



## CAPABILITY STATEMENT

[www.ndttechops.com.au](http://www.ndttechops.com.au)

### About Us

NDT Tech Ops is a West Australian owned and operated business offering comprehensive non-destructive testing (NDT) services, carried out with the utmost level of expertise and professionalism by qualified, experienced technical staff who are committed to providing high-quality workmanship.

Since its inception in 2016, NDT Tech Ops has built strong relationships with Clients, based on safe, reliable delivery of projects while providing the flexibility to meet our Clients' needs.

We constantly strive to be the best and safest in the industry. We achieve this by understanding and working collaboratively with our Clients to understand their needs. We invest in the safety and development of our team and use the latest NDT technologies.

### Our Values

#### FLEXIBILITY:

We take the time to understand and work with our Clients and understand their individual needs

#### EFFICIENCY:

We are available on call, with rapid response times for testing and reporting

#### RELIABILITY:

Our success is built on the success of our Clients – we do what we say we will do within the time frames required by our Clients



# QUALITY

NDT Tech Ops is committed to providing the highest level of product-testing services for our Clients.

We have established comprehensive policies and operational procedures, which comply with ISO/IEC 17025 requirements.

All employees accept their share of responsibility for identifying Client needs and expectations and ensuring that our service meets or exceeds these expectations, while complying with all legal and contractual obligations.

Our Management System is regularly reviewed by Senior Management, to ensure our objective of total customer satisfaction is met, and that the system is suitable and effective in meeting both Client and company needs.

NDT Tech Ops has a culture which positions us as leaders in our field. We are committed to continuous process improvement, human resources development, and working closely with our Clients to understand and exceed their needs.



# SAFETY AND HEALTH

At NDT Tech Ops, our people are our most important asset, and we are absolutely committed to their safety and health.

We engage directly with our Clients and employees to ensure shared responsibilities for our safety and health objectives are met.

NDT Tech Ops believes:

- All incidents are preventable;
- Leadership is required for success in safety;
- Each of us has a personal responsibility for our safety and the safety of others;
- No job is so important that it will be pursued at the sacrifice of safety;
- Success depends on ensuring everyone has the competence, knowledge and desire to work safely.

To achieve this, we:

- Ensure a positive, supportive culture based on active leadership, consultation and engagement with all employees and Clients;
- Endorse relevant legislation, standards and best practice that impact on the operation and work environment, including duty of care required by employers and employees;
- Identify hazards and verify controls— that eliminate or reduce the potential risk to a level as low as reasonably practicable— are implemented effectively prior to commencing any activity;
- Implement and monitor safe work practices, continually review related procedures to ensure employees receive approved, current information to carry out tasks safely and effectively;
- Actively recognise and support opportunities for continuous safety and health improvement.



# MAGNETIC PARTICLE INSPECTION

The use of magnetism to detect discontinuities in ferromagnetic material can be traced back to the mid-1860s, when magnetised cannon barrels were swept with a compass to detect localised magnetic field leakages that corresponded with flaws in the barrels.

Magnetic Particle Inspection was developed in the 1920s, initially discovered by William Hoke when he discovered grinding dust sticking to and making patterns on ferromagnetic materials that correspond with cracking. By 1929, methods were established, equipment was made available, and the use of this test extended across industry.

Although the physics of the inspection has not changed in modern times, the technique has benefited from advancements in material technologies which have resulted in increased sensitivity and efficiency. Magnetic Particle Inspection (a.k.a. MPI, MT) is a non-destructive testing method used to detect surface or near-surface discontinuities in ferromagnetic materials. It is widely relied upon by industry globally as a cost-effective surface NDT method.

## Magnetic Particle Inspection Techniques Offered by NDT Tech Ops

- Colour Contrast using 240 volt AC portable yokes in accordance with AS 1171 and ISO 9934.1;
- Fluorescent using 240 volt AC portable yokes in accordance with AS 1171 and ISO 9934.1.



# ULTRASONIC TESTING INSPECTION

Ultrasonic inspection of materials was developed by several people across the globe early during the 20th Century. Inspired by sonar technologies developed prior to WW2, studies for the application of ultrasonic waves continued through the years. As early as 1931, and through to 1940, various patents were issued for equipment as technologies developed; however, ultrasonic testing equipment only became commercially available in the 1950s.

Although the physics of the inspection has not changed in modern times, advancements in material technologies and computing power have increased both the sensitivity and efficiency of this technique.

Ultrasonic Inspection (UT) is a non-destructive testing method used to measure the thickness of materials, and to detect discontinuities in solid materials. This technique is relied upon by global industry as a reliable and sensitive NDT method.

## Ultrasonic Inspection Techniques Offered by NDT Tech Ops

- Ultrasonic testing of fusion welded joint in carbon steel and low alloy steel in accordance with AS 2207 and ISO 17640;
- Ultrasonic thickness determination in accordance with AS 2452.3 and AS ISO 16809.



# LIQUID PENETRANT INSPECTION

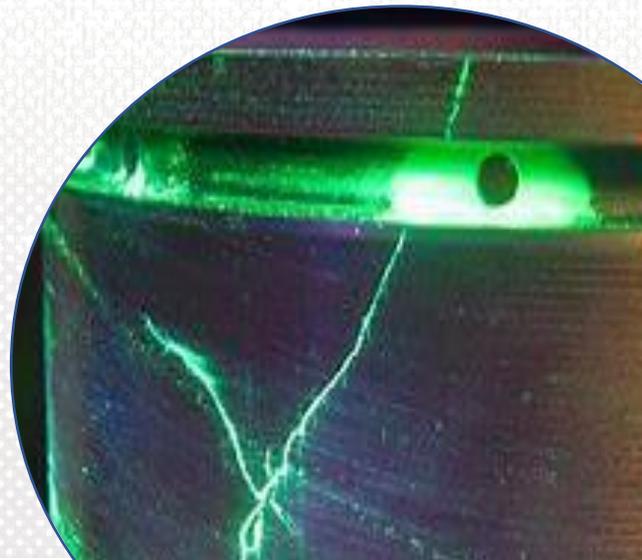
Liquid Penetrant Inspection was initially developed from an inspection technique call 'Oil and Whiting', which was used from the 1880s-1920s for the detection of surface-breaking discontinuities, particularly in the rail industry. The technique we use today was enhanced during 1935 to 1940 by developments in Fluorescent Penetrant Inspections, to meet the WW2 requirements of a higher-sensitivity inspection method for aircraft components.

Liquid Penetrant Inspection (a.k.a. LPI, PT) is a non-destructive testing method for detection of open-to-the-surface discontinuities in non-porous materials.

Although commonly used as a technique to inspect non-ferrous metals, it is also used on non-metals, and widely relied upon by global industry as a sensitive-surface NDT method.

## **Liquid Penetrant Inspection Techniques Offered by NDT Tech Ops**

- Solvent Removable Colour Contrast in accordance with AS 2062 and ISO 3452.1;
- Solvent Removable Fluorescent in accordance with AS 2062 and ISO 3452.1;
- Water Washable Colour Contrast in accordance with AS 2062 and ISO 3452.1;
- Water Washable Fluorescent in accordance with AS 2062 and ISO 3452.1.



# NDT

TECH OPS

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