Keevituse kvaliteedinõuded. Metallide sulakeevitus. Osa 4: Elementaarsed kvaliteedinõuded

Quality requirements for welding - Fusion welding of rt 4. metallic materials - Part 4: Elementary quality requirements



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 729-4:1997 sisaldab Euroopa standardi EN 729-4:1994 ingliskeelset teksti.

This Estonian standard EVS-EN 729-4:1997 consists of the English text of the European standard EN 729-4:1994.

Standard on kinnitatud Eesti Standardikeskuse 19.12.1997 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas. This standard is ratified with the order of Estonian Centre for Standardisation dated 19.12.1997 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.

ICS 25.160.10

Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega: Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

Right to reproduce and distribute Estonian Standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation: Aru str 10 Tallinn 10317 Estonia; www.evs.ee; Phone: +372 605 5050; E-mail: info@evs.ee

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

September 1994

UDC 621.791.5:669:658.562

Descriptors: Welding, fusion welding, quality assurance, requirements.

English version

Quality requirements for welding

Fusion welding of metallic materials Part 4: Elementary quality requirements

Exigences de qualité en soudage; soudage par fusion de matériaux métalliques. Partie 4: Exigences de qualité élémentaires Schweißtechnische Qualitätsanforderungen; Schmelzschweißen metallischer Werkstoffe. Teil 4: Elementar-Qualitätsanforderungen

This European Standard was approved by CEN on 1994-09-06.

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 United Kingdom.

CEN

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

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

Contents

		Page
Fo	reword	. 2
1	Scope	. 3
	Normative references	
3	Definitions	. 4
4	Contract and design review	. 4
	Sub-contracting	
	Welders	
7	Welding equipment	. 5
8	Welding activities	. 5
9	Welding consumables	. 5
10		
11	Non-conforming and corrective action	. 5
12	Quality records	. 5

Foreword

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

CEN/TC 121 decided to submit the final draft for Formal Vote. The result was positive.

EN 729 is composed of the four following Parts:

EN 729-1 Quality requirements for welding – Fusion welding of metallic materials – Part 1: Guidelines for selection and use EN 729-2 Quality requirements for welding – Fusion welding of metallic materials – Part 2: Comprehensive quality require-

EN 729-2 Quality requirements for welding – Fusion welding of metallic materials – Part 2: Comprehensive quality requirements

EN 729-3 Quality requirements for welding – Fusion welding of metallic materials – Part 3: Standard quality requirements EN 729-4 Quality requirements for welding – Fusion welding of metallic materials – Part 4: Elementary quality requirements

This European Standard has been prepared under a mandate given to CEN by the Commission of the European Communities and the European Free Trade Association, and supports essential requirements of the relevant EC Directives.

This European Standard shall be given the status of a national standard, either by publication of an identical text or endorsement, and conflicting national standards withdrawn, by March 1995 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, 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 United Kingdom.

1 Scope

This standard has been prepared such that:

- it is independent of the type of welded construction to be manufactured;
- it defines quality requirements for welding both in workshops and on site;
- it provides guidance for describing a manufacturers capability to produce welded constructions to meet specified requirements;
- it may also be used as a basis for assessing the manufacturer in respect to his welding capability.

This standard is appropriate when demonstration of a manufacturers capability to produce welded construction, fulfilling specified quality requirements, are specified in one or more of the following:

- a contract between involved parties;
- an application standard;
- a regulatory requirement.

The requirements contained within this standard may be adopted in full or may be selectively deleted by the manufacturer if not applicable to the construction concerned. They provide a flexible framework for the control of welding in the following cases:

- Case 1

To provide specific requirements for fusion welding in contracts which require the manufacturer to have a quality system other than EN 29001 or EN 29002 and where the documented welding control has a minor importance to the overall integrity of the final construction.

- Case 2

To provide specific requirements for fusion welding as guidance to a manufacturer developing a quality system.

- Case 3

To provide specific requirements for references in application standards which uses fusion welding as part of its requirements or in a contract between relevant parties.

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 revisons 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 287-1	Approval testing of welders - Fusion welding - Part 1: Steels
EN 287-2	Approval testing of welders - Fusion welding - Part 2: Aluminium and alluminium alloys
EN 473	Non-destructive testing - Qualification and certification of personnel
EN 729-1	Quality requirments for welding - Fusion welding of metallic materials - Part 1: Guidelines for selection and use
prEN 1418	Welding personnel -Approval testing of welding personnel for fully mechanized and automatic welding of metallic materials
EN 29001:1987	Quality systems - Model for quality assurance in design/development, production, installation and servicing
EN 29002:1987	Quality systems - Model for quality assurance in production and installation

3 Definitions

For the purposes of this standard, definitions listed in EN 729-1 apply.

4 Contract and design review

The manufacturer shall review the contractual requirements and the design data provided by the purchaser or in-house data for products design by the manufacturer. This is to ensure that all information necessary to carry out the fabrication operations is available prior to the commencement of the work. The manufacturer shall affirm his capability to meet all welding contract requirements and ensure adequate planning of all quality related activities.

5 Sub-contracting

Any sub-contractor shall work under the order and responsibility of the manufacturer and shall fully comply with the relevant requirements of this standard.

6 Welders

All welders and welding operators shall be approved by an appropriate test according to appropriate part of EN 287 or EN 1418. All records of approval shall be maintained up to date.