Stationary training equipment - Part 4: Strength training benches, additional specific safety requirements and test methods (ISO 20957-4:2016)



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 20957-4:2016 sisaldab Euroopa standardi EN ISO 20957-4:2016 ingliskeelset teksti.		
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.	
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 07.12.2016.	Date of Availability of the European standard is 07.12.2016.	
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.	

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

ICS 97.220.30

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2016

EN ISO 20957-4

ICS 97.220.30

Supersedes EN 957-4:2006+A1:2010

English Version

Stationary training equipment - Part 4: Strength training benches, additional specific safety requirements and test methods (ISO 20957-4:2016)

Équipement d'entraînement fixe - Partie 4: Bancs pour haltères, exigences spécifiques de sécurité et méthodes d'essai supplémentaires (ISO 20957-4:2016)

Stationäre Trainingsgeräte - Teil 4: Kraft-Trainingsbänke, zusätzliche besondere sicherheitstechnische Anforderungen und Prüfverfahren (ISO 20957-4:2016)

This European Standard was approved by CEN on 7 November 2016.

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, 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: Avenue Marnix 17, B-1000 Brussels

European foreword

This document (EN ISO 20957-4:2016) 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 2017, and conflicting national standards shall be withdrawn at the latest by June 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 957-4:2006+A1:2010.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 20957-4:2016 has been approved by CEN as EN ISO 20957-4:2016 without any modification.

		Page
Foreword.		iv
Introducti	on	v
1 Sco	pe	1
2 Nor	mative references	1
3 Ter	ms and definitions	1
4 Clas	ssification	1
5.1 5.2 5.3 5.4 5.5 5.6 5.7	General Benches with fixed barbell supports 5.2.1 Stability of the barbell 5.2.2 Lateral stability of benches with fixed barbell supports 5.2.3 Longitudinal stability of benches with fixed barbell supports Free-standing barbell supports Dimensions of the barbell support Barbell support strength and stability Loading Barbell support	1 1 1 2 2 2 2 2 2 2 2 2 3 3
6 Tes 6.1 6.2 6.3 6.4 6.5	t methods General 6.1.1 Dimensional check 6.1.2 Visual examination 6.1.3 Performance test Testing of rotational stability of the barbell Testing of rotational stability of benches with fixed barbell supports Testing of longitudinal stability Testing of barbell support strength and stability	3 3 3 3 3 4 4
7 Tes	t report	

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 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 20957-4 was prepared by the European Committee 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 20957-4:2005), which has been technically revised with the following changes:

- publication as an EN ISO;
- formulation aligned with ISO 20957-1;
- <u>Clause 5</u> "Safety requirements" specified and restructured;
- Clause 6 "Test methods" specified and restructured;
- normative references updated.

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

Introduction

Obcument is a previous agreement of the state of the stat This document concerns the safety of strength training benches. It is intended to be used in conjunction with ISO 20957-1. The requirements of this document take priority over the requirements in ISO 20957-1.

Stationary training equipment —

Part 4:

Strength training benches, additional specific safety requirements and test methods

1 Scope

This document specifies safety requirements for stationary strength training benches and free-standing barbell racks in addition to the general safety requirements of ISO 20957-1. It is intended to be read in conjunction with ISO 20957-1.

This document is applicable to stationary training equipment type benches (type 4) (hereinafter referred to as benches) with the classes S, H and I according to 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 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 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

4 Classification

The classification shall be according to ISO 20957-1.

5 Safety requirements

5.1 General

Depending on the design of the training equipment, the following requirements shall apply as appropriate.

5.2 Benches with fixed barbell supports

5.2.1 Stability of the barbell

Overturning of the barbell by an unequal load shall be prevented either by the distance between the supports or safety device.