

NDT – Advanced Techniques

Delivery Method: eLearning || Duration: 2 hours || Course Fee: 280 €

Category: Material, Welding & NDT

Available languages: English

Certificate

On completion of the training program, the student will be awarded:

- A Certificate of **NDT – Advanced Techniques**, issued by Bureau Veritas Solutions Marine & Offshore.

The Certificate of **NDT – Advanced Techniques** is obtained after completion of the course and passing the online test.

Presentation

This training course gives a general presentation of the three Advanced NDT Methods (Time-of-Flight Diffraction (TOFD), Phased Array Ultrasonic (PAUT) and Digital Radiography (DR)), their basic principles and how the corresponding equipment should be used in accordance with the testing procedure to ensure the quality of the test performance and testing results.

Whom the course is for

The course **NDT – Advanced Techniques** is aimed at anyone interested in getting familiar with this NDT technique. This may include Ship Managers, Technical Superintendents, Ship Masters, Officers and Seafarers; Offshore Units Operators and technical staff; Shipyards Technical Staff; Surveyors; P&I and/or Insurance Inspectors; etc.

Objectives

On completion of the training, students will be able to:

- Understand the setup and principles of advanced NDT techniques in comparison with conventional methods.
- Know the testing procedure and the inspection process referred to the equipment used.
- Differentiate applications according to the advantages and limitations.
- Get familiar with the aspects of test performance and obtained testing results.

Program

- Time-of-flight diffraction (TOFD)
 - Basic principle
 - Testing procedure
 - System set-up and checks
 - Data interpretation and evaluation
 - Acceptance levels
 - Advantages and limitations
- Phased Array Ultrasonic Technique (PA-UT)
 - Ultrasonic phased array technology
 - Phased array benefits
 - Basic principle
 - Testing procedure
 - Settings
 - PA-UT instead of RT
 - Advantages and limitations
- Digital Radiography (DR)
 - Digital radiography techniques
 - Computed radiography & direct digital radiography
 - Digital image quality
 - Basic principles
 - Testing procedure
 - Evaluation and interpretation of results
 - Advantages and limitations
- Applications and acceptance criteria
 - Scope
 - Indication evaluation
 - Acceptance criteria
 - Test report
- Reliability, quality of test results
 - UT system performance
 - NDT personnel competence