
**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



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2008

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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.

Amendment 1 to ISO 15614-1:2004 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 121, *Welding*, in collaboration with Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 10, *Unification of requirements in the field of metal welding*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Requests for official interpretations of any aspect of this Amendment to ISO 15614-1 should be directed to the Secretariat of ISO/TC 44/SC 10 via your national standards body. A complete listing of these bodies can be found at www.iso.org.

STANDARDSISO.COM : Click to view the full PDF of ISO 15614-1:2004/Amd 1:2008

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

Page v, Foreword, para 1

Delete “DS”, insert “DIN”.

Pages 2 to 3, Clause 2

Delete the entries for EN 439 and EN 25817.

After the normative reference entry for EN 1714, delete the remaining entries, and insert:

“EN 12062, *Non-destructive examination of welds — General rules for metallic materials*

ISO 4063:1998, *Welding and allied processes — Nomenclature of processes and reference numbers*

ISO 5817:2003, *Welding — Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) — Quality levels for imperfections*

ISO 6947:1990, *Welds — Working positions — Definitions of angles of slope and rotation*

ISO 9606-1, *Qualification test of welders — Fusion welding — Part 1: Steels*

ISO 9606-4:1999, *Approval testing of welders — Fusion welding — Part 4: Nickel and nickel alloys*

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 15608:2005, *Welding — Guidelines for a metallic materials grouping system*

ISO 15609-1:2004, *Specification and qualification of welding procedures for metallic materials — Welding procedure specification — Part 1: Arc welding*

ISO 15609-2:2001, *Specification and qualification of welding procedures for metallic materials — Welding procedure specification — Part 2: Gas welding*

ISO 15613:2004, *Specification and qualification of welding procedures for metallic materials — Qualification based on pre-production welding test*”

Page 6, Figure 3

In the drawing, delete the (lowest horizontal) label for the front edge width, “*b*”, insert “*a*”.

Page 16, 7.5

Delete “EN 25817”, insert “ISO 5817”.

Delete the text after the colon and the NOTE, and insert “excess convexity, excess throat thickness and excessive penetration and incorrect weld toe, for which level C shall apply. The requirement $\leq 0,05 t$ does not apply for undercut. Undercut shall be $\leq 0,5$ mm. Angular misalignment is not applicable for the welding procedure test.

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

Page 17, 8.1

Delete “Clause 7”, insert “Clause 8”.

Page 17, 8.3.1

Insert the following sentence immediately before the NOTE:

“Permanent backing material shall be considered as a parent metal within the approval (sub-)group.”

Page 18, Table 3, column 2, row 11

Against “8-8”, delete “8^c”, insert “8^b”.

Pages 23 and 24: 8.5.2.1, 8.5.3.1, 8.5.4.2

Delete (six times) “EN 439”, insert (six times) “ISO 14175”.

Page 24, 8.5.4.2

Delete “qualified”, insert “used in the test”.