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**Non-destructive testing — Qualification
and certification of personnel**

Essais non destructifs — Qualification et certification du personnel



Reference number
ISO 9712:2005(E)

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 9712 was prepared by Technical Committee ISO/TC 135, *Non-destructive testing*, Subcommittee SC 7, *Personnel qualification*.

This third edition cancels and replaces the second edition (ISO 9712:1999), which has been technically revised.

This corrected version of ISO 9712:2005 incorporates the following corrections.

- The wording of the Introduction has been slightly modified.
- The terms and definitions have been placed in alphabetical order.
- In 8.8.3, “(D, E or F)” has been replaced by “(D, E and F)”, so that it is clear this requirement applies to all three parts of the examination to which it relates.
- The wording of the note to 9.2.1 and that of the requirement 9.2.2 has been altered to eliminate ambiguity.
- 10.5.3.2 a) has been clarified; while the cross-reference to 10.5.2 given in the final paragraph of 12.3 has been corrected to refer to 10.5.3.1 a).
- The cross-reference to another, non-existent, table made in the table in Annex F has been eliminated.
- Some minor typographical errors have been corrected.

Introduction

Since the effectiveness of any application of non-destructive testing (NDT) depends upon the capabilities of the persons who perform or are responsible for the test, a procedure was developed to provide a means for evaluating and documenting the competence of personnel whose duties require the appropriate theoretical and practical knowledge of the non-destructive tests that they perform, specify, supervise, monitor or evaluate. An added incentive stems from the world-wide comparability of a wide range of industrial applications requiring common non-destructive testing approaches.

When certification of NDT personnel is defined in product standards, regulations, codes or specifications, it is important to certify the personnel in accordance with this International Standard. Where latitude is provided in the criteria within this International Standard, the certification body has the final decision in determining specific requirements.

Non-destructive testing — Qualification and certification of personnel

1 Scope

This International Standard specifies the qualification and certification of personnel involved in non-destructive testing (NDT). It is applicable to proficiency in one or more of the following methods:

- acoustic emission testing;
- eddy current testing;
- infrared thermographic testing;
- leak testing (hydraulic pressure tests excluded);
- magnetic particle testing;
- penetrant testing;
- radiographic testing;
- strain testing;
- ultrasonic testing;
- visual testing (direct unaided visual tests and visual tests carried out during the application of another NDT method are excluded).

Certification to this International Standard provides an attestation of general competence of the NDT operator. It does not represent an authorization to operate, since this remains the responsibility of the employer, and the certified employee may require additional specialized knowledge of parameters such as equipment, NDT procedures, materials and products of the employer. Where required by regulatory requirements and codes, the authorization to operate will be given in writing by the employer in accordance with a quality procedure that 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 tested products.

The system specified by this International Standard could also be applicable to other NDT methods, where independent certification programs exist.

NOTE Wherever the gender-specific word "his" or "he" appears in this International Standard, the feminine form "her" or "she" is equally applicable.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 17024, *Conformity assessment — General requirements for bodies operating certification of persons*