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NSAI Standards

Irish Standard
I.S. EN 16729-1:2016

Railway applications - Infrastructure - Non-destructive testing on rails in track - Part 1: Requirements for ultrasonic inspection and evaluation principles

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National Foreword

I.S. EN 16729-1:2016 is the adopted Irish version of the European Document EN 16729-1:2016, Railway applications - Infrastructure - Non-destructive testing on rails in track - Part 1: Requirements for ultrasonic inspection and evaluation principles

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 16729-1

May 2016

ICS 93.100

English Version

Railway applications - Infrastructure - Non-destructive testing on rails in track - Part 1: Requirements for ultrasonic inspection and evaluation principles

Applications ferroviaires - Infrastructure - Essais non destructifs sur les rails de voie - Partie 1: Exigences pour les principes d'évaluation et d'inspection par ultrasons

Bahnanwendungen - Infrastruktur - Zerstörungsfreie Prüfung an Schienen im Gleis - Teil 1: Anforderungen an Ultraschallprüfungen und Bewertungsgrundlagen

This European Standard was approved by CEN on 12 March 2016.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European foreword

This document (EN 16729-1:2016) has been prepared by Technical Committee CEN/TC 256 “Railway applications”, the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by November 2016, and conflicting national standards shall be withdrawn at the latest by November 2016.

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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2008/57/EC.

For relationship with EU Directive 2008/57/EC, see informative Annex ZA, which is an integral part of this document.

This series of European Standards EN 16729, *Railway applications — Infrastructure — Non-destructive testing on rails in track*, consists of:

— *Part 1: Requirements for ultrasonic inspection and evaluation principles*;

— *Part 2: Eddy current testing of rails in track* [planned];

— *Part 3: Requirements for identifying internal and surface rail defects* [planned];

— *Part 4: Qualification of personnel for non-destructive testing on rails* [planned].

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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Introduction

This European Standard represents the actual state of the art of automated ultrasonic testing of rails in track applied by European railway companies.

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1 Scope

This European Standard applies to testing of rails installed in track for detecting internal discontinuities.

This part applies to testing equipment fitted to dedicated test vehicles or manually-propelled devices. This European Standard does not define the requirements for vehicle acceptance. This part of the standard does not apply to ultrasonic testing of rails in a production plant.

The European Standard specifies the requirements for testing principles and systems in order to produce comparable results with regard to location, type and size of discontinuities in rails. This European Standard is not aiming to give any guidelines for managing the result of ultrasonic rail testing.

This European Standard applies only to rail profiles meeting the requirements of EN 13674-1.

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.

EN 1330-4, *Non-destructive testing - Terminology - Part 4: Terms used in ultrasonic testing*

EN 13674-1, *Railway applications - Track - Rail - Part 1: Vignole railway rails 46 kg/m and above*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1330-4 and the following apply.

3.1
parts of the rail
components that constitute the rail itself as shown in Figure 1

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