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Stationary training equipment

**Part 10: Exercise bicycles with a fixed wheel or without a freewheel —
Additional specific safety requirements and test methods**



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AS ISO 20957.10:2021

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- Australian Industry Group
- Consumers Federation of Australia
- Engineers Australia
- Institute of Public Works Engineering Australasia
- Kidsafe Australia
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Preface

This Standard was prepared by the Standards Australia Committee CS-101, Sports and recreational facilities and equipment.

The objective of this document is to specify safety requirements for exercise bicycles with a fixed wheel or without freewheel that have an inertia of $> 0.6 \text{ kg}\cdot\text{m}^2$. The requirements are in addition to the general safety requirements of AS 20957.1:2021, with which this document is intended to be read in conjunction.

This document is identical with, and has been reproduced from, ISO 20957-10:2017, *Stationary training equipment — Part 10: Exercise bicycles with a fixed wheel or without freewheel — Additional specific safety requirements and test methods*.

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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).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

ISO 20957-10 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 136, *Sports, playground and other recreational facilities and equipment*, in collaboration with ISO Technical Committee TC 83, *Sports and other recreational facilities and equipment*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 20957-10:2007), which has been technically revised.

The main changes compared to the previous edition are as follows:

- the Scope has been simplified;
- the formulation has been aligned with ISO 20957-1;
- [Clause 5](#) has been specified and restructured;
- [Clause 6](#) has been specified and restructured;
- the Normative references have been updated.

A list of all parts in the ISO 20957 series can be found on the ISO website.

Australian Standard[®]

Stationary training equipment

Part 10: Exercise bicycles with a fixed wheel or without a freewheel — Additional specific safety requirements and test methods

1 Scope

This document specifies safety requirements for exercise bicycles with a fixed wheel or without freewheel that have an inertia of $>0,6 \text{ kg}\cdot\text{m}^2$. The requirements are in addition to the general safety requirements of ISO 20957-1, with which this document is intended to be read in conjunction.

Any attachment provided with the exercise bicycle with a fixed wheel or without freewheel for the performance of additional exercises is subject to the requirements of ISO 20957-1.

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

ISO 13732-1:2006, *Ergonomics of the thermal environment — Methods for the assessment of human responses to contact with surfaces — Part 1: Hot surfaces*

ISO 20957-1, *Stationary training equipment — Part 1: General safety requirements and test methods*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 20957-1 and the following apply.

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

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

3.1

flywheel

rotating mass designed to create inertia

3.2

freewheel

mechanism which is designed to disengage the *flywheel* (3.1) from the pedal mechanism in one direction

3.3

seat pillar

connection between the frame and the seat provided to adjust the height of the seat

3.4

seat tube

part of the frame where the *seat pillar* (3.3) is inserted

3.5

handlebar stem

connection between the frame and the handlebar provided to adjust the height of the handlebar