EESTI STANDARD EVS-EN 1711:2000

Keevitusõmbluse mittepurustav uurimine. Keevitusõmbluste pöörisvooluurimine komplekstasapinna analüüsi abil

Non-destruktive examination of welds - Eddy current examination of welds by complex plane analysis

EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1711:2000 sisaldab Euroopa standardi EN 1711:2000 ingliskeelset teksti.	This Estonian standard EVS-EN 1711:2000 consists of the English text of the European standard EN 1711:2000.
Standard on kinnitatud Eesti Standardikeskuse 08.08.2000 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 08.08.2000 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

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EUROPEAN STANDARD
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English version

Non-destructive examination of welds

Eddy current examination of welds by complex plane analysis

Contrôle non destructif des assemblages soudés – Contrôle par courants de Foucault des assemblages soudés par analyse des signaux dans le plan complexe

Zerstörungsfreie Prüfung von Schweißverbindungen – Wirbelstromprüfung von Schweißverbindungen durch Vektorauswertung

This European Standard was approved by CEN on 1999-12-11.

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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 121 "Welding", the secretariat of which is held by DS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2000, and conflicting national standards shall be withdrawn at the latest by August 2000.

This European Standard 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).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This standard defines eddy current examination techniques for detection of surface breaking and near surface planar imperfections, mainly in ferritic materials (weld material, heat affected zones, parent materials).

This eddy current technique can also be applied to other metallic construction materials (e.g. stainless steels) if required by the design specification.

The techniques can be applied to coated and uncoated objects during fabrication and in service, onshore and offshore.

The examination can be carried out on all accessible surfaces and on welds of almost any configuration.

Usually, it can be applied in the as-welded condition. However, a very rough surface can prevent an efficient examination.

Unless otherwise specified for specific points in this standard, the general principles of prEN 12084:1995 apply.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 473, *Qualification and certification of NDT personnel — General principles.*

EN 1289, *Non-destructive examination of welds — Penetrant testing of welds - Acceptance levels.*

EN 1291, *Non-destructive examination of welds — Magnetic particle testing of welds - Acceptance levels.*

EN 1330-5, *Non-destructive testing — Terminology — Part 5 : Terms used in Eddy current testing.*

EN 12062, *Non-destructive examination of welds — General rules for metallic materials.*

prEN 12084 :1995, *Non-destructive testing — Eddy current examination — General principles and basic guidelines.*

EN 25817, *Arc-welded joints in steels — Guidance on quality levels for imperfections (ISO 5817 :1992).*

EN 30042, *Arc-welded joints in aluminium and its weldable alloys — Guidance on quality levels for imperfections (ISO 10042 :1992).*

3 Terms and definitions

For the purposes of this standard, the terms and definitions given in EN 1330-5 apply.

4 Personnel requirements

Personnel conducting the examinations in accordance with this standard shall be qualified and certified to an appropriate level in accordance with EN 473.