Irish Standard
I.S. EN 12543-2:2008

Non-destructive testing - Characteristics of focal spots in industrial X-ray systems for use in non-destructive testing - Part 2: Pinhole camera radiographic method

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Non-destructive testing - Characteristics of focal spots in industrial X-ray systems for use in non-destructive testing - Part 2: Pinhole camera radiographic method

Essais non destructifs - Caractéristiques des foyers émissifs des tubes radiogènes industriels utilisés dans les essais non destructifs - Partie 2: Méthode radiographique par sténopé

Zerstörungsfreie Prüfung - Charakterisierung von Brennflecken in Industrie-Röntgenanlagen für die zerstörungsfreie Prüfung - Teil 2: Radiographisches Lochkamera-Verfahren

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Foreword

This document (EN 12543-2:2008) has been prepared by 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of an identical text or by endorsement, at the latest by January 2009, and conflicting national standards shall be withdrawn at the latest by January 2009.

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.

This document supersedes EN 12543-2:1999.

EN 12543-2 is part of a series of European Standards under the general title *Non-destructive testing – Characteristics of focal spots in industrial X-ray systems for use in non-destructive testing*; the other Parts are the following:

EN 12543-1: *Part 1: Scanning method;*

EN 12543-3: *Part 3: Slit camera radiographic method*;

EN 12543-4: *Part 4: Edge method;*

EN 12543-5: *Part 5: Measurement of the effective focal spot size of mini and micro focus X-ray tubes*.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

In order to cover the different requirements for focal spot size measurement, five different methods are described in EN 12543-1 to EN 12543-5.

The scanning method (EN 12543-1) is dedicated to those applications where quantitative values for the intensity distribution and spot size are needed, i.e. calibration and image processing purposes.

The radiographic methods (EN 12543-2 and EN 12543-3) describe the traditional techniques and are dedicated for certification purposes and for field applications. A digital detector not only provides focal spot length and width, but also the user with quantitative values for intensity distribution. The digital method may be used as a reference method as in EN 12543-1

Where no pinhole or slit cameras are available in the field, the edge method (EN 12543-4) may be applied. It represents a very simple method for field application.

For micro focus systems, see EN 12453-5.