

STN	Železnice Chyby koľajníc Časť 1: Manažérstvo chýb koľajníc	STN EN 17397-1
		73 6328

Railway applications - Rail defects - Part 1: Rail defect management

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

Táto norma bola označená vo Vestníku ÚNMS SR č. 05/21

Obsahuje: EN 17397-1:2020

132766

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 17397-1

November 2020

ICS 93.100

English Version

Railway applications - Rail defects - Part 1: Rail defect
management

Applications ferroviaires - Défauts de rails - Partie 1 :
Gestion des défauts de rails

Bahnanwendungen - Schienenfehler - Teil 1:
Handhabung von Schienenfehlern

This European Standard was approved by CEN on 28 September 2020.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, 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
1 Scope.....	4
2 Normative references.....	4
3 Terms and definitions	4
4 Abbreviations	7
5 Defect management system.....	7
5.1 General.....	7
5.2 Defect types	7
5.3 NDT inspection of rails.....	7
5.4 Management of NDT inspection results.....	8
6 Limits of rail condition.....	8
6.1 General.....	8
6.2 Definition of limits	8
6.3 Rail defect immediate action limits L_{IA}.....	10
7 Risk mitigation.....	10
Annex A (informative) Description of rail defects	11
A.1 Definition and description of rail defects.....	11
A.2 Characterization of rail defects.....	15
A.2.1 Transverse cracking.....	15
A.2.2 Horizontal cracking.....	19
A.2.3 Longitudinal vertical cracking	25
A.2.4 Squat	29
A.2.5 Head checks.....	33
A.2.6 Other rail head surface conditions	35
A.2.7 Corrosion.....	50
A.2.8 Wear.....	54
A.2.9 Other rail defects.....	59
Annex B (informative) Immediate action limits L_{IA}	67
Bibliography.....	69

European foreword

This document (EN 17397-1:2020) 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 May 2021, and conflicting national standards shall be withdrawn at the latest by May 2021.

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.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document specifies the defect management system the infrastructure manager uses to control the risk of severe accidents due to degradation of internal or surface defects on rails complying with EN 13674-1, EN 13674-2, EN 13674-4 and EN 15689:2009 (excluding grooved rails EN 14811 — which need alternative systems).

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 16729-3:2018, *Railway applications - Infrastructure - Non-destructive testing on rails in track - Part 3: Requirements for identifying internal and surface rail defects*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN