

**Specification and qualification of welding
procedures for metallic materials - Welding
procedure specification - Part 5: Resistance
welding**

Specification and qualification of welding procedures
for metallic materials - Welding procedure
specification - Part 5: Resistance welding

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 15609-5:2004 sisaldab Euroopa standardi EN ISO 15609-5:2004 ingliskeelset teksti. Käesolev dokument on jõustatud 26.10.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 15609-5:2004 consists of the English text of the European standard EN ISO 15609-5:2004. This document is endorsed on 26.10.2004 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
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Käsitlusala: This standard specifies requirements for the content of welding procedure specifications for resistance spot, seam, butt and projection welding processes. The principles of this standard may also be applied to other resistance and related welding processes subject to agreement between the contracting parties.	Scope: This standard specifies requirements for the content of welding procedure specifications for resistance spot, seam, butt and projection welding processes. The principles of this standard may also be applied to other resistance and related welding processes subject to agreement between the contracting parties.
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ICS 25.160.10

Võtmesõnad:

English version

**Specification and qualification of welding procedures
for metallic materials**

Welding procedure specification

Part 5: Resistance welding

(ISO 15609-5 : 2004)

Descriptif et qualification d'un mode
opérateur de soudage pour les
matériaux métalliques – Descriptif
d'un mode opératoire de soudage –
Partie 5: Soudage par résistance
(ISO 15609-5 : 2004)

Anforderung und Qualifizierung von
Schweißverfahren für metallische
Werkstoffe – Schweißanweisung –
Teil 5: Widerstandsschweißen
(ISO 15609-5 : 2004)

This European Standard was approved by CEN on 2004-01-16.

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.

The European Standards exist 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, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

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

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

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Foreword

This document (EN ISO 15609-5:2004) has been prepared by Technical Committee CEN/TC 121 "Welding", the secretariat of which is held by DIN, 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 February 2005, and conflicting national standards shall be withdrawn at the latest by February 2005.

Annexes A, B and C are informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

NOTE Normative references to International Standards are listed in annex ZA (normative).

Introduction

All new welding procedures issued and the procedure for their creation and qualification are to be in accordance with this standard for the date of its issue.

This standard does not, however, invalidate welding procedures and their qualification complying with then existing national or international standards or regulations, provided the intent of the technical requirement is satisfied and the specified application remains unchanged.

1 Scope

This standard specifies requirements for the content of welding procedure specifications for resistance spot, seam, butt and projection welding processes. The acceptability of applying the principles of the standard to other resistance and related welding processes should be established before any qualification is undertaken.

This standard is part of a series of standards. Details of this series are given in EN ISO 15607:2003, annex A.

Variables listed in this standard are those influencing either weld dimensions (quality), weld nugget dimension, weld pattern positioning, mechanical properties or geometry of the welded joint.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

EN ISO 5183-1, *Resistance welding equipment - Electrode adaptors, male taper 1:10 - Part 1: Conical fixing, taper 1:10* (ISO 5183-1:1998)

EN ISO 5183-2, *Resistance spot welding — Electrode adaptors, male taper 1:10 — Part 2: Parallel shank fixing for end-thrust electrodes* (ISO 5183-2: 2000).

EN ISO 8205-1, *Water-cooled secondary connection cables for resistance welding — Part 1: Dimensions and requirements for double-conductor connection cables* (ISO 8205-1: 2002).

EN ISO 8205-2, *Water-cooled secondary connection cables for resistance welding — Part 2: Dimensions and requirements for single-conductor connection cables* (ISO 8205-2: 2002).

EN ISO 15607:2003, *Specification and qualification of welding procedures for metallic materials — General rules* (ISO 15607: 2003).

EN 25184, *Straight resistance spot welding electrodes* (ISO 5184: 1979).

EN 25821, *Resistance spot welding electrode caps* (ISO 5821: 1979).

EN 25827, *Spot welding — Electrode back-ups and clamps* (ISO 5827: 1983).

EN 28430-1, *Resistance spot welding — Electrode holders — Part 1: Taper fixing 1:10* (ISO 8430-1: 1988).

EN 28430-2, *Resistance spot welding — Electrode holders — Part 2: Morse taper fixing* (ISO 8430-2: 1988).

EN 28430-3, *Resistance spot welding — Electrode holders — Part 3: Parallel shank fixing for end thrust* (ISO 8430-3: 1988).

ISO 669:2000, *Resistance welding — Resistance welding equipment — Mechanical and electrical requirements*.