Specification and qualification of welding procedures for metallic materials - Welding procedure specification - Part 4: Laser beam welding

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NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 15609-4:2009 sisaldab Euroopa standardi EN ISO 15609-4:2009 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 15609-4:2009 consists of the English text of the European standard EN ISO 15609-4:2009.
Standard on kinnitatud Eesti Standardikeskuse 30.10.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 30.10.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 05.05.2009.	Date of Availability of the European standard text 05.05.2009.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

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Supersedes EN ISO 15609-4:2004

English Version

Specification and qualification of welding procedures for metallic materials - Welding procedure specification - Part 4: Laser beam welding (ISO 15609-4:2009)

Descriptif et qualification d'un mode opératoire de soudage pour les matériaux métalliques - Descriptif d'un mode opératoire de soudage - Partie 4: Soudage par faisceau laser (ISO 15609-4:2009)

Anforderung und Qualifizierung von Schweißverfahren für metallische Werkstoffe - Schweißanweisung - Teil 4: Laserstrahlschweißen (ISO 15609-4:2009)

This European Standard was approved by CEN on 14 May 2009.

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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 CEN Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN ISO 15609-4:2009) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with Technical Committee CEN/TC 121 “Welding” the secretariat of which is held by DIN.

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 November 2009, and conflicting national standards shall be withdrawn at the latest by November 2009.

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Endorsement notice

The text of ISO 15609-4:2009 has been approved by CEN as a EN ISO 15609-4:2009 without any modification.

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1 Scope

This part of ISO 15609 specifies requirements for the content of the welding procedure specification (WPS) for laser beam welding processes, including overlay welding. It is not applicable to other processes for cladding (e.g. thermal spraying).

This part of ISO 15609 is part of a series of standards, and details of this series are given in ISO 15607:2003, Annex A.

Variables listed in this part of ISO 15609 are those influencing the quality and properties of the welded joint. The dimensions mentioned in this part of ISO 15609 influence the metallurgical and mechanical qualities, the geometry of the structural member and other important performance properties.

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.

ISO 4063, *Welding and allied processes — Nomenclature of processes and reference numbers*

ISO 6947, *Welds — Working positions — Definitions of angles of slope and rotation*

ISO 14175, *Welding consumables — Gases and gas mixtures for fusion welding and allied processes*

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

ISO/TR 25901:2007, *Welding and related processes — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 15607:2003, ISO/TR 25901:2007 and the following apply.

3.1
slope up
⟨beam welding⟩ controlled increase of the beam power at the beginning of the welding

[ISO/TR 25901:2007, definition 2.337]