



BSI Standards Publication

Railway applications – Infrastructure – Rail mounted railway maintenance and inspection machines and associated equipment – Explanation of machine type and compliance, including acceptance processes

National foreword

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

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Railway applications - Infrastructure - Rail mounted
railway maintenance and inspection machines and
associated equipment - Explanation of machine type and
compliance, including acceptance processes

Applications ferroviaires - Infrastructure - Machines
ferroviaires de maintenance et d'inspection
- Explication du type de machine et de leur
conformité, y compris les processus d'autorisation

Bahnanwendungen - Infrastruktur -
Schienengebundene Instandhaltungs- und
Inspektionsmaschinen - Erläuterung des
Maschinentyps und der Konformität,
einschließlich der Zulassungsverfahren

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Contents

Page

European foreword	iii
Introduction	iv
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 Modes of operation	7
4.1 Introduction	7
4.2 Working mode	7
4.3 Travelling mode	8
4.4 Running mode	9
5 Generic types of machine	10
5.1 Introduction	10
5.1.1 Classification — general	10
5.1.2 Railbound machines	11
5.1.3 Road-rail machines	11
5.1.4 Demountable machines and trailers	12
5.1.5 Trolleys and portable machines	12
5.1.6 Demountable modules	12
5.1.7 Attachments	12
5.1.8 Machines without rail wheels	13
5.2 Classification of rail mounted machines	13
5.2.1 Classification method	13
5.2.2 Machines with a running mode	13
5.2.3 Machines with a road mode	13
5.2.4 How does the machine move along the track	13
5.2.5 Combination of questions	13
6 Assessment of machines	14
6.1 Introduction	14
6.2 Machinery Directive	14
6.3 European Railway Package	15
6.3.1 Interoperability Directive	15
6.3.2 Safety Directive (2004/49/EC as amended by 2016/798/EU)	16
6.4 Common elements of design review processes	17
6.5 Acceptance to work on the railway	18
7 Composition of standards for machines	19
7.1 Introduction	19
7.2 Series of standards	19
8 Special national conditions	19
8.1 Introduction	19
Annex A (informative) Examples of machine types	20
Bibliography	35

European foreword

This document (CEN/TR 17498:2020) has been prepared by Technical Committee CEN/TC 256 “Railway applications”, the secretariat of which is held by DIN.

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Introduction

This document is intended as an explanatory guide to machines that are fitted with rail wheels. It is written to clarify the complex variety of machines that are used for the construction, maintenance, inspection, repair and renewal of railway infrastructure. It is intended to be used as an introduction to, and application guide for, the suite of standards for rail mounted maintenance and infrastructure inspection machines. It is an aid to clarify which standard to use for a particular machine. This document does not introduce any new requirements.

Machines are designed and intended for a specific working purpose and their ability to operate as a railway vehicle is considered as an additional function.

There are various standards which apply to the machines in scope of this document:

- EN 13977;
- EN 14033 series;
- EN 15746 series;
- EN 15955.

1 Scope

This document covers machines fitted with rail wheels that are used for the construction, maintenance, inspection, repair and renewal of railway infrastructure. It is also applicable to machines used for emergency rescue purposes on railway infrastructure.

NOTE Inspection of the infrastructure includes measurement.

This document explains the different modes of operation, classification of machines and which standard covers the technical requirements. There is also guidance on the compliance process provided to explain the design review process of different legislation, how these can be combined into one process (to avoid duplication) and achieve a common understanding of what the design review is achieving.

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 ISO 12100, *Safety of machinery — General principles for design — Risk assessment and risk reduction (ISO 12100)*

EN 13977, *Railway applications — Track — Safety requirements for portable machines and trolleys for construction and maintenance*

EN 14033-1:2017, *Railway applications — Track — Railbound construction and maintenance machines — Part 1: Technical requirements for running*

EN 14033-2, *Railway applications — Track — Railbound construction and maintenance machines — Part 2: Technical requirements for travelling and working*

EN 14033-3, *Railway applications — Track — Railbound construction and maintenance machines — Part 3: General safety requirements*

EN 14033-4, *Railway applications — Track — Railbound construction and maintenance machines — Part 4: Technical requirements for running, travelling and working on urban rail*

EN 15746-1:—¹⁾, *Railway applications — Track — Road-rail machines and associated equipment — Part 1: Technical requirements for travelling and working*

EN 15746-2:—²⁾, *Railway applications — Track — Road-rail machines and associated equipment — Part 2: General safety requirements*

EN 15746-3:—³⁾, *Railway applications — Track — Road-rail machines and associated equipment — Part 3: Technical requirements for running*

EN 15746-4:—⁴⁾, *Railway applications — Track — Road-rail machines and associated equipment — Part 4: Technical requirements for running, travelling and working on urban rail*

EN 15955:—⁵⁾, *Railway applications — Infrastructure — Demountable machines, trailers and associated equipment — General safety and technical requirements for travelling and working*

EN 16704-1, *Railway applications — Track — Safety protection on the track during work — Part 1: Railway risks and common principles for protection of fixed and mobile work sites*

1) Under preparation. Stage at the time of publication: FprEN 15746-1.

2) Under preparation. Stage at the time of publication: FprEN 15746-2.

3) Under preparation. Stage at the time of publication: FprEN 15746-3.

4) Under preparation. Stage at the time of publication: FprEN 15746-4.

5) Under preparation. Stage at the time of publication: prEN 15955.