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Railway applications - Closing and locking devices for payload protecting devices against environmental influences - Requirements for durability, operation, indication, maintenance, recycling

I.S. EN 15723:2010

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EUROPEAN STANDARD

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English Version

**Railway applications - Closing and locking devices for payload
protecting devices against environmental influences -
Requirements for durability, operation, indication, maintenance,
recycling**

Applications ferroviaires - Dispositifs de fermeture et de
verrouillage des équipements de protection du chargement
contre les influences environnantes - Exigences de
résistance mécanique, exploitation, marquage,
maintenance et recyclage

Bahnanwendungen - Verschluss- und Sicherungsteile von
Ladegutschutzeinrichtungen gegen Umwelteinflüsse -
Anforderungen an Festigkeit, Bedienbarkeit,
Kennzeichnung, Instandhaltung, Entsorgung

This European Standard was approved by CEN on 7 November 2009.

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Foreword

This document (EN 15723:2010) 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of an identical text or by endorsement, at the latest by July 2010, and conflicting national standards shall be withdrawn at the latest by July 2010.

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(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

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Introduction

To achieve an undisturbed, reliable and safe operation of freight trains it is essential to define common requirements for closing and locking devices of protecting devices of interoperable trains with respect to e.g. structural requirements, operating characteristics, way of operation, maintenance as well as their handling.

1 Scope

This European Standard applies to new and upgraded freight wagons where an approval is required. These protecting devices are classified into two types of load and this standard defines the requirements for the durability of the closing and locking devices, their status indication, maintenance and recycling. This standard also defines pass-fail criteria for the dimensioning tests.

NOTE Provisions going beyond the scope of these requirements should be agreed by the contracting parties involved.

This standard is not applicable to closing and locking devices which are used to ensure a pressure difference or to retain liquids /liquid payloads. It is not applicable to vehicles which are emptied by pressure, nor is it applicable to loose tarpaulins.

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 349, *Safety of machinery — Minimum gaps to avoid crushing of parts of the human body*

prEN 12663-2, *Railway applications — Structural requirements of railway vehicle bodies — Part 2: Freight wagons*

prEN 15877-1, *Railway applications — Marking on railway vehicles — Part 1: Freight wagons*

3 Terms and definitions

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

3.1

aerodynamic forces

forces affecting the vehicle and component assemblies by an air stream

3.2

forces from selfmass

inertia forces resulting from dynamic forces applied to the protecting (locking) devices

3.3

unloading door

type of door which is subject to the force of the payload (or a proportion of it)

NOTE The door should be able to be secured against un-planned opening (Category 2).

3.4

movable device to protect

device to protect payload against environmental influences and exterior forces

NOTE 1 Loose tarpaulins are not considered as a movable protecting device.

EXAMPLES Sliding walls, flaps, rigid sliding hoods and covers, hinged doors, bottom doors.

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