

Metallide keevitusprotseduuride spetsifitseerimine ja atesteerimine. Osa 5: Atesteerimine kaarkeevituseks heakskiidetud keevitusmaterjale kasutades

Specification and approval of welding procedures for metallic materials - Part 5: Approval by using approved welding consumables for arc welding

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 288-5:1998 sisaldab Euroopa standardi EN 288-5:1994 ingliskeelset teksti.

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EUROPEAN STANDARD

EN 288-5

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English version

**Specification and approval of welding procedures
for metallic materials - Part 5: Approval by using
approved welding consumables for arc welding**

Descriptif et qualification d'un mode
opérateur de soudage pour les matériaux
métalliques - Partie 5: Qualification par
utilisation de produits consommables de soudage
agréés pour le soudage à l'arc

Anforderung und Anerkennung von
Schweißverfahren für metallische Werkstoffe -
Teil 5: Anerkennung durch Einsatz anerkannter
Schweißzusätze für das Lichtbogenschweißen

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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 the Technical Committee CEN/TC 121 "Welding", the secretariat of which is held by DS.

This European Standard consists of the following parts:

- Part 1 : General rules for fusion welding;
- Part 2 : Welding procedure specification for arc welding;
- Part 3 : Welding procedure tests for the arc welding of steels;
- Part 4 : Welding procedure tests for the arc welding of aluminium and its alloys;
- Part 5 : Approval by using approved welding consumables for arc welding;
- Part 6 : Approval related to previous experience;
- Part 7 : Approval by a standard welding procedure for arc welding;
- Part 8 : Approval by a pre-production welding test.

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of an identical text or by endorsement, at the latest by February 1995, and conflicting national standards shall be withdrawn at the latest by February 1995.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, United Kingdom.

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0 Introduction

In EN 288-1, one of the methods of welding procedure approval is by using approved welding consumables.

1 Scope

This standard simplifies the approval of welding procedures especially for repetitive operations.

This standard gives the necessary information to explain the requirements referenced in EN 288-1 about the approval of welding procedures using approved consumables.

In addition it gives the range of approval and the validity.

This standard applies to fusion welding of metallic materials.

The process numbers refer to EN 24063.

Essentially this standard covers the processes with consumables given in table 1.

Table 1 : Applicable welding processes

Process		Process applicable for steel	Process applicable for aluminium and its alloys
Number	Type		
111	Metal arc welding with covered electrode	X	-
114	Flux cored wire metal-arc welding without gas shield	X	-
131	Metal-arc inert gas welding ; MIG welding	-	X
135	Metal-arc active gas welding ; MAG welding	X	-
136	Flux cored wire metal-arc welding with active gas shield	X	-
137	Flux cored wire metal-arc welding with inert gas shield	X	-
141	Tungsten inert gas arc welding ; TIG welding	X	X
Key :			
X indicates the process for which the standard is applicable- indicates the process for which the standard is not applicable.			

Other fusion welding processes may be accepted by agreement between contracting parties.

It is intended for application to parent metals which produce acceptable micro structures and properties in the heat affected zone which do not deteriorate significantly in service.

This standard is not applicable where hardness or impact properties, preheating, control heat input, interpass temperature and post-weld heat-treatment are specified.

The use of this standard may also be restricted by an application standard or at the enquiry/order stage by contracting 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 288-1 | Specification and approval of welding procedures for metallic materials - Part 1 : General rules for fusion welding. |
| EN 288-2 | Specification and approval of welding procedures for metallic materials - Part 2 : Welding procedure specification for arc welding. |
| 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 439 | Welding consumables - Shielding gases for arc welding and cutting |
| EN 24063 | Welding, brazing, soldering and braze welding of metals - Nomenclature of processes and reference numbers for symbolic representation on drawings. |

3 Definitions

For the purpose of this standard, the definitions listed in EN 288-1 shall apply.

4 Preliminary welding procedure specifications (pWPS)

The approval of a welding procedure based on approved consumables shall be based on a pWPS according to EN 288-2. This pWPS shall specify the range for all the relevant parameters.

5 Approval of the welding procedure

The approval of the welding procedure shall be carried out by an examiner or test body according to EN 288-1.

The essential items for the approval are :

- Specifications of parent metal(s) to be used according to the relevant EN,
- Records of the approved consumables to be used according to the relevant EN,
- A specific pWPS according to EN 288-2 and suitable for the application.