



SLOVENSKI STANDARD
oSIST prEN ISO 9712:2011
01-maj-2011

Neporušitveno preskušanje - Kvalificiranje in certificiranje osebja za neporušitvene preiskave - Splošna načela (ISO/DIS 9712:2011)

Non-destructive testing - Qualification and certification of NDT personnel - General principles (ISO/DIS 9712:2011)

Zerstörungsfreie Prüfung - Qualifizierung und Zertifizierung von Personal der zerstörungsfreien Prüfung - Allgemeine Grundlagen (ISO/DIS 9712:2011)

Essais non destructifs - Qualification et certification du personnel END - Principes généraux (ISO/DIS 9712:2011)

Ta slovenski standard je istoveten z: prEN ISO 9712

ICS:

03.100.30	Vodenje ljudi	Management of human resources
19.100	Neporušitveno preskušanje	Non-destructive testing

oSIST prEN ISO 9712:2011

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NORME EUROPÉENNE
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Will supersede EN 473:2008

English Version

Non-destructive testing - Qualification and certification of NDT personnel - General principles (ISO/DIS 9712:2011)

Essais non destructifs - Qualification et certification du
personnel END - Principes généraux (ISO/DIS 9712:2011)

Zerstörungsfreie Prüfung - Qualifizierung und Zertifizierung
von Personal der zerstörungsfreien Prüfung - Allgemeine
Grundlagen (ISO/DIS 9712:2011)

This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/TC 138.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Contents	Page
Foreword.....	3

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Foreword

This document (prEN ISO 9712:2011) has been prepared by Technical Committee ISO/TC 135 "Non-destructive testing" in collaboration with Technical Committee CEN/TC 138 "Non-destructive testing" the secretariat of which is held by AFNOR.

This document is currently submitted to the parallel Enquiry.

This document will supersede EN 473:2008.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

Endorsement notice

The text of ISO/DIS 9712:2011 has been approved by CEN as a prEN ISO 9712:2011 without any modification.

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DRAFT INTERNATIONAL STANDARD ISO/DIS 9712

ISO/TC 135/SC 7

Secretariat: **SCC**Voting begins on
2011-02-17Voting terminates on
2011-07-17

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Non-destructive testing — Qualification and certification of NDT personnel — General principles

Essais non destructifs — Qualification et certification du personnel END — Principes généraux

[Revision of third edition (ISO 9712:2005) and ISO 9712:2005/Cor.1:2006]

ICS 03.100.30; 19.100

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ISO/CEN PARALLEL PROCESSING

This draft has been developed within the International Organization for Standardization (ISO), and processed under the **ISO-lead** mode of collaboration as defined in the Vienna Agreement.

This draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel five-month enquiry.

Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month approval vote in ISO and formal vote in CEN.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.

Pour accélérer la distribution, le présent document est distribué tel qu'il est parvenu du secrétariat du comité. Le travail de rédaction et de composition de texte sera effectué au Secrétariat central de l'ISO au stade de publication.

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Contents

Page

Foreword	v
Introduction.....	vi
1 Scope	1
2 Normative references	2
3 Terms and definitions	2
4 Methods and symbols	5
5 Responsibilities	5
5.1 General	5
5.2 Certification body	6
5.3 Authorised qualifying body	6
5.4 Examination centre	7
5.5 Employer	7
5.6 Candidate	8
5.7 Certificate holders	8
6 Levels of qualification	8
6.1 Level 1	8
6.2 Level 2	9
6.3 Level 3	9
7 Eligibility	10
7.1 General	10
7.2 Training	10
7.3 Industrial NDT experience	12
7.3.1 General	12
7.3.2 Level 3	12
7.3.3 Possible reductions	13
7.4 Vision requirements - all levels	14
8 Qualification examination	14
8.1 General	14
8.2 Examination content and grading for Level 1 and Level 2	14
8.2.1 General examination	14
8.2.2 Specific examination	15
8.2.3 Practical examination	15
8.2.4 Grading of the Level 1 and Level 2 qualification examination	16
8.3 Examination content and grading for Level 3	17
8.3.1 General	17
8.3.2 Basic examination	17
8.3.3 Main method examination	18
8.3.4 Grading of level 3 qualification examinations	18
8.4 Conduct of examinations	18
8.5 Re-examination	19
8.6 Examination exemptions	19
9 Certification	19
9.1 Administration	19
9.2 Certificates and/or wallet cards	20
9.3 Digital certificates	20
9.4 Validity	21
9.4.1 General	21

ISO/DIS 9712

9.4.2	Revalidation.....	21
10	Renewal	21
11	Recertification	21
11.1	General.....	21
11.2	Level 1 and 2	22
11.3	Level 3.....	22
12	Files	23
13	Transition period.....	23
Annex A (normative) Sectors		24
Annex B (normative) Minimum number and type of test specimens for the Levels 1 and 2 practical examination		25
Annex C (normative) Structured credit system for Level 3 recertification		27
Annex D (normative) Grading Practical examination		29
D.1	Grading of Level 1 and 2 practical examination - guidance on the percentile weighting.....	29
D.2	Weighting of Level 3 NDT procedure examination -	31
Bibliography		32

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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, and by Technical Committee CEN/TC 138, *Non-destructive testing* in collaboration.

This fourth edition cancels and replaces the thirs edition (ISO 9712:2005), which has been technically revised.

The main changes are :

- separation of the method "Magnetic testing" into two sub-methods: Magnetic Particle testing and Flux leakage testing
- clarification of responsibilities for Certification body, Qualification body and Examination Centre
- rewrite of the clause "Training" for clarification and change in the number of required hours
- rewrite of the clause "Experience" for clarification
- introduction of "Digital Certificates"
- for level 3 recertification, deletion of the requirement for the demonstration of practical skill
- other minor technical and editorial changes

ISO/DIS 9712

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 of evaluating and documenting the competence of personnel whose duties require the appropriate theoretical and practical knowledge of the non-destructive tests 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 required in product standards, regulations, codes or specifications, it is important to certify the personnel in accordance with this International Standard. When latitude is provided in the criteria within this International standard, the certification body has the final decision in determining specific requirements.

When there is no requirement in legislation, in standard or in the order for certification of NDT personnel it is for the employer of such personnel to decide how to assure himself that they are competent to do the work assignments. So he may employ people who are already certified, or he may apply his own expertise so as to assure himself that his employee has the necessary competence. In this last case a prudent employer would no doubt use this standard as a reference document.

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Non-destructive testing — Qualification and certification of NDT personnel — General principles

1 Scope

This International Standard establishes principles for the qualification and certification of personnel who perform industrial non-destructive testing (NDT).

NOTE 1 The term 'industrial' implies the exclusion of applications in the field of medicine.

The system described in this International Standard can also apply to other NDT methods, or to new techniques within an established NDT method, provided a comprehensive scheme of certification exists and the method or technique is covered by International, European, regional or national standards,

The certification covers proficiency in one or more of the following methods :

- a) acoustic emission testing;
- b) eddy current testing;
- c) infrared thermography testing;
- d) leak testing (hydraulic pressure tests excluded);
- e) magnetic testing (magnetic particle testing and flux leakage testing) ;
- f) penetrant testing;
- g) radiographic testing;
- h) strain testing
- i) ultrasonic testing;
- j) 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 specific for the employer.

Where required by regulatory requirements and codes, the authorization to operate shall 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.

NOTE 2 This standard specifies requirements for what are in effect third-party conformity assessment schemes; These requirements do not directly apply to conformity assessment by second or first parties but relevant parts of this standard can be referred to in such arrangements.