

VERTEST

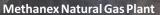
Project Examples

Inspection & Maintenance - Liberdade Fso, Bayu Udan

Liberdade was the world's first constructed dual FSO (Floating, Storage and Offloading) ship for Bayu-Udan field for Conoco Phillips. Vertest's tasks included providing UT thickness, UT Weld Scanning, Magnetic Particle, Dye Penetrant and Visual NDT Methods to the FSO Hull by double Rope Access.

Other inspections carried out:

- The weld scanning inspection of the deck fairleads
- Magnetic particle Inspection of bevel edges on flanges for refridge maintenance work
- Magnetic particle Inspection of Lifting lugs
- UT thickness Inspection of the deck (areas of visible severe corrosion)



CUI (Corrosion Under Insulation) inspections were undertaken to all pipe work. All work at Methanex was completed on pipe racks from ropes at height.

By utilising rope access the pressures of supplying large quantities of unavailable scaffolders and scaffolding was eliminated.

Our technicians moved through the pipe racks swiftly and caused no disruption to surrounding contractors.



Wagon Yoke Inspection

At Pacific National's Dysart yard, Vertest were called upon to work alongside Pacific National in testing and creating a condition monitoring strategy to prevent failures leading to improved productivity by minimising down time and unexpected stoppages. This work needed to be conducted simultaneously with other works on the wagons, giving a seamless flow to their operation.

Pacific National utilise Vertest's professional knowledge to position drilled access holes in the wagons to allow access to the areas that require inspection. Vertest created calibration pieces and provide a Phased Array Ultrasonic testing technique that allows identification and sizing of any cracked areas.



Chimney Stack Structural Survey

Vertest completed an integrity survey of the 60m high Double Brick lined Chimney Stack working with Geovert and GHD Consultants.

The Chimney stack was accessed by aide, ascending from the ground up using Hilti Mechanical Shear Set Bolts. Cover meters were used to map reinforcing and plot locations for core samples. Once core samples were taken holes were entered with a Bore Scope to survey strata and lead chimney lining seals. Schmitt Hammer and Impact Echo tests were used. On completion of testing holes were repaired.

As part of the work a structural integrity survey of the existing Access Ladders and Platforms was under taken.



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Project Examples

Queensland Alumina Limited - Service Contract

In Gladstone Vertest provide Rope Acces NDT and Coatings Inspection services at the QAL Refinery (one of the world's largest alumina refineries).

Vertest plays a crucial role in providing 3rd party NDT to Head contractor Geovert who carry out Mechanical and Structural repairs by Rope Access. Vertest is part of a team that consists of a WTIA cert 10 welding supervisor, L3 NDT supervisor and techs, coded welders, fitters, riggers, Blasters, Painters and Tradesman all of whom work by Rope Access.

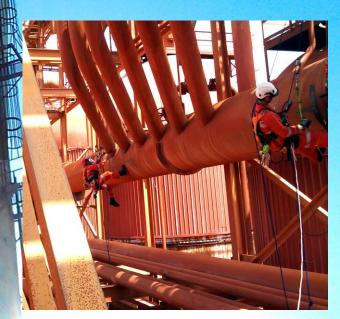
The methods used have created significant cost savings for the client by eliminating the use of cranes and man baskets to carry out inspections as well as eliminating the need to build and strip scaffold.

The following is a selection of areas of the Refinery where Vertest have worked carrying out inspections:

- Aux Tower Make Up Lines
- Bauxite Unloaders
- Boilers
- Bucket Elevator Shafts
- Caustic Tanks
- · Chimney Stack Ladders
- Coal Silos
- Condensation Tanks
- Conveyors
- Cooler Tower Ball Mills
- Cranes
- Cyclones
- Day BinsDigesters
- Draft Tubes
- Fan Shaft Vent Valves
- Flash Tanks
- Flumes
- Liquor Relay Tanks
- Mill Retention Tanks
- Mud Tanks
- Oil Tanks
- Precipitation Tanks
- Pump Off Pipes
- Relief Lines
- Settler Tanks
- Slurry Density Control Tanks
- Test Tanks
- · Train Loader Bins
- Washer Tanks
- Washer Feed Lines
- Wharf Pipe work







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Project Examples

Red Mud Dam

QAL Refinery's Red Mud Dam pipeline crosses the South Trees tidal inlet where Vertest were contracted to perform structural inspections over water.

Tasks included various surface coating inspections including overseeing the quality of preparation and coating application to structural steel, removal and replacement of Denso corrosion systems, sea pile cap and structural fastener inspections.



Gove Agglomerator Tank

Vertest completed a full turnaround of the tank which included MT & UT to the Tank Shell, Launder Chutes, internal and External Tank Nozzles, Draft Tube Hangers & Support Stays as well as visual inspection of the Draft Tube Assembly, Agitator Steady Bearing and Propeller Housing and Agitator Assembly.

All works were completed by Rope Access.

As part of the scope Vertest completed Magnetic Flux Leakage Floor Scanning.



Cement Australia, Cement Ball Mill 1

Vertest have been contracted by Cement Australia to carry out Ultrasonic Thickness testing and MPI to various plant including Cooling Towers and Ball Mills. Rope Access has decreased the downtime of plant and eliminated scaffolding leading to increased cost savings.



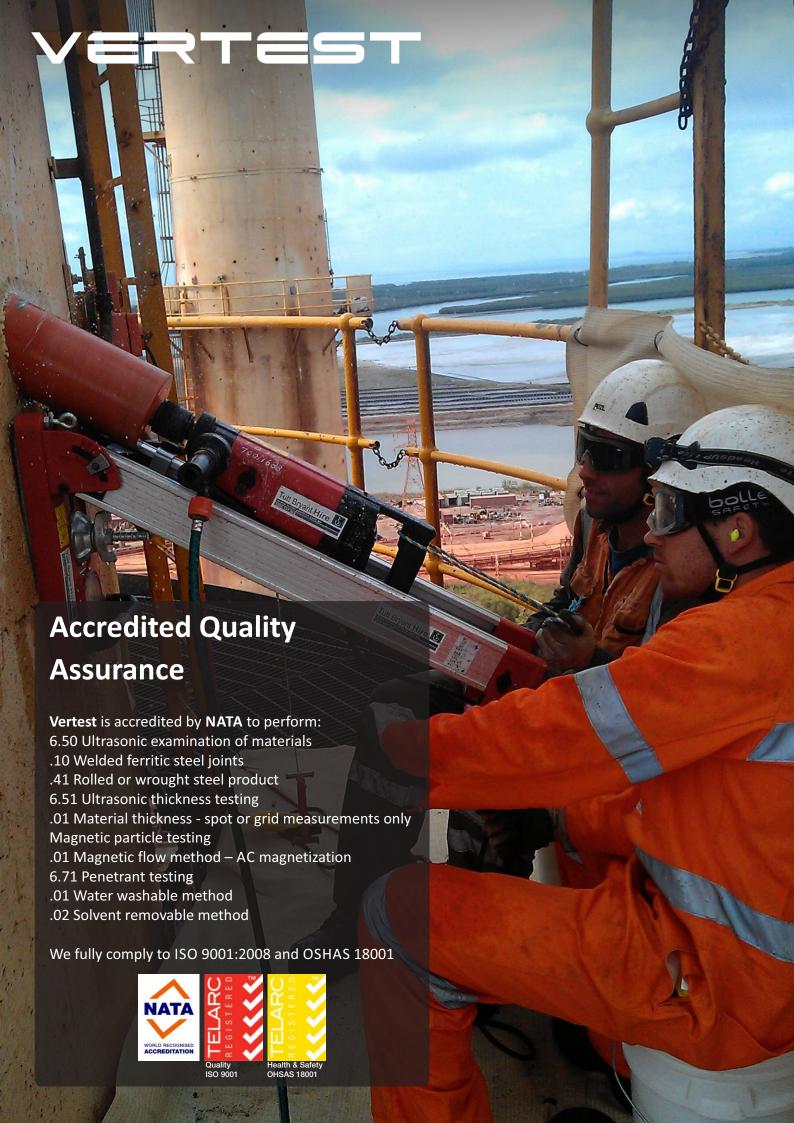
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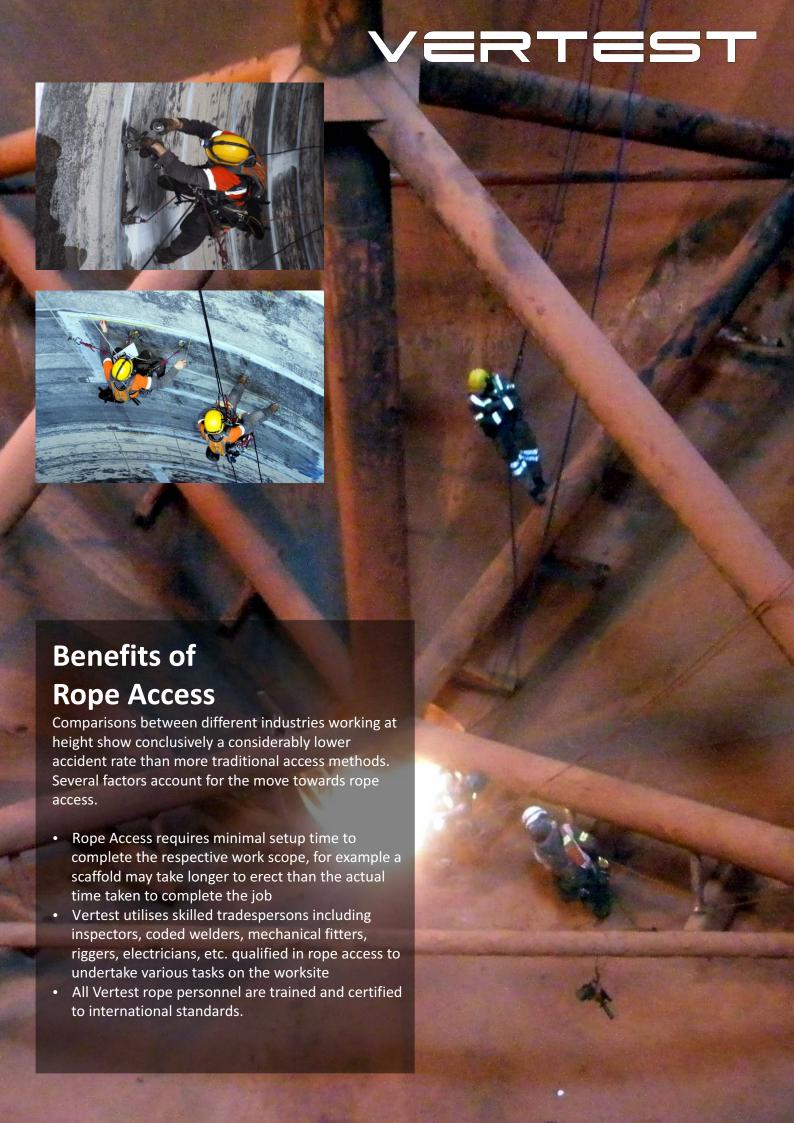
Geovert is an engineering and construction company that provides innovative difficult access solutions for industry clients in the Mining and Oil & Gas sectors. **Geovert** operate through-out the Asia Pacific region with offices across Australia, New Zealand, Singapore and Indonesia. The company operates two divisions; Ground Support and Asset Integrity Maintenance, which is strengthened by the wholly owned subsidiary NDT company, **Vertest.**

Asset Integrity Maintenance

The division provides the following comprehensive range of inspection, construction & maintenance services:

- Inspections: Visual, CUI & NDT
- Fabric Maintenance: Blasting, Painting, Coatings & Insulation
- Mechanical & Structural Maintenance: Fabrication, Installation, & Welding
- Installation of non-scaffold access platforms
- Rope Access, Rigging & Heavy Lifting





Conventional method for mag particle inspection inside tank

Erect scaffold 4 men x 120 hours

Blast, buff & surface preparation 1 man x 6 hours

Inspection of works
1 man x 3 hours

Dismantle scaffolding 4 men x 120 hours

Total Man Hours = 249

Technical access method for mag particle inspection inside

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Abseil to worksite

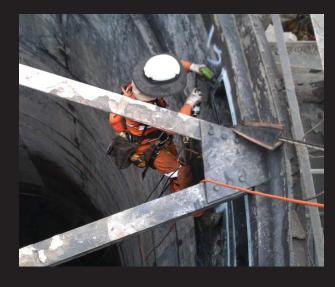
Blast, buff & surface preparation

Inspection of works

Derig worksite

3 men x 10 hours

Total Man Hours = 30











Rope Access NDT Specialists

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