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Veoseade ja kruvisidur KONSOLIDEERITUD TEKST**

Railway applications - Railway rolling stock - Draw gear
and screw coupling CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15566:2009+A1:2010 sisaldab Euroopa standardi EN 15566:2009+A1:2010 ingliskeelset teksti.

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English Version

Railway applications - Railway rolling stock - Draw gear and screw coupling

Applications ferroviaires - Matériel roulant ferroviaire -
Organes de traction et tendeur d'attelage

Bahnanwendungen - Schienenfahrzeuge - Zugeinrichtung
und Schraubenkupplung

This European Standard was approved by CEN on 19 December 2008 and includes Amendment 1 approved by CEN on 28 September 2010.

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Foreword

This document (EN 15566:2009+A1:2010) 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of an identical text or by endorsement, at the latest by May 2011, and conflicting national standards shall be withdrawn at the latest by May 2011.

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 includes Amendment 1, approved by CEN on 2010-09-28.

This document supersedes EN 15566:2009.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**.

A1 This document has been prepared under a mandate given to CEN/CENELEC/ETSI 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. **A1**

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

This European Standard is based on UIC 520, UIC 825, UIC 826, UIC 827-1 and UIC 827-2.

1 Scope

This standard specifies the requirement of the draw gear and screw coupling for the end rolling stock which have to couple with other interoperable rolling stock (freight wagons, locomotives, passenger vehicles ...).

This standard covers the functionality construction, interfaces, testing including pass fail criteria for draw gear and screw coupling.

The standard describes three categories of classification of draw gear and screw coupling, (1 MN, 1,2 MN and 1,5 MN).

2 Normative references

The following referenced documents are indispensable for the application 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 287-1, *Qualification test of welders — Fusion welding — Part 1: Steels*

EN 10002-1, *Metallic materials — Tensile testing — Part 1: Method of test at ambient temperature*

EN 10021, *General technical delivery conditions for steel products*

EN 10025 (allparts), *Hot rolled products of structural steels*

EN 10045-1, *Metallic materials — Charpy impact test — Part 1: Test method*

EN 10079, *Definition of steel products*

EN 10083-1, *Steels for quenching and tempering — Part 1: General technical delivery conditions*

EN 10083-2, *Steels for quenching and tempering — Part 2: Technical delivery conditions for non alloy steels*

EN 10083-3, *Steels for quenching and tempering — Part 3: Technical delivery conditions for alloy steels*

EN 10204:2004, *Metallic products — Types of inspection documents*

EN 10228-3, *Non-destructive testing of steel forgings — Part 3: Ultrasonic testing of ferritic or martensitic steel forgings*

EN ISO 377, *Steel and steel products — Location and preparation of samples and test pieces for mechanical testing (ISO 377:1997)*

EN ISO 868, *Plastics and ebonite — Determination of indentation hardness by means of a durometer (Shore hardness) (ISO 868:2003)*

EN ISO 6506-1, *Metallic materials — Brinell hardness test — Part 1: Test method (ISO 6506-1:2005)*

EN ISO 7438, *Metallic materials — Bend test (ISO 7438:2005)*

EN ISO 9001:2000, *Quality management systems — Requirements (ISO 9001:2000)*

ISO 37, *Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties*

ISO 48, *Rubber, vulcanized or thermoplastic — Determination of hardness (Hardness between 10 IRHD and 100 IRHD)*

ISO 188, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests*

ISO 813, *Rubber, vulcanized or thermoplastic — Determination of adhesion to a rigid substrate — 90 degree peel method*

ISO 815-1, *Rubber, vulcanized or thermoplastic — Determination of compression set — Part 1: At ambient or elevated temperatures*

ISO 815-2, *Rubber, vulcanized or thermoplastic — Determination of compression set — Part 2: At low temperatures*

ISO 7619-1, *Rubber, vulcanized or thermoplastic — Determination of indentation hardness — Part 1: Durometer method (Shore hardness)*

3 Terms and definitions

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

3.1

screw coupling system

system to connect two railway vehicles consisting of draw gear, draw hook and screw coupling

3.2

draw gear

system consisting of an assembly of mechanical parts and absorber fixed on the railway vehicle which is able to work in traction

NOTE A representative drawing is given in Figure 3.

3.3

draft gear

system consisting of an assembly of mechanical parts and absorber fixed on the railway vehicle which is able to work in compression and traction (push-pull)

NOTE 1 It is not a part of this standard.

NOTE 2 Freight wagons with draft gear are considered as freight wagons with draw gear, if they fulfil the specified characteristic conditions in this standard including interface to draw-hook.

3.4

draw hook

mechanical part to transfer forces between draw gear and screw coupling

NOTE Definition in EN 15020 "Rescue coupler": part of a conventional and mechanical manual coupling, also known as UIC draw hook.

3.5

screw coupling

mechanical system to connect to the draw hook of the adjacent railway vehicle including length adjustment