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**1. REFERENCES:**

EN 4179  
 Part 145.30

**2. APPLICABLE DOCUMENTS:**

Procedure P003  
 Procedure P005

**3. SCOPE:**

This procedure outlines the requirements for individuals, and/or training facilities involved in NDT training for the Aerospace Industry.

**4. PURPOSE:**

This procedure will be used to ensure uniform training and examination of NDT personnel for the aerospace industry.

**5. DEFINITIONS:**

Approval	Written statement by the NANDTBB that an individual has met the applicable requirements of this standard.
Documented	The condition of being in written or electronic form.
Employer	A government, prime contractor, sub-contractor, supplier, processor, or outside agency employing individuals performing NDT
Evaluation	A review, to determine whether the applicant meets the specified requirements of this procedure
Examination	Formal, controlled, documented program of activities designed to impart the knowledge and skills necessary to be qualified to this standard
Experience	Actual performance or observation conducted in the work environment resulting in the acquisition of knowledge and skills, this does not include classroom or laboratory training but does include on the job training.
Method	One of the disciplines of non destructive inspection or testing (e.g. ultrasonic) within which different techniques exist.

NANDTB	Netherlands Aerospace Non Destructive Testing Board An independent national aerospace organization representing the Netherlands aerospace industry that is chartered by the participating prime contractors and recognized by the CAA-NL to provide or support NDT qualification and examination services in accordance with this standard. Such services may include participation in approval and certification.
Training Provider	A person or organization providing training and/or examining NDT inspection personnel
Procedure	A general or detailed written instruction for conducting a given process.
Written	Retrievable electronic or hard copy.

**6. APPLICATION:**

6.1. This procedure is applicable for all training providers involved in the training and/ or examination of NDT inspection personnel.

**7. RESPONSIBILITIES:**

7.1. The training provider is responsible to comply with the requirements of this procedure.

7.2. It is the responsibility of the NANDTB to provide outlines for training and examination requirements.

7.3. The EN4179 certified Level 3 is responsible to approve all NDT inspection personnel meeting the requirements of this procedure.

**8. NON DESTRUCTIVE TEST METHODS:**

8.1. Certification of NDT inspection personnel is required for the following methods:

- § Eddy Current Testing (ET)
- § Liquid Penetrant Testing (PT)
- § Magnetic Particle Testing (MT)
- § Radiographic Testing (RT)
- § Ultrasonic Testing (UT)

**9. TRAINING PROVIDER:**

**9.1. ADMINISTRATION**

- 9.1.1. The training provider shall have a system for the administration of the NDT training courses and examinations.

**10. TRAINING MATERIALS:**

**10.1. SYLLABUS**

- 10.1.1. The training provider shall have a trainings syllabus in accordance with NANDTB procedure P003, The syllabus shall be checked and revised as necessary in respect of scientific, industrial and technological developments upon request providers of NDT training shall submit a syllabus for review by the NANDTB.

**10.2. COURSE DOCUMENTS**

- 10.2.1. The training provider shall keep a master set of course documents, check these and revise them as necessary. Marking theme with the date of such changes, to ensure that courses are completed properly in spite of any personnel changes.
- 10.2.2. The content of the training courses shall take the specific requirements of the aerospace industry into account, and available to the participants in the form of a course document. The syllabus shall cover at least the outlines as defined in NANDTB procedure P003, In addition the following shall be added, new developments in the aeronautical field (materials, manufacturing processes, inspection methods etc.), International and manufacturers own aeronautical standards and specifications shall be taken into account

**10.3. CONDUCT OF COURSES**

- 10.3.1. Training shall include general, specific and practical instructions.
- 10.3.2. The training shall meet the requirements of the particular employer or prime contractor. For example the subject matter shall include the relevant inspection procedures, instruction sheets, specifications, standards etc.
- 10.3.3. Teaching shall also include materials, products, construction, manufacturing processes etc for level 2 and 3 candidates.
- 10.3.4. Every candidate shall have the opportunity to thoroughly practice the actual applications of the methods taught.

## **11. EXAMINATIONS:**

### **11.1. CONDUCT OF EXAMINATIONS**

- 11.1.1. The training provider shall be capable of conducting a qualifying examination in accordance with the NANDTB examination guidelines (procedure P005).
- 11.1.2. Precautions shall be taken to avoid cheating, and deception of examiners
- 11.1.3. There shall be a system to ensure that test pieces used during training are not used for examination.
- 11.1.4. All test specimen used during examination shall be checked and documented.

### **11.2. CERTIFICATES**

- 11.2.1. Participants who have completed training course and passed the theoretical (general and specific) and practical examination, shall receive a certificate confirming that they have completed their NDT training successfully.

## **12. FACILITIES**

### **12.1. TRAINING ENVIRONMENT**

- 12.1.1. The training facilities shall be conform all relevant legal provisions (e.g. occupational health and safety regulations).

### **12.2. RESOURCES**

- 12.2.1. The rooms used for course and practical training, shall be well equipped with teaching materials such as blackboards, overhead projectors or video beamers.

### **12.3. NDT EQUIPMENT**

- 12.3.1. Sufficient NDT equipment shall be available, including instruments accessories and reference bodies, to cover the whole range of NDT inspection technique, the type of equipments used shall reflect the nature of the equipment used by the participants in their normal work environment
- 12.3.2. Suitable safety equipment shall be available if required.

### **12.4. TEST SPECIMEN**

- 12.4.1. Test specimen used for training shall be available in sufficient number and complexity to cover the whole range of applications.
- 12.4.2. There shall be a sufficient number of test specimen specific related to the work environment of the participant, containing natural and artificial defects to cover the whole range of testing.
- 12.4.3. Test specimen used during training shall not be used for examination purposes.

### **13. TRAINING / EXAMINING PERSONNEL REQUIREMENTS**

#### **13.1. INSTRUCTORS**

13.1.1. The training provider shall have enough instructors to ensure that one instructor is always present during a course

#### **13.2. INSTRUCTORS QUALIFICATION**

13.2.1. NDT instructors shall have suitable qualifications and adequate experience in the aerospace sector in accordance with EN4179.

13.2.2. NDT instructors shall have adequate knowledge of inspection techniques specific to the aerospace industry

#### **13.3. CONTINUING EDUCATION OF INSTRUCTORS**

13.3.1. The instructors of the training provider shall be informed regularly of the latest industrial processes and practices.

#### **13.4. REVISION OF DOCUMENTS**

13.4.1. Individuals who prepare or revise NDT course documents and examinations shall be qualified to perform such work.

### **14. RECORDS**

#### **14.1. RECORDS OF PARTICIPANTS**

14.1.1. The records of every participant in the NDT courses shall be kept for at least 7 years they shall contain at least:

- § Name of the course taken
- § Dates of NDT training
- § Instructors and examiners involved
- § Examination results (theoretical and practical)
- § Details of the test specimen and equipment used during examination.

#### **14.2. PERSONNEL RECORDS**

14.2.1. Records of instructors shall be kept for at least 7 years and updated in as far they refer to the following

- § Experience
- § Qualification
- § Approval
- § Special training and continued education

**14.3. TEST SPECIMEN**

- 14.3.1. The Training provider shall maintain a fully documented system clearly representing all the test specimen used for training and examination purposes. This includes a data sheet showing the position and extent of all defects relevant to the NDT technique.