

ICS 93.100

**Railway applications –
Infrastructure –
Non-destructive testing on rails in track – Part 4: Qualification of personnel
for non-destructive testing on rails;
English version EN 16729-4:2018,
English translation of DIN EN 16729-4:2019-03**

Bahnanwendungen –
Infrastruktur –
Zerstörungsfreie Prüfung an Schienen im Gleis – Teil 4: Qualifizierung von Personal für die
zerstörungsfreie Prüfung an Gleisen;
Englische Fassung EN 16729-4:2018,
Englische Übersetzung von DIN EN 16729-4:2019-03

Applications ferroviaires –
Infrastructure –
Essais non destructifs sur les rails de voie – Partie 4: Qualification du personnel en charge des
essais non destructifs sur les rails;
Version anglaise EN 16729-4:2018,
Traduction anglaise de DIN EN 16729-4:2019-03

Document comprises 31 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

A comma is used as the decimal marker.

National foreword

This document (EN 16729-4:2018) has been prepared by Technical Committee CEN/TC 256 “Railway applications” (Secretariat: DIN, Germany), Subcommittee SC 1 “Infrastructure” (Secretariat: IPQ Portugal), Working Group WG 50 “Monitoring and treatment of rails” (Secretariat: DIN, Germany).

The responsible German body involved in its preparation was *DIN-Normenausschuss Fahrweg und Schienenfahrzeuge* (DIN Standards Committee Railway), Subcommittee NA 087-00-01-12 UA “Monitoring and treatment of rails”.

This document is based on the English reference version.

English Version

**Railway applications - Infrastructure - Non-destructive
testing on rails in track - Part 4: Qualification of personnel
for non-destructive testing on rails**

Applications ferroviaires - Infrastructure - Essais non
destructifs sur les rails de voie - Partie 4: Qualification
du personnel en charge des essais non destructifs sur
les rails

Bahnwendungen - Infrastruktur - Zerstörungsfreie
Prüfung an Schienen im Gleis - Teil 4: Qualifizierung
von Personal für die zerstörungsfreie Prüfung an
Gleisen

This European Standard was approved by CEN on 17 September 2018.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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.

CEN members are the national standards bodies of 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 United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

Page

European foreword.....	3
Introduction	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions	5
4 Symbols and abbreviations	5
5 Levels of qualifications.....	6
5.1 Level 1	6
5.2 Level 2	6
5.3 Level 3	7
6 Railway infrastructure experience.....	7
7 Examination	7
7.1 General.....	7
7.2 Content and duration of the examination	7
7.3 Assessment of the examination	7
7.4 Requalification	7
Annex A (informative) Theoretical and practical training.....	8
A.1 Training time	8
A.2 Training syllabus.....	9
A.2.1 General.....	9
A.2.2 Visual testing	9
A.2.3 Ultrasonic testing.....	13
A.2.4 GWT — Basics.....	17
A.2.5 Eddy current testing.....	18
A.2.6 Magnetic particle testing.....	21
A.2.7 Penetrant testing.....	22
Annex B (informative) Training and qualification for NDT inspectors.....	24
Annex ZA (informative) Relationship between this European Standard and the essential requirements of EU Directive 2008/57/EC aimed to be covered.....	27
Bibliography.....	29