BS EN 15085-4:2023

BSI Standards Publication

Railway applications — Welding of railway vehicles and components

Part 4: Production requirements

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National foreword

This British Standard is the UK implementation of EN 15085-4:2023. It supersedes BS EN 15085-4:2007, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee RAE/3/-/11, Railway Applications - Structural requirements and Welding.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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European foreword

This document (EN 15085-4:2023) 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of an identical text or by endorsement, at the latest by September 2023, and conflicting national standards shall be withdrawn at the latest by September 2023.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 document supersedes EN 15085-4:2007.

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.

EN 15085-4:2023 includes the following changes with respect to EN 15085-4:2007:

a) Normative reference have been updated;

b) Clause 4, Preparation before welding has been revised;

c) Clause 5, Requirements for welding has been revised;

d) Clause 6, Special requirements for maintenance welding of railway vehicles has been deleted

e) Annex A, Guidance on the choice of filler material has been added

f) Annex ZA has been added.

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.

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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 defined 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 of standards 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.

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1 Scope

This document specifies the production requirements (i.e. preparation and execution) of the welding work 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 1011-1:2009, *Welding - Recommendations for welding of metallic materials - Part 1: General guidance for arc welding*

EN 1011-2:2001, *Welding - Recommendations for welding of metallic materials - Part 2: Arc welding of ferritic steels*

EN 1011-3:2018, *Welding - Recommendations for welding of metallic materials - Part 3: Arc welding of stainless steels*

EN 1011-4:2000, *Welding - Recommendations for welding of metallic materials - Part 4: Arc welding of aluminium and aluminium alloys*

EN 1011-5:2003, *Welding - Recommendations for welding of metallic materials - Part 5: Welding of clad steel*

EN 1011-6:2018, *Welding - Recommendation for welding of metallic materials - Part 6: Laser beam welding*

EN 1011-7:2004, *Welding - Recommendations for welding of metallic materials - Part 7: Electron beam welding*

EN 1011-8:2018, *Welding - Recommendations for welding of metallic materials - Part 8: Welding of cast irons*

EN 287-6:2018, *Qualification test of welders - Fusion welding - Part 6: Cast irons*

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

EN 14532-1:2004, *Welding consumables - Test methods and quality requirements - Part 1: Primary methods and conformity assessment of consumables for steel, nickel and nickel alloys*

EN 14532-2:2004, *Welding consumables - Test methods and quality requirements - Part 2: Supplementary methods and conformity assessment of consumables for steel, nickel and nickel alloys*

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

EN 15085-3:2022, *Railway applications - Welding of railway vehicles and components - Part 3: Design requirements*

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