SLOVENSKI STANDARD
SIST EN ISO 20769-2:2019

01-marec-2019

Nadomešča:
SIST EN 16407-2:2014

Neporušitvene preiskave - Radiografski pregled korozije in nanosov v ceveh z rentgenskimi žarki in žarki gama - 2. del: Radiografski pregled preko dveh sten (ISO 20769-2:2018)

Non-destructive testing -- Radiographic inspection of corrosion and deposits in pipes by X- and gamma rays - Part 2: Double wall radiographic inspection (ISO 20769-2:2018)

Zerstörungsfreie Prüfung - Durchstrahlungsprüfung auf Korrosion und Ablagerungen in Rohren mit Röntgen - und Gammastrahlen - Teil 2: Doppelwand-Durchstrahlungsprüfung (ISO 20769-2:2018)

Essais non destructifs - Examen radiographique de la corrosion et des dépôts dans les canalisations, par rayons X et rayons gamma - Partie 2: Examen radiographique double paroi (ISO 20769-2:2018)

Ta slovenski standard je istoveten z: **EN ISO 20769-2:2018**

ICS:

19.100	Neporušitveno preskušanje	Non-destructive testing
23.040.01	Deli cevovodov in cevovodi na splošno	Pipeline components and pipelines in general

SIST EN ISO 20769-2:2019 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 20769-2

October 2018

ICS 19.100

Supersedes EN 16407-2:2014

English Version

Non-destructive testing - Radiographic inspection of corrosion and deposits in pipes by X- and gamma rays - Part 2: Double wall radiographic inspection (ISO 20769-2:2018)

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This European Standard was approved by CEN on 9 August 2018.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN ISO 20769-2:2018) has been prepared by Technical Committee ISO/TC 135 "Non-destructive testing" in collaboration with Technical Committee CEN/TC 138 “Non-destructive testing” the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by April 2019, and conflicting national standards shall be withdrawn at the latest by April 2019.

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

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Endorsement notice

The text of ISO 20769-2:2018 has been approved by CEN as EN ISO 20769-2:2018 without any modification.

INTERNATIONAL STANDARD

ISO 20769-2

First edition
2018-09

Non-destructive testing — Radiographic inspection of corrosion and deposits in pipes by X- and gamma rays —

Part 2: Double wall radiographic inspection

Essais non destructifs — Examen radiographique de la corrosion et des dépôts dans les canalisations, par rayons X et rayons gamma —

Partie 2: Examen radiographique double paroi

Reference number
ISO 20769-2:2018(E)

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Published in Switzerland

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 135 *Non-destructive testing*, Subcommittee SC 5 *Radiographic testing*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

A list of all parts in the ISO 20769 series can be found on the ISO website.

Non-destructive testing — Radiographic inspection of corrosion and deposits in pipes by X- and gamma rays —

Part 2:
Double wall radiographic inspection

1 Scope

This document specifies fundamental techniques of film and digital radiography with the object of enabling satisfactory and repeatable results to be obtained economically. The techniques are based on generally recognized practice and fundamental theory of the subject.

This document applies to the radiographic examination of pipes in metallic materials for service induced flaws such as corrosion pitting, generalized corrosion and erosion. Besides its conventional meaning, "pipe" as used in this document is understood to cover other cylindrical bodies such as tubes, penstocks, boiler drums and pressure vessels.

Weld inspection for typical welding process induced flaws is not covered, but weld inspection is included for corrosion/erosion type flaws.

The pipes can be insulated or not, and can be assessed where loss of material due, for example, to corrosion or erosion is suspected either internally or externally.

This document covers double wall inspection techniques for detection of wall loss, including double wall single image (DWSI) and double wall double image (DWDI).

Note that the DWDI technique described in this document is often combined with the tangential technique covered in ISO 20769-1.

This document applies to in-service double wall radiographic inspection using industrial radiographic film techniques, computed digital radiography (CR) and digital detector arrays (DDA).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 11699-1, *Non-destructive testing — Industrial radiographic film — Part 1: Classification of film systems for industrial radiography*

ISO 11699-2, *Non-destructive testing — Industrial radiographic films — Part 2: Control of film processing by means of reference values*

ISO 17636-2, *Non-destructive testing of welds — Radiographic testing — Part 2: X- and gamma-ray techniques with digital detectors*

ISO 19232-1, *Non-destructive testing — Image quality of radiographs — Part 1: Determination of the image quality value using wire-type image quality indicators*

ISO 19232-5, *Non-destructive testing — Image quality of radiographs — Part 5: Determination of the image unsharpness value using duplex wire-type image quality indicators*

