

This is a preview of "BS EN ISO 20957-10:2...". [Click here to purchase the full version from the ANSI store.](#)



BSI Standards Publication

Stationary training equipment

Part 10: Exercise bicycles with a fixed wheel or without freewheel - Additional specific safety requirements and test methods (ISO 20957-10:2017)

This is a preview of "BS EN ISO 20957-10:2...". [Click here to purchase the full version from the ANSI store.](#)

National foreword

This British Standard is the UK implementation of EN ISO 20957-10:2017. It is identical to ISO 20957-10:2017. It supersedes BS EN 957-10:2005, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee SW/136/4, Sports, Playground and other Recreational Equipment - Stationary Training Equipment.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2018
Published by BSI Standards Limited 2018

ISBN 978 0 580 94558 8

ICS 97.220.30

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 January 2018.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

This is a preview of "BS EN ISO 20957-10:2017". Click here to purchase the full version from the ANSI store.

EUROPÄISCHE NORM

December 2017

ICS 97.220.30

Supersedes EN 957-10:2005

English Version

Stationary training equipment - Part 10: Exercise bicycles with a fixed wheel or without freewheel - Additional specific safety requirements and test methods (ISO 20957- 10:2017)

Équipement d'entraînement fixe - Partie 10: Bicyclettes
d'exercice avec une roue fixe ou sans roue libre -
Exigences spécifiques de sécurité et méthodes d'essai
supplémentaires (ISO 20957-10:2017)

Stationäre Trainingsgeräte - Teil 10:
Trainingsfahrräder mit starrem Antrieb oder ohne
Freilauf - Zusätzliche besondere sicherheitstechnische
Anforderungen und Prüfverfahren (ISO 20957-
10:2017)

This European Standard was approved by CEN on 9 October 2017.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

This is a preview of "BS EN ISO 20957-10:2...". [Click here to purchase the full version from the ANSI store.](#)

European foreword

This document (EN ISO 20957-10:2017) has been prepared by Technical Committee ISO/TC 83 "Sports and other recreational facilities and equipment" in collaboration with Technical Committee CEN/TC 136 "Sports, playground and other recreational facilities and equipment" the secretariat of which is held by DIN.

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 June 2018, and conflicting national standards shall be withdrawn at the latest by June 2018.

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 supersedes EN 957-10:2005.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

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

Endorsement notice

The text of ISO 20957-10:2017 has been approved by CEN as EN ISO 20957-10:2017 without any modification.

This is a preview of "BS EN ISO 20957-10:2...". Click here to purchase the full version from the ANSI store.

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Classification	2
5 Safety requirements	3
5.1 External construction.....	3
5.1.1 Transmission elements, rotating parts, squeeze and shear points.....	3
5.1.2 Temperature of accessible surfaces.....	4
5.2 Intrinsic loading.....	4
5.2.1 Seat pillar.....	4
5.2.2 Handlebar.....	4
5.2.3 Pedal.....	4
5.3 Seat pillar adjustment.....	4
5.3.1 General.....	4
5.3.2 Insertion depth.....	5
5.4 Handlebar.....	5
5.4.1 Handlebar stem adjustment.....	5
5.4.2 Insertion depth.....	5
5.5 Pedals.....	5
5.6 Stability.....	5
5.7 Locking system.....	5
5.8 Emergency braking system.....	6
5.8.1 Effectiveness.....	6
5.8.2 Actuator integrity.....	6
5.8.3 Visibility.....	6
5.9 Endurance for the pedal crank assembly.....	6
5.10 Foot clearance.....	6
5.11 Power display.....	6
5.12 Additional instructions for use.....	7
5.13 Additional marking.....	7
6 Test methods	8
6.1 General.....	8
6.1.1 Dimensional check.....	8
6.1.2 Visual examination.....	8
6.1.3 Performance test.....	8
6.2 Testing of transmission elements, rotating parts, squeeze and shear points.....	8
6.3 Testing of temperature of accessible surfaces.....	8
6.4 Testing of intrinsic loading.....	8
6.5 Testing of handlebars.....	8
6.6 Testing of stability.....	8
6.7 Testing of the emergency braking system.....	9
6.7.1 Testing of effectiveness.....	9
6.7.2 Testing of actuator integrity.....	9
6.8 Testing of the pedal crank assembly.....	9
6.9 Testing of the power display.....	10
6.10 Testing of locking system.....	11
7 Test report	11
Bibliography	12

This is a preview of "BS EN ISO 20957-10:2...". Click here to purchase the full version from the ANSI store.

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.

This is a preview of "BS EN ISO 20957-10:2...". Click here to purchase the full version from the ANSI store.

Stationary training equipment —

Part 10:

Exercise bicycles with a fixed wheel or without 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