



BSI Standards Publication

Carrier Cycles

Part 2: Lightweight single track carrier cycles — Mechanical aspects

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 17860-2:2024) has been prepared by Technical Committee CEN/TC 333 “Cycles”, the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by March 2025, and conflicting national standards shall be withdrawn at the latest by March 2025.

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 is part of standard series consisting of the following parts, users are invited to check which parts are applicable to their situation

- EN 17860-1:2023, Cycles — Carrier Cycles — Part 1: Vocabulary
- FprEN 17860-2:2023, Cycles — Carrier Cycles — Part 2: Lightweight single track carrier cycles – mechanical and functional aspects
- FprEN 17860-3:2023, Cycles — Carrier Cycles — Part 3: Lightweight multi track carrier cycles – mechanical and functional aspects
- prEN 17860-4, Cycles — Carrier Cycles — Heavyweight multi track carrier cycles – mechanical and functional aspects
- prEN 17860-5:2023, Cycles — Carrier Cycles — Electrical aspects
- prEN 17860-6, Cycles — Carrier Cycles — Passenger transport
- prEN 17860-7:2023, Cycles — Carrier Cycles — Trailers

Examples of carrier cycle configurations can be found in Annex A. Annex B provides a reading guide for parts 2,3 and 4 of this standard series.

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.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Introduction

This document gives requirements and test methods for mechanical and functional aspects for single track carrier cycles.

This document has been developed in response to demand throughout Europe. Its aim is to provide a standard for the assessment of mechanical aspects for single track carrier cycles of a type which are excluded from type approval by Regulation (EU) No. 168/2013.

Because of the diversity of geometries and solutions of carrier cycles not all requirements and test methods in this document may apply to every carrier cycle.

- Annex A gives an overview of vehicle configurations.
- Annex B provides a reading guide for the parts of this standard series.
- Annex J contains a rationale explaining the choices made when developing the standard series

This document is based on a risk analysis, the focus is on mechanical aspects for single track carrier cycles. This document is a type C standard as specified in EN ISO 12100. The machinery concerned and the extent to which hazards, hazardous situations and hazardous events are covered are indicated in the scope of this document.

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1 Scope

This document is applicable to single track carrier cycles with or without electric assistance and a maximum gross vehicle weight of:

- 300 kg in case the manufacturer defines the carrier cycle to be intended for both private and commercial use; or
- 250 kg in case the manufacturer defines the carrier cycle to be intended for solely private use.

NOTE Requirements for electrical power assisted carrier cycles are covered in part 5 of this standard series.

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 17860-1, *Cycles — Carrier Cycles — Part 1: Terms and definitions*

EN ISO 4210-2:2023, *Cycles - Safety requirements for bicycles - Part 2: Requirements for city and trekking, young adult, mountain and racing bicycles (ISO 4210-2:2023)*

EN ISO 4210-3:2023, *Cycles - Safety requirements for bicycles - Part 3: Common test methods (ISO 4210-3:2023)*

EN ISO 4210-4:2023, *Cycles - Safety requirements for bicycles - Part 4: Braking test methods (ISO 4210-4:2023, Corrected version 2023-08)*

EN ISO 4210-6:2023, *Cycles - Safety requirements for bicycles - Part 6: Frame and fork test methods (ISO 4210-6:2023, Corrected version 2023-08)*

EN ISO 4210-7:2023, *Cycles - Safety requirements for bicycles - Part 7: Wheel and rim test methods (ISO 4210-7:2023)*

EN ISO 4210-8:2023, *Cycles - Safety requirements for bicycles - Part 8: Pedal and drive system test methods (ISO 4210-8:2023)*

EN ISO 4210-9:2023, *Cycles - Safety requirements for bicycles - Part 9: Saddles and seat-post test methods (ISO 4210-9:2023)*

ISO 5775-1:2023, *Bicycle tyres and rims — Part 1: Tyre designations and dimensions*

ISO 5775-2:2023, *Bicycle tyres and rims — Part 2: Rims*

EN ISO 11243:2023, *Cycles - Luggage carriers for bicycles - Requirements and test methods (ISO 11243:2023)*

EN ISO 12100:2010, *Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)*

ISO 9633:2001, *Cycle chains — Characteristics and test methods*

ISO 6742-1:2015, *Cycles — Lighting and retro-reflective devices — Part 1: Lighting and light signalling devices*