

SLOVENSKI

PREDSTANDARD

**SIST EN ISO 15614-
1:2004/oprA1:2006**

januar 2006

**Specifikacija in razvrščanje varilnih postopkov za kovinske materiale -
Preskus postopka varjenja - 1. del: Obločno in plinsko varjenje jekel in
obločno varjenje niklja in nikljevih zlitin (ISO 15614-1:2004/DAM 1:2005)**

(istoveten EN ISO 15614-1:2004/prA1:2005)

Specification and qualification of welding procedures for metallic materials -
Welding procedure test - Part 1: Arc and gas welding of steels and arc welding of
nickel and nickel alloys (ISO 15614-1:2004/DAM 1:2005)

ICS 25.160.10

Referenčna številka
SIST EN ISO 15614-
1:2004/oprA1:2006(en)

November 2005

ICS

English Version

Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 1: Arc and gas welding of steels and arc welding of nickel and nickel alloys (ISO 15614-1:2004/DAM 1:2005)

Descriptif et qualification d'un mode opératoire de soudage pour les matériaux métalliques - Epreuve de qualification d'un mode opératoire de soudage - Partie 1: Soudage à l'arc et aux gaz des aciers et soudage à l'arc des nickels et alliages de nickel (ISO 15614-1:2004/DAM 1:2005)

This draft amendment is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/TC 121.

This draft amendment A1, if approved, will modify the European Standard EN ISO 15614-1:2004. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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

Foreword

This document (EN ISO 15614-1:2004/prA1:2005) 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 document is currently submitted to the parallel Enquiry.

This document 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).



DRAFT AMENDMENT ISO 15614-1:2004/DAmD 1

ISO/TC 44/SC 10

Secretariat: DIN

Voting begins on:
2005-11-17

Voting terminates on:
2006-04-17

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Specification and qualification of welding procedures for metallic materials — Welding procedure test —

Part 1:

Arc and gas welding of steels and arc welding of nickel and nickel alloys

AMENDMENT 1

Descriptif et qualification d'un mode opératoire de soudage pour les matériaux métalliques — Épreuve de qualification d'un mode opératoire de soudage —

Partie 1: Soudage à l'arc et aux gaz des aciers et soudage à l'arc des nickels et alliages de nickel

AMENDEMENT 1

ICS 25.160.10

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This draft International Standard is a draft standard developed within the European Committee for Standardization (CEN) and processed under the CEN-lead mode of collaboration as defined in the Vienna Agreement. The document has been transmitted by CEN to ISO for circulation for ISO member body voting in parallel with CEN enquiry. Comments received from ISO member bodies, including those from non-CEN members, will be considered by the appropriate CEN technical body. Should this DIS be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month FDIS vote in ISO and formal vote in CEN.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.

Pour accélérer la distribution, le présent document est distribué tel qu'il est parvenu du secrétariat du comité. Le travail de rédaction et de composition de texte sera effectué au Secrétariat central de l'ISO au stade de publication.

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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 15614-1 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 10, *Unification of requirements in the field of metal welding*.

ISO 15614 consists of the following parts, under the general title *Specification and qualification of welding procedures for metallic materials — Welding procedure test*:

- *Part 1: Arc and gas welding of steels and arc welding of nickel and nickel alloys*
- *Part 2: Arc welding of aluminium and its alloys*
- *Part 3: Fusion and pressure welding of non-alloyed and low-alloyed cast irons*
- *Part 4: Finishing welding of aluminium castings*
- *Part 5: Arc welding of titanium, zirconium and their alloys*
- *Part 6: Arc welding of copper and its alloys*
- *Part 7: Overlay welding*
- *Part 8: Welding of tubes to tube-plate joints*
- *Part 10: Hyperbaric dry welding*
- *Part 11: Electron and laser beam welding*
- *Part 12: Spot, seam and projection welding*
- *Part 13: Resistance butt and flash welding*

Foreword

This document EN ISO 15614-1:2004/A1:2005 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 Amendment to the European Standard EN ISO 15614-1:2004 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by *month year of DOP*, and conflicting national standards shall be withdrawn at the latest by *month year of DOW*.

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Foreword

DS has to be replaced by DIN in the first sentence.

2 Normative references

prEN ISO 9606-1 has to be deleted and replaced by "EN 287-1, *Qualification test of welders — Fusion welding — Part 1: Steels*".

EN 25817 has to be deleted and replaced by "EN ISO 5817, *Welding — Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) — Quality levels for imperfections (ISO 5817:2003)*".

prEN ISO 15609-1 has to be corrected into "EN ISO 15609-1, *Specification and qualification of welding procedures for metallic materials — Welding procedure specification — Part 1: Arc welding (ISO 15609-1:2004)*".

The reference to (ISO 15613:2003) has to be deleted and replaced by (ISO 15613:2004).

5 Welding procedure test

prEN ISO 9606-1 has to be deleted and replaced by EN 287-1.

7.5 Acceptance levels

Change clause 7.5 as follows:

A welding procedure is qualified if the imperfections in the test piece are within the specified limits of quality level B in EN ISO 5817 except for imperfection types as follows; excess convexity, excess throat thickness and excessive penetration and incorrect weld toe, for which level C shall apply. The requirement $h \leq 0,05t$ does not apply for undercut. Undercut shall not exceed 0,5 mm. Angular misalignment is not applicable for the welding procedure test.

NOTE The correlation between the quality levels of **EN ISO 5817** and the acceptance levels of the different NDT techniques are given in EN 12062.