



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**

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## National foreword

This Published Document is the UK implementation of CEN/TR 17498:2020.

The UK participation in its preparation was entrusted to Technical Committee RAE/2, Railway Applications - Track.

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

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TECHNICAL REPORT

**CEN/TR 17498**

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TECHNISCHER BERICHT

July 2020

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ICS 45.120; 93.100

English Version

**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

This Technical Report was approved by CEN on 15 June 2020. It has been drawn up by the Technical Committee CEN/TC 256.

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# Contents

Page

<b>European foreword</b> .....	<b>iii</b>
<b>Introduction</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>5</b>
<b>2 Normative references</b> .....	<b>5</b>
<b>3 Terms and definitions</b> .....	<b>6</b>
<b>4 Modes of operation</b> .....	<b>7</b>
4.1 Introduction .....	7
4.2 Working mode .....	7
4.3 Travelling mode .....	8
4.4 Running mode .....	9
<b>5 Generic types of machine</b> .....	<b>10</b>
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
<b>6 Assessment of machines</b> .....	<b>14</b>
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
<b>7 Composition of standards for machines</b> .....	<b>19</b>
7.1 Introduction .....	19
7.2 Series of standards .....	19
<b>8 Special national conditions</b> .....	<b>19</b>
8.1 Introduction .....	19
<b>Annex A (informative) Examples of machine types</b> .....	<b>20</b>
<b>Bibliography</b> .....	<b>35</b>

## **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.

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.

## 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:—<sup>1)</sup>, *Railway applications — Track — Road-rail machines and associated equipment — Part 1: Technical requirements for travelling and working*

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

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

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

EN 15955:—<sup>5)</sup>, *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*

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