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Railway applications - Welding of railway vehicles and
components - Part 6: Maintenance welding
requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 15085-6:2022 sisaldab Euroopa standardi EN 15085-6:2022 ingliskeelset teksti.	This Estonian standard EVS-EN 15085-6:2022 consists of the English text of the European standard EN 15085-6:2022.
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English Version

Railway applications - Welding of railway vehicles and components - Part 6: Maintenance welding requirements

Applications ferroviaires - Soudage des véhicules ferroviaires et des pièces - Partie 6 : Exigences de soudage en maintenance

Bahnanwendungen - Schweißen von Schienenfahrzeugen und -fahrzeugteilen - Teil 6: Anforderungen für die schweißtechnische Instandsetzung

This European Standard was approved by CEN on 17 January 2022.

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European foreword

This document (EN 15085-6:2022) 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of an identical text or by endorsement, at the latest by April 2023, and conflicting national standards shall be withdrawn at the latest by April 2023.

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.

This series of European Standards EN 15085 “*Railway applications — Welding of railway vehicles and components*” consists of the following parts:

- *Part 1: General;*
- *Part 2: Requirements for welding manufacturers;*
- *Part 3: Design requirements;*
- *Part 4: Production requirements;*
- *Part 5: Inspection, testing and documentation;*
- *Part 6: Maintenance welding requirements.*

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

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

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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Introduction

Welding is a special process in the manufacture of railway vehicles and their parts. The required provisions for this process are laid down in the standards series EN ISO 3834. The basis of these provisions is the basic technical welding standards with respect to the special requirements for the construction of railway vehicles.

This series of standards applies to welding of metallic materials in the manufacture and maintenance of railway vehicles and their parts.

It describes the control for the welding process for railway vehicles and their components for new manufacture and maintenance.

With respect to the railway environment, this series of standards defines the quality requirements for the welding manufacturer to undertake new building and repair work.

Components, parts and subassemblies are assigned a classification level, based on their safety relevance. According to these levels, qualifications for welding personnel of the manufacturer are specified.

This series provides an essential link between the weld performance class defined during design, the quality of the weld, and the demonstration of the required quality by inspection.

This series of standards does not deal with product qualification.

NOTE This series standard can also be used by internal and external parties, including certification bodies, to assess the organization's ability to meet customer, regulatory and the organization's own requirements.

1 Scope

This document defines the quality requirements as well as the design and production requirements for welding to be followed by manufacturers during maintenance or maintenance activities on railway vehicles and components.

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 13306:2017, *Maintenance — Maintenance terminology*

EN 15085-1: -¹, *Railway applications — Welding of railway vehicles and components — Part 1: General*

EN 15085-2:2020, *Railway applications — Welding of railway vehicles and components — Part 2: Requirements for welding manufacturer*

EN 15085-3: -², *Railway applications — Welding of railway vehicles and components — Part 3: Design requirements*

EN 15085-4: -³, *Railway applications — Welding of railway vehicles and components — Part 4: Production requirements*

EN 15085-5: -⁴, *Railway applications — Welding of railway vehicles and components — Part 5: Inspection, testing and documentation*

EN 17018:2019, *Railway applications — Rolling stock maintenance — Terms and definitions*

EN ISO 3834-1:2021, *Quality requirements for fusion welding of metallic materials — Part 1: Criteria for the selection of the appropriate level of quality requirements (ISO 3834-1:2021)*

EN ISO 3834-2:2021, *Quality requirements for fusion welding of metallic materials — Part 2: Comprehensive quality requirements (ISO 3834-2:2021)*

EN ISO 3834-3:2021, *Quality requirements for fusion welding of metallic materials — Part 3: Standard quality requirements (ISO 3834-3:2021)*

EN ISO 3834-4:2021, *Quality requirements for fusion welding of metallic materials — Part 4: Elementary quality requirements (ISO 3834-4:2021)*

EN ISO 3834-5:2021, *Quality requirements for fusion welding of metallic materials — Part 5: Documents with which it is necessary to conform to claim conformity to the quality requirements of ISO 3834-2, ISO 3834-3 or ISO 3834-4 (ISO 3834-5:2021)*

EN ISO 15613:2004, *Specification and qualification of welding procedures for metallic materials — Qualification based on pre-production welding test (ISO 15613:2004)*

¹ Under preparation. Stage at time of publication: prEN 15085-1:2021.

² Under preparation. Stage at time of publication: FprEN 15085-3:2022.

³ Under preparation. Stage at time of publication: prEN 15085-4:2020.

⁴ Under preparation. Stage at time of publication: prEN 15085-5:2020.

EN ISO 15614-1:2017, ⁵ *Specification and qualification of welding procedures for metallic materials — Welding procedure test — Part 1: Arc and gas welding of steels and arc welding of nickel and nickel alloys (ISO 15614-1:2017, Corrected version 2017-10-01)*

EN ISO 15614-2:2005, *Specification and qualification of welding procedures for metallic materials — Welding procedure test — Part 2: Arc welding of aluminium and its alloys (ISO 15614-2:2005)*

EN ISO 15614-3:2008, *Specification and qualification of welding procedures for metallic materials — Welding procedure test — Part 3: Fusion welding of non-alloyed and low-alloyed cast irons (ISO 15614-3:2008)*

EN ISO 15614-4:2005, ⁶ *Specification and qualification of welding procedures for metallic materials — Welding procedure test — Part 4: Finishing welding of aluminium castings (ISO 15614-4:2005)*

EN ISO 15614-7:2019, *Specification and qualification of welding procedures for metallic materials — Welding procedure test — Part 7: Overlay welding (ISO 15614-7:2016)*

EN ISO 15614-11:2002, *Specification and qualification of welding procedures for metallic materials — Welding procedure test — Part 11: Electron and laser beam welding (ISO 15614-11:2002)*

EN ISO 15614-12:2014, *Specification and qualification of welding procedures for metallic materials — Welding procedure test — Part 12: Spot, seam and projection welding (ISO 15614-12:2014)*

EN ISO 15614-13:2012, *Specification and qualification of welding procedures for metallic materials — Welding procedure test — Part 13: Upset (resistance butt) and flash welding (ISO 15614-13:2012)*

CEN ISO/TR 15608:2017, *Welding — Guidelines for a metallic materials grouping system*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15085-1:-1, EN 17018:2019 and in EN 13306:2017 as well as the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

repair

physical action taken to restore the required function of an entity treated either in position or removed

3.2

maintenance plan

railway vehicle or component based structured document containing a set of planned maintenance activities and their maintenance interval limits based upon information in the maintenance manual

[SOURCE: EN 17018:2019, 3.1.4]

⁵ Document impacted by A1:2019.

⁶ Document impacted by AC:2007.