

Asset Inspection

Imagery Services using RPAS

Regular inspections and maintenance are critical for asset owners to ensure the safety of people and maximise the efficiency of their operations. Structural engineers face many challenges with inspecting and reporting on the condition of assets. Onsite inspections often need to be coordinated with shutdowns and inspection teams face possible exposure to hazards and risks that require specific (and sometimes expensive) controls to ensure their safety.

With little or no interruption to onsite activities, Scout Aerial captures and collates imagery using remotely operated vehicles (air, land and water), eliminating exposure of personnel to danger and allows higher order inspections from the safety of an office. Engineers can easily identify, locate and report defects from the resulting high resolution full-colour and thermal infrared imagery (which can reveal heat loss and insulation issues that are not apparent to the naked eye). Our teams also operate ultrasonic sensors that provide information about the thickness of steel structures such as 'hot' flue stacks and vents that are otherwise impossible to inspect safely.

We generate 3D models or 'Digital Twins' which can be used to classify defects and prioritise maintenance activities, ensuring repairs and replacements are completed safely, on-time and with minimal disruption to operations. Our clients have peace of mind knowing Scout Aerial is certified, compliant and fully insured.

APPLICATIONS

- › Routine inspection of industrial facilities, flue gas stacks, water tanks, powerlines, communication towers, wind farms, solar farms etc.
- › Large structures that require regular inspection and maintenance
- › Locations that are dangerous or difficult for people to access
- › Creation of 3D digital models to monitor deformation

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|-------------------|---------------------------|
| ✓ Surface defects | ✓ Safety hazards/guarding |
| ✓ Cracks/Splits | ✓ Misalignment |
| ✓ Rust/corrosion | ✓ Deformation (tanks) |
| ✓ Seals and leaks | ✓ Fixings and fastenings |

BENEFITS

- › Reduced risk to personnel (working at heights, confined spaces, high voltage, biological contaminants, large bodies of water)
- › Reduced downtime and loss of productivity
- › Quicker and more cost effective than labour-intensive methods
- › Real-time analysis and early detection of issues
- › Compliance & Reporting benefits

DELIVERABLES

- › High resolution images and video for granular examination from the office
- › Thermal, multispectral and ultrasonic data
- › 3D models/digital twins for sharing and collaboration
- › Automated defect tagging reports

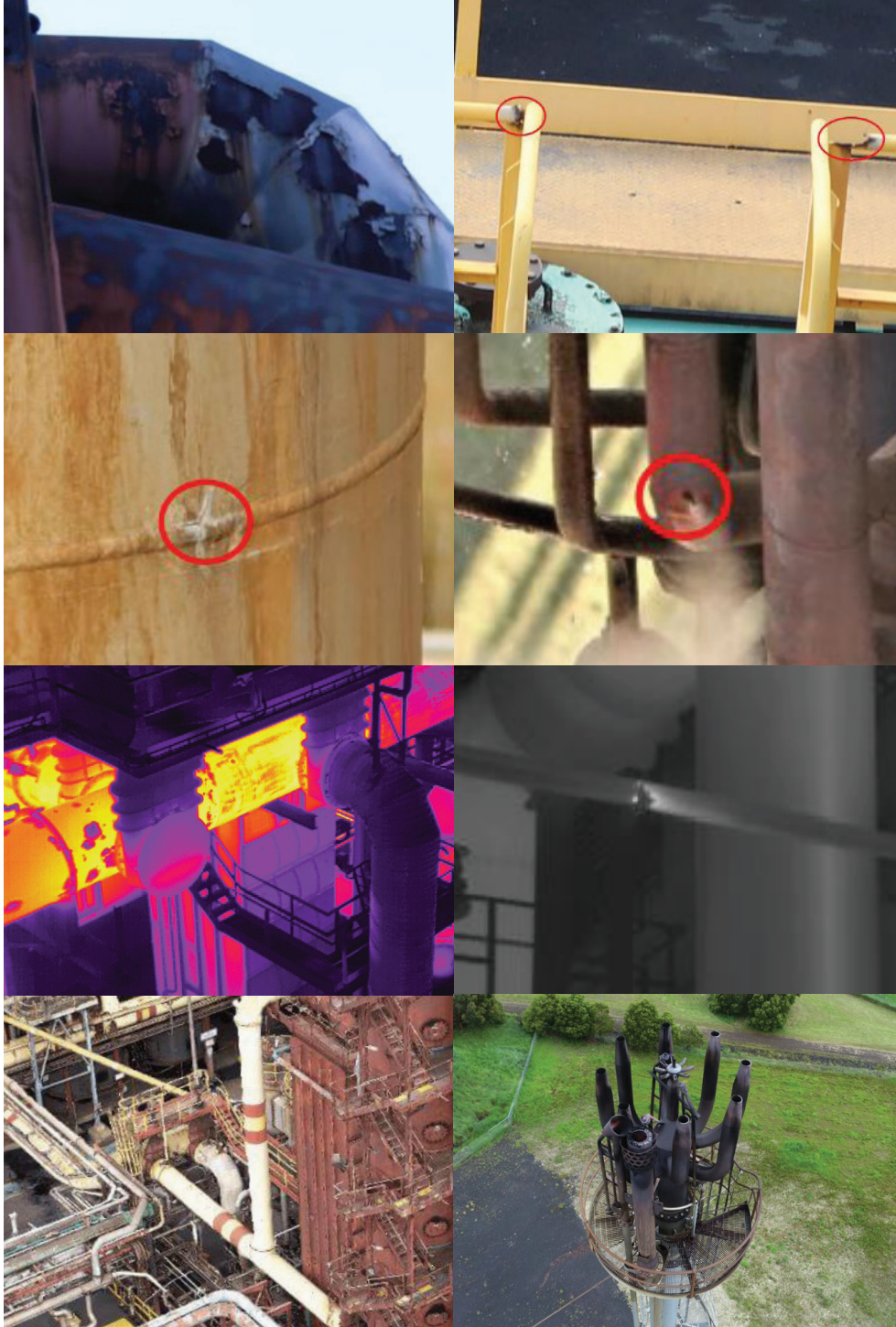


Visit scoutaerial.com.au/capabilities/inspection to learn more.

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POWERFUL INSIGHTS



- › Identify potential hazards before they become incidents, accidents or delays
- › Check for hazards and integrity to be sure it is safe for crews to respond
- › 360-degree assessments with the ability to zoom in for granular examinations capable of detecting surface degradation, cracks, leaks or other flaws
- › Ability to capture locations that are dangerous or difficult for people to access
- › High definition thermal imagery that can see what the human eye can't
- › Onsite engineers can view live video and request further inspection of problematic areas
- › 3D digital models for construction, preventive/ corrective maintenance
- › Detailed high resolution imagery for your asset inventories and full data storage for future comparison and analysis

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