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BSI Standards Publication

Gymnastic equipment - General safety requirements and test methods

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National foreword

This British Standard is the UK implementation of EN 913:2018. It supersedes BS EN 913:2008, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee SW/136/22, Sports, Playground and other Recreational Equipment - Gymnasium and Playing Field 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 97582 0

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 December 2018.

Amendments/corrigenda issued since publication

Date	Text affected
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EUROPÄISCHE NORM

December 2018

ICS 97.220.30

Supersedes EN 913:2008

English Version

Gymnastic equipment - General safety requirements and test methods

Matériel de gymnastique - Exigences générales de sécurité et méthodes d'essai

Turngeräte - Allgemeine sicherheitstechnische Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 22 July 2018.

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.

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

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European foreword

This document (EN 913:2018) has been prepared by 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 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.

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 913:2008.

This European Standard is one of several standards, each of which deals with a particular type or a particular group of gymnastic equipment. Gymnastic equipment of any type not covered by a relevant European Standard is covered by this general standard.

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

The principal changes from the previous edition of EN 913 are as follows:

- a) Scope has been concretised by adding sports equipment;
- b) Term "hazard" modified according to EN ISO 12100:2010;
- c) Term "risk" added according to EN ISO 12100:2010;
- d) References to relevant European Directives added;
- e) Risk of "fire" has been deleted, as it is not relevant for gymnastic equipment;
- f) New [Subclause 5.1](#) "Material" added;
- g) Requirements regarding entrapment have been harmonized with EN 1176-1:2017;
- h) Entrapment requirement for floor fixings has been added;
- i) New [Subclause 5.7](#) "Friction and abrasion" added;
- j) New [Subclause 5.8](#) "Ergonomics" added;
- k) In [Clause 6](#) a reference to the relevant European Standard on Gymnastic equipment was added;
- l) New [Clause 7](#) "Manufactures instructions" has been added;
- m) Body mass for multiple use has been modified according to CEN ISO/TR 7250-2;
- n) New "Bibliography" added.

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, 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.

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1 Scope

This document specifies general safety requirements and test methods for all pieces of gymnastic and sports equipment and for all pieces of equipment for the use of physical education, training and competition, intended for use supervised by a competent person and not specified in other, individual standards and/or federation rules.

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 1991-1-1, *Eurocode 1: Actions on structures — Part 1-1: General actions — Densities, self-weight, imposed loads for buildings*

EN 1991-1-3, *Eurocode 1 — Actions on structures — Part 1-3: General actions — Snow loads*

EN 1991-1-4, *Eurocode 1: Actions on structures — Part 1-4: General actions — Wind actions*

EN 1991-1-5, *Eurocode 1: Actions on structures — Part 1-5: General actions — Thermal actions*

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

ISO 6487, *Road vehicles — Measurement techniques in impact tests — Instrumentation*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

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

3.1

hazard

potential source of harm

[SOURCE: EN ISO 12100:2010, 3.6]

3.2

risk

combination of probability of occurrence of harm and the severity of that harm

[SOURCE: EN ISO 12100:2010, 3.12]

3.3

body mass

mass of the person(s) using the equipment

3.4

static load

load acting on the equipment due to its structure, added weights and pre-stressed components

3.5

dynamic factor

factor to take account of the increase in effective body mass during a dynamic movement