

**Metalsete materjalide keevisõmbluste
purustav katsetamine. Keevisõmbluste
makroskoopiline ja mikroskoopiline
kontrollimine**

Destructive tests on welds in metallic materials -
Macroscopic and microscopic examination of welds

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1321:1999 sisaldab Euroopa standardi EN 1321:1996 ingliskeelset teksti.	This Estonian standard EVS-EN 1321:1999 consists of the English text of the European standard EN 1321:1996.
Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala: Käesolev standard määrab kindlaks katsekehade ettevalmistamise, testimiskorra ja põhieesmärgid makro- ja mikrostruktuuri uurimisel.	Scope:
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Võtmesõnad: katsekehade ettevalmistamine, keevisliited, keevitusvead, makroskoopiline analüüs, mikroanalüüsid, protseduurid, purustavad teimid, tähistus

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Descriptors: Testing, welded joints, macroscopic examination, metals.

English version

Destructive tests on welds in metallic materials

Macroscopic and microscopic examination of welds

Essais destructifs des soudures sur matériaux métalliques – Examen macroscopique et microscopique des assemblages soudés

Zerstörende Prüfung von Schweißverbindungen an metallischen Werkstoffen – Makroskopische und mikroskopische Untersuchungen von Schweißnähten

This European Standard was approved by CEN on 1996-09-27.

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.

This European Standard exists 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

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

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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 April 1997, and conflicting national standards shall be withdrawn at the latest by April 1997.

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

1 Scope

This standard specifies the methods of specimen preparation, test procedures and their main objectives for the macroscopic and microscopic examination.

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 288-3	Specification and approval of welding procedures for metallic materials - Part 3 : Welding procedure tests for the arc welding of steels
EN 288-4	Specification and approval of welding procedures for metallic materials - Part 4 : Welding procedure tests for the arc welding of aluminium and its alloys
EN 26520	Classification of imperfections in metallic fusion welds, with explanations (ISO 6520:1982)
CR 12187	Welding - Guidelines for a grouping system of materials for welding purposes
CR 12361	Destructive test on welds in metallic materials - Etchants for macroscopic and microscopic examination

3 Definitions

For the purposes of this standard, the following definitions apply :

3.1 macroscopic examination : the examination of a test specimen by the naked eye, or under low magnification, with or without etching.

3.2 microscopic examination : the examination by microscope with a magnification normally within 50 to 500 times, with or without etching.

3.3 operator: the person who performs the macroscopic and/or microscopic examination.