



NSAI
Standards

Irish Standard
I.S. EN 913:2018+A1:2021

Gymnastic equipment - General safety requirements and test methods

I.S. EN 913:2018+A1:2021

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

EN 913:2018+A1:2021

Published:

2021-09-15

This document was published under the authority of the NSAI and comes into effect on:

2021-10-03

ICS number:

97.220.30

NOTE: If blank see CEN/CENELEC cover page

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

National Foreword

I.S. EN 913:2018+A1:2021 is the adopted Irish version of the European Document EN 913:2018+A1:2021, Gymnastic equipment - General safety requirements and test methods

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

For relationships with other publications refer to the NSAI web store.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This page is intentionally left blank

EUROPEAN STANDARD

EN 913:2018+A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2021

ICS 97.220.30

Supersedes EN 913:2018

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 and includes Amendment 1 approved by CEN on 17 February 2021.

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, 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, 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

EN 913:2018+A1:2021 (E)

Contents	Page
European foreword	3
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Risk assessment	6
5 General safety requirements	6
5.1 Materials	6
5.2 Surface finish	7
5.3 Entrapment	8
5.3.1 Gaps and shearing/crushing points	8
5.3.2 Transport system	9
5.3.3 Floor fixings	9
5.4 Stability and strength	9
5.4.1 General	9
5.4.2 Stability	9
5.4.3 Strength	9
5.5 Adjustment devices	9
5.6 Shock absorption of top padding	9
5.7 Friction and abrasion	10
5.8 Ergonomics	10
6 Marking	10
7 Manufacturer Instructions	10
Annex A (normative)  Determination of entrapment	11
Annex B (normative) Mechanical loading for determination of stability and strength	15
Annex C (normative) Determination of shock absorption of padding	19
Bibliography	21

European foreword

This document (EN 913:2018+A1:2021) 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 March 2022, and conflicting national standards shall be withdrawn at the latest by March 2022.

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 A1 EN 913:2018 A1.

This document 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.

This document includes Amendment 1 approved by CEN on 17 February 2021.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

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;

EN 913:2018+A1:2021 (E)

- 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, 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, Turkey and the United Kingdom.

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

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-