

Course Duration : 10 Days Training
Daily Schedule : 7:30am - 3:30pm
Training Date : Upon Request
Training Venue : Doha
Traning Fees : TBI



ULTRASONIC TESTING LEVEL II .course outline

Session 1

- Bench Mark Quiz
- General NDT
- Basic Requirements of a good Testing
- SNT-TC-1A Requirements
- Qualification Levels
- Examination Details

Session 2

- Basic Principles
- Equipment
- Lesson 1, 2

Session 3

- Practical Demonstration (Machine Introduction)

Session 4

- Practical Demonstration (Machine Introduction)

DAY 1

Session 1

- Last Day Quiz Discussion
- Last Day Review
- Lesson 2, 3

Session 2

- Lesson 3, 4

Session 3

- Practical

Session 4

- Practical

DAY 2

Session 1

- Last Day Quiz Discussion
- Last Day Review
- Lesson 4, 5

Session 2

- Lesson 5, 6

Session 3

- Practical

Session 4

- Practical

DAY 3

Session 1

- Last Day Quiz Discussion
- Last Day Review Lesson 6, 7

Session 2

- Lesson 7, 8

Session 3

- Practical

Session 4

- Practical

DAY 4

ULTRASONIC TESTING LEVEL II .course outline

Session 1

- Last Day Quiz Discussion
- Last Day Review Lesson 8, 9

DAY
5

Session 2

- Lesson 9, 10

Session 3

- Practical

Session 4

- Practical

Session 1

- Last Day Quiz Discussion
- Last Day Review Lesson 10, 11

DAY
6

Session 2

- Lesson 11, 12

Session 3

- Practical

Session 4

- Practical

Session 1

- Last Day Quiz Discussion
- Last Day Review
- Lesson 12, 13

DAY
7

Session 2

- Lesson 13, 14
- ASME Code Requirements

Session 3

- Practical

Session 4

- Practical

Session 1

- Interpretation & Evaluation of indications
- Weld Scanning

DAY
8

Session 2

- Weld Scanning

Session 3

- Practical

Session 4

- Practical

Session 1, 2

- Revision of Syllabus

DAY
9

Session 3, 4

- Mock up paper and Discussion

Session 1, 2

- Theory Examination (General + Specific)

DAY
10

Session 3, 4

- Practical Examination

Course Description

This course is designed to meet the requirements of ASNT document SNT-TC-1A.

It introduces different methods and techniques involved in performing ultrasonic inspection

It provides comprehensive knowledge about the theoretical background, practical applications, and recent developments in UT. The course program contains theoretical lectures and practical testing of training samples using different UT techniques.

Course Outline

- Basic Principles.
- The Propagation of sound.
- Sound Generation.
- Ultrasonic Testing Capabilities
- Ultrasonic Testing Equipment
- Probe Index Determination
- Probe Angle Determination
- Types of Ultrasonic representation
- DAC Curve
- Probe beam spread
- 0° Probe Scanning
- Angle Probe Scanning.
- Testing Techniques.
- Ultrasonic Thickness Surveying.
- Ultrasonic Weld Inspection Technique
- Report writing

Course Objectives

On the completion of this course the participants expected to be able to.

- Assess visually, the condition of metallic surfaces.
- Reveal the sub-surface defects using UT techniques.
- Interpret different indications of UT.
- Write or Review the UT test reports.
- Supervise and control the UT conducted by contractors or sub-ordinates.
- And much more...

Who Should Attend

NDT inspectors, material inspectors, inspection engineers, pipeline inspectors, plant inspectors, inspection supervisors and any person interested to know NDT principle.

About the Instructor



Mr. Amit Vijaykumar Deshpande

Educational Qualifications:

Diploma in Metallurgy

NDT QUALIFICATION

- | | |
|---|--|
| a. Ultrasonic Testing | - ASNT Level -III |
| b. Magnetic Particle Testing | - ASNT Level - III |
| c. Liquid Penetration Testing | - Level - II (As per ASNT-SNT-TC-1A 96) |
| d. Radiographic Testing | - Level -II (As per ASNT-SNT-TC-1A 96) |
| e. Leak Testing (BT) | - Level -II (As per ASNT-SNT-TC-1A 96) |
| f. Welding Inspector by | - (Indian Society for Non- Destructive Testing) Pune Chapter |
| g. Certified Welding Inspector by American Welding Society- Cert. No.05061481 | |
| h. UT - TOFD | - Level II Training |
| i. API - 510 Pressure Vessel Inspector | |
| j. MT, UT Level 2 as per EN 473 | |

WORK EXPERIENCE

A. MAHINDRA SINTERED PRODUCTS LTD., (Government Training) in R& D Centre – worked as a Trainee Development Engineer. (Period - from 15th June 1996 to 14th June 1997)

- Used to do metallurgical development of new inquiries.
- Regular lab testing i.e. Raw material testing, in-production testing.
- Used to work in action plan team on non-conformities

B. ELCA QUALITY SYSTEMS, Pune-worked as a Marketing Representative (Period - from 1st January 99 to 30th April 2000).

- Used to handle Spectroscopy.
- Used to Metallurgical testing (hardness, bend test, tensile)

C. INTERNATIONAL RADIOGRAPHY SERVICES, Pune (Period - from 15th May 2000 – 10th September 2001).

- For NDT training purpose working with ASNT Level III qualified Proprietor of the company.
- Work experience of RT, PT, UT, MT, and welding qualifications.

D. ELCA QUALITY SYSTEMS, Pune as a Technician (Period - from 25th September 2001 – 31st March 2002).

- Working in Metallurgy and Physical Department
- In metallurgy, working on Metallography of Ferrous, Non-ferrous, Metals (With respect to the respective Standards)
- In Physical Department, Used to test metals for their physical properties.

E. INSIGHT QALITY SERVICES, Pune – 9 as a Inspection Engineer (Period – from 01st April, 2002 – till date)

- Completed the inspection for Dairy tanks for M/s. Chitale (Qty. 17 nos.)
- Conducted inspection of export transformer tanks for M/s. Ador Powertron
- Conducted Magnetic Particle Testing for NPCIL / Alfa Laval PHE studs.
- Stage and final inspection for NPCIL / KBL fabricated pump components at Precifab- Kolhapur, Hindustan Structural – Karad, Biyani Alloys – Jejuri & Electro-transf, Raizan, Rucha Industries - Pune
- Completed Pressure Vessels inspection for Air Receivers under ASME Section VIII Div. 1.
- Carried out Magnetic Particle Inspection for Thermax Ltd. at their Rajasthan site.(Shree Cement Ltd.)
- Conducting the third party inspection for pressure vessels and Heat exchangers for various customers viz DR- Ahmedabad, Atlas Copco- Nasik, NPCIL Bangalore
- Worked with M/s. KBL, Pune at its NPCIL Tarapur site for NDT inspection
- Worked with DR – Ahmedabad at its Daman site for Pressure Piping (as per ASME B31.3) fabrication and welding inspection
- Working in Welding Qualification (carried out as per BS/ASME sec IX)
- Worked with M/s. Equatte through HEISCO at Kuwait during their shut down held in March 2004 for a period of 1 month. I was working as a NDT Technician.
- Working with Tetra Pak India Pvt. Limited for their Quality Assurance wing for Dairy and Chemical Process Vessel Fabrication.
- Worked at M/s. Kooheji Contractors at Bahrain for 4-month period from 15th April to 24th August 2006. For the fabrication of Structural Work in the area of Quality Control.
- From 25th August to upto date working in inspection of welding, fabrication, forging.
- Conducting UT training for Level I/II as per SNT-TC-1A scheme.
- Conducted stage inspection for Economiser heat Exchangers for Thermax Limited.
- Conducting NDT for PHE – Water Washable PT, UT & MT of welds.
- Conducted Inspection for Economiser for Thermax at Vadodara
- Conducting NDT Inspection for PETROBRAS (client Dresser Rand)
- Attended one month shut down at Qatar Petroleum, Qatar in Nov 2009 as a API 510 Pressure Vessel Inspector.