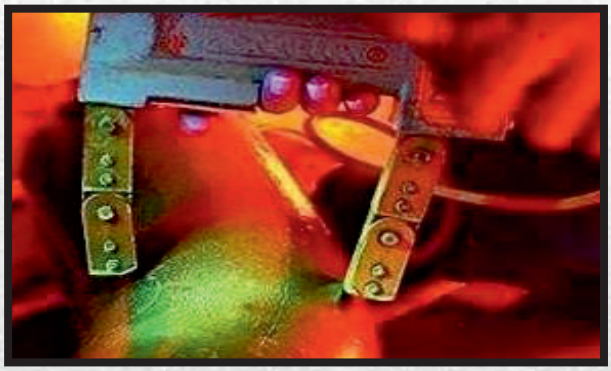
PARAS INSPECTION SERVICES

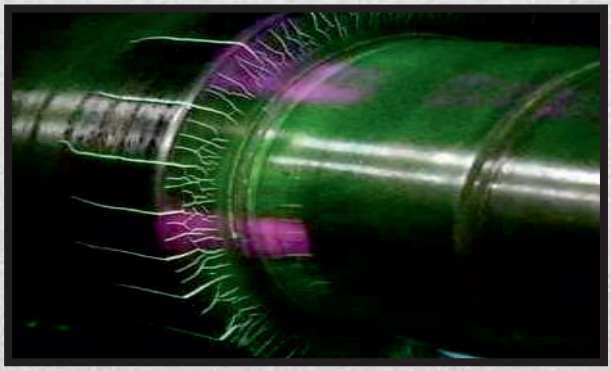
QUALITY RESOURCES

NDT SERVICES & TRAINING WITH CERTIFICATION













parasndt@gmail.com

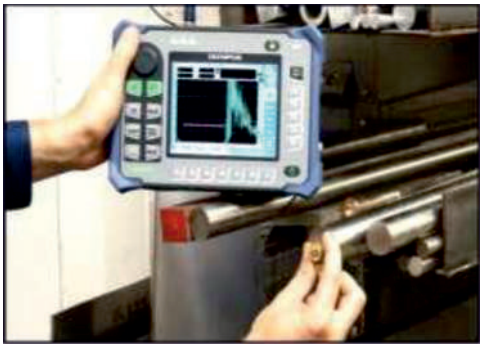
: +91 7228808525


Oil & Gas - Onshore & Offshore
Chemical, Fertilizer
Wind Mill
Power Plant
Petrochemical, Refineries
Defence
Cement Plant
Manufacturing Fabrication Industry
Sectors of Industries

Non-destructive testing (NDT) is a testing and analysis technique used by industry to evaluate the properties of a material, component, structure or system for characteristic differences or welding defects and discontinuities without causing damage to the original part. NDT also known as non-destructive examination (NDE), non-destructive inspection (NDI) and non-destructive evaluation (NDE).
We provide NDT Services variety of Industry Sectors like Fabrication, Forging, casting, Fertilizer, Refineries, Piping, Power Plant, cement plant, Wind Mill & Defense .

ULTRASONIC TESTING

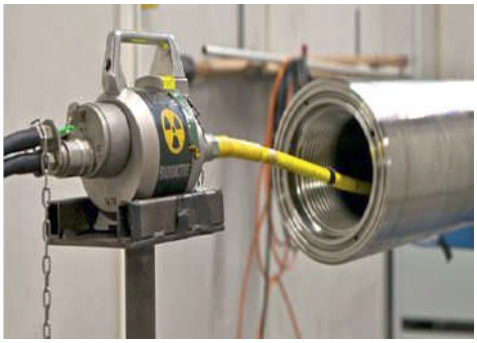
- High penetration power, allowing for flaw detection deep within a part.
- High sensitivity, allowing for the detection of very small flaw scan be used to test when only one side of an object is accessible
- Greater accuracy, when compared to other non-destructive testing methods, for determining depth of internal flaws and the thickness of parts with parallel surfaces.
- Able to estimate size, shape, orientation and nature of defects.
- Able to estimate alloy structures of components with differing acoustic properties.
- Non-hazardous to nearby personnel, equipment or materials.
- Highly automated and portable operations possibleImmediate results can be obtained.



RADIOGRAPHY TESTING

Industrial radiography is a non-destructive testing (NDT) method of inspecting the quality and integrity of materials for hidden flaws by using the ability of short wavelength electromagnetic radiation (high energy photons) to penetrate various materials. Commonly, RT is performed using two different sources of radiation which are X-ray and Gamma ray.

- Provide permanent visual image of the test object.
- The results of inspection can be reviewed at any time.
- Applicable to almost all materials.



LIQUID PENETRANT TESTING

Liquid penetrant testing is a versatile nondestructive test method used for the detection of OPEN TO SURFACE DISCONTINUITIES in a wide variety of solid, non-porous materials. This method is also known as dye penetration testing. It is economical, versatile, and requires minimal training when compared to other NDE methods.

- Fast turnaround time
- High sensitivity
- Flaws are visually indicated on surface
- Appropriate for large & complex shapes



MAGNETIC PARTICLE TESTING

Magnetic particle testing is a non-destructive test method, which can be used to inspect a variety of ferromagnetic components and products. These include castings, forgings and weldments.

- Simple, fast, and reliable operation
- Versatile to locate both surface and near surface
- No size limitations for parts to be tested
- Indication are directly visible on the surface



HARDNESS TESTING

Hardness testing enables you to evaluate a material's properties, such as strength, ductility and wear resistance, and so helps you determine whether a material or material treatment is suitable for the purpose you require .



POSITIVE MATERIAL IDENTIFICATION



Positive Material Identification PMI (Positive Material Identification) testing is the analysis of materials to determine the chemical composition of a metal or alloy at particular (Usually multiple) steps of alloy manufacturing or in-process alloy installation.

- Knowing the exact composition and grade of an alloy enables suppliers, plant workers, and other responsible parties in the chain of custody of components to match alloy specifications that are chosen for their specific properties such as heat resistance, corrosion resistance, durability etc. Having the right alloy in the right place is essential in places like petroleum refineries and chemical plants, because the right alloy with the right properties is often all that stands between a safe, efficient operation and lost time and revenue.

NDT-TRAINING & CERTIFICATION

PARAS Inspection Services a leading NDT Training Provider in Ahmedabad. We provide world class NDT Training, Examination and Certification in accordance with American Standard ASNT. Our aim is to provide high quality training to the professionals to make them more competent and confident in delivering their responsibilities in the level of quality expected from the industry. We have excellent training room equipped with audio, visual power point



presentation and latest NDT Instruments for Practical Training. Our faculty is highly qualified and experienced. We provide NDT Level – I and Level – II Training in Ultrasonic Testing, Radiography Training, Magnetic Particle Testing, Liquid Penetrant Testing, Eddy Current Testing, Visual Testing and Leak Testing. We took NDT training at Adani power Plant at Mundra, Tata power plant Mundra, Bhuj boiler, Ratnamani pipes & tubes, Indus University & etc.

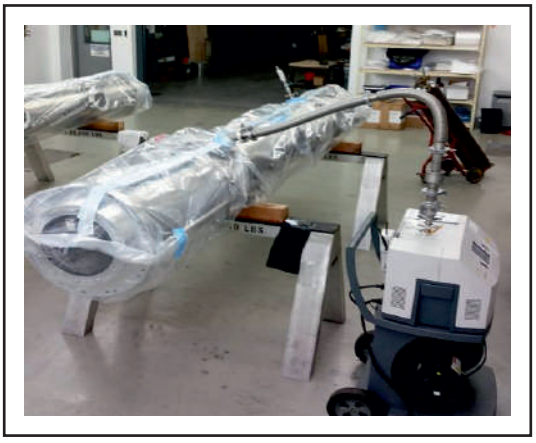
ADVANCE NON-DESTRUCTIVE TESTING

ECT/RFT/MFL/IRIS - Eddy Current testing of tubes is an effective Way of assessing the condition and lifespan of tubes, particularly in The power generation, petrochemical, chemical, fertilizer and Air conditioning industries.
Eddy current testing is an advanced nondestructive testing technique using electromagnetism induction for crack detection, measurement of metal thickness, detection of metal thinning due to corrosion and erosion, determination of coating thickness, and the measurement of electrical conductivity and magnetic permeability. Eddy current testing can be used in a wide variety of test, including welding inspection, tubing inspection, corrosion detection etc.



LEAK TESTING

A Helium Leak Detector, also known as a Mass Spectrometer Leak Detector (MSLD), is used to locate and measure the size of leaks into or out of a system or containing device. The tracer gas, helium, is introduced to a test part that is connected to the leak detector. The helium leaking through the test part enters through the system and this partial pressure is measured and the results are displayed on a meter.
We offer services for Helium Leak Testing and Vacuum Box Testing.

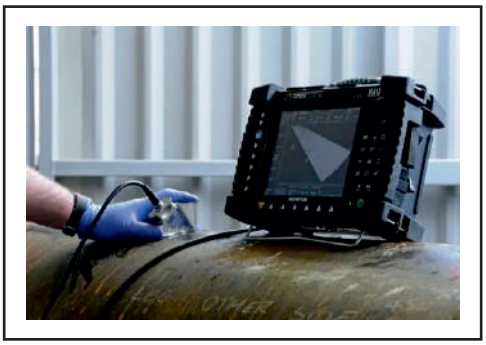


PAUT/TOFD

Phased Array Ultrasonic Testing is an advance method of NDT examination

utilizing multi-element probes, which are individually excited under computer control.

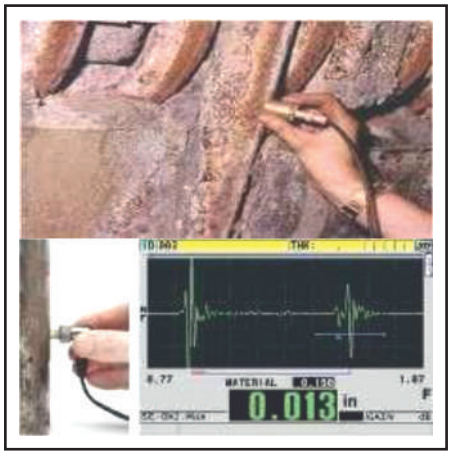
Both PAUT (Phased Array Ultrasonic Testing) and TOFD (Time of Flight Diffraction) are forms of ultrasonic testing (UT) that are used by NDT inspection services to evaluate assets for flaws and defects. Like PAUT, TOFD uses sound waves to detect flaws by measuring the time that it takes for the sound wave to be emitted and returned. However, the difference between PAUT and TOFD is that TOFD measures both high and low amplitude waves. That is, PAUT records only high amplitude waves that are returning from the back of the asset, while TOFD records both high amplitude waves and low amplitude waves that deflect off of the tips of flaws and defects.



Now, Phased Array Ultrasonic Testing is widely used in steel fabrication industries as an alternative method of testing in lieu of radiography testing for thick wall materials.

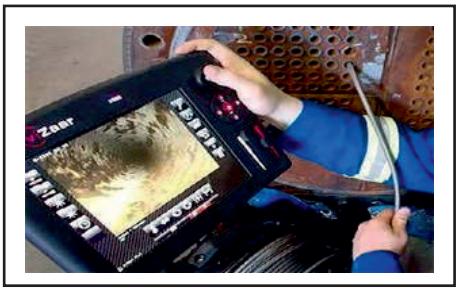
- Ability to penetrate thick sections
- Faster inspection rate
- Ability to inspect many different materials
- Image Data is recorded and saved.

OXIDE SCALE MEASUREMENT



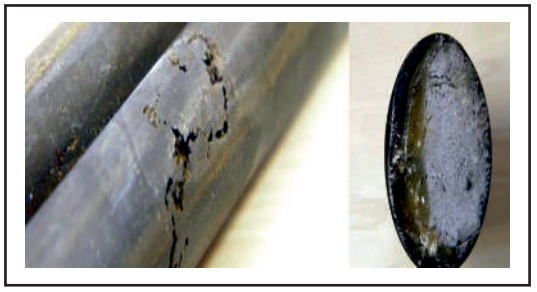
The ID oxide scale is produced by oxidation in the Boiler Tubes. The scale build up occurs when the tubes have experienced high temperatures for extended periods of time. The formation of ID scale reduces heat transfer and results in a further increase of tube metal temperature. The increase in ID scale and the associated tube metal temperature promotes creep in the tube metal. Formation of creep results in a loss of strength at high temperature and therefore a loss in remaining life. The final outcome of excessive scale is a long term overheats failure. Our advance Ultrasonic Testing equipment and highly experienced engineer ensures accurate and reliable Internal Oxide Scale Thickness measurements.

REMOTE VISUAL INSPECTION



Industrial videoscopes are commonly used for visual inspection of inner areas of various infrastructure equipment as well as industrial products. Familiar examples cover a broad range from monitoring of home pipings or ducts of water/sewerage, gas and air conditioners to quality check of automobile components. They are also used for visual inspection of large equipment such as airplane engines and electricity generator turbines without dismantling those. Thus, industrial videoscopes play important roles to support safety and security from behind the scenes. Particularly, videoscopes are the requisite equipment for inspection of heat exchangers.

REMAINING LIFE ASSESSMENT



Remaining life assessment (RLA) is an important tool in securing the operational safety of aged structures and plants. RLA combined with risk based inspection can prevent unforeseen outages and failures that can have tragic and costly consequences.

- With RLA as part of a fitness for service (FFS) assessment the full service life of individual mechanical components can be safely utilized.
- The key point in determining the remaining life of a mechanical component is determining when structural integrity becomes critical due to progressive damage caused by the applicable damage mechanism(s).

Due to continuous use under high temperature, pressure and critical environmental conditions, material properties are degraded. Damage due to creep, fatigue and corrosion are irreversible and essential to predict remaining life.



NDT LEVEL – III CONSULTANCY

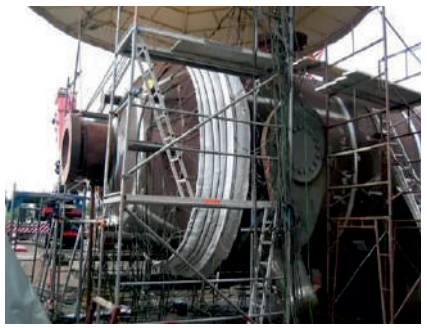
We provide NDT Level – III Consultancy for preparation and approval of NDT written practices as per ASNT recommended practice SNT-TC-1A or CP 189, preparation and approval of NDT procedures for various inspection methods as per applicable National or International Code and Standard, technical assistance in purchasing and installation of NDT equipment or system at client's works and operator training to run the equipment or system, periodic evaluation and recertification of NDT Level – I and Level –II certificate as per guidelines of ASNT recommended practice SNT-TC-1Aor CP 189.

IN-SITU METALLOGRAPHY



In-Situ Metallography is an on-site, non-destructive Metallurgical Technique, employed for microscopically observing and documenting the microstructural integrity of many engineering metal parts, castings, forgings, welds, brazed joints, equipment, components, boilers, pressure vessels, main steam pipes, pipelines and all type of structures.

POST WELD HEAT TREATMENT (PWHT)



Post Weld Heat Treatment or PWHT must be performed after every welding in order to ensure the material strength of the part is retained.

PWHT ensures the reduction of residual stresses, controlling material hardness, and enhancement of mechanical strength.

- Improved metallurgical structure
- Improved ductility of the material
- Reduced risk of brittle fracture as ductility increases
- Relaxed thermal stress due to the redistribution of residual stresses.
- Tempered metal

THIRD PARTY INSPECTION SERVICES



A third-party inspection is the assessment or evaluation of your products for quality control by an independent third-party inspection company.
We carry out site inspection for industrial projects.
Industrial Third-Party inspection refers to independent inspection services that are provided by inspection agencies either hired by a buyer or seller. We have a team of highly qualified and experienced engineers. We provide services for pre-shipment inspection, witness important tests and inspection such as technical assessment for shop approval, raw material inspection, in-process stage witness, NDE test, welding process and heat-treatment process witness, mechanical – chemical – metallurgical tests witness, hydro static and dimensional measurement witness as per National or International Code, Standard or customer specification. We also provide services for NDT audits.

- **Consultancy for approval & audit for ASME U & R stamp.**
- **Consultancy for approval & audit for IBR.**
- **Consultancy for approval & audit for API monogram.**
- **Technical audits of Oil & Gas installations.**
- **QMS audits as per ISO 9001.**
- **Expediting services.**
- **NDT NABL Technical Audit Services**

Get in Touch

Shehbaz Alam -DIRECTOTR
(B.E in Metallurgy, ASNT NDT Level III)
parasndt@gmail.com | +91 7228808525, +91 9974992425
OFFICE ADDRESS: 6, Rudra Estate, B/H. SHUBH ESTATE ZAVERI INDUSTRIAL AREA, Kathwada-Singarva Rd, Kathwada, Gujarat 382430

Some of our Valuable Clients:

