Company Profile

www.itsinspection.co.za

ITS
NDT AND INSPECTION SERVICES

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Innovation. Reliability. Safety.

First impressions are the ones that last”

As the demand for non-destructive testing (NDT) and quality assurance continues to grow both locally and internationally, I.T.S (Inspection and Testing Services) was established by seasoned experts in the industry.

Recognizing the critical need for reliable, accurate, and efficient inspection services, our founders set out to create a company that not only meets but exceeds the stringent standards required in various industries. I.T.S was built on the foundation of delivering high-quality, cost-effective solutions that ensure the integrity and safety of materials and structures without causing damage.

Our team’s deep industry knowledge and commitment to excellence drive us to provide unparalleled service, tailored to the unique needs of each client, ensuring compliance, safety, and performance across all projects.

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[Welcome to our world]

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Key Points

NDT & Inspection Productivity

- **Specialists in NDT & Quality Assurance**

2016
Building the team
Investment in equipment and training.

2019
Fully Accredited
Complete ISO

2024
Market Leader
The benchmark in NDT and Inspections

SAFETY

Safety is our utmost priority, and we are dedicated to continuous improvement and unwavering quality.

We believe that first impressions are lasting, and this principle drives us to excel in every aspect of our work.

Our commitment to delivering exceptional service sets us apart as industry leaders in the engineering, manufacturing, and petrochemical sectors, where we consistently uphold the highest standards of quality and safety.

MISSION

- Our mission is to strive for the best possible way to produce services at high standard of quality, giving the client value for money and peace of mind when using our services.
- All employees (together with the employer) strive to conduct themselves with utmost professionalism, treating every job as an important one, be it big or small.

- We support innovation and research intended in advancing the industry.

10 years+

Experience

Our team boasts a wealth of knowledge and expertise in the NDT and inspection field

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Innovative Technologies

Impact and Vision

KEY INNOVATIONS:

- **Advanced Digital Radiography**

  With the integration of high-resolution digital detectors and sophisticated image processing software, inspections are faster, safer, and more precise, allowing for real-time analysis and improved defect detection capabilities.

- **Phased Array Ultrasonic Test-**

  By using multiple ultrasonic elements and electronic time delays, PAUT allows for more detailed and versatile inspections, including complex geometries and thick materials. This technology provides high-resolution imaging and advanced defect characterization, making it ideal for critical applications.

JOIN US FOR THE FUTURE OF INNOVATION

We are not just keeping up with industry advancements – we are setting the pace. By embracing cutting-edge technologies and forward-thinking solutions in non-destructive testing, we're redefining standards of quality, efficiency, and reliability. When you partner with I.T.S, you're not just choosing a service provider; you're joining a community of innovators committed to pushing the boundaries of what's possible. Let's shape the future of inspection and testing together – where precision meets progress.

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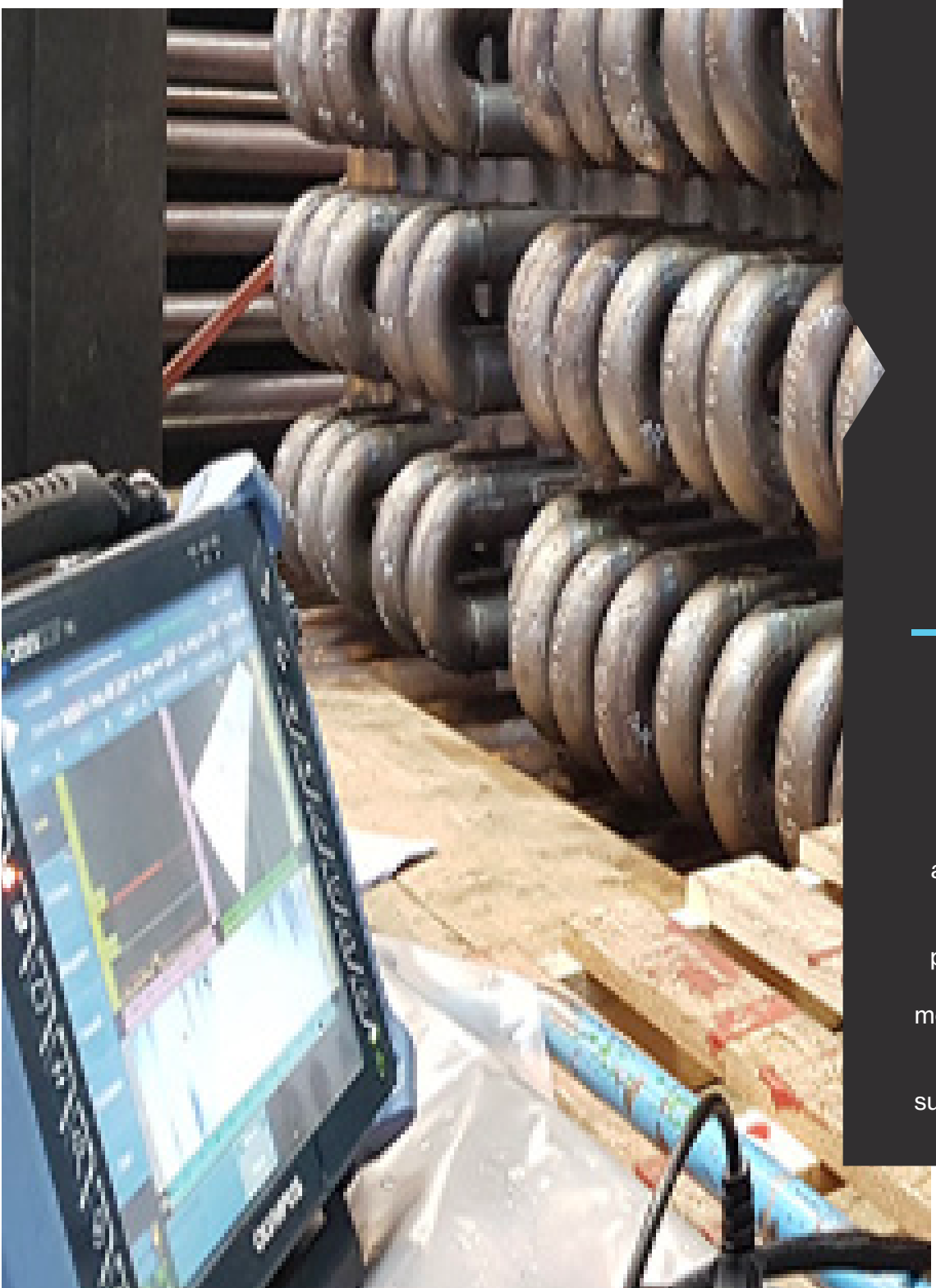
Innovative Testing for Every Challenge

Explore our Ser-

Precision Testing for Maximum Assurance

Delivering reliable, accurate, and thorough inspection services across all industries.



2024

Cutting-Edge Inspections

We utilize state-of-the-art technologies to provide advanced inspection solutions, ensuring precision, reliability, and efficiency. Our commitment to innovation keeps us at the forefront of the industry, delivering superior results for every project.

Phased Array Testing (PAUT)

- An advanced non-destructive inspection technique that uses a set of ultrasonic testing (UT) probes made up of numerous small elements. Each of these is pulsed individually with computer-calculated timing to create the phased aspect of the process, while the array refers to the multiple elements that make up a PAUT system.

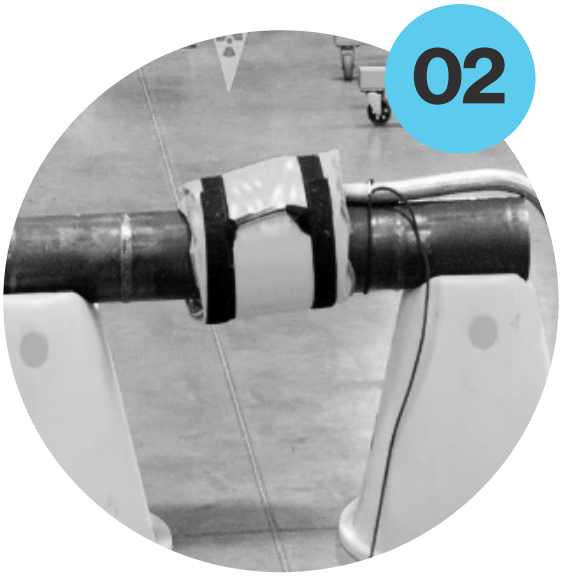
The beam from a phased array probe can be focused and electronically swept across an inspection piece without moving the probe itself. This differs from single element probes (also known as monolithic probes). These more conventional probes need to be physically moved or turned to cover larger areas, which is not required for PAUT.

Phased array ultrasonic testing provides a number of advantages and can be used in a range of applications and industries. As a non-destructive testing method, it is more reliable, effective and faster than many other methods, such as radiographic inspection.

Radiographic Testing (RT) is a non-destructive testing (NDT) method which uses either x-rays or gamma rays to examine the internal structure of manufactured components identifying any flaws or defects.

In Radiography Testing the test-part is placed between the radiation source and film (or detector). The material density and thickness differences of the test-part will attenuate (i.e. reduce) the penetrating radiation through interaction processes involving scattering and/or absorption.

The differences in absorption are then recorded on film(s) or through an electronic means. In industrial radiography there are several imaging methods available, techniques to display the final image, i.e. Film Radiography, Real Time Radiography (RTR), Computed Tomography (CT), Digital Radiography (DR), and Computed Radiography (CR).



Radiographic

Cathodic Protection Services

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We provide comprehensive Cathodic Protection Services designed to safeguard your critical assets from corrosion.

Specializing in both impressed current and sacrificial anode systems, our solutions are tailored to extend the life of pipelines, tanks, offshore structures, and other metallic assets across a range of industries.

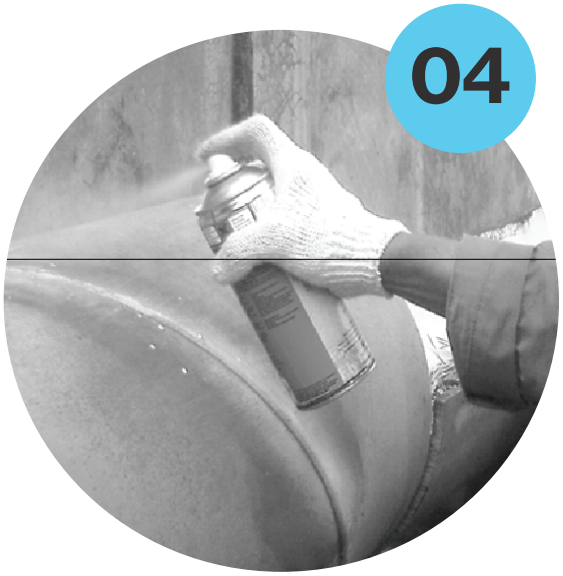
Our expert team conducts detailed assessments and employs advanced technologies to design, install, monitor, and maintain cathodic protection systems that ensure optimal performance and compliance with industry standards.

By mitigating corrosion risks, we help our clients reduce maintenance costs, prevent environmental damage, and maintain the integrity of their infrastructure, ultimately providing peace of mind and long-term protection.

1. Consulting
2. Testing and monitoring
3. Nace CP level 2 technicians
4. Repairs and Maintenance
5. Cathodic Protection Design
6. Cathodic Protection Installation
7. Project Supervision/ Management
8. Cathodic Protection Surveys
   - DCVG (direct current voltage gradient)
   - PCM surveys (pipe current mapper)
   - Soil Resistivity Surveys
   - Pipe to soil Surveys
   - Current demand surveys
   - Stray DC current survey
   - AC Mitigation

Also known as Dye Penetrant Inspection (DPI) or Penetrant Testing (PT), this is a widely used, cost-effective non-destructive testing method designed to detect surface-breaking defects in non-porous materials such as metals, plastics, and ceramics. DPI involves applying a visible or fluorescent dye to the surface of the test material. The dye penetrates any surface flaws, such as cracks or porosity, through capillary action. After a short dwell time, the excess dye is removed, and a developer is applied to draw out the penetrant trapped in defects, making them visible under natural or UV light.

This method is highly effective for identifying small surface discontinuities that might otherwise be missed, providing a quick and reliable means of ensuring the integrity of components in a wide range of industries, including aerospace, automotive, and manufacturing. Its simplicity, low cost, and versatility make it an essential tool for quality assurance and maintenance programs



Liquid Penetration Testing (DPI)

Magnetic Particle Inspection

MPI is a sophisticated non-destructive testing (NDT) method used to detect both surface and sub-surface discontinuities in ferrous materials. This technique involves magnetizing the material to create a magnetic field, which is then exposed to magnetic particles – either dry or suspended in a liquid. When a defect is present, it disrupts the magnetic field, causing the particles to accumulate at the defect sites, making them visible for inspection.

MPI is highly effective for identifying cracks, weld defects, and other imperfections that may compromise the integrity of ferrous components. It is widely used across various industries, including automotive, aerospace, and manufacturing, for quality control and maintenance purposes. The method offers reliable, fast, and precise detection of material flaws, ensuring safety and performance standards are met.

Ultrasonic Testing

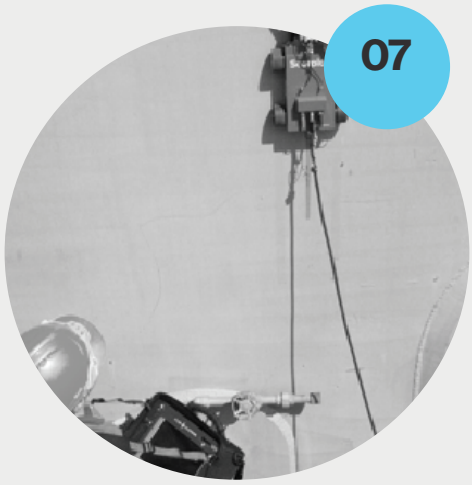
Wall thickness measurement of piping, storage tanks pressure vessels. Inspection of rolled sheets or plate for laminar type discontinuities.

Inspection of shafts of various lengths for discontinuities. Testing of welds in piping and pressurized equipment for the detection of internal discontinuities.

Tank Crawler Inspection

This ultrasonic thickness scanner is capable of scanning various areas of equipment such as up the side of tanks, tank roofs, pressure vessels, piping of variouscdiameters, piping in the horizontal position, piping in the vertical position, columns, reactors, and many other applications.

The scanner attaches to the side of a tank by using high strength rare-earth magnetic wheels. The unit is remotely controlled with a 100 feet umbilical cord along with a water pump and reservoir to ensure proper water path.



Post-Weld Heat Treatment

Post Weld Heat Treatment (PWHT) or stress relief, as it is sometimes known, is a method for reducing and redistributing the residual stresses in the material that have been introduced by welding.

Mangetic Flux Leakage

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USED TO

Detect and evaluate corrosion, pitting, and wall loss in both lined and unlined metallic storage tanks, pipelines, and other steel structures.

This technique relies on the principle of magnetizing the steel with a strong magnetic field generated by a powerful magnet. When the steel is in good condition, the magnetic field remains within the material.

However, in areas where there is corrosion, metal loss, or other defects, the uniformity of the magnetic field is disrupted, causing it to “leak” out of the steel surface.

MFL tools are equipped with sensitive sensors placed between the poles of the magnet, precisely detecting these leakage fields.

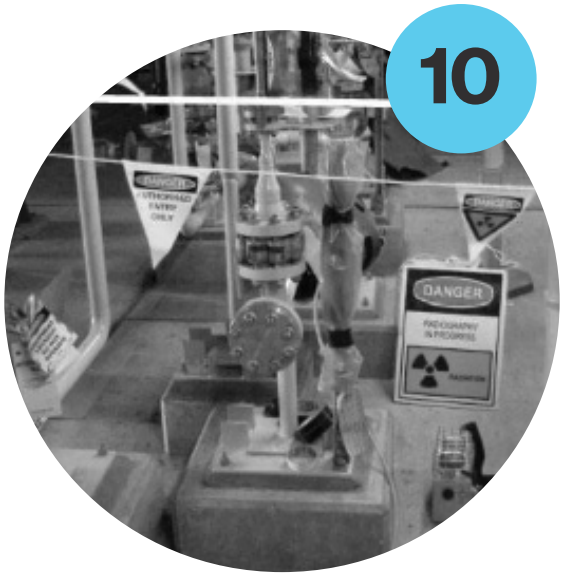
The sensors capture variations in the magnetic flux, which are then analyzed to identify and locate defects such as corrosion, cracks, or thinning in the material. MFL is particularly valuable in inspecting large surface areas quickly and accurately, providing detailed data on the extent and severity of metal loss.

This method offers several advantages, including the ability to perform inspections without removing linings or coatings, making it suitable for in-service tanks and pipelines.

MFL is widely recognized for its speed, reliability, and capability to detect both surface and sub-surface defects, contributing to proactive maintenance strategies and extending the lifespan of critical infrastructure.

Close Proximity Testing (CPT) is a specialized non-destructive testing method designed for high-precision inspection of components and structures in tight or challenging spaces. This technique allows for detailed examination of areas that are difficult to access using conventional testing methods. By employing advanced equipment and techniques, CPT ensures accurate detection of surface and near-surface defects, such as cracks or corrosion, without requiring extensive disassembly or repositioning of the tested items.

Ideal for complex or confined environments, Close Proximity Testing provides reliable results and helps maintain the integrity and safety of critical infrastructure. Whether used in aerospace, automotive, or industrial applications, CPT is essential for effective quality control, preventive maintenance, and ensuring operational reliability in restricted spaces.



Close Proximity Testing

CCTV Internal Pipe Inspection

CCTV Internal Pipe Inspection is a cutting-edge technique used to visually assess the condition of pipes and conduits from the inside. By deploying high-resolution cameras and advanced lighting systems, this method allows for detailed, real-time inspection of pipe interiors, uncovering issues such as blockages, corrosion, cracks, and structural damage.

A non-invasive solution, used for evaluating the integrity of pipes in various settings, including municipal water systems, industrial pipelines, and residential plumbing. The technology captures clear, precise images and video footage, enabling thorough analysis and accurate diagnostics without the need for disruptive excavation or dismantling.

With the ability to pinpoint problem areas quickly and efficiently, CCTV Internal Pipe Inspection helps streamline maintenance and repair processes, reduce costs, and ensure the long-term reliability and safety of your piping infrastructure."

Positive Material Identification

Positive Material Identification (PMI) is a precise method for verifying the composition of metals and alloys. Using advanced analytical techniques, PMI ensures materials meet specified standards and are free from contaminants or incorrect alloys.

This crucial process helps maintain quality control, prevent costly errors, and ensure compliance with industry regulations.

Corrosion mapping

Corrosion Mapping provides a detailed assessment of corrosion levels in tanks and pipes, using advanced technology to create accurate visual representations of material loss.

This technique helps identify and quantify corrosion damage, enabling effective maintenance planning and prolonging the life of your infrastructure.

Conventional NDT

Conventional NDT encompasses a range of proven, reliable techniques used to evaluate the integrity of materials, components, and structures without causing damage.

Ideal for detecting surface and subsurface defects, conventional NDT methods are widely used across industries such as aerospace, oil and gas, manufacturing, and construction. They offer effective solutions for routine inspections, quality control, and maintenance programs, ensuring that safety and compliance standards are consistently met

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Comprehensive Solutions

Explore our full range of specialized services designed to meet your unique need.

Additional Services

Spark / Holiday Detection

Using high-voltage equipment, this method detects even the smallest breaches in protective coatings on pipelines, tanks, and other structures, ensuring comprehensive coverage and corrosion resistance.

Internal Rotary Inspection System

IRIS, is an ultrasonic testing method used for inspecting the internal condition of pipes and tubes. It provides accurate measurements of wall thickness and detects corrosion, erosion, and other flaws in various industrial applications.

Eddy Current Testing

Eddy Current Testing is a non-destructive method used to detect surface and near-surface defects in conductive materials. It's ideal for identifying cracks, corrosion, and material thickness variations efficiently.

Hardness Testing

Technique used to measure the resistance of a material to deformation. It provides crucial insights into material strength, durability, and suitability for various applications.

Pipe and Metallurgical 3d Scanning and Recreation

Provides high-resolution digital models of pipes and metallurgical components, capturing detailed dimensions and features. This technology enhances inspection, reverse engineering, and quality control, ensuring precise measurements and accurate component reproduction.

Ultrasonic TOFD inspection

Time of Flight Diffraction (TOFD) is an advanced NDT technique used for detecting and sizing flaws in welds. It offers high accuracy in identifying crack depth and orientation, making it ideal for critical structural inspections.

Ultrasonic Wall Thickness Testing

Method used to measure the thickness of materials like pipes and tanks. It accurately detects corrosion, erosion, and wear, ensuring structural integrity and safety.

Replica Tests for Microstructure (Situ Metallography)

Involves creating a replica of a material's surface using a special film. This allows for detailed examination of the microstructure without cutting the component, aiding in condition assessment and failure analysis

16 Client Portfolio

We work with the best.

We take pride in collaborating with a diverse range of industry leaders, delivering top-notch inspection and testing services tailored to their specific needs.

Our esteemed clients include prominent names in the oil and gas, power generation, chemical, aerospace, and manufacturing sectors. By partnering with us, they benefit from our expertise, advanced technology, and commitment to excellence, ensuring their projects meet the highest standards of quality and safety.

Join our growing list of satisfied clients who trust us for reliable and innovative solutions.

Contact Us

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Why choose

We are about people.

Staff

All our staff are well experienced and qualified under SNTTC1A, ASNT and PCN. All NDT staff undergo extensive training and examinations before getting appointed as qualified NDT technicians at I.T.S

Benefits

Team I.T.S will deliver real value for your entity by protecting both your brand andreputation by and by ensuring the safe and efficient operation of your products, equipment and plant assets.

We will help save time, reduce costs and loss of revenue due to product, equipment and assets defects or failure.

Accreditation

I.T.S is a proudly South African company with a BBBEE LEVEL 1 status. We are also working in accordance to ISO 18001, 14001 and 9001

50+
Qualified

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Approved Inspection Authority

- As a recognized Approved Inspection Authority, we offer expert validation and certification across various inspection domains.

In the non-destructive testing (NDT) industry, Approved Inspection Authorities (AIA) play a crucial role in maintaining high standards of quality and safety. As the demand for precise and reliable inspections grows across various sectors, including aerospace, oil and gas, and manufacturing, the need for accredited authorities becomes even more essential.

AIAs ensure that NDT practices comply with stringent industry standards and regulations, providing expert validation and certification. Their role includes overseeing inspection processes, certifying technicians, and ensuring that testing methods meet rigorous quality criteria. By doing so, AIAs help prevent failures, enhance safety, and ensure the integrity of critical infrastructure and components.

In a field where accuracy and reliability are paramount, AIAs offer the assurance that inspections are conducted with the highest level of professionalism and technical expertise, safeguarding both operational efficiency and public safety.

Our Services

New Manufacture

As an approved inspection authority, we provide comprehensive evaluations for new manufacturing processes. Our expert team ensures that newly manufactured components meet rigorous industry standards, from design and material selection to final production, guaranteeing quality and compliance."

In-Service Inspection

Our in-service inspection services are tailored to monitor and assess equipment and infrastructure during operation. We conduct thorough evaluations to detect wear, corrosion, and other issues, ensuring ongoing safety, reliability, and performance of your assets.

NDT Services

We provide comprehensive non-destructive testing (NDT) solutions, employing advanced techniques to inspect materials and structures without causing damage, ensuring accurate and reliable assessments.

Structural Inspection

We specialize in structural inspection, assessing the integrity and safety of buildings, bridges, and other critical structures. Our detailed inspections identify potential issues and ensure that all components adhere to safety standards and regulations, supporting long-term stability and performance.

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Innovative Technologies

Impact and Vision

Trust us to deliver meticulous and dependable inspection services, upholding the highest standards of quality and safety across all your inspection needs.

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