PD CEN/TS 17100:2017

BSI Standards Publication

Non-destructive testing - Penetrant testing - Reference photographs and sizing of indications

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National foreword

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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.

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TECHNICAL SPECIFICATION

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English Version

Non-destructive testing - Penetrant testing - Reference photographs and sizing of indications

Essais non destructifs - Contrôle par ressuage et par magnétoscopie - Photographies de référence et dimensionnement des indications

Zerstörungsfreie Prüfung - Eindringprüfung - Referenzfotos und Dimensionierung von Anzeigen

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European foreword

This document (CEN/TS 17100:2017) has been prepared by Technical Committee CEN/TC 138 "Non-destructive testing", the secretariat of which is held by AFNOR.

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1 Scope

This document specifies minimum requirements in order to obtain and reproduce photographs used as reference records relative to PT (penetrant testing) colour contrast and fluorescent indications. It also provides requirements for the monitoring of resolution when measurements are to be indirectly performed by recording.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CEN/TR 16638:2014, *Non-destructive testing - Penetrant and magnetic particle testing using blue light*

EN ISO 3059, *Non-destructive testing - Penetrant testing and magnetic particle testing - Viewing conditions (ISO 3059)*

EN ISO 12706, *Non-destructive testing - Penetrant testing - Vocabulary (ISO 12706)*

ISO 12233, *Photography — Electronic still picture imaging — Resolution and spatial frequency responses*

ISO 18911, *Imaging materials — Processed safety photographic films — Storage practices*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 12706, ISO 12233, ISO 18911, CEN/TR 16638 and the following apply:

3.1
reference photograph
approved record with sufficient sharpness and details showing all or part of PT indications used as a master document and the visual baseline

4 Safety precautions

All relevant international, regional, national and local regulations including health and safety recommendations and particularly photobiological rating for lighting sources shall be taken into account.

5 General principles

5.1 Purpose of a reference photograph

A reference photograph is a representative record of an approved indication, obtained after a PT process. It can be used for indirect sizing of the indication. Precautions shall be taken for the monitoring of resolution.

The indication record shall not modify the true indication, shape, sharpness and dimensions.

The record shall reproduce the indication in a proper form.

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