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NATIONAL FOREWORD

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 15614-1

June 2004

ICS 25.160.10 Supersedes EN 288-3 : 1992.

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)

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 gas des aciers et soudage à l'arc des nickels et alliages de nickel (ISO 15614-1 : 2004) Anforderung und Qualifizierung von Schweißverfahren für metallische Werkstoffe – Schweißverfahrensprüfung – Teil 1: Lichtbogen- und Gasschweißen von Stählen und Lichtbogenschweißen von Nickel und Nickellegierungen (ISO 15614-1: 2004)

This European Standard was approved by CEN on 2003-05-07.

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.

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Foreword

This document has been prepared by Technical Committee CEN/TC 121 "Welding", the Secratariat 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of an identical text or by endorsement, at the latest by December 2004, and conflicting national standards shall be withdrawn at the latest by December 2004.

This document replaces EN 288-3:1992.

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).

For relationship with EU Directive(s), see informative Annexes ZB and ZC.

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.



Introduction

All new welding procedure tests are to be carried out in accordance with this standard from the date of its issue.

However, this European Standard does not invalidate previous welding procedure tests made to former national standards or specifications or previous issues of this standard.

Where additional tests have to be carried out to make the qualification technically equivalent, it is only necessary to do the additional tests on a test piece which should be made in accordance with this standard.

1 Scope

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

This standard specifies how a preliminary welding procedure specification is qualified by welding procedure tests.

This standard defines the conditions for the execution of welding procedure tests and the range of qualification for welding procedures for all practical welding operations within the range of variables listed in clause 8.

Tests shall be carried out in accordance with this standard. Additional tests may be required by application standards.

This standard applies to the arc and gas welding of steels in all product forms and the arc welding of nickel and nickel alloys in all product forms

Arc and gas welding are covered by the following processes in accordance with EN ISO 4063:

- 111 manual metal arc welding (metal-arc welding with covered electrode);
- 114 self-shielded tubular-cored arc welding;
- 12 submerged arc welding;
- 131 metal inert gas welding, MIG welding;
- 135 metal active gas welding, MAG welding;
- 136 tubular-cored metal arc welding with active gas shield;
- 137 tubular-cored metal arc welding with inert gas shield;
- 141 tungsten inert gas arc welding; TIG welding;
- 15 plasma arc welding;
- 311 oxy-acetylene welding.

The principles of this European Standard may be applied to other fusion welding processes.

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