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Aerospace series - Metallic materials - Test methods - Part 21: Radiographic testing of castings

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

Aerospace series - Metallic materials - Test methods - Part 21: Radiographic testing of castings

Série aérospatiale - Matériaux métalliques - Méthodes d'essais - Partie 21 : Examen radiographique des pièces moulées

Luft- und Raumfahrt - Metallische Werkstoffe - Prüfverfahren - Teil 21: Durchstrahlungsprüfung von Gußstücken

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Contents

Page

European foreword

This document (EN 2002-21:2019) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

This document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2020, and conflicting national standards shall be withdrawn at the latest by May 2020.

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1 Scope

This document specifies the requirements for the radiographic testing of castings for aerospace applications.

It shall be applied when referred to in the EN technical specification or material standard unless otherwise specified on the drawing, order or testing schedule.

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.

EN 1330-1, *Aerospace series — Non-destructive testing — Terminology — Part 1: List of general terms*

EN 1330-2, *Aerospace series — Non-destructive testing — Terminology — Part 2: Terms common to the non-destructive testing methods*

EN 1330-3, *Aerospace series — Non-destructive testing — Terminology — Part 3: Terms used in industrial radiographic testing*

EN 4179, *Aerospace series — Aerospace series — Qualification and approval of personnel for non-destructive testing*

EN 4258, *Aerospace series — Metallic materials — General organization of standardization — Links between types of EN standards and their use*

EN 4259, *Aerospace series — Metallic materials — Definitions of general terms*[1)]

EN 25580, *Aerospace series — Non-destructive testing — Industrial radiographic illuminators — Minimum requirements*

EN ISO 5579, *Non-destructive testing — Radiographic testing of metallic materials using film and X- or gamma rays — Basic rules*[2)]

EN ISO 19232-1, *Non-destructive testing — Image quality of radiographs — Part 1: Determination of the image quality value using wire-type image quality indicators*[2)]

EN ISO 19232-2, *Non-destructive testing — Image quality of radiographs — Part 2: Determination of the image quality value using step/hole-type image quality indicators*[2)]

EN ISO 19232-3, *Non-destructive testing — Image quality of radiographs — Part 3: Image quality classes*[2)]

EN ISO 11699-1, *Non-destructive testing — Industrial radiographic film — Classification of film systems for industrial radiography*[2)]

1) Published as ASD-STAN Standard at the date of publication of this standard by AeroSpace and Defence industries Association of Europe Standardization (ASD-STAN), http://www.asd-stan.org/

2) Published by: International Organization for Standardization, http://www.iso.ch/

ASTM E155-95, *Standard Reference Radiographs for Inspection of Aluminium and Magnesium Castings* 3)

ASTM E192-95, *Standard References Radiographs for Investment Steel Castings of Aerospace Applications* 3)

ASTM E24215, *Standard Reference Radiographs for Appearances of Radiographic Images as Certain Parameters are Changed*3)

ASTM E446-93, *Standard Reference Radiographs for Steel Castings up to 2 in (51 mm) in Thickness* 3)

ASTM E132015, *Standard Reference Radiographs for Titanium Castings* 3)