This is a free page sample. Access the full version online.



Irish Standard I.S. EN ISO 10893-2:2011

Non-destructive testing of steel tubes -Part 2: Automated eddy current testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of imperfections (ISO 10893-2:2011)

© NSAI 2011 No copying without NSAI permission except as permitted by copyright law.

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

٦

SWIFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

<i>This document replaces:</i> EN 10246-3:1999				
<i>This document is based on:</i> EN ISO 10893-2:2011	<i>Published:</i> 18 April, 2011			
This document was publish under the authority of the and comes into effect on: 18 April, 2011	ned NSAI		ICS number: 77.040.20	
NSAI 1 Swift Square, Northwood, Santry Dublin 9	T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie W NSAI.ie	Sales: T +353 1 857 6730 F +353 1 857 6729 W standards.ie		
Údarás um Chaighdeáin Náisiúnta na hÉireann				

EUROPEAN STANDARD

EN ISO 10893-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2011

ICS 23.040.10; 77.040.20; 77.140.75

Supersedes EN 10246-3:1999

English Version

Non-destructive testing of steel tubes - Part 2: Automated eddy current testing of seamless and welded (except submerged arcwelded) steel tubes for the detection of imperfections (ISO 10893-2:2011)

Essais non destructifs des tubes en acier - Partie 2: Contrôle automatisé par courants de Foucault pour la détection des imperfections des tubes en acier sans soudure et soudés (sauf à l'arc immergé sous flux en poudre) (ISO 10893-2:2011) Zerstörungsfreie Prüfung von Stahlrohren - Teil 2: Automatisierte Wirbelstromprüfung nahtloser und geschweißter (ausgenommen unterpulvergeschweißter) Stahlrohre zum Nachweis von Unvollkommenheiten (ISO 10893-2:2011)

This European Standard was approved by CEN on 10 December 2010.

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 CEN-CENELEC Management Centre or to any CEN member.

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-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

EN ISO 10893-2:2011 (E)

Contents

Page

Foreword

This document (EN ISO 10893-2:2011) has been prepared by Technical Committee ISO/TC 17 "Steel" in collaboration with Technical Committee ECISS/TC 110 "Steel tubes, and iron and steel fittings" the secretariat of which is held by UNI.

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 October 2011, and conflicting national standards shall be withdrawn at the latest by October 2011.

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

This document supersedes EN 10246-3:1999.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 10893-2:2011 has been approved by CEN as a EN ISO 10893-2:2011 without any modification.

This page is intentionally left BLANK.



ISO 10893-2

First edition 2011-04-01

Non-destructive testing of steel tubes —

Part 2:

Automated eddy current testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of imperfections

Essais non destructifs des tubes en acier —

Partie 2: Contrôle automatisé par courants de Foucault pour la détection des imperfections des tubes en acier sans soudure et soudés (sauf à l'arc immergé sous flux en poudre)



Reference number ISO 10893-2:2011(E)

ISO 10893-2:2011(E)

I.S. EN ISO 10893-2:2011

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 2011

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

Contents

Page

Forev	word	iv
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	General requirements	2
5 5.1 5.2	Test method Test techniques Test equipment	2 2 3
6 6.1 6.2 6.3 6.4 6.5	Reference tube General Concentric coil technique Segment coil technique Fixed and rotating coil/pancake technique Dimensions of the reference standards	6 6 6 7 7
7	Equipment calibration and checking	9
8	Acceptance	10
9	Test report	10
Anne	ex A (informative) Guidance notes on limitations of eddy current test method	11

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 10893-2 was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 19, *Technical delivery conditions for steel tubes for pressure purposes*.

This first edition cancels and replaces ISO 9304:1989, which has been technically revised.

ISO 10893 consists of the following parts, under the general title Non-destructive testing of steel tubes:

- Part 1: Automated electromagnetic testing of seamless and welded (except submerged arc-welded) steel tubes for the verification of hydraulic leaktightness
- Part 2: Automated eddy current testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of imperfections
- Part 3: Automated full peripheral flux leakage testing of seamless and welded (except submerged arcwelded) ferromagnetic steel tubes for the detection of longitudinal and/or transverse imperfections
- Part 4: Liquid penetrant inspection of seamless and welded steel tubes for the detection of surface imperfections
- Part 5: Magnetic particle inspection of seamless and welded ferromagnetic steel tubes for the detection of surface imperfections
- Part 6: Radiographic testing of the weld seam of welded steel tubes for the detection of imperfections
- Part 7: Digital radiographic testing of the weld seam of welded steel tubes for the detection of imperfections
- Part 8: Automated ultrasonic testing of seamless and welded steel tubes for the detection of laminar imperfections
- Part 9: Automated ultrasonic testing for the detection of laminar imperfections in strip/plate used for the manufacture of welded steel tubes
- Part 10: Automated full peripheral ultrasonic testing of seamless and welded (except submerged arcwelded) steel tubes for the detection of longitudinal and/or transverse imperfections

- Part 11: Automated ultrasonic testing of the weld seam of welded steel tubes for the detection of longitudinal and/or transverse imperfections
- Part 12: Automated full peripheral ultrasonic thickness testing of seamless and welded (except submerged arc-welded) steel tubes

This is a free page sample. Access the full version online.

I.S. EN ISO 10893-2:2011



This is a free preview. Purchase the entire publication at the link below:

Product Page

S Looking for additional Standards? Visit Intertek Inform Infostore

> Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation