AS 19202.1:2021

Australian STANDARD®

STANDARDS Australia

Summer toboggan runs

Part 1: Safety requirements and test methods (ISO 19202-1:2017 (ED.1.0) MOD)

AS 19202.1:2021

This Australian Standard ® was prepared by CS-101, Sports and recreational facilities and equipment. It was approved on behalf of the Council of Standards Australia on 14 July 2021.

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Australian Competition and Consumer Commission
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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 the safety requirements for planning of track, design and calculation, manufacturing, erection, testing and commissioning of summer toboggan runs and their components according to Clause 3. Those are sports facilities with an inclined guided downhill track, on which the user passes a difference in height by the user's dependent speed control, to a limited velocity and descending by gravity. The basic approach is the consciousness that the sledding usually implies for the users a remaining risk, which is comparable with sports activities, e.g. bicycle riding, alpine skiing, rope courses, because:

(a) active independent actions without supervision are necessary on tracks in order to control descents (distance control and braking); and

(b) posture and balance to ensure the balance between centrifugal and gravitational force are required.

This document is applicable to summer toboggan runs and major modification to summer toboggan runs and toboggans manufactured after the effective date of publication.

This document is an adoption with national modifications, and has been reproduced from, ISO 19202-1:2017, *Summer toboggan runs — Part 1: Safety requirements and test methods*. The modifications are additional requirements and are set out in Appendix ZZ, which has been added at the end of the source text.

Appendix ZZ lists the variations to ISO 19202-1:2017 (ED.1) for the application of this document in Australia.

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

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

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 on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 83, *Sports and other recreational facilities and equipment*.

A list of all the parts in the ISO 19202 series can be found on the ISO website.

NOTES

Australian Standard®

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1 Scope

This document specifies the safety requirements for planning of track, design and calculation, manufacturing, erection, testing and commissioning of summer toboggan runs and their components according to Clause 3. Those are sports facilities with an inclined guided downhill track, on which the user passes a difference in height by user's dependent speed control, to a limited velocity and descending by gravity. Its basic approach is the consciousness that the sledding usually implies for the users a remaining risk, which is comparable with sports activities, e.g. bicycle riding, alpine skiing, rope courses, because

a) active independent actions without supervision are necessary on tracks in order to control descents (distance control and braking), and

b) posture and balance to ensure the balance between centrifugal and gravitational force are required.

This document is applicable to summer toboggan runs and major modification to summer toboggan runs and toboggans manufactured after the effective date of 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.

ISO 9606 (all parts), *Qualification testing of welders — Fusion welding*

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

ISO 13849-1, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design*

ISO 13857, *Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs*

ISO 19202-2, *Summer toboggan runs — Part 2: Safety requirements for operation*

ISO/IEC 17020, *Conformity assessment — Requirements for the operation of various types of bodies performing inspection*

IEC 60364-5-54, *Low-voltage electrical installations — Part 5-54: Selection and erection of electrical equipment — Earthing arrangements and protective conductors*

IEC 61508 (all parts), *Functional safety of electrical/electronic/programmable electronic safety-related systems*

EN 349, *Safety of machinery — Minimum gaps to avoid crushing of parts of the human body*

EN 1090 (all parts), *Execution of steel structures and aluminium structures*

EN 1991 (all parts), *Eurocode 1: Actions on structures*

EN 1993 (all parts), *Eurocode 3: Design of steel structures*

EN 1999-1-1, *Eurocode 9: Design of aluminium structures — Part 1-1: General structural rules*