



BSI Standards Publication

Stationary training equipment

Part 2: Strength training equipment — Additional specific safety requirements and test methods

This is a preview of BS EN ISO 20957-2:2024. [Click here to purchase the full version from the ANSI store.](#)

National foreword

This British Standard is the UK implementation of EN ISO 20957-2:2024. It is identical to ISO 20957-2:2024. It supersedes BS EN ISO 20957-2:2021, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee SW/136, Sports, playground and other recreational equipment.

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

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

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Text affected

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Stationary training equipment - Part 2: Strength training equipment - Additional specific safety requirements and test methods (ISO 20957-2:2024)

Appareils d'entraînement fixes - Partie 2: Appareil d'entraînement de force - Exigences spécifiques de sécurité et méthodes d'essai supplémentaires (ISO 20957-2:2024)

Stationäre Trainingsgeräte - Teil 2: Kraft-Trainingsgeräte, zusätzliche besondere sicherheitstechnische Anforderungen und Prüfverfahren (ISO 20957-2:2024)

This European Standard was approved by CEN on 14 September 2024.

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European foreword

This document (EN ISO 20957-2:2024) 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of an identical text or by endorsement, at the latest by April 2025, and conflicting national standards shall be withdrawn at the latest by April 2025.

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 ISO 20957-2:2021.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

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Endorsement notice

The text of ISO 20957-2:2024 has been approved by CEN as EN ISO 20957-2:2024 without any modification.

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Annex ZA (informative)

Relationship between this European Standard and the safety requirements of Directive 2001/95/EC aimed to be covered

This European Standard has been prepared under a Commission's standardization request Standardisation mandate issued to the European standardisation organisations (ESOs) to develop European standards for stationary training equipment "M/506" to provide one voluntary means of conforming to the safety requirements of Commission Decision (EU) No 476/2011 of 27 July 2011 implementing General Product Safety Directive 2001/95/EC of the European Parliament and of the Council with regard to safety requirements for stationary training equipment.

Once this standard is cited in the Official Journal of the European Union under that Directive 2001/95/EC, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding safety requirements of that Directive and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Commission Decision (EU) No 476/2011 of 27 July 2011 implementing Directive 2001/95/EC of the European Parliament and of the Council with regard to safety requirements for stationary training equipment and Commission's standardization request Standardisation mandate issued to the European standardisation organisations (ESOs) to develop European standards for stationary training equipment 'M/506'

Safety Requirements of EC Decision (EU) No 476/2011		Clause(s)/sub-clause(s) of this EN
I.	Product and product definition	1; 3; 4
II. A	General safety requirements	1; 5.1.1; 5.3.1; 5.8
II. B.	Specific Safety Requirements	5.3.1; 5.3.2
(a)	Stability of free-standing equipment	5.1
(b)	Sharp edges and burrs	—
(c)	Tube ends	—
(d)	Squeeze, shear, rotating and reciprocating points within the accessible area	5.4
(e)	Weights	5.2.1; 5.2.2.1; 5.2.2.2; 5.2.2.3; 5.2.2.4; 5.4.1; 5.4.2; 5.5
(f)	Equipment access and escape	5.6
(g)	Adjustment and locking mechanisms	5.4.1.2; 5.8; 5.9
(h)	Ropes, belts and chains	5.2.1
(i)	Wire ropes and pulleys	—
(j)	Rope and belt guides	—
(k)	Pull-in points	5.7

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Safety Requirements of EC Decision (EU) No 476/2011		Clause(s)/sub-clause(s) of this EN
(l)	Gripping positions	—
(m)	Integral handgrips	—
(n)	Applied handgrips	—
(o)	Rotating handgrips	—
(p)	Electrical safety	—
(q)	Care and maintenance	—
(r)	Assembly instructions	—
(s)	General instructions for use	5.8
(t)	Basic biomechanical requirements	—
(u)	Marking	5.9
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(w)	Immobilisation unit especially for children by locking the power out	—
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(b)	Visual examination	6.1.2
(c)	Tactile examination	6.1.3
(d)	Performance test	6.1.4
(f)	Testing of pull-in points	6.1.1; 6.1.2; 6.1.4
(h)	Stability test	6.2
(i)	Determination of breaking load of ropes, belts and chains	5.2.1
(l)	Testing of access/escape	6.1.1; 6.1.2; 6.1.4
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	Other tests – Impact Testing	6.4.2

WARNING 1 Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 Other Union legislation may be applicable to the products falling within the scope of this standard.

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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 document 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).

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

This third edition cancels and replaces the second edition (ISO 20957-2:2020), which has been technically revised.

The main changes are as follows:

- referenced standards have been updated with year of publication;
- NOTE 2 has been added to [Clause 1](#);
- [Clause 3](#) has been updated to add definition and corresponding figure for rack station;
- [Clause 5](#) has been restructured;
- [6.1.5](#) "Finger entrapment test" has been added.

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

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Stationary training equipment —

Part 2:

Strength training equipment — Additional specific safety requirements and test methods

1 Scope

This document specifies safety requirements for stationary strength training equipment, in addition to the general safety requirements of ISO 20957-1:2013.

This document is applicable to stationary strength training equipment with stacked weight resistance or alternative means of resistance, such as elastic cords, hydraulic, pneumatic, electrical, magnetic, springs and externally loaded weights (hereinafter referred to as stationary training equipment) with the classes H, S and I according to ISO 20957-1:2013.

NOTE Accuracy classes are not applicable to this type of stationary training equipment as accuracy classes do not affect the safety of this 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 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

ISO 20957-1:2013, *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 20957-1:2013 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

selectorized equipment

strength training equipment where the resistance means is a load that is an integral part of the device that can be varied by the user without adding or removing components to and from the equipment

Note 1 to entry: An example is shown in [Figure 1](#).