BS EN ISO 11699-2:2018

BSI Standards Publication

Non-destructive testing - Industrial radiographic films

Part 2: Control of film processing by means of reference values

bsi.

National foreword

This British Standard is the UK implementation of EN ISO 11699-2:2018. It is identical to ISO 11699-2:2018. It supersedes BS EN ISO 11699-2:2011, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee WEE/46, Non-destructive testing.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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English Version

Non-destructive testing - Industrial radiographic films - Part 2: Control of film processing by means of reference values (ISO 11699-2:2018)

Essais non destructifs - Films utilisés en radiographie industrielle - Partie 2: Contrôle du traitement des films au moyen de valeurs de référence (ISO 11699-2:2018)

Zerstörungsfreie Prüfung - Industrielle Filme für die Durchstrahlungsprüfung - Teil 2: Kontrolle der Filmverarbeitung mit Hilfe von Referenzwerten (ISO 11699-2:2018)

This European Standard was approved by CEN on 3 August 2018.

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

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European foreword

This document (EN ISO 11699-2:2018) 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of an identical text or by endorsement, at the latest by March 2019, and conflicting national standards shall be withdrawn at the latest by March 2019.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.

This document supersedes EN ISO 11699-2:2011.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 11699-2:2018 has been approved by CEN as EN ISO 11699-2:2018 without any modification.

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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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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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.

This second edition cancels and replaces the first edition (ISO 11699-2:1998), which has been technically revised. The main changes compared to the previous edition are as follows:

— extension of Clause 5 to mixed film systems and support users of mixed systems in quality control and comparison to classified film systems;

— editorial changes.

A list of all parts in the ISO 11699 series can be found on the ISO website.

Introduction

This document specifies a procedure for the control of the film processing systems by users by processing pre-exposed strips.

These strips are pre-exposed by X-rays and are accompanied by a certificate from the film strip manufacturer.

The user processes the pre-exposed strips in his film processing system and records the results. In this document, Clause 4 shows the responsibility of the film strip manufacturer. The user is responsible for Clauses 5 to 8, which show compliance with the chosen film system classification.

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INTERNATIONAL STANDARD **ISO 11699-2:2018**

Non-destructive testing - Industrial radiographic films —

Part 2:
Control of film processing by means of reference values

1 Scope

This document specifies a procedure for the control of film processing systems.

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 films — Part 1: Classification of film systems for industrial radiography*

ISO 18901, *Imaging materials — Processed silver-gelatin-type black-and-white films — Specifications for stability*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
film system
combination of film and film processing which is carried out in accordance with the instructions of film manufacturer and/or the manufacturer of the processing chemicals

[SOURCE: ISO 11699-1:2008, 3.1]

3.2
film system class
film system (3.1) classification according to the limiting values given in ISO 11699-1:2008, Table 1

3.3
film strip
piece of film material on which different steps of constant optical density are exposed

3.4
pre-exposed film strip
film strip (3.3) that is pre-exposed by X-rays so as to present at least ten different optical density steps after processing

3.5
net density
diffuse optical density without base and fog density