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ISO 20957-6:2021

Australian STANDARD®

STANDARDS Australia

Stationary training equipment

Part 6: Treadmills, additional specific safety requirements and test methods



AS ISO 20957.6:2021

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Preface

This Standard was prepared by the Standards Australia Committee CS-101, Sports and recreational facilities and equipment.

The objective of this document is to specify safety requirements and test methods for treadmills in addition to the general safety requirements and test methods of AS 20957.1:2021. It is intended that this document is applied together with AS 20957.1:2021.

This document deals with significant hazards, hazardous situations and events relevant to stationary training equipment used as intended and under the conditions of misuse foreseeable by the manufacturer (see Clause 4).

This document is applicable to power-driven as well as to non-power/manually driven training equipment type treadmills (hereafter referred to as treadmills) with the classes S, H and I and classes A, B and C regarding accuracy.

This document is not applicable to treadmills which are manufactured before its publication.

This Standard is identical with, and has been reproduced from, ISO 20957-6:2021, *Stationary training equipment — Part 6: Treadmills, additional specific safety requirements and test methods*.

As this document has been reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker.

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The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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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 of 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 www.iso.org/iso/foreword.html.

This document was prepared by the European Committee for Standardization (CEN) (as EN 957-6:2010+A1:2014) and was adopted, without modification other than those given below by Technical Committee ISO/TC 83, *Sports and other recreational facilities and equipment*.

— references to EN documents were replaced with their equivalent ISO standard;

— in Clause 4, the NOTE was changed to body text;

— in 6.1, "comply" changed to "conform";

— in 6.11, in the NOTE, "may" was changed to "might";

— in Clause 9, the footnote was changed to a NOTE;

— minor editorial changes.

This second edition cancels and replaces the first edition (ISO 20957-6:2005), which has been technically revised.

The main changes compared to the previous edition are as follows:

— specifications and definitions amended;

— list of significant hazards added (Clause 4);

— modification of safety requirements and/ or protective measures (Clause 6);

— deletion of the reference to ISO 5904[1)] in 6.11;

— requirements and test methods for the transmission elements and rotating parts amended;

— requirements and test methods for safety stop amended;

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— requirements for the static loading, especially for class S amended;

— requirement for the endurance testing of class I added;

— requirements and test methods for treadmills with front handlebar and side handrails amended;

— requirements for the footrail amended;

— requirements for the permanent marking and test methods of the running surface added;

— requirements and test methods for the acceleration of power-driven treadmills added;

— requirements and test methods for folding treadmills added;

— requirements and test methods for the heart rate control mode added;

— requirements and test methods for noise added;

— requirements for the marking of the maximum lateral position added;

— modification of the testing of endurance (7.8);

— modification of the testing of the accuracy of time, speed and distance indications (7.15);

— requirements for the test report and marking added;

— additional instructions for use extended;

— modification of Figure 1;

— addition of Figure 2;

— modification of Figure 3;

— editorial changes.

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

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

This document is a type C standard as stated in ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations and hazardous events are covered are indicated in the scope of this document.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.

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NOTES

Australian Standard®

Stationary training equipment

Part 6: Treadmills, additional specific safety requirements and test methods

1 Scope

This document specifies safety requirements and test methods for treadmills in addition to the general safety requirements and test methods of ISO 20957-1. It is intended that this document is applied together with ISO 20957-1.

This document deals with significant hazards, hazardous situations and events relevant to stationary training equipment used as intended and under the conditions of misuse foreseeable by the manufacturer (see Clause 4).

This document is applicable to power-driven as well as to non-power/manually driven training equipment type treadmills (hereafter referred to as treadmills) with the classes S, H and I and classes A, B and C regarding accuracy.

This document is not applicable to treadmills which are manufactured before it publication.

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 60335-1, *Household and similar electrical appliances — Safety — Part 1: General requirements (IEC 60335-1:2010, modified)*

EN 60601-1, *Medical electrical equipment — Part 1: General requirements for basic safety and essential performance (IEC 60601-1:2005)*

ISO 11201, *Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections*

ISO 11202, *Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions applying approximate environmental corrections*

ISO 12100, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

ISO 12947-1:1998, *Textiles — Determination of the abrasion resistance of fabrics by the Martindale method — Part 1: Martindale abrasion testing apparatus*

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 and the following apply.

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

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