
**Safety of amusement rides and
amusement devices —**

**Part 2:
Operation and use**

*Sécurité des manèges et des dispositifs de divertissement —
Partie 2: Fonctionnement et utilisation*



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Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Operation, maintenance and use of amusement rides and amusement devices	5
4.1 General	5
4.2 Standard documentation	5
4.3 Responsibilities of the controller	6
4.3.1 General	6
4.3.2 Selection and training of staff	6
4.3.3 Assembly and disassembly	7
4.3.4 Care of equipment	9
4.3.5 Trial operations and checks	12
4.3.6 Operation	13
4.3.7 Duties for the supervision of the operation	15
4.3.8 Servicing (maintenance, repair and modification)	16
4.4 Duties of the amusement device operator	17
4.4.1 General requirements	18
4.4.2 Safe operation	18
4.5 Duties of the attendant	19
4.6 Independent inspection	20
4.6.1 In-service inspection	20
4.6.2 Reports	20
4.7 Emergency situations	20
4.7.1 General	20
4.7.2 Means of evacuation and escape	20
4.7.3 Fire	20
Annex A (informative) Training, qualification and experience for competent persons	23
Annex B (informative) Provisions prior to use	24
Bibliography	27

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 254, *Safety of amusement rides and amusement devices*.

This second edition cancels and replaces the first edition (ISO 17842-2:2015), which has been technically revised.

The main changes are as follows:

- references to ISO/TS 17929 have been removed;
- the list of terms in [Clause 3](#) has been updated;
- [4.2](#), Standard documentation has been updated;
- [4.3.3.3.1](#), General has been added;
- [4.3.4.1](#), General has been added;
- [4.3.4.4.3](#), Operating control equipment has been updated;
- [4.3.4.4.4](#), Control equipment operated by passengers has been updated;
- [4.3.5.2](#), Daily check and trial run has been updated;
- [4.3.6.1](#), During operating cycle has been updated;
- [4.3.8.3](#), Repairs has been updated;
- [4.3.8.4](#), Modification has been updated;
- [4.6.1.2](#), Inspection process and [4.6.2](#), Reports have been added;
- Table A.1 was updated;

- [Annex B](#) has been added;
- Bibliography was updated.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Safety of amusement rides and amusement devices —

Part 2: Operation and use

1 Scope

This document specifies the minimum requirements necessary to ensure the safe maintenance, operation, inspection and testing of amusement rides and amusement devices which are intended to be installed both repeatedly without degradation or loss of integrity, and temporarily or permanently in fairgrounds and amusement parks or any other locations, and is concerned with the installing, assembly and disassembly, operating, handling, maintaining, repairing, modifying and inspecting of amusement devices, and is addressed to controllers, operators, attendants and inspection bodies.

The following are not covered by this document (this list is not exhaustive):

- grandstands;
- construction site installations;
- scaffolding;
- removable agricultural structures;
- simple coin-operated children's amusement devices;
- carrying up to three children, and recreational devices like waterslides or summer toboggan runs;
- playground equipment;
- rope courses;
- climbing walls;
- inflatable trampolines and swimming pool equipment.

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.

ISO 2307, *Fibre ropes — Determination of certain physical and mechanical properties*

ISO 9554, *Fibre ropes — General specifications*

ISO 7165, *Fire fighting — Portable fire extinguishers — Performance and construction*

ISO 13857, *Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs*

ISO/IEC 17020, *Conformity assessment — Requirements for the operation of various types of bodies performing inspection*

ISO 17842-1, *Safety of amusement rides and amusement devices — Design and manufacture*

ISO 17842-3, *Safety of amusement rides and amusement devices — Requirements for inspection during design, manufacture, operation and use*

IEC 60947-3, *Low-voltage switchgear and controlgear — Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units*

EN 12385, *Steel wire ropes — Safety*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 17020, ISO 17842-1 and the following apply.

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

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

3.1 amusement device

arrangement of equipment that produces the desired effect of amusement or entertainment when the passenger moves through it or on it primarily by his or her own action, or any other system that is not covered by the term *amusement ride* (3.3)

3.2 amusement device log

book and/or electronic data file containing all the necessary information about the use and history of any *amusement device* (3.1)

3.3 amusement ride

device to entertain *passengers* (3.21) during motion, creating biomechanical effects on passengers

Note 1 to entry: In this document, the term “amusement device” is used to refer to an *amusement device* (3.1) or amusement ride.

3.4 attendant

trained person appointed to work under the supervision of an *operator* (3.20), to assist in the operation of an *amusement device* (3.1) available for use by the public.

3.5 barrier

device intended to prevent the user from falling and from passing beneath

3.6 competent person

person who can demonstrate that they have acquired through training, qualifications or experience, or a combination of these, the knowledge and skills enabling them to perform a specified task

3.7 component

component which forms part of an assembly in which at least one component moves

Note 1 to entry: Excluding vibration and deformation.