Vessel Inspections  
Pressure Equipment Fitness-for-Service Assessments  
Vibration and Infrared Condition Monitoring  
Mechanical Condition Assessment  
Inspections of Earthmoving Equipment  
Risk Assessment Facilitation  
Quality Assurance and Rope Condition Monitoring*



*International Involvement in Engineering, Mining and Drilling*



## Personnel

Quest Technical Services complies with BEE requirements. All inspectors are fully qualified to industry requirements and are of the most experienced in South Africa.

## Safety

Quest Technical Services complies with all safety requirements in the Global industry.

## Equipment

Modern, state of the art instrumentation, complying with international requirements and standards are used at all times.

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## Non-destructive Testing Services



We have developed and implemented special non-destructive techniques to assess and monitor the safe operation and maximise the lifespan of critical equipment and components.

Our NDT technicians use the most effective technology to aid the early detection of flaws or deterioration in components. The technology advantage is boosted by ongoing training to ensure accurate assessments.

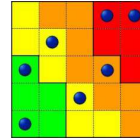
### NDT Services include:

- Thickness measurements
- MPI (Magnetic Particle Inspections) for surface or near surface defects
- Eddy current testing for surface or near surface defects
- Corrosion mapping
- Time of Flight Diffraction testing (ToFD) of welds and winder drum shafts
- Ultrasonic Phased array inspections of welds and components subject to cracking
- Pressure vessel, boiler inspection and certification
- Pipeline inspection
- Tank inspection
- Ground penetrating radar for silo & box front inspections
- Sheave wheel rim profile analysis
- Non-destructive testing consulting services

### Key Benefits:

- On-stream inspections are the primary focus
- Cost effective inspection solutions
- Defect management through quality defect assessment
- Improved asset management
- Integration into reliability centered maintenance

## Consulting and Risk Services



Quest offers a variety of consulting services to the mining and related industries. The services have been developed specifically to assist our clients with their risk management programmes.

### Risk Assessment Services:

Risk assessments are an important part of successfully operating a business. It allows for the identification of business risks, safety risks and environmental risks of which the safety risk assessments are a legal requirement and also the responsibility of all employers.

Quest offers the facilitation and documentation of:

- Baseline Risk Assessments
- Issue Based Risk Assessments
- Bowtie Analyses to identify and develop recovery strategies

### Risk Based Inspection Planning of Pressurised Equipment

Quest specialises in the development of Risk Based Inspection (RBI) programmes for pressurised equipment.

The RBI programmes offer an equipment based risk assessment, Written Schemes of Examination for the individual plant items and an engineering Fitness-for-Service assessment.

We focus on developing on-stream inspection programmes using the most appropriate inspection technologies that deliver inspection results that can be used to trend degradation.

These inspection results are analysed to determine the fitness-for-service and the inspection intervals are set based on the remaining life and the associated risks of operating the equipment.

### Structural Engineering

The continuous or regular assessments of structural equipment is important so as to understand the actual condition and the maintenance requirements.

Quest offers SIMM (structural inspections and maintenance management) of all structural equipment. These inspections are performed and a detailed report is generated describing the condition of the equipment together with remediation actions that are required.

## Mechanical Services



Quest offers a variety of mechanical services to the mining and related industries so as to ensure the operability of their equipment. These services include:

- Mill and Scrubber Audits
- Laser Alignment
- Bearing and Coupling repairs and maintenance
- Turbo Compressor overhauls
- Winder Shaft Alignment
- Ventilation Fan Auditing
- Dynamic Balancing
- Sheave wheel alignment
- Overhead Crane inspections
- Inspections of Excavators and Earth Moving Equipment
- Hydraulic repairs

## Vibration monitoring and oil analysis



Quest offers additional services in order to satisfy the requirements of our clients. The additional services are:

### Condition Monitoring

- Vibration measurement and analysis
- On-line vibration monitoring
- Oil analysis
- Infrared Thermography

## Other Services



Quest also offers additional services in order to satisfy the requirements of our clients.

### Quality Assurance and Quality Control

Third party Inspections and QA Audits on projects.