



## LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING (AUTONOMOUS)

L.B.Reddy Nagar, Mylavaram - 521 230, N.T.R. District, Andhra Pradesh, India  
Affiliated to JNTUK, Kakinada & Approved by AICTE New Delhi  
Accredited by NBA under Tier - I, Accredited by NAAC  
An ISO 21001:2018, 500001:2018, 14001:2015 Certified Institution

### DEPARTMENT OF AEROSPACE ENGINEERING

Estd.: 1998 Website: <https://www.lbrce.ac.in/ase/index.php> Email: [hodaero@lbrce.ac.in](mailto:hodaero@lbrce.ac.in) Phone:08659-222933 Ext:624/623

## REPORT

**Title of the Program:** A Two-day Industry-Oriented Hands-on Non-Destructive Testing (NDT) Training.

**Date and Duration:** 25-11-2022 to 26-11-2022 (10.00 A.M to 3.00 P.M)

**Resource Person:** Mr. P. Dileep Kumar, ASNT Level III Certified Professional, SITS NDT, Kakinada.

**Faculty coordinator:** G.V Surya Narayana, Asst Professor

**Number of Participants:** 20

### **Objective of the Program:**

The objective of the industry-Oriented Hands-on NDT Training was to provide participants with practical exposure to Non-Destructive Testing (NDT) techniques widely used in aerospace, mechanical, manufacturing, and allied industries. The training aimed to bridge the gap between academic learning and industrial practices by introducing inspection methods used for quality assurance and structural integrity assessment.

**Program Description:** During the training, the resource person explained the fundamentals of Non-Destructive Testing and its significance in industrial applications. Various NDT methods such as Visual Testing (VT), Liquid Penetrant Testing (LPT), Magnetic Particle Testing (MPT), Ultrasonic Testing (UT), and Radiographic Testing (RT) were discussed in detail. Emphasis was given to defect identification, quality control procedures, and industrial safety practices. The participants were provided with hands-on training sessions where they gained practical experience in operating NDT equipment, conducting inspections, interpreting test results, and identifying material defects. Real-time demonstrations enabled students to understand the practical implementation of NDT techniques in industrial environments.

## **Outcomes of the Program:**

After attending the two-day training program, students are able to

1. List and define different defects that occur during Non-Destructive Examination.
2. To identify the types of equipment used for each non-destructive Examination.
3. To explain the purpose of the Equipment, Application, and standard techniques required to perform major non-destructive welds.
4. To specify ASME & ASNI Codes, Standards, or Specifications related to each testing method.
5. Have the knowledge and essential skills to identify strengths and weaknesses in materials used in fabrication.

## **Conclusion**

The two-day Industry-Oriented Hands-on NDT Training was highly beneficial for the participants. The expert guidance provided by Mr. P. Dileep Kumar helped students gain valuable practical knowledge and industry exposure in the field of Non-Destructive Testing. The program successfully achieved its objective of enhancing students' technical competencies and employability skills through hands-on learning.

## **Feedback Summary**

Feedback was collected from all 20 participants at the end of the training program. The overall response was highly positive, with students expressing satisfaction regarding the quality of the sessions, practical exposure, and interaction with the resource person.

## **Key Feedback Highlights**

- The demonstrations of various Non-Destructive Testing methods provided valuable insights into real industrial inspection practices.
- Faculty found the sessions on defect identification and interpretation of test results particularly informative and useful.
- The resource person, Mr. P. Dileep Kumar, was highly appreciated for his clear explanations, practical examples, and interactive teaching methodology.
- Participants expressed that the training enhanced their confidence in handling NDT equipment and understanding quality assurance procedures used in industry.

## Overall Rating

Based on the feedback received, the program was rated as **Excellent**, with most participants recommending similar industry-oriented training programs in the future to strengthen practical skills and industry readiness.

## Suggestions from Participants

- Organize advanced-level NDT training programs covering specialized inspection techniques.
- Increase the duration of practical sessions to allow more hands-on experience.
- Conduct regular industry-oriented certification programs in collaboration with NDT professionals and industries.



Day-1  
Addressing by Mr Dileep Kumar



Day-2  
Hands on Experience by faculty  
Conducting and Identifying Defects on Non  
Ferrous Materials by LPT