METALLIDE KEEVITUSPROTSEDUURIDE SPETSIFITSEERIMINE JA ATESTEERIMINE. KEEVITUSPROTSEDUURI SPETSIFIKAAT. OSA 2: GAASKEEVITUS

Specification and approval of welding procedures for metallic materials - Welding procedure specification - Part 2: Gas welding



## **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

See Eesti standard EVS-EN ISO 15609-	This Estonian standard EVS-EN ISO 15609-
2:2002+A1:2004 sisaldab Euroopa standardi EN	2:2002+A1:2004 consists of the English text of the
ISO 15609-2:2001+A1:2003 ingliskeelset teksti.	European standard EN ISO 15609-2:2001+A1:2003.
Standard on jõustunud sellekohase teate	This standard has been endorsed with a
avaldamisega EVS Teatajas.	notification published in the official bulletin of the
	Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud	Date of Availability of the European standard is
	01.09.2001, for amendment A1 is 10.12.2003.
kättesaadavaks 01.09.2001, muudatuse A1	01.07.2001, 101 differing file 11 13 10.12.2003.
10.12.2003.	
	The standard is evailable from the Estanian Control
	The standard is available from the Estonian Centre
Standardikeskusest.	for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

ICS 25.160.10

### Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

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

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Aru 10, 10317 Tallinn, Eesti; koduleht <u>www.evs.ee</u>; telefon 605 5050; e-post <u>info@evs.ee</u>

### The right to reproduce and distribute 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 a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Aru 10, 10317 Tallinn, Estonia; homepage <a href="www.evs.ee">www.evs.ee</a>; phone +372 605 5050; e-mail <a href="mailto:info@evs.ee">info@evs.ee</a>

# EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

# **EN ISO 15609-2**

September 2001

ICS 25.160.10

### **English version**

# Specification and qualification of welding procedures for metallic materials - Welding procedure specification - Part 2: Gas welding (ISO 15609-2:2001)

Descriptif et qualification d'un mode opératoire de soudage pour les matériaux métalliques - Descriptif d'un mode opératoire de soudage - Partie 2: Soudage aux gaz (ISO 15609-2:2001) Anforderung und Anerkennung von Schweißverfahren für metallische Werkstoffe - Schweißanweisung - Teil 2: Gasschweißen (ISO 15609-2:2001)

This European Standard was approved by CEN on 2 May 2001.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

### **Foreword**

The text of EN ISO 15609-2:2001 has been prepared by Technical Committee CEN/TC 121 "Welding", the secretariat of which is held by DS, in collaboration with Technical Committee ISO/TC 44 "Welding and allied processes".

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 2002, and conflicting national standards shall be withdrawn at the latest by March 2002.

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.

The annexes A and ZA are informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following and cally, L 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.

### 1 Scope

This European Standard specifies requirements for the content of welding procedure specifications for gas welding processes.

This standard is part of a series of standards, details of this series are given in prEN ISO 15607, annex A.

Variables listed in this standard are those influencing the quality of the welded joint.

### 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 ISO 6947, Welds - Working positions - Definitions of angles of slope and rotation (ISO 6947:1993).

EN ISO 4063, Welding and allied processes – Nomenclature of processes and reference numbers (ISO 4063:1998).

prEN ISO 15607, Specification and approval of welding procedures for metallic materials – General rules (ISO/DIS 15607:2000).

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 given in prEN ISO 15607 apply.

# 4 Technical contents of Welding Procedure Specification (WPS)

### 4.1 General

The Welding Procedure Specification (WPS) shall give details of how a welding operation is to be successfully performed.

Welding Procedure Specifications may cover a certain range of thickness of the joined parts and may also cover a range of parent materials or welding consumables. Some manufacturers may prefer additionally to prepare work instructions for each specific job as part of detailed production planning.

Information listed in 4.2 to 4.4 is adequate for most gas welding procedures. For some applications it may be necessary to supplement or reduce the list.

Ranges and tolerances, according to the relevant standard of the series (see prEN ISO 15607) and to the manufacturer's experience, shall be specified where appropriate.

An example of the WPS-format is shown in annex A.