

Quality requirements for welding – Fusion welding of metallic materials – Part 4: Elementary quality requirements

The European Standard EN 729-4:1994 has the status of a Swedish Standard. This document contains the official English version of EN 729-4:1994 with a Swedish translation.

Swedish Standards corresponding to documents referred to in this Standard are listed in "Catalogue of Swedish Standards", annually issued by SIS. The Catalogue lists, with reference number and year of Swedish approval, International and European Standards approved as Swedish Standards as well as other Swedish Standards.

Kvalitetskrav för svetsning – Smältsvetsning av metalliska material – Del 4: Enkla kvalitetskrav

Den europeiska standarden EN 729-4:1994 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 729-4:1994 med svensk översättning.

Motsvarigheten och aktualiteten i svensk standard till de publikationer som omnämns i denna standard framgår av "Katalog över svensk standard", som årligen ges ut av SIS. I katalogen redovisas internationella och europeiska standarder som fastställts som svenska standarder och övriga gällande svenska standarder.

EUROPEAN STANDARD

EN 729-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 1994

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Descriptors: welding, fusion welding, welded constructions, metal products, quality, quality assurance, manufacturing

English version

Quality requirements for welding —
Fusion welding of metallic materials —
Part 4: Elementary quality requirements

Exigences de qualité en soudage — Soudage
par fusion des matériaux métalliques —
Partie 4: Exigences de qualité élémentaire

Schweißtechnische Qualitätsanforderungen —
Schmelzschiessen metallischer Werkstoffe —
Teil 4: Elementar-Qualitätsanforderungen

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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.

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CEN

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

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

EUROPASTANDARD
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Nyckelord: svetsning, smältsvetsning, svetsade konstruktioner, metallprodukter, kvalitet, kvalitetssäkring, tillverkning

Svensk version

**Kvalitetskrav för svetsning – Smältsvetsning
av metalliska material – Del 4: Enkla kvalitetsfordringar**

Exigences de qualité en soudage –
Soudage par fusion des matériaux
métalliques – Partie 4: Exigences
de qualité élémentaire

Quality requirements for welding –
Fusion welding of metallic
materials – Part 4: Elementary
quality requirements

Schweißtechnische Qualitätsanfor-
derungen – Schmelzschweißen
metallischer Werkstoffe – Teil 4:
Elementar-Qualitätsanforderungen

Denna europastandard antogs av CEN 1994-09-06. CEN-medlemmarna är förpliktade att följa fordringarna i CEN/CENELECs interna bestämmelser som anger på vilka villkor denna europastandard i oförändrat skick skall ges status som nationell standard.

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Foreword

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

CEN/TC 121 has decided to submit the final draft for formal vote by its resolution 173/1993. 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 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 EC Directive(s).

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 March 1995, and conflicting national standards shall be withdrawn at the latest by March 1995.

According to 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.

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Förord

Denna europastandard har utarbetats av den tekniska kommittén CEN/TC 121 "Welding" med sekretariat vid DS.

CEN/TC 121 beslöt genom sin resolution 173/1993 att sända ut sitt slutliga förslag till formell omröstning. Resultatet av denna var positivt.

SS-EN 729 består av följande fyra delar:

- SS-EN 729-1 *Kvalitetskrav för svetsning – Smältsvetsning av metalliska material – Del 1: Riktlinjer för val och användning;*
- SS-EN 729-2 *Kvalitetskrav för svetsning – Smältsvetsning av metalliska material – Del 2: Omfattande kvalitetskrav;*
- SS-EN 729-3 *Kvalitetskrav för svetsning – Smältsvetsning av metalliska material – Del 3: Normala kvalitetskrav;*
- SS-EN 729-4 *Kvalitetskrav för svetsning – Smältsvetsning av metalliska material – Del 4: Enkla kvalitetskrav*

Denna europastandard har utarbetats under ett mandat till CEN från EG och EFTA och stöder väsentliga krav i EGs Direktiv.

Denna europastandard skall ges status som nationell standard antingen genom publicering av en identisk text eller genom ikraftsättning senast i mars 1995. Motstridande nationella standarder skall dras in senast i mars 1995.

Enligt CEN/CENELECS interna bestämmelser är följande länder förpliktigade att införa denna europastandard: Belgien, Danmark, Finland, Frankrike, Grekland, Irland, Island, Italien, Luxemburg, Nederländerna, Norge, Portugal, Schweiz, Spanien, Storbritannien, Sverige, Tyskland och Österrike.

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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 manufacturer's 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.

The standard is appropriate when demonstration of a manufacturer's 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 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 287-1	<i>Approval testing of welders — Fusion welding — Part 1: Steels</i>
EN 287-2	<i>Approval testing of welders — Fusion welding — Part 2: Aluminium and aluminium alloys</i>
EN 473	<i>Non-destructive testing — Qualification and certification of personnel</i>
EN 729-1	<i>Quality requirements for welding — Fusion welding of metallic materials — Part 1: Guidelines for selection and use</i>
prEN 1418	<i>Welding personnel — Approval testing of welding personnel for fully mechanized and automatic welding of metallic materials</i>
EN 29001 : 1987	<i>Quality systems — Model for quality assurance in design development, production, installation and servicing</i>
EN 29002 : 1987	<i>Quality systems — Model for quality assurance in production and installation</i>

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 Subcontracting

Any subcontractor 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.