EESTI STANDARD EVS-EN 1011-2:2001

# Keevitamine. Soovitused metallmaterjalide keevitamiseks. Osa 2: Ferriitteraste kaarkeevitus

Welding - Recommendations for welding of metallic materials - Part 2: Arc welding of ferritic steels

EESTI STANDARDIKESKUS

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

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| Käesolev Eesti standard EVS-EN 1011-2:2001 sisaldab Euroopa standardi EN 1011-2:2001 ingliskeelset teksti. | This Estonian standard EVS-EN 1011-2:2001 consists of the English text of the European standard EN 1011-2:2001. |
| Standard on kinnitatud Eesti Standardikeskuse 18.06.2001 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas. | This standard is ratified with the order of Estonian Centre for Standardisation dated 18.06.2001 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
# NORME EUROPÉENNE
# EUROPÄISCHE NORM

EN 1011-2

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**English version**

Welding

# Recommendations for welding of metallic materials

## Part 2: Arc welding of ferritic steels

Soudage – Recommandations pour le soudage des matériaux métalliques – Partie 2: Soudage à l'arc des aciers ferritiques

Schweißen – Empfehlungen zum Schweißen metallischer Werkstoffe – Teil 2: Lichtbogenschweißen von ferritischen Stählen



This European Standard was approved by CEN on 2000-07-06.

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

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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of an identical text or by endorsement, at the latest by July 2001, and conflicting national standards shall be withdrawn at the latest by July 2001.

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.

# Introduction

This European Standard supplements Part 1. It is issued with several annexes in order that it can be extended to cover the different types of steel which are produced to all the European steel standards for ferritic steels (see clause 5).

This standard gives general guidance for the satisfactory production and control of welds in ferritic steels. Details concerning the possible detrimental phenomena which can occur are given with advice on methods by which they can be avoided. This standard is generally applicable to all ferritic steels and is appropriate regardless of the type of fabrication involved, although the application standard can have additional requirements.

## 1 Scope

This European Standard gives guidance for manual, semi-mechanised, mechanised and automatic arc welding of ferritic steels (see clause 5), excluding ferritic stainless steels, in all product forms.

## 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 (including amendments).

EN 288-2:1997, *Specification and approval of welding procedures for metallic materials — Part 2: Welding procedure specification for arc welding*

EN 1011-1:1998, *Welding — Recommendations for welding of metallic materials — Part 1: General guidance for arc welding*

EN 29692, *Metal-arc welding with covered electrode, gas-shielded metal-arc — welding and gas welding — Joint preparations for steel (ISO 9692:1992)*

EN ISO 13916, *Welding — Guidance for the measurement of preheating temperature, interpass temperature and preheat maintenance temperature (ISO 13916:1996)*

CR ISO 15608, *Welding — Guidelines for a metallic material grouping system (ISO/TR 15608:2000)*

## 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions listed in EN 1011-1:1998 and the following apply:

3.1
**cooling time $t_{8/5}$**
the time taken, during cooling, for a weld run and its heat affected zone to pass through the temperature range from 800 °C to 500 °C

3.2
**run out length**
the length of a run produced by the melting of a covered electrode