SLOVENSKI oSIST prEN ISO 17660-2:2005 PREDSTANDARD

marec 2005

Varjenje - Varjenje betonskega jekla - 2. del: Neobremenjeni zvarni spoji (ISO/DIS 17660-2:2004)

Welding - Welding of reinforcing steel - Part 2: Non-load bearing welded joints (ISO/DIS 17660-2:2004)

(standards.iteh.ai)

<u>SIST EN ISO 17660-2:2007</u> https://standards.iteh.ai/catalog/standards/sist/c2a98340-5d67-453d-82a9-12c3c498d9e4/sist-en-iso-17660-2-2007

ICS 25.160.10

Referenčna številka oSIST prEN ISO 17660-2:2005(en)

© Standard je založil in izdal Slovenski inštitut za standardizacijo. Razmnoževanje ali kopiranje celote ali delov tega dokumenta ni dovoljeno

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 17660-2:2007

https://standards.iteh.ai/catalog/standards/sist/c2a98340-5d67-453d-82a9-12c3c498d9e4/sist-en-iso-17660-2-2007

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

DRAFT prEN ISO 17660-2

December 2004

ICS

English version

Welding - Welding of reinforcing steel - Part 2: Non-load bearing welded joints (ISO/DIS 17660-2:2004)

Soudage - Soudage des aciers pour armature - Partie 2: Assemblages non transmettants (ISO/DIS 17660-2:2004)

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

If this draft becomes a European Standard, 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.

This draft European Standard 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.

CEN members are the national standards bodies of 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.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

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

Ref. No. prEN ISO 17660-2:2004: E

prEN ISO 17660-2:2004 (E)

Foreword

This document (prEN ISO 17660-2:2004) 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 document is currently submitted to the third parallel Enquiry.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 17660-2:2007</u> https://standards.iteh.ai/catalog/standards/sist/c2a98340-5d67-453d-82a9-12c3c498d9e4/sist-en-iso-17660-2-2007 DRAFT INTERNATIONAL STANDARD ISO/DIS 17660-2.3



ISO/TC 44/SC 10

Secretariat: DIN

Voting begins on: 2004-12-23

Voting terminates on: 2005-03-23

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Welding — Welding of reinforcing steel —

Part 2: Non-load bearing welded joints

Soudage — Soudage des aciers pour armature —

Partie 2: Assemblages non transmettants

ICS 25.160.10

iTeh STANDARD PREVIEW (standards.iteh.ai)

ISO/CEN PARALLEL ENQUIRY

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.

In accordance with the provisions of Council Resolution 15/1993 this document is circulated in the English language only.

Conformément aux dispositions de la Résolution du Conseil 15/1993, ce document est distribué en version anglaise seulement.

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.

THIS DOCUMENT IS A DRAFT CIRCULATED FOR COMMENT AND APPROVAL. IT IS THEREFORE SUBJECT TO CHANGE AND MAY NOT BE REFERRED TO AS AN INTERNATIONAL STANDARD UNTIL PUBLISHED AS SUCH.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

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.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 17660-2:2007 https://standards.iteh.ai/catalog/standards/sist/c2a98340-5d67-453d-82a9-12c3c498d9e4/sist-en-iso-17660-2-2007

Copyright notice

This ISO document is a Draft International Standard and is copyright-protected by ISO. Except as permitted under the applicable laws of the user's country, neither this ISO draft nor any extract from it may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, photocopying, recording or otherwise, without prior written permission being secured.

Requests for permission to reproduce should be addressed to 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

Reproduction may be subject to royalty payments or a licensing agreement.

Violators may be prosecuted.

Contents

Forew	ord	iv
Introdu	uction	v
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Symbols and abbreviated terms	2
5	Welding processes	3
6	Non-load bearing welded joints	3
7	Materials	4
8	Quality requirements	4
9	Welding personnel	4
10	Welding procedure specification (WPS)	5
11	Welding procedures	5
12	Production weld test	7
13	Execution and inspection of production welding of reinforcing steel	7
14	Examination and testing of test specimens	
15	Production log and inclusion and and and and and and and a state of the state of th	
Annex	A (informative) Technical knowledge of welding coordinator for welding reinforcing steel bars	10
Annex	B (informative) Test specimens	11
Annex	C (informative) Evaluation of testing of welded joints	12
Annex	D (informative) Example for production log	13
	ZA (normative) Normative references to international publications with their relevant European publications	
Bibliog	graphy	16

Figures

Figure 1 — Lap joint	3
Figure 2 — Cross joint	4
Figure 3 — Cross joints in bends	8
Figure B.1 — Test specimen for lap joint for tensile test	11
Figure B.2 — Test piece for cross joints for tensile test	11

Tables

Table 1 — List of welding processes and reference numbers in accordance with ISO 4063	3
Table 2 — Recommended range of bar diameters for non-load bearing welded joints	3
Table 3 — Range of qualification of diameter of reinforcing steel bar and material thickness	6
Table 4 — Appropriate standards for different welding processes	6
Table D.1— Necessary information, which should be given1	13

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 17660-2:2007</u> https://standards.iteh.ai/catalog/standards/sist/c2a98340-5d67-453d-82a9-12c3c498d9e4/sist-en-iso-17660-2-2007

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.

ISO 17660-2 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 17660 consists of the following parts, under the general title Welding — Welding of reinforcing steel:

- Part 1: Load bearing welded joints 10.2 MOS. ITCI
- Part 2: Non-load bearing welded joints

https://standards.iteh.ai/catalog/standards/sist/c2a98340-5d67-453d-82a9-12c3c498d9e4/sist-en-iso-17660-2-2007

Introduction

Reinforcing steel bars are produced by a number of process routes and usually have a ribbed profile. Taking these issues into account it is apparent that both the welder and the welding coordinator require a specific level of skill and job knowledge, as well as the need for the adoption of special procedures for quality assurance.

Requests for official interpretations of any aspect of this International Standard should be directed to the Secretariat of ISO/TC 44/SC 10 via your national standards body, a complete listing which can be found at ww.iso.org.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 17660-2:2007</u> https://standards.iteh.ai/catalog/standards/sist/c2a98340-5d67-453d-82a9-12c3c498d9e4/sist-en-iso-17660-2-2007

Welding — Welding of reinforcing steel —

Part 2: Non-load bearing welded joints

1 Scope

This standard applies to the welding of weldable reinforcing steel and stainless reinforcing steel of non-load bearing welded joints in work shops or on site. Load bearing welded joints are covered by ISO 17660-1.

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 10079, Definition of steel products.

prEN 10080-1, Steel for the reinforcement of concrete — Weldable reinforcing steel — Part 1: General requirements.

ISO 3834-4, Quality requirements for welding — Fusion welding of metallic materials — Part 4: Elementary quality requirements.

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

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

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

ISO 15609-5, Specification and approval of welding procedures for metallic materials — Welding procedure specification — Part 5: Resistance welding.

ISO 14731, Welding coordination — Tasks and responsibilities.

ISO 15614-1, Specification and approval 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 15614-12, Specification and approval of welding procedures for metallic materials — Welding procedure test — Part 12: Spot, seam and projection welding.

ISO 15630-1, Steel for the reinforcement and prestressing of concrete — Test methods — Part 1: Reinforcing bars and wires.

ISO 15630-2, Steel for the reinforcement and prestressing of concrete — Test methods — Part 2: Welded fabric.

ISO/DIS 16020, Steel for the reinforcement and prestressing of concrete — Vocabulary.