

**Non-destructive testing of steel tubes - Part 10:
Automated full peripheral ultrasonic testing of seamless
and welded (except submerged arc-welded) steel tubes
for the detection of longitudinal and/or transverse
imperfections (ISO 10893- 10:2011)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 10893-10:2011 sisaldab Euroopa standardi EN ISO 10893-10:2011 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.04.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 01.04.2011.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 10893-10:2011 consists of the English text of the European standard EN ISO 10893-10:2011.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.04.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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The standard is available from Estonian standardisation organisation.

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English Version

Non-destructive testing of steel tubes - Part 10: Automated full peripheral ultrasonic testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of longitudinal and/or transverse imperfections (ISO 10893-10:2011)

Essais non destructifs des tubes en acier - Partie 10:
Contrôle automatisé par ultrasons sur toute la
circonférence des tubes en acier sans soudure et soudés
(sauf à l'arc immergé sous flux en poudre) pour la détection
des imperfections longitudinales et/ou transversales (ISO
10893-10:2011)

Zerstörungsfreie Prüfung von Stahlrohren - Teil 10:
Automatisierte Ultraschallprüfung nahtloser und
geschweißter (ausgenommen unterpulvergeschweißter)
Stahlrohre über den gesamten Rohrumfang zum Nachweis
von Unvollkommenheiten in Längs- und/oder Querrichtung
(ISO 10893-10:2011)

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

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN ISO 10893-10:2011) 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.

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Endorsement notice

The text of ISO 10893-10:2011 has been approved by CEN as a EN ISO 10893-10:2011 without any modification.

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Non-destructive testing of steel tubes —

Part 10:

Automated full peripheral ultrasonic testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of longitudinal and/or transverse imperfections

1 Scope

This part of ISO 10893 specifies requirements for automated full peripheral ultrasonic shear wave (generated by conventional or phased array technique) testing of seamless and welded [except submerged arc-welded (SAW)] steel tubes, for the detection of longitudinal and/or transverse imperfections.

Unless otherwise specified in the purchase order, the testing method is applicable to the detection of predominantly longitudinal imperfections.

In the case of testing on longitudinal imperfections, Lamb wave testing can be applied at the discretion of the manufacturer.

For seamless tubes, by agreement between the purchaser and manufacturer, testing principles of this part of ISO 10893 can be applied to detect imperfections having other orientations.

This part of ISO 10893 is applicable to the inspection of tubes with an outside diameter greater than or equal to 10 mm, normally with an outside diameter-to-thickness ratio greater than or equal to 5.

This part of ISO 10893 can also be applicable to the testing of circular hollow sections.

NOTE For options for testing tubes with an outside diameter-to-thickness ratio less than 5 on longitudinal imperfections, see Annex A.

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.

ISO 5577, *Non-destructive testing — Ultrasonic inspection — Vocabulary*

ISO 9712, *Non-destructive testing — Qualification and certification of personnel*

ISO 11484, *Steel products — Employer's qualification system for non-destructive testing (NDT) personnel*