

#### PALLAKKI NDT EXCELLENCE CENTER PVT LTD

#### 7 Reasons to choose Pallakki NDT





### MANAGEMENT **TEAM**



SASHIDHAR P. PALLAKKI Director & CEO, Pallakki NDT Excellence Center Pvt. Ltd

Shashidhar P Pallakki. Director for Pallakki NDT Excellence Center Pvt Ltd. Pallakki NDT Excellence Center is a NADCAP, NABL accredited, and AS-9100 Organization located in Peenya, Bangalore catering to NDT services to many Organizations like BEML, HAL, NPCIL, VSSC, L&T, DRDO, LPSC, etc. 28 years of experience in different NDE methods as an NDT service provider of various industrial backgrounds like Petrochemicals, Heavy Engineering, Fabrication, Forging, Foundry, Aerospace etc. Conversant with many International Codes, Standards, and Specifications like ASME. ASNT, AWS, BS E ISO, ANSI, API, etc... Currently as an independent NDE service provider for various methods

to different customers like IOCL, BEML, L & T. NPCIL, Rail wheel Factory, VISL, etc. Trained more than 3000 NDE personnel for various methods like PT, RT, UT, MT, VT, and ET through our Pallakki NDT



DR SHYAMSUNDER MANDAYAM Professional Director Pallakki NDT Excellence Center Pvt. Ltd

A B.E (Metallurgy) from MS University Baroda and a Ph.D from IIT, Kharagpur, he is a 38 years experienced researcher, technologist and trainer. He is involved with NDT training for Level 1, 2 and 3 for several methods over the last 30 years for different certification schemes. He has 12 patents and 180+ papers in various journals, books and proceedings and delivered 100+ invited talks. Received several prestigious awards like ISNT National NDT award for R&D, GE India's JRD Tata award for excellence, GE Whitney award. He is a Honorary Fellow of ISNT and a Life Member of ASNT, MSI, AMSI, InSIS.



### ABOUT PALLAKKINDT

Pallakki NDT Excellence Center Pvt Ltd is NADCAP and NABL-2017 Accredited, AS 9100-2016, ISO 9001 - 2015 Certified and DGAQA approved company in NDE services. It was established in the year 2001 to provide quality and reliable NDT services on time and also impart quality training in the related field.

Pallakki NDT Excellence Center Pvt Ltd is proud to be the best NADCAP Accredited Aerospace NDT lab in Bangalore-INDIA and NABL -2017 accredited NDT Lab in Bengaluru-INDIA also providing ANST NDT Level II Training, NDT Level III Consultancy and Aerospace NDT Services among Top NDT Companies based in Bangalore-INDIA. Rendering the services throughout INDIA, through a team of highly qualified, certified and devoted professionals having substantial experience with vast multi-disciplinary background and with world class NDE equipment and accessories.

Pallakki NDT Excellence Center Pvt Ltd has served and satisfied more than 200 plus reputed customers like NAL, HAL, ISRO, BEML, BEL, NPCIL, DRDO, ADA, NAMMA-METRO, GE, RAILWHEEL FACTORY, SOUTH WESTERN RAILWAY etc., by our professional and dedicated approach. We have ambitious plans to meet the ever-increasing demands of the market by bringing in large and reputed clients to our fold and are continuously gearing up to take formidable new challenges in various sectors like Aerospace, Automobile, Earthmoving, Petro chemicals, Oil & Gas, Process Industries like Foundry, Forgings and Fabrications. Pallakki NDT Excellence Center Pvt Ltd providing ASME U Stamp and ASME U2 Stamp NDE Consultancy since last 15 years in INDIA. PALLAKKI NDT EXCELLENCE CENTER PVT LTD have NADCAP accredited word class NDT facilities in FPI-Aerospace and MPI-Aerospace and NDT lab in NADCAP Accredited NDT Lab list.



### WHY TO CHOOSE ADVANCED NDE

Advanced Non-Destructive Evaluation (NDE) techniques are essential because they offer enhanced capabilities in inspecting and assessing materials and structures. Traditional NDE methods have limitations in terms of sensitivity, speed, and accuracy, which can lead to undetected defects and increased safety risks. Advanced NDE techniques, such as phased array ultrasonics, eddy current arrays, and digital radiography, provide superior precision, quicker results, and the ability to examine complex structures.

#### Traditional NDE methods, while valuable, are associated with several significant challenges:

- **LIMITED SENSITIVITY :** Traditional methods like visual inspection or simple radiography can miss subtle defects, leading to false negatives and potential safety risks.
- **INCOMPLETE COVERAGE :** Many traditional NDE methods are single-point or line scans, which can result in inadequate coverage, especially for large or complex structures.
- **HUMAN ERROR :** Human interpretation is often required, introducing subjectivity and the possibility of operator error. This can lead to inconsistencies in inspection results.
- **TIME-CONSUMING :** Some traditional techniques are time-consuming and may require prolonged equipment setup, causing downtime in industries that demand continuous operation.
- **LIMITED DATA RECORDING :** Older methods may lack the ability to store inspection data digitally, making it challenging to track changes in material conditions over time.
- ENVIRONMENTAL CONSTRAINTS : Traditional NDE methods may have limitations when dealing with adverse environmental conditions, such as extreme temperatures or restricted access areas.
- **INCOMPATIBILITY WITH ADVANCED MATERIALS :** Many advanced materials, like composites or high-strength alloys, may not be adequately assessed using traditional NDE techniques due to differences in material properties.



### OUR SERVICES

## **ADVANCED NDE**

#### PHASED ARRAY ULTRASONIC TESTING



Olympus MX-3.64.128 PCI

Olympus X3 64-128. Innovative amplitude-free live phase coherence imaging (PCI) improves small-defect sensitivity and penetration in noisy materials, all while easing your setup and simplifying sizing. Made possible by new generation electronics, TFM imaging offers better focusing capabilities for smaller indications and an improved signal-to-noise ratio (SNR). With its 128-element aperture capacity, the OmniScan X3 64 model provides enhanced image clarity. The Acoustic Influence Map (AIM) tool provides you with an instant visual model of the sensitivity based on your TFM mode, probe, settings, and simulated reflector.



Olympus .38 DLP

#### ULTRASONIC THICKNESS GAUGE

- The Olympus 38 DLP Thickness Gauge is a cutting-edge device revolutionizing non-destructive testing.
- 9+ can measure the thickness with paint, with oxidation
- 9+ can measure 1/4" pipe
- High Resolution software option of 0.001 mm or 0.0001 in. with single element transducers 2.25 MHz to 30 MHz
- Multilayer software option for measurements of up to four layers simultaneously
- High Penetration software option for attenuating materials such as fiberglass, rubber and thick casting
- Thickness, Velocity, and time-of-flight measurements
- Time-based B-scan mode; 10,000 reviewable readings per scan



### **EDDY CURRENT NORTEC 600D**

Nortec 600D

#### • To detect fine surface cracks in Nonferrous materials.

- Portable eddy current (EC) flaw detectors inspect metallic parts and perform highly reliable and advanced flaw detection of surface and near-surface defects especially in weld and cast products.
- Our eddy current testing equipment includes the latest advances in eddy current flaw detection for precise use in various inspection applications. In an eddy current inspection job, you need equipment you can trust.



### COMPUTED RADIOGRAPHY

The INDUSTREX HPX-1 Plus is ideal for a lab environment where highresolution is critical with adjustable PMT and Laser Power to fine tune every image for optimum capture every time. The HPX-1 Plus also has the capability to handle extra-long plates – ideal for aerospace applications.

- No Dark room Process and leads Environment friendly
- Easy to share the images and Easy to archive
- Automated verification to provide assurance to customers and auditors of image integrity and authenticity.
- Accepts custom cut plates and rigid cassettes.



### **DIGITAL RADIOGRAPHY**



Digital radiography is an advanced technology based on digital detector systems in which the x-ray image is displayed directly on a computer screen without the need for developing chemicals or intermediate scanning.

- Shorter exposure times-almost 40% lesser time as compare to Conventional RT
- Enhanced SNR and linearity-Signal to Noise ratio can be easily control
- Reduced inspection time as no chemical processing of film is required-No additional process
- Digital image enhancement and data storage-Easy to archive or share the images

#### DIGITISER

Digitizer is the equipment of choice for users who demand the highest image quality for non-destructive tests and examination radiographs. Using precise optics and a helium neon laser captures your industrial radiographs with speed, accuracy, and reliability.

- High quality digitized images.
- Post digitisation eliminates film storage.
- Download digitized image on any media via FTP server in case of urgency.
- Customized solutions.
- Highest Precision Digitization.
- Laser point to point digitiser.





### **CONVENTIONAL NDE**



### **ULTRASONIC TESTING**

Ultrasonic Testing services for raw materials, rolled products, casting, forging and welding. Contact testing carried out at client locations and at sites.



### **RADIOGRAPHIC TESTING**

Radiographic Testing by using Iridium-192 Gamma Ray and Portable X-Ray machines with 0.1mm focal point. Jobs carried out by BARC Certified Non Destructive Testing Level-I and Level-II Technicians.



### **PENETRANT TESTING**

Both visible red dye penetrant and fluorescent penetrant inspections line at client locations as well as at our lab. Fluorescent Penetrant Inspection line approved by NADCAP.



#### **MAGNETIC PARTICLE TESTING**

MPI crack detection for using Head shot and Coil shot. MPI available with visible wet particles and Fluorescent wet particles. MPI line approved by NADCAP.





### **VISUAL TESTING**

Visual Testing is perhaps the oldest and most widely used inspection technique. Often the eyes of the inspector are the only "equipment" used for the inspection.



### **EDDY CURRENT TESTING**

- Conductivity Measurements for Non Ferrous materials.
- Crack Detection
- Segregation
- Coating Measurement



# TRAINING & CERTIFICATIONS

Pallakki NDT Excellence Center Pvt. Ltd approved Authorised Training Center from TUV-Nord to conduct ISO-9712 Training.

Pallakki Excellence Center Pvt. Ltd is conducting Advanced Technologies of DR, CR, PAUT, and ECT Level I and II training as per SNT-TC-1A.





# CERTIFICATIONS & ACCREDITIONS

NDT Lab Accredited with NABL - ISO / IEC 17025:2017

SNT-TC-1A and ISO 9712 Training and Certification NADCAP Accredited Aerospace NDT Lab

AS 9100:2016 Certified NDT Lab

NDT Level III Consultancy

### **PALLAKKI NDT HIGHLIGHTS**





### MAJOR **CLIENTS**























## GET IN TOUCH



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OLYMPUS

Location