Keevisõmbluste mittepurustav kontroll. Sulakeevitusliidete visuaalne kontroll

N - - V ISO 17637:2003



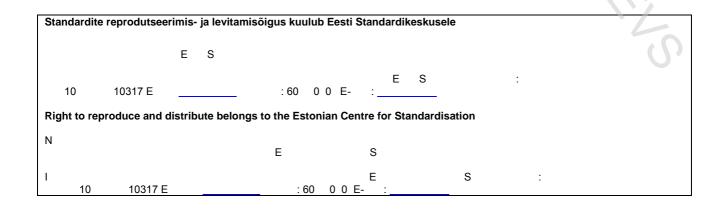


EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

E 17637:2011 ISO 17637:2011	EVS-EN ISO E	EN	E E EN ISO 1763	EVS-EN ISO 17637:2011 E 37:2011
S 31 03 2011 EVS	E S S		E S 31 03 2011	E
E	Е		02 03 2011	E
02 03 2011 S	E			E

ICS 2 160 0



EUROPEAN STANDARD NORME EUROPÉENNE

EN ISO 17637

EUROPÄISCHE NORM

March 2011

ICS 25.160.40

Supersedes EN 970:1997

English Version

Non-destructive testing of welds - Visual testing of fusion-welded joints (ISO 17637:2003)

Contrôle non destructif des assemblages soudés - Contrôle visuel des assemblages soudés par fusion (ISO 17637:2003)

Zerstörungsfreie Prüfung von Schweißverbindungen -Sichtprüfung von Schmelzschweißverbindungen (ISO 17637:2003)

This European Standard was approved by CEN on 13 February 2011.

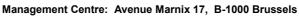
CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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



Foreword

The text of ISO 17637:2003 has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 17637:2011 by Technical Committee CEN/TC 121 "Welding" the secretariat of which is held by DIN.

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 September 2011, and conflicting national standards shall be withdrawn at the latest by September 2011.

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

This document supersedes EN 970:1997.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 17637:2003 has been approved by CEN as a EN ISO 17637:2011 without any modification.



Contents Page Forewordiv 1 Scope......1 2 Test conditions and equipment......1 3 Personnel qualification......1 Visual testing 2 4.1 Visual testing of joint preparation......2 4.2 Visual testing during welding2 4.3 4.4 Visual testing of the finished weld2 4.5 5 Test records 4



Non-destructive testing of welds — Visual testing of fusion-welded joints

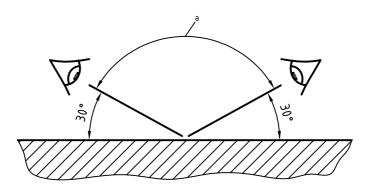
1 Scope

This International Standard covers the visual testing of fusion welds in metallic materials. It may also be applied to visual testing of the joint prior to welding.

2 Test conditions and equipment

The illuminance at the surface shall be a minimum of 350 lx. However, 500 lx is recommended.

For direct inspection, the access shall be sufficient to place the eye within 600 mm of the surface to be examined and at an angle not less than 30° (see Figure 1).



a Range

Figure 1 — Access for testing

Remote inspection using mirrors, boroscopes, fibre optic cables or cameras shall be considered when the access for testing in accordance with Figure 1 is not possible or when specified by an application standard.

An additional light source can be used to increase the contrast and relief between imperfections and the background.

Where the result of visual testing is inconclusive, the visual test should be supplemented by other non-destructive testing methods for surface inspections.

Examples of equipment used for visual testing are given in Annex A.

3 Personnel qualification

Visual testing of welds and the evaluation of results for final acceptance shall be performed by qualified and capable personnel. It is recommended that personnel be qualified in accordance with ISO 9712 or an equivalent standard at an appropriate level in the relevant industry sector.