




Technical Inspection and verification Co., Ltd.
Certification scheme – Requirements for the
qualification and certification of NDT Personnel in as
per ISO 9712:2021, Non-destructive testing –
Qualification and certification of NDT personnel

No.	E/SYS/06/01
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Requirements for the qualification and certification of NDT Personnel in as per ISO 9712:2021, Non-destructive testing – Qualification and certification of NDT personnel

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Introduction

This certification scheme is for the certification of competence of personnel engaged in the NDT with various levels as per the International Standard ISO 9712.

There is a wide range of qualification examinations available within the scheme, covering various NDT methods and techniques. This document is prepared for the general requirements and procedures common to all general parts of the scheme. This scheme tries to covers various industry and product sectors. Details of the sector, method and levels are described in this scheme.

- NDT of castings
- NDT of welds
- NDT of wrought products and forgings

This document is designed to provide comprehensive information for users of the Certification Scheme.

1.0 Scope

This document describes a system for the qualification and certification of personnel who perform industrial Non-Destructive Testing.

Specific details of the certification available at each level in the various NDT methods and product sectors are contained in section 24 of this document.

2.0 External References


- ISO/IEC 17024, General requirements for bodies operating certification systems of persons
- CEN ISO/TR 25107, Non-destructive testing – Guidelines for NDT training syllabuses
- CEN ISO/TR 25108, Non-destructive testing – Guidelines for NDT personnel training organizations
- ISO 9712, Non-destructive testing — Qualification and certification of NDT personnel. Non- destructive testing – Qualification and certification of personnel.
- SNT-TC-1A, Recommended practice, personnel qualification and certification in Nondestructive testing.
- ASNT Standard Topical Outlines for Qualification of NDT Personnel (ANSI/ASNT CP-105)

3.0 Terms and Definitions

For the purposes of this document, the definition is as below for better understanding:

- **Approved Training Organisation (ATO)** – A legal entity assessed against the criteria in CEN ISO/TR 25108 and approved by **TIV** to provide specified training courses for personnel intending to attempt a specified examination.
- **Authorised Examination Centre (AEC)** – a location, approved by **TIV**, where qualification examinations are conducted.

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- **Appropriately Qualified Personnel** - Individuals carrying out supervision of candidates for certification holding relevant certification issued by a recognized **TIV** meeting the requirements of ISO/IEC 17024.

Note: The certification concerned must include supervisory competence and have a similar technical scope as that certification which is the subject of surveillance. Where there are insufficient appropriately qualified persons in a country outside of the present field of operations to satisfy the requirement, supervision of candidates may be carried out by persons holding relevant qualification acceptable to **TIV**.

- **Candidate** - individual seeking qualification and certification and who gains experience under the supervision of suitably qualified personnel.
- **Certificate** – document, issued by **TIV** under the provisions of the applicable standard, indicating that the named person has demonstrated the competence(s) defined on the certificate
- Certification - procedure used by **TIV** to confirm that the qualification requirements for a method, level and sector have been fulfilled, leading to the issue of a certificate


Note: The issuing of a certificate does not authorize the holder to operate; this authority can only be given by the employer.

- **TIV** - The body that administrative procedures for certification of NDT personnel in accordance with this specification, and fulfils the requirements of ISO/IEC 17024.
- **Employer** - The organisation for which a candidate or holder of certification works on a regular basis. An employer may also be a candidate.
- **Examiner** - An individual certificated to Level 3 in the method and sector for which he or she is to conduct, supervise and grade examinations and who is authorised so to do by **TIV**.
- **General Examination** – a written examination, at Level 1 or 2, concerned with the principles of an NDT method.
- **Industrial NDT Experience** – the experience needed to acquire the skill and knowledge to fulfil the provisions of qualification in the appropriate sector, and which is gained under the supervision of Appropriately Qualified Personnel, in the application of the NDT method in the sector concerned.

Note: In the event that the qualification examination has been passed by a candidate lacking the experience required for certification, **TIV** will issue a letter of attestation to the successful candidate indicating that he or she has passed the qualification examination and needs only to meet the experience requirement in order to be certificated.

- **Invigilator**- An individual, trained by an **TIV** in the process of examination invigilation to requirements, who is impartial with respect to the candidate(s) under examination. Invigilators shall be authorized in writing by **TIV** on the **TIV** schedule of authorization.
- **Job-specific training** - instruction, provided by the employer (or his agent) to the candidate or certificate holder in those aspects of non-destructive testing specific to the employer's products, NDT equipment, NDT procedures, and applicable codes, standards and specifications, leading to the award of operating authorization.


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Note: A job specific examination, which is often solely of a practical nature, may be conducted by the employer as a part of the NDT personnel authorization procedure or CB will conduct such examination as per the requirements.

- **Main NDT Method Examination** - written examination, which demonstrates the candidate's general and specific knowledge of the applicable NDT method, and the ability to write NDT procedures for the NDT method as applied in the industrial or product sector(s) for which certification is sought.
 - **Multiple choice examination question** - A question worded in a manner giving rise to four potential replies, only one of which is correct, the remaining three being incorrect or incomplete
 - **NDT Instruction** - A written description of the precise steps to be followed in testing to an established standard, code, specification or NDT procedure.
 - **NDT Technique** - A specific way of utilizing an NDT method (for example, ultrasonic immersion technique).
 - **NDT Procedure** - A written description of all essential parameters and precautions to be observed when applying an NDT technique to a specific test, following an established standard, code or specification. An NDT Procedure can involve the application of more than one NDT Method or Technique.
 - **NDT Method** - Discipline applying a physical principle in Non-Destructive Testing (for example, Ultrasonic Testing).
 - **NDT Training** - a process of instruction in theory and practice in the NDT method in which certification is sought, which takes the form of training courses to a syllabus approved by **TIV**.
 - **Operating Authorization** - written statement issued by the employer, based upon the scope of certification, authorizing the individual to carry out defined tasks. Authorization may be dependent on the provision of job- specific training.
 - **Practical Examination** - assessment of practical skills in which the candidate demonstrates familiarity with and the ability to operate the necessary test equipment, to test the prescribed specimens, and to record and to analyse the resulting information to the degree required.
 - **Qualification** - Evidence of training, professional knowledge, skill and experience as well as physical fitness to enable NDT personnel to properly perform NDT tasks
 - **Qualification Examination** - An examination administered directly by **TIV**, which assesses the general, specific and practical knowledge and skill of the candidate.
- Note:** No documentary material, other than that provided by the examination centre, is to be accessible to the candidate under any circumstances during a qualification examination. In an open book examination, the candidate is provided with all necessary reference material by the examination centre; during a closed book examination, the candidate is not allowed access to any reference material whatsoever.
- **Qualified supervision** - supervision of candidates gaining experience by NDT personnel certificated under the Certification Scheme or by non-certificated personnel who, in the opinion of **TIV**, possess the knowledge, skill, training and experience

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required to properly perform such supervision.

- **Record of Certification** - Document listing all certification issued under the rules specified in this document and its antecedents, indicating that the named individual has demonstrated proficiency in performing NDT within the scope of the certification.
- **Sector** - A particular section of industry or technology where specialized NDT practices are used, requiring specific product related knowledge, skill, equipment or training. A sector may be interpreted to mean a product (castings, welds or wrought products) or an industry (railway or in-service testing).
- **Significant Interruption** - absence from (or a change of) work activity which prevents the holder of certification from practicing the duties corresponding to his or her level in the method and sector(s) for which certification was issued, for (a) a continuous period in excess of one year or (b) two or more periods for a total time exceeding two years.

Note: Legal holidays, or periods of sickness or courses of less than thirty days are not taken into account when calculating the interruption.

- **Specific Examination** - written examination, at Level 1 or Level 2, concerned with testing techniques applied in a particular sector(s), including knowledge of the product(s) tested, and of codes, standards, specifications, procedures and acceptance criteria.
- **Specification** - document stating requirements
- **Specimen** - a sample used in practical examinations, which may include radiographs and data sets, and which are representative of products typically tested in the applicable sector, and which may include more than one area or volume to be tested.
- **Specimen master report** - model answer, indicating the optimum result for a practical examination given a defined set of conditions (equipment type, settings, technique, specimen, etc.), against which the candidate's test report will be graded.
- **Supervision** - act of directing the application of NDT performed by other NDT personnel, which includes the control of actions involved in the preparation of the test, performance of the test and reporting of the results.
- **Validation** - act of demonstrating that a verified procedure will work in practice and fulfil its intended function, normally achieved by actual witnessing, demonstration, field or laboratory tests or selected trials.
- **Written Practice** – documented procedure detailing the employer's requirements for qualification, certification and authorization of NDT employees.
- **Renewal** - Procedure for revalidation of a certificate at any time up to five years after success in an initial, supplementary or recertification examination
- **Recertification** – Procedure for revalidation of a certificate by examination or by otherwise satisfying **TIV** that the published criteria for recertification are satisfied.

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4.0 Abbreviations

The abbreviations used in this certification scheme are as follows:

AEC	Authorised Examination centers
ATO	Approved Training Organisations
AUT	Automated Ultrasonic Testing
CB	TIV
ET	Electromagnetic Testing (Eddy Current Testing)
MT	Magnetic Particle Testing
NDT	Non-Destructive Testing
OTJ	On-the-job (Training)
PA	Phased array Ultrasonic testing
PT	Penetrant Testing
QA	Quality Assurance
QC	Quality Control
RI	Radiographic Interpreter
RT	Radiographic Testing
TOFD	Time of Flight Diffraction
UT	Ultrasonic Testing
VT	Visual Testing

5.0 Duties and responsibilities


TIV (CB) fulfils the requirements of ISO/IEC 17024 and will ensure that the Certification Scheme(s) for qualification and certification of personnel, are controlled and operated so as to ensure, amongst other things, that they are impartial, and that decisions taken and implemented at all levels, including management and committees, are free from commercial or other pressures that may prevent the objective provision of certification services.

Ensure that information obtained during the certification process, of from sources other than the applicant or candidate or certified person, is not disclosed to anyone without the written consent of the individual concerned, except where the law of land requires such information to be disclosed. Approve Examination Centre (AECs) where qualification examinations are conducted.

The employer shall attest to the validity of the personal information provided by the candidate, including the declaration of education, training and experience required for eligibility.

As required by regulatory requirements and codes, give the authorization to operate in writing by the employer in accordance with a Written Practice or Quality Procedure that

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defines any employer required job-specific training and examinations designed to verify the certificate holder's knowledge of relevant industry code(s), standard(s), NDT procedures, equipment, and acceptance criteria for the products tested.

Ensure that candidates gaining experience for certification are supervised by Appropriately Qualified Personnel with regard to certificated persons, be responsible for:

- Issuing the operating authorization
- Verification of visual acuity in accordance with CB requirements, and
- Verification of continuity in the application of the NDT method without Significant Interruption.

Candidates for certification shall:

- Provide verifiable documentary evidence in a form acceptable to **TIV** (a correctly completed form F/CCS/01 satisfies this requirement) that experience has been gained under the supervision of Appropriately Qualified Personnel.
- Provide documentary evidence of satisfactory completion of a course of training at an ATO approved by **TIV**.
- Undertake to abide by the Code of Ethics, for candidates and certificates holders assume all of the responsibilities described for the employer if self-employed.
- Certificate holders shall undertake to abide by the Code of Ethics published by CB.
- Submit to an annual test of visual acuity, and provide the results of tests on to the employer.
- Notify certification Services and the employer in the event that the conditions for validity of certification are not fulfilled.

6.0 Levels of Qualification


Level 1 personnel are qualified to carry out NDT operations according to written instructions under the supervision of Appropriately Qualified Level 2 or Level 3 Personnel. Within the scope of the competence defined on the certificate, Level 1 personnel may be authorized by the employer to perform the following in accordance with NDT instructions:

- Set up equipment;
- Carry out the test;
- Record and classify the results in terms of written criteria;
- Report the results.

Level 1 personnel have not demonstrated competence in the choice of test method or technique to be used, nor for the assessment, characterization or interpretation of test results.

Level 2 personnel have demonstrated competence to perform and supervise non-destructive testing according to established or recognized procedures. Within the scope of the competence defined on the certificate, level 2 personnel may be authorised by the employer to:

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- Select the NDT technique for the test method to be used;
- Define the limitations of application of the testing method;
- Translate NDT standards and specifications into NDT instructions;
- Set up and verify equipment settings;
- Perform and supervise tests;
- Interpret and evaluate results according to applicable standards, codes or specifications;
- Prepare written NDT instructions;
- Carry out and to supervise all level 1 duties;
- Provide guidance for personnel at or below level 2, and
- Organize and report the results of non-destructive tests.

7.0 Training

To be eligible for examination, candidates must have successfully completed, prior to making application for examination, a CB validated course of training at **TIV** Training division or **TIV** Approved training organization (ATO). The training covers the relevant part of the published syllabus (CEN ISO/TR 25107) for which the certification is sought. For all levels, the candidate shall satisfactorily complete a course of theoretical and practical training delivered by the **TIV** Training division through an ATO approved by **TIV**.

Candidate holding a valid training certificate issued by a third party **TIV** (approved by Certification bodies coming under IAF/ILAC/APAC) meeting the requirements of ISO 9712 shall be acceptable and considered as a completion of qualification training.

Where qualification examinations are to be conducted for candidates in an overseas location and CB validated training is not available through an existing ATO, any training that covers the relevant syllabus may be granted interim recognition for up to two years as meeting **TIV**'s requirements for pre-certification training.

For mature candidates, with at least 5 years documented experience without significant interruption in the NDT method and sector for which certification is sought, who can provide evidence of completion of a course of training (covering the relevant syllabus) which was of at least the duration specified in Table 1, the need to have attended an approved course of training may be waived. Such candidates should apply to **TIV** as 'mature candidates', attaching evidence of that status. If a significant interruption in continuity in the application of the NDT method exists, the candidate shall undertake further training determined by CB. The minimum required duration of any training, which includes both theoretical and practical elements, is shown in Table 1:

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Table 1 – Minimum required durations of training^{1,4}		
NDT Method	Level 1 days	Level 2 day²
ET ³	5	6
MT ^{5,6}	3	2
PT ^{5,6}	3	2
VT ^{5,6}	3	2
RT-FI	N/A	8
UT ³	8	10
UT-PA	5 (prerequisites UT Level 1)	5 (prerequisites UT Level 2)
UT-TOFD	5 (prerequisites UT Level 1)	5 (prerequisites UT Level 2)

NOTE-1: One day duration is at least seven (7) hours, which can be achieved on a single day or by accumulating hours.

NOTE-2: Direct access to Level 2 requires the total number of days shown in Table 1 for Level 1 and Level 2, Up to one third of the total specified in this table may take the form of OTJ training documented using suitable form provided it is verifiable and covered practical application of the syllabus detailed in the training syllabus published as CEN ISO/TR 25107.

NOTE-3: Persons attending an approved course of training prior to gaining the experience necessary for certification are advised that many of the concepts involved in the application of the NDT method concerned may be difficult to grasp without previous experience. This is especially so for UT as well as ET, and training in such cases may need to be significantly extended beyond the minimum durations specified in Table 1.

NOTE-4: Training hours are based upon candidates possessing basic mathematical skills and prior knowledge of materials and processes. If it is not the case, additional training may be required.

NOTE-5: A person who has graduated from technical college or university or has completed two years of engineering or science study at college or university may be permitted a reduction of up to 50% of the total required number of training hours if the course or study is recognized by TIV.


NOTE-6: For persons seeking certification in more than one method, or for those already certified and seeking certification in another method, then the training syllabus concerned duplicates certain aspects (i.e. product technology), the total number of training days for these methods may be reduced in line with the training syllabus.

8.0 Industrial NDT Experience

Industrial NDT experience in the appropriate sector may be acquired either prior to or following success in the qualification examination

In the event that the experience is sought following successful examination, the results of

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the examination shall remain valid for up to two (2) years.

Documentary evidence (in a form acceptable to **TIV**, i.e., on form F/CCS/01) of experience satisfying the following requirements shall be confirmed by the employer and submitted to the **TIV** prior to examination, or directly to CB prior to the award of certification in the event that experience is gained after examination.

The minimum duration of experience for certification are as defined in Table 2.

Table 2 – Minimum Duration of Experience for certification^{b,c}		
NDT Method	Experience (days)	
	Level 1	Level 2^a
ET	45	135
MT	15	45
PT	15	45
VT	15	45
RT-FI	N/A	180
UT	45	135
UT-PA	45	135
UT-TOFD	45	135

a) For direct access to level 2 certification, work experience shall consist of the sum of the times required for level level 1 and level 2

b) A certified level 1 or 2 adding an additional method may be permitted a reduction of required experience of 25% for that additional method.

c) A certified level 1 or 2 individual changing sector, adding another sector or technique for the same NDT method shall be required to gain additional experience of at least 25% 25% of the experience required in Table 2 and this shall never be less than 15 days duration.


d) When the scope of certification sought is limited in application, experience duration may be reduced by up to 50% but shall not be less than 15 days.

e) Up to 50 % of the practical experience time may be achieved by an appropriate practical course, the duration of which may be weighted by a maximum factor of five (5) this procedure shall not be used in conjunction with that described in c. The course shall be concentrated on practical solutions of frequently occurring testing problems, and the programme shall be approved by **TIV**.

9.0 Vision Requirements

The requirements for colour perception and acuity of vision, together with the qualifications of those administering the vision tests, are asked at the time of application, which includes a form for recording the results of vision tests. The requirements are reproduced below for

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ease of information.

Candidates for qualification examinations will be required, on the day of the examination, to provide proof of a satisfactory vision test conducted within the 12 months preceding the examination.

Near vision acuity shall permit reading a minimum of Jaeger number 1 or Times Roman N 4.5 or equivalent letters (having a height of 1.6 mm) at not less than 30 cm with one or both eyes, either corrected or uncorrected.

Color vision shall be sufficient that the candidate can distinguish and differentiate contrast between the colors or shades of grey used in the NDT method concerned as specified by the employer.

NOTE: Sub-sequent to certification, the documented tests of visual acuity shall be carried out at least every twelve months.

10.0 Qualification Examination

10.1 General

An examiner shall not be permitted to examine any candidate that he has trained for the examination, or who is employed in the same facility as the candidate.

Note: only CB authorised examiners and examination invigilators within the Certification Scheme, and all examination personnel are required to declare any interest in a candidate that presents for examination. In case of doubt regarding maintenance of impartiality, examiner shall consult with the Certification Manager before conducting examinations.

10.2 Examination Application

Initial enquiries to **TIV** may be by telephone. Formal applications must be made on an application form (F/CCS/01) available direct from **TIV**. No examination appointment can be considered confirmed until a correctly completed application form has been received.

Application forms ask for specific details on experience and training to the published syllabus and must be signed to the effect that these details are correct. In the event of a false statement being discovered, any certification awarded as a result of the examination will be null and void.


Applications dependent upon the individual holding appropriate certification must be supported by acceptable evidence of such certification; photocopies are acceptable at this stage, but original certificates, together with proof of identity, shall be presented to the examination invigilator on the date of examination. Failure to comply with this clause will result in a refusal to examine.

The location of all examination centers is informed by **TIV** to candidate on time to time of case to case basis by e mail.

Provision is made wherever possible for candidates with a disability which may affect their ability to complete qualification examinations. For example, up to 25% additional time may be allowed in examinations for candidates suffering from dyslexia. The candidate is responsible for bringing his or her disability to the attention of **TIV**.

10.3 Examination Equipment and Documentation

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TIV will provide all necessary codes & standards for reference during examination. NDT equipment for examination shall be calibrated and accepted by Examiner who administer the exam.

Candidates must not be in possession of any reference documentation or equipment, other than that provided by **TIV**, during a qualification examination.

Provided security of examination materials can be guaranteed, candidates will be allowed the use of a CB provided PC or lap-top computer in the NDT instruction and NDT procedure writing section of the qualification examination. On no account will the use of a candidate's own computer be permitted during a qualification examination.

The use of a pocket calculator is permissible in qualification examinations provided that it is of a type that does not permanently store programs, formulae or data relevant to NDT.

Mobile telephones are not permitted in any examination area.

10.4 **Qualification Examination Content - Levels 1 and 2**

Examination sections

The qualification examination consists of written general and specific parts, and a specific practical examination covering a given NDT method applied to specimens' representative of products in one or more industrial sectors.

The general and specific written examinations are comprised mainly of multi-choice answer questions (exceptions being the radiation protection).

The time allowed to the candidates for completion of each examination shall be based on two (2) minutes per multiple choice General question and three (3) minutes per multiple choice Specific question.

The practical examination is of sufficient duration, complexity and scope adequately to verify the candidate's ability to apply the NDT method to real test situations. The time allowed for the practical examination is detailed in the appropriate appendix to these general requirements.

General Examination


The general examination includes only validated questions selected in an unpredictable way from the collection of general questions approved by **TIV** at the time of the examination. The number of questions in each NDT method general examination shall be a minimum of **40** multiple choice questions

Specific Examination

The specific examination includes only validated questions selected in an unpredictable way from the collection of specific questions approved by **TIV** at the time of the examination. The number of questions in each NDT method general examination shall be a minimum of **20** multiple choice questions. If the specification covers two or more sectors, the minimum number of questions shall be at least **30**, evenly spread between industrial or product sectors concerned.

During the specific examination, the candidate shall be required to answer multiple-choice questions, including questions involving calculations, written procedures and questions on product technology, codes, standards and specifications.

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Practical Examination (see Annex D of ISO 9712:2021 for information on grading)

The practical examination is designed to ascertain the ability of the candidate to:

- Make the required settings;
- Operate the test equipment properly;
- Perform testing of prescribed components relating to the industrial sector concerned;
- Record and to analyse the resultant information to the degree required according to written instructions for Level 1 or a code, standard, specification or a procedure for Level 2.

For Level 2 the candidate will demonstrate the ability to prepare written instructions for Level 1. This will be an open book examination where the candidate is provided with the relevant standard, code or specification, together with a copy of Annex D of ISO9712:2021.

The Level 1 candidate will follow the NDT instruction(s) provided by the examiner, while the Level 2 candidate will select the applicable NDT technique and determine the operating conditions related to a given code, standard, or specification.

The specimens used for the practical test will be selected from a collection of representative specimens approved by **TIV**. Each test specimen shall contain one or more of the discontinuities defined in ISO/TS 22809.

The number of areas or volumes to be tested and the time allowed during the practical examination will be adequate to the level and NDT method, and to the sector concerned, and is defined in the relevant appendix to this specification.

Specimens will be uniquely identified and have a master report which includes all of the equipment settings used to detect specified discontinuities contained within the specimen. The master sheet is compiled based upon at least two independent tests, and is validated by an ASNT and/or ISO 9712 Level 3 certificate holder for use in grading qualification examinations. The independent test reports from which the master report is compiled shall be retained as records.

Specimens contain discontinuities characteristic of those that occur during manufacturing or in service. They may be natural, artificial or implanted. For practical radiography, the specimen will not necessarily contain discontinuities since these will be exhibited in the radiographs for interpretation.


For those examinations where discontinuities are normally replaced by artificial sources or data, the level 1 candidate shall demonstrate the ability to set up the equipment, verify its sensitivity and record the test data; the level 2 candidate shall also demonstrate the ability to interpret and evaluate previously recorded test data.

11.0 Examination Exemptions

Candidates in initial examinations are not required to attempt an examination part in which they have already achieved success during the process of gaining certification, so long as the subject examination part has (or had) the same (or a greater) scope as that part for which an exemption is claimed, and the resultant certification remains valid.

Existing level 3 certificate holders wishing to gain level 2 certification in the same sector and NDT method; will be exempt all examination parts other than the level 2 practical

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examination.

Existing Level 3 candidates (who hold a valid ASNT / ACCP /ISO9712 certificate appearing for Level 2) is exempted to take General examination. The candidate need to appear for specific and practical exams on the Industrial sector sought.

If any candidate elects to claim an exemption to which he or she is entitled, the mark obtained in the examination, which lead to the issue of certification, under which such exemption is claimed, where the actual examination mark cannot be ascertained, a mark of 70% will be used.

Level 3 candidates who hold valid level 2 in the same sector or have successfully passed a level 2 practical examination for the method in an industrial sector are exempt from passing again the level 2 practical examination. This exemption is only valid for the product sectors covered by the industrial sector concerned and, in any other circumstances; the relevant sector is the sector in which the candidate seeks level 3 certification.

For the purpose of claiming exemptions, certification issued by other independent NDT personnel certification bodies may be considered by **TIV** for equivalence (contact **TIV** for further information). An administrative charge will be made where **TIV** requires an evaluation of alternative certification.

If any candidate elects to include in his or her examination any part or parts from which he or she could be exempt, then failure in any such part will cause the candidate to fail and no certification will be issued. The validity of any existing certificates held by the candidate will be unaffected by such failure.

12.0 Conduct of Examinations

12.1 General

All examinations shall be conducted in the **TIV** main office, external locations under full administrated by the Certification Manager, or in any of the AEC's of **TIV**.

At the time of examination, the candidate shall have in his or her possession valid proof of identification and an official notification of the examination, which shall be shown to the examiner or invigilator upon demand.


Candidates must not be in possession of any equipment or documentation, other than that provided by the examination centre with the authority of an authorised examiner, during a qualification examination.

Any candidate who, during the course of the examination, does not abide by the examination rules or who perpetrates, or is an accessory to, fraudulent conduct shall be excluded from further participation.

Candidates proved to have cheated in a qualification examination will not be accepted as a candidate for any further examination for a period of 12 calendar months from the date of the examination in which cheating was established to have taken place. No examination results will be issued for those examination parts already completed and a letter will be sent to the candidate concerned and to the employer or sponsor explaining why the examination was terminated.

Examination questions are validated by **TIV**. The examination papers shall be validated and approved by the examiner and the grading shall be done in accordance with the

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procedure approved by **TIV**.

An examiner shall not be permitted to examine any candidate;

- a) That he or she has trained for the examination for a period of 2 years from the date of the conclusion of the training activities
- b) Who is working (permanently or temporarily) in the same facility as the examiner.

12.2 Preparation and conduct of examinations

All qualification examinations shall be prepared, and supervised by authorised examiners, and conducted in AECs established, approved and monitored by **TIV**

Examinations shall be invigilated by an examiner, or by one or more trained and authorised invigilators placed under the responsible examiner's control.

13.0 Grading of Examinations

The pass mark for each examination part, and for levels 1 and 2, for each examination specimen tested, is 70%.

Grading of practical; refer to Annex D of ISO 9712:2021.

To be eligible for certification all candidates must achieve a score of no less than 70% in the general, specific and practical examination parts.

14.0 Re-examination

A candidate who fails to obtain the pass grade for any examination part (general, specific or practical), may be re-examined twice in the failed part(s), provided the re-examination takes place not sooner than one month, unless further training acceptable to **TIV** is satisfactorily completed, not later than two years after the original examination.

A candidate who fails all permitted re-examinations shall apply for and take the initial examination according to the procedure established for new candidates.

A candidate whose examination results have not been accepted for reason of fraud or unethical behavior shall wait at least 12 months before re-applying for examination.

15.0 Publication of Examination Results


All candidates will be issued with a standard examination results notice by **TIV**, normally within 21 days of completion of examination, provided all examination fees have been paid.

A copy of the results notice will be sent to the organisation paying the examination and certification fees, and **TIV** will issue certification to candidates fulfilling all pre-requisites (training, experience, satisfactory vision and success in the relevant examination) for certification.

Candidates who have met all requirements for certification with the exception of having the required minimum experience will be advised by the certification Records Office on how to record experience gained under Appropriately Qualified Supervision. Applications for certification post experience are made directly to Certification Manager.

Candidates who fail any part of the examination will be provided with brief reasons for failure on this notice.

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16.0 Certification

Successful candidates will be issued a certificate of competence, which indicates that all conditions for certification, as detailed in the present specification document, are met. Issue of certification normally takes place within 30 days from the date of the examination. However, where a candidate for certification has achieved a pass in all relevant examination parts, but has not yet satisfied the pre-requisite experience and vision requirements, the issue of certification may be deferred for up to two years from the date of success in the qualification examination.

Once Certification Manager is in possession of evidence that all pre-requisites (training, experience, satisfactory vision and success in the relevant qualification examination) have been satisfied, a certificate stating the level and category awarded will be published.

The record of certification and/or corresponding wallet card bears:

- The family name and forename of the certificated individual;
- The date of certification;
- The date upon which certification expires;
- The level of certification;
- Reference to this international standard
- The NDT method(s);
- The applicable sector(s);
- The specific scope of the competence;
- A unique personal identification number;
- The signature of the certificated individual;
- A photo of the certificated individual (on the certificate or a wallet card).
- **TIV** Seal on the certificate and laminated ID card
- The signature of the designated representative of **TIV**
- A provision endorsement by employer to operate

Note: By issuing the certificate and/or the corresponding wallet card, **TIV** attests to the qualification of the individual but does not give any authority to operate.

17.0 Validity of Certification


The period of validity of the certification is normally of five years from the date of certification, and the expiry date is indicated on the certificate and/or wallet card.

Where success in the recertification procedure occurs within the 90 days prior to expiry of the certificate, the new certificate will expire five years after the expiry date of the certificate being revalidated. If the renewal or recertification procedure is completed prior to 90 days before expiry, the new certificate will be valid for five years from the completion of that renewal or recertification procedure.

Certification shall be invalid:

- In any industrial sector which is not covered by the certificate (unless the holder successfully completes a supplementary examination for the industrial sector);
- At the option of **TIV** after reviewing evidence of unethical behavior (Code of Ethics for certificate holders and requirements given in E/SYS/09);
- If examination or certification fees are not paid when due;

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- If the individual fails to satisfy the criteria for visual acuity and colour perception;
- If a significant interruption (see definitions) takes place in the method for which the individual is certificated;
- From the date of issue of notification of failure in a recertification examination.

Verification of current certification is available at <https://www.tiv.co.th/certificate-holder/> provided the correct name and personal number of the individual is entered.

18.0 Renewal and recertification

The procedure for renewal and recertification of level 1 and 2 certificates is detailed in document QP/01.

To ensure continuity, it is advisable to submit applications for renewal or recertification at least 60 days prior to certificate expiry. Applications for renewal or recertification after the certificate has expired may be considered (up to one year after expiry), but such applications will be subject to payment of an additional administration fee.

a) Renewal

Prior to the completion of the period of validity following certification and recertification, certification shall be renewed by the certification body for new period of validity on production of:

- Documentary evidence of a satisfactory vision test record per clause 9. Near vision acuity examination taken within the preceding 12 months. Color vision and/or grey scale perception examination taken within the preceding 60 months; AND
- Verifiable documentary evidence of continued satisfactory work activity without significant interruption in the method and sector for which certification renewal is sought (if this requirement is not met, full practical examination in accordance with clause 10.4 is required);

AND either:

- Successful completion of a practical examination element in accordance with clause 10.4 except that it shall consist of minimum 50% of the examination specimen required by clause 10.4; OR
- Successfully meeting the requirements of the structured credit system as given in Annex C of ISO 9712:2021. Minimum of 75 of 100 points for Level 1 and minimum of 50 of 100 points for Level 2 is required.


If renewal is applied for more than 12 months after expiry, recertification by examination shall be required.

b) Recertification

Prior to the completion of each second period of validity, the certified individual shall be recertified by the certification body for a new period of five years or less, provided the individual meets the criterion for renewal specified in 18.a).i&.ii and meets the applicable conditions described in the following.

- Levels 1 and 2 certificate holders seeking recertification shall provide a confirmation issued by the employer of continued satisfactory work activity

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without significant interruption in the method and sector for which recertification is sought and satisfy practical examination per clause 10.4 (if this requirement is not met, full examination general, specific and practical examination in accordance with clause 10.4 is required)

- ii. If the individual fails to achieve a grade of at least 70% on the practical exam, two re-examinations of the recertification examination shall be allowed after at least 7 days and within 12 months of the first attempt at the recertification examination.
- iii. In the event of failure in the two allowable re-examinations, the certificate shall be withdrawn. To reinstate certification, a candidate shall complete further training acceptable to the certification body and retake all examination elements required for initial certification.

If recertification is applied for more than 12 months after expiry, a complete initial examination - general, specific and practical - for Level 1 and Level 2, shall be required.

19.0 Complaints and Appeals

Certificate holders must recognize that personal integrity and professional competence are the fundamental principles on which their testing activities are founded (see also use and misuse of certificates – paragraph 23 and E/SYS/09). Accordingly, it is a condition of certification that certificate holders shall undertake to comply with a code of ethics, which is published as document reference E/SYS/09.

An aggrieved party in a dispute, which considers itself to have reasonable grounds for questioning the competency or ethical behavior of a certificated individual or his employer, may petition **TIV** for withdrawal or cancellation of certification (QP/01). Such a petition must be accompanied by all relevant facts and, if it is the view of **TIV** that an adequate case has been presented, a full investigation of the circumstances under dispute will be initiated.

20.0 Change of Employer

Change of employer shall not be cause for recertification.

Certificates signed by the employer for authorization purposes must be returned to **TIV** for re-issue upon change of employer.

21.0 Supplementary Examinations


Holders of Level 1 or 2 certification who wish to add an additional category (where appropriate) at the same level will attempt a supplementary examination comprised of specific theory and/or specific practical parts.

Supplementary examinations may only be attempted 56 days or more prior to the expiry of the certificate to be supplemented. This is to allow sufficient time for the publication of results and the retesting of failed supplementary examinations. Under certain circumstances, the 56 day 'rule' may be waived (contact **TIV** for further information).

Applicants for level 2 supplementary examinations will be required to submit to the examining **TIV** log sheets showing continuity of employment and in the application of the method in the industry or product sector concerned.

The pass mark for all supplementary examination parts will be 70%. Refer to the appropriate appendix to this document for specific information.

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One re-test of a partly failed supplementary examination will be allowed between thirty days and six months after the initial attempt. Failure of such a retest will result in the candidate being required to pass the whole of the supplementary examination to gain the certification sought.

In the event of partial failure of a supplementary examination where the retest cannot be completed (for whatever reason) prior to expiry of certification, the candidate will not be allowed a retest of the attempted supplementary examination.

Any new certification issued as a result of successful supplementary examination will incorporate the previous certification and will be valid for a maximum of 5 years from the date of completion of the first successful attempt at the supplementary examination.

22.0 Certification and Examination Records

TIV will retain records of certification issued as a result of success in any qualification examination for a minimum period of 10 years. An updated database of certificated personnel, which includes (amongst other things) the name, unique personal identification number and scope of certification held by each individual, is maintained by **TIV** records office. Verification of the certification status of individual certificated personnel is freely available at www.TIV.co.th

CB will retain examination records of successful and unsuccessful candidates for a period of 10 years from the date of the examination. Audit of specific individual examination records, which are under the jurisdiction of **TIV**, may be made available in appropriate circumstances. Contact **TIV** for further information.

23.0 Use and Misuse of Certificates

The issue of a certificate indicates that the holder has demonstrated an acceptable level of competence measured by means of the relevant examination conducted at a CB in accordance with the prevailing requirements on the date indicated using a particular set of equipment on a specific product. Certificate holders or employers are not permitted to imply any further degree of competence on the basis of the certificate.


Certificate holders or their employers must not use or refer to CB certificates, nor **TIV** logo, nor must they knowingly allow them to be used or referred to by a third party, in a manner that may be considered fraudulent or to bring the Certification Scheme into disrepute. The full conditions of use of **TIV** logo, or reference to CB certification, are detailed in a separate document (E/SYS/08 and E/SYS/09) available from **TIV**.

All certificated personnel are required to keep a register of complaints made against them within the scope of the certificate of competence. Failure to keep such a register or failure to enter valid complaints in it will be construed as a misuse of the certificate and appropriate penalties will be applied, see below. The register of complaints must be made available to **TIV** on request.

The penalty for misuse of certification in all cases is invalidation of the certificate. If the misuse was in the public domain, publication of the transgression may also be undertaken. Any misuse, which appears to be an infringement of the law, will result in the matter being reported to the authorities.

Certificates are valuable documents which should be kept in a safe place. Any suspicion of forgery or misrepresentation must be reported to **TIV**. Loss or theft of certificates must be

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reported to the authorities and to **TIV**.

It is required that all certificate holders maintain a log demonstrating continuity in the application of the NDT activity for which they are certificated. Examples of suitable pages for recording details of employment, continuity and surveillance may be carried out in a prescribed report.


New employers presented with certification should satisfy themselves that the certificate holder has been employed without significant interruption (see definitions) on work for which the certificate was granted. It is strongly recommended that the employer request sight of the certificate holder's logbook.

24.0

Certification Available

NDT method	Level	Sector
Eddy current Testing (ET)	1, 2	Welds (w)
Eddy Current Testing – Tubes (ET)	1, 2	Tubes and Pipes (t)
Magnetic Particle Testing (MT)	1, 2	Multi-sector (c/f/w)
Penetrate Testing (PT)	1, 2	Multi-sector (c/f/w)
Visual Testing (VT)	1, 2	Multi-sector (c/f/w)
Radiography Interpretation (RT-FI)	2	Welds (w)
Ultrasonic Testing (UT)	1, 2	Welds (w)
Phased Array Ultrasonic Testing (UT-PA)	1, 2	Welds (w)
Time of flight Diffraction (UT-TOFD)	1, 2	Welds (w)


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25.0 Summary of Examination Requirement

Method	Level	Product Sector ⁽¹⁾	General		Specific			Practical-Hand On				Practical - Instruction Writing		
			No. of Question	Time Allowed (minutes)	No. of Question	Time Allowed (minutes)	Reference standard(s)	No. of Specimen(s)	Time Allowed (minutes)	Description ⁽³⁾	Mandatory Detection & Evaluation	No. of instruction	Time Allowed (minutes)	Description
ET	1	t	40	80	20	60	EN 1971-1, EN 1971-2	2	120	Two copper alloy tubes with difference location of discontinuities	70% detection required	1	90	N/A
		w	40	80	20	60	ISO 17643	2	120	One fillet tee weld and one plate butt weld, carbon steel material				
		t & w	40	80	30	90	EN 1971-1, EN 1971-2, ISO 17643	2	120	One copper alloy tube and one carbon steel fillet tee weld				
	2	t	40	80	20	60	EN 1971-1, EN 1971-2	2	120	Two copper alloy tubes with difference location of discontinuities	70% detection required	1	90	(2)
		w	40	80	20	60	ISO 17643	2	120	One fillet tee weld and one pipe butt weld, carbon steel material	Correctly evaluate discontinuities detected against acceptance criteria with minimum 70% pass mark required			
		t & w	40	80	30	90	EN 1971-1, EN 1971-2, ISO 17643	2	120	One copper alloy tube and one carbon steel pipe butt weld				
MT	1	c	40	80	20	60	ISO 4986	2	120	Two casted irons with difference shape/size/discontinuities	100% detection required	1	90	N/A
		f	40	80	20	60	EN 10228-1	2	120	Two forged steel with difference shape/size/discontinuities				
		w	40	80	20	60	ISO 17638	2	120	One fillet tee weld and one plate butt weld, carbon steel material				
		c & w	40	80	30	90	ISO 4986, ISO 17638	2	120	One casted iron and one carbon steel fillet tee weld				
		f & w	40	80	30	90	EN 10228-1, ISO 17638	2	120	One forged steel and one carbon steel fillet weld				
		c, f & w	40	80	30	90	ISO 4986, EN 10228-1, ISO 17638	3	180	One casted iron, one forged steel and one carbon steel fillet tee weld				
	2	c	40	80	20	60	ISO 4986	2	120	Two casted irons with difference shape/size/discontinuities	100% detection required	1	90	(2)
		f	40	80	20	60	EN 10228-1	2	120	Two forged steel with difference shape/size/discontinuities				
		w	40	80	20	60	ISO 17638 & ISO 23278	2	120	One fillet tee weld and one carbon steel pipe butt weld				
		c & w	40	80	30	90	ISO 4986, ISO 17638 & ISO 23278	2	120	One casted iron and one carbon steel pipe butt weld				
		f & w	40	80	30	90	EN 10228-1, ISO 17638 & ISO 23278	2	120	One forged steel and one carbon steel pipe butt weld				
		c, f & w	40	80	30	90	ISO 4986, EN 10228-1, ISO 17638 & ISO 23278	3	180	One casted iron, one forged steel and one carbon steel pipe butt weld				

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Method	Level	Product Sector ⁽¹⁾	General		Specific			Practical-Hand On			Practical - Instruction Writing			
			No. of Question	Time Allowed (minutes)	No. of Question	Time Allowed (minutes)	Reference standard(s)	No. of Specimen(s)	Time Allowed (minutes)	Description ⁽³⁾	Mandatory Detection & Evaluation	No. of instruction	Time Allowed (minutes)	Description
PT	1	c	40	80	20	60	ISO 4987	2	120	Two casted irons with difference shape/size/discontinuities	70% detection required	N/A		
		f	40	80	20	60	EN 10228-2	2	120	Two forged steel with difference shape/size/discontinuities				
		w	40	80	20	60	ISO 3452-1	2	120	One fillet tee weld and one plate butt weld				
		c & w	40	80	30	90	ISO 4987, ISO 3452-1	2	120	One casted iron and one fillet tee weld				
		f & w	40	80	30	90	EN 10228-2, ISO 3452-1	2	120	One forged steel and one fillet weld				
		c, f & w	40	80	30	90	ISO 4987, EN 10228-2, ISO 3452-1	3	180	One casted iron, one forged steel and one fillet tee weld				
	2	c	40	80	20	60	ISO 4987	2	120	Two casted irons with difference shape/size/discontinuities	70% detection required Correctly evaluate discontinuities detected against acceptance criteria with minimum 70% pass mark required	1	90	(2)
		f	40	80	20	60	EN 10228-2	2	120	Two forged steel with difference shape/size/discontinuities				
		w	40	80	20	60	ISO 3452-1 & ISO 23277	2	120	One fillet tee weld and one pipe butt weld				
		c & w	40	80	30	90	ISO 4987, ISO 3452-1 & ISO 23277	2	120	One casted iron and one pipe butt weld				
		f & w	40	80	30	90	EN 10228-2, ISO 3452-1 & ISO 23277	2	120	One forged steel and one pipe butt weld				
		c, f & w	40	80	30	90	ISO 4987, EN 10228-2, ISO 3452-1 & ISO 23277	3	180	One casted iron, one forged steel and one pipe butt weld				

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Method	Level	Product Sector ⁽¹⁾	General		Specific			Practical-Hand On				Practical - Instruction Writing		
			No. of Question	Time Allowed (minutes)	No. of Question	Time Allowed (minutes)	Reference standard(s)	No. of Specimen(s)	Time Allowed (minutes)	Description ⁽³⁾	Mandatory Detection & Evaluation	No. of instruction	Time Allowed (minutes)	Description
VT	1	c	40	80	20	60	ISO 11971	2	120	Two casted irons with difference shape/size/discontinuities	100% detection required	N/A		
		f	40	80	20	60	ISO 9237	2	120	Two forged steel with difference shape/size/discontinuities				
		w	40	80	20	60	ISO 17637	2	120	One fillet tee weld and one plate butt weld				
		c & w	40	80	30	90	ISO 11971, ISO 17637	2	120	One casted iron and one fillet tee weld				
		f & w	40	80	30	90	ISO 9237, ISO 17637	2	120	One forged steel and one fillet weld				
		c, f & w	40	80	30	90	ISO 11971, ISO 9237, ISO 17637	3	180	One casted iron, one forged steel and one fillet tee weld				
	2	c	40	80	20	60	ISO 11971	2	120	Two casted irons with difference shape/size/discontinuities	100% detection required	1	90	(2)
		f	40	80	20	60	ISO 9237	2	120	Two forged steel with difference shape/size/discontinuities				
		w	40	80	20	60	ISO 17637 & ISO 5817	2	120	One fillet tee weld and one pipe butt weld				
		c & w	40	80	30	90	ISO 11971, ISO 17637 & ISO 5817	2	120	One casted iron and one pipe butt weld				
		f & w	40	80	30	90	ISO 9237, ISO 17637 & ISO 5817	2	120	One forged steel and one pipe butt weld				
		c, f & w	40	80	30	90	ISO 11971, ISO 9237, ISO 17637 & ISO 5817	3	180	One casted iron, one forged steel and one pipe butt weld				

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Method	Level	Product Sector ⁽¹⁾	General		Specific			Practical-Hand On				Practical - Instruction Writing		
			No. of Question	Time Allowed (minutes)	No. of Question	Time Allowed (minutes)	Reference standard(s)	No. of Specimen(s)	Time Allowed (minutes)	Description ⁽³⁾	Mandatory Detection & Evaluation	No. of instruction	Time Allowed (minutes)	Description
RT -FI	2	w	40	80	20	60	ISO 17636-1 & ISO 10675-1	20	120	Twenty film images of butt weld with difference thickness and discontinuities, carbon steel material	70% detection required Correctly evaluate discontinuities detected against acceptance criteria with minimum 70% pass mark required	1	90	(2)
UT	1	w	40	80	20	60	ISO 17640	2	120	One plate and one pipe (Dia.10") butt weld, carbon steel material	All lack of side wall fusion shall be detected	N/A		
	2	w	40	80	20	60	ISO 17640 & ISO 11666	2	120	One plate and one pipe (Dia.6") butt weld, carbon steel material	All lack of side wall fusion shall be detected Correctly evaluate discontinuities detected against acceptance criteria with minimum 70% pass mark required	1	90	(2)
UT - PA	1	w	40	80	20	60	ISO 13588	2	120	One plate and one pipe (Dia.10") butt weld, carbon steel material	100% detection required	N/A		
	2	w	40	80	20	60	ISO 13588 & ISO/FDIS 19285	2	120	One plate and one pipe (Dia.6") butt weld, carbon steel material	100% detection required Correctly evaluate discontinuities detected against acceptance criteria with minimum 70% pass mark required	1	90	(2)
UT - TO FD	1	w	40	80	20	60	ISO 16828	2	120	One plate and one pipe (Dia.10") butt weld, carbon steel material	70% detection required	N/A		
	2	w	40	80	20	60	ISO 16828 & ISO 15626	2	120	One plate and one pipe (Dia.6") butt weld, carbon steel material	70% detection required Correctly evaluate discontinuities detected against acceptance criteria with minimum 70% pass mark required	1	90	(2)

Note:

- (1) Product Sector abbreviation.
 - c: casting
 - f: forging
 - w: welding
 - t: tubes and pipes
 - wp: wrought product except forging
- (2) The candidate shall write an NDT instruction suitable for Level 1 personnel specific to specimen and technique selected by the Examiner.
- (3) NDT techniques and operating condition.
 - i. For Level 1, NDT Instruction including technique and operating condition to be used will be provided by an Examiner
 - ii. For Level 2, the candidate shall select the applicable NDT technique and determine the operating conditions related to a given code, standard and specification.

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Table C.1 — Structured credit system for renewal Level 1, 2 and 3 and for Level 3 recertification ^a

Item	Activity	Level 1			Level 2			Level 3		
		Points granted per activity	Maximum number of points per year of activity	Maximum number of points over 5 years of activity	Points granted per activity	Maximum number of points per year of activity	Maximum number of points over 5 years of activity	Points granted per activity	Maximum number of points per year of activity	Maximum number of points over 5 years of activity
Part A										
1	Performance of NDT Activities ^a	2 / day	25	95	2 / day	25	95	2 / day	25	95
2	Completion of theoretical training in the method	1 / day	5	15	1 / day	5	15	1 / day	5	15
3	Completion of practical training in the method	2 / day	10	25	2 / day	10	25	2 / day	10	25
4	Delivery of practical or theoretical training in NDT in the method considered	N/A	N/A	N/A	1 / day	15	75	1 / day	15	75
5	Participation in research activities in NDT field or for engineering of NDT (see Annex E)	1 / week	15	60	1 / week	15	60	1 / week	15	60
Part B										
6	Participation to a technical seminar/paper in the field of the method or technique	1 / day	2	10	1 / day	2	10	1 / day	2	10
7	Presenting a technical seminar/paper in the field of the method or technique	1 / presentation	3	15	1 / presentation	3	15	1 / presentation	3	15
8	Current individual membership in NDT or NDT related society	1 / membership	2	5	1 / membership	2	5	1 / membership	2	5
9	Technical oversight and mentoring of NDT personnel/ trainee in the relevant method	N/A	N/A	N/A	2 / mentee	10	30	2 / mentee	10	40
10	Participation or convenorship in standardization and technical committees	N/A	N/A	N/A	1 / committee	3	15	1 / committee	4	20

NOTE Where the term "year(s)" is noted in this table, this is specified as a certification year and not as a calendar year.

^a See [C.2](#) for specific details of this activity.

Item	Activity	Level 1			Level 2			Level 3		
		Points granted per activity	Maximum number of points per year of activity	Maximum number of points over 5 years of activity	Points granted per activity	Maximum number of points per year of activity	Maximum number of points over 5 years of activity	Points granted per activity	Maximum number of points per year of activity	Maximum number of points over 5 years of activity
11	Performing a technical NDT role within a certification body	N/A	N/A	N/A	2 / activity	10	30	2 / activity	10	40

NOTE Where the term "year(s)" is noted in this table, this is specified as a certification year and not as a calendar year.


^a See [C.2](#) for specific details of this activity.

C.2 Performance of NDT activities.

C.2.1 in assessing this activity type, the certification body should consider the responsibilities of employers as specified in 5.5 and the duties specified in clause 6. The following work activities may be considered as accepted

- knowledge and understanding of customer's specifications and the inspection standard;
- verification of operating conditions or setting up of the test equipment, successful performance of NDT, satisfactory reporting;
- performance as a Level 3 examiner.

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C.2.2 In order to assess the activities specified in C.2.1, the certification body may request from the individual seeking renewal or Level 3 recertification documentation and/or evidence to demonstrate compliance including, but not limited to, the following:

- a) confirmation of the candidates work activities by a certified individual or referee;
- b) confirmation of the level of activity of the individual in the given method;
- c) confirmation of formal documented competency or proficiency test(s) in the given method;
- d) dates and protocol number of reports;
- e) details of any job specific training received;
- f) confirmation of employer's authorization to operate;
- g) summary of activities and outputs;
- h) job/position description;
- i) annual/regular employer assessment of performance/competence;
- j) sample NDT reports;
- k) sample procedure(s) developed (Level 3 only);
- l) customers feedback;
- m) confirmation of adherence to code of ethics from employer;
- n) confirmation of compliance with additional national requirement (i.e. radiation safety).

Other Evidence may be deemed acceptable or be requested by the certification body. The certification body may require that some or all of the submitted evidence be confirmed by the employer.

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