

Nederlandse norm

NEN-EN 16241

(en)

Spoorwegtoepassingen - Remhefboom

Railway applications - Slack adjuster

Vervangt NEN-EN 16241:2011 Ontw.

ICS 45.040
februari 2014

Als Nederlandse norm is aanvaard:
 - EN 16241:2014, IDT

Voorbeeld
 Preview

Normcommissie 345051 "Spoorwegen"



THIS PUBLICATION IS COPYRIGHT PROTECTED

DEZE PUBLICATIE IS AUTEURSRECHTELIJK BESCHERMD

Apart from exceptions provided by the law, nothing from this publication may be duplicated and/or published by means of photocopy, microfilm, storage in computer files or otherwise, which also applies to full or partial processing, without the written consent of the Netherlands Standardization Institute.

The Netherlands Standardization Institute shall, with the exclusion of any other beneficiary, collect payments owed by third parties for duplication and/or act in and out of law, where this authority is not transferred or falls by right to the Reproduction Rights Foundation.

Auteursrecht voorbehouden. Behoudens uitzondering door de wet gesteld mag zonder schriftelijke toestemming van het Nederlands Normalisatie-instituut niets uit deze uitgave worden veelevoudigd en/of openbaar gemaakt door middel van fotokopie, microfilm, opslag in computerbestanden of anderszins, hetgeen ook van toepassing is op gehele of gedeeltelijke bewerking.

Het Nederlands Normalisatie-instituut is met uitsluiting van ieder ander gerechtigd de door derden verschuldigde vergoedingen voor veelevoudiging te innen en/of daartoe in en buiten rechte op te treden, voor zover deze bevoegdheid niet is overgedragen c.q. rechtens toekomt aan de Stichting Reprorecht.

Although the utmost care has been taken with this publication, errors and omissions cannot be entirely excluded. The Netherlands Standardization Institute and/or the members of the committees therefore accept no liability, not even for direct or indirect damage, occurring due to or in relation with the application of publications issued by the Netherlands Standardization Institute.

Hoewel bij deze uitgave de uiterste zorg is nagestreefd, kunnen fouten en onvolledigheden niet geheel worden uitgesloten. Het Nederlands Normalisatie-instituut en/of de leden van de commissies aanvaarden derhalve geen enkele aansprakelijkheid, ook niet voor directe of indirecte schade, ontstaan door of verband houdend met toepassing van door het Nederlands Normalisatie-instituut gepubliceerde uitgaven.

Nederlands voorwoord

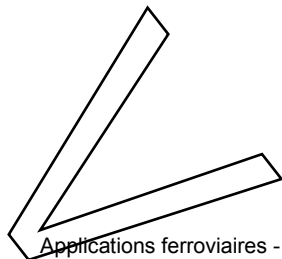
Voor de in deze norm vermelde normatieve verwijzingen bestaan in Nederland de volgende equivalenten:

<u>vermelde norm</u>	<u>Nederlandse norm</u>	<u>titel</u>
EN 60721-3-5:1997	NEN-EN-IEC 60721-3-5:1997	Indeling van omgevingsomstandigheden van elektrotechnische producten - Deel 3: Indeling in groepen van omgevingsparameters en hun gradaties - Sectie 5: Installaties en apparatuur voor voertuigen
EN 61373	NEN-EN-IEC 61373	Spoorwegen en soortgelijk geleid vervoer - Uitrusting voor rollend materieel - Schok- en trilbeproevingen

voorbeeld
Preview

Voorbeeld
Preview

ICS 45.040



English Version

Railway applications - Slack adjuster

Applications ferroviaires - Régleur de timonerie

Bahnanwendungen - Gestängesteller

This European Standard was approved by CEN on 16 November 2013.

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

Preview



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Design and manufacture	6
4.1 Requirements	6
4.1.1 General	6
4.1.2 Maintenance of block to tread clearance	6
4.1.3 Take up	6
4.1.4 Pay out	6
4.1.5 Shock and Vibration	6
4.1.6 Space envelope	7
4.1.7 Maximum load absorption	9
4.2 Service life	9
4.3 Ambient temperature	10
4.4 Other environmental conditions	10
4.4.1 General	10
4.4.2 Humidity	10
4.4.3 Rain	10
4.4.4 Snow, ice and hail	10
4.4.5 Solar radiation	11
4.4.6 Resistance to pollution	11
4.5 External appearance	11
5 Materials	11
6 Type test methods	11
6.1 Sampling for type test	11
6.2 Test requirements	12
6.3 Test procedure	12
6.3.1 Principle	12
6.3.2 Check of physical and geometrical characteristics	12
6.3.3 Operation	12
6.3.4 Operation at extreme temperatures	13
6.3.5 Maximum load absorption	14
6.3.6 Life test	14
6.4 Approval validity	14
6.5 Test Report	15
7 Routine test	15
8 In-Service assessment	15
9 Designation	15
10 Identification and marking	15
Annex A (informative) In-service trial	16
A.1 General	16
A.2 Test set-up and sampling	16

A.3	Procedure	16
A.4	Pass/fail criteria	16
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2008/57/EC		17
	Bibliography	21

Voorbereid
Preview

Foreword

This document (EN 16241:2014) 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 August 2014, and conflicting national standards shall be withdrawn at the latest by August 2014.

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 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.

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.

Preview

Copyright

1 Scope

This European Standard establishes general principles for designing, manufacturing and type testing slack adjusters.

NOTE 1 These requirements cannot be written in sufficient detail to ensure good workmanship or proper construction. Each manufacturer is therefore responsible for taking every necessary step to make sure that the quality of workmanship and construction is such as to ensure accordance with good engineering practice.

It is applicable to double acting slack adjusters designed to control the block (shoe) to tread (wheel) clearance of tread braked vehicles with conventional brake cylinders and rigging, without taking the track-gauge into consideration.

NOTE 2 The term used for this device by UIC is "Brake rigging adjuster".

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 60721-3-5:1997, *Classification of environmental conditions — Part 3: Classification of groups of environmental parameters and their severities — Section 5: Ground vehicle installations*

EN 61373, *Railway applications — Rolling stock equipment — Shock and vibration tests (IEC 61373)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

tread

surface of a monobloc wheel or of a separate tread on which the brake block rubs

3.2

slack adjuster

device to compensate for wear of brake shoes, wheel treads and brake rigging pivots to maintain a nominal block to tread clearance

Note 1 to entry: These slack adjusters are fitted separately in the brake rigging as independent devices. These slack adjusters are sometimes referred to as regulators.

3.3

double acting

works in two directions to take up excessive clearance between the brake block and tread or pay out to allow the nominal clearance to be restored between the brake block and tread where this is reduced

3.4

take up

reduction in the length of the brake rigging caused by the operation of the slack adjuster

3.5

pay out

increase in length of the brake rigging caused by the operation of the slack adjuster

ALTIJD DE ACTUELE NORM IN UW BEZIT HEBBEN?

Nooit meer zoeken in de systemen en uzelf de vraag stellen:
“Is NEN-EN 16241:2014 en de laatste versie?”™

Via het digitale platform NEN Connect heeft u altijd toegang tot de meest actuele versie van deze norm. Vervallen versies blijven ook beschikbaar. **U en uw collega's** kunnen de norm via NEN Connect makkelijk raadplagen, online en offline.

Kies voor slimmer werken en bekijk onze mogelijkheden op www.nenconnect.nl.

Heeft u vragen?

Onze Klantenservice is bereikbaar maandag tot en met vrijdag, van 8.30 tot 17.00 uur.

Telefoon: 015 2 690 391

E-mail: klantenservice@nen.nl

