# INTERNATIONAL STANDARD



First edition 1999-12-01

# Snowboards — Binding mounting area —

Part 2: Requirements and test methods for snowboards with inserts

iTeh Surfs des neiges — Zone de montage de la fixation — Partie 2: Exigences et méthodes d'essai relatives aux surfs des neiges munis d'inserts (s.iteh.ai)

<u>ISO 10958-2:1999</u> https://standards.iteh.ai/catalog/standards/sist/dd48f933-e520-49b8-8f66-97296567368a/iso-10958-2-1999



#### 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard 10958-2 was prepared by Technical Committee ISO/TC 83, Sports and recreational equipment, Subcommittee SC 4, Skis and snowboards.

ISO 10958 consists of the following two parts, under the general title Snowboards — Binding mounting area:

- Part 1: Requirements and test methods for snowboards without inserts
- Part 2: Requirements and test methods for snowboards with inserts RV RW

# (standards.iteh.ai)

<u>ISO 10958-2:1999</u> https://standards.iteh.ai/catalog/standards/sist/dd48f933-e520-49b8-8f66-97296567368a/iso-10958-2-1999

© ISO 1999

International Organization for Standardization Case postale 56 • CH-1211 Genève 20 • Switzerland Internet iso@iso.ch

Printed in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

## Snowboards — Binding mounting area —

### Part 2:

Requirements and test methods for snowboards with inserts

### 1 Scope

This part of ISO 10958 specifies requirements and test methods for snowboards on which bindings are attached by means of inserts that are not removable and screws.

This part of ISO 10958 does not apply to snowboards for children with a mass less then 25 kg.

It contains data for the manufacturer of snowboards, bindings and retention devices concerning dimensions, tests and other specifications for the binding mounting area.

(standards.iteh.ai)

For dimensions with no tolerance indicated, a tolerance of ±1 mm is valid.

#### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 10958. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 10958 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 68-1:1998, ISO general purpose screw threads — Basic profile — Part 1: Metric screw threads.

ISO 4759-1:—<sup>1)</sup>, *Tolerances for fasteners* — *Part 1: Bolts, screws, studs and nuts* — *Product grades A, B and C.* 

#### 3 Terms and definitions

For the purposes of this part of ISO 10958, the terms and definitions of ISO 68-1 and the following apply.

#### 3.1

insert

reusable commonly threaded attachment point permanently fixed in the snowboard at the time of manufacture, used to mount the bindings to the snowboard and typically arranged in a pattern corresponding to a particular binding manufacturer's pattern

<sup>&</sup>lt;sup>1)</sup> To be published. (Revision of ISO 4759-1:1978)

#### 3.2

#### retention strength

axial pull-out force of an insert in a snowboard tested in accordance with 6.1 and 7.1

#### 3.3

#### spin resistance

moment required to rotate an insert tested in accordance with 6.2 and 7.2

#### 3.4

#### screw thread engagement

*E* number of threads engaged by a standard screw in an insert (see Figure 1)

#### 3.5

#### insert well depth

i

distance within the insert well from the snowboard top surface to the unobstructed bottom clearance of the binding-insert (see Figure 1)

#### 3.6

#### countersink depth

С

Distance from the snowboard top surface to the first thread of the insert (see Figure 1)



#### Figure 1 — Illustration of screw thread engagement, insert well depth and countersink depth

### 4 Specifications for design of snowboard insert

Snowboard inserts and insert screws shall have a geometry as described in 4.1 to 4.5.

4.1 Inserts shall have an M6×1, 6H class internal thread with standard tolerances in accordance with ISO 68-1.

**4.2** Insert screws shall have an M6×1, 6g class external thread with standard tolerances in accordance with ISO 68-1, and a screw length tolerance according to ISO 4759-1.

**4.3** The snowboard design shall provide, for a minimum insert well depth i of 5,5 mm, a minimum screw engagement E of 3,0 threads. The length of the screw shall allow a 0,5 mm gap between the end of the screw and the bottom of the insert.

**4.4** The maximum countersink depth *c* shall be 1,7 mm.

**4.5** Inserts in a snowboard shall have a relative positional tolerance of either 0,5 % of the specified binding-insert position relative to all other inserts in the inserts hole pattern of one foot, or  $\pm$  0,2 mm, whichever is greater.

### 5 Strength requirements

#### 5.1 Retention strength

When tested in accordance with 7.1, inserts in a snowboard shall have a minimum retention strength of 4 500 N for those snowboards with a suggested rider mass of 45 kg or more; and a minimum retention strength of 3 500 N for those snowboards with a suggested rider mass between 25 kg and 45 kg.

#### 5.2 Spin resistance

When tested in accordance with 7.2, inserts in a snowboard shall have a minimum spin resistance of 20 N·m.

#### 6 Test apparatus

#### 6.1 Retention-strength test apparatus

**Universal test machine (UTM),** with a pull-out device according to Figure 2, having a minimum load range of 10 000 N.



Figure 2 — Universal test machine with pull-out device

The pull-out device (see Figure 2) shall consist of

- a) a rigid steel attachment plate (A) with one hole of diameter 6,5 mm,
- b) a universal joint (B) which is connected to the attachment plate and to the clamping device of the test machine, and
- c) a snowboard support (C) having two support rollers with a distance of 200 mm between them.

#### 6.2 Spin-resistance test apparatus

- **6.2.1** Device, capable of applying a torque directly to the insert (e.g. long screw with counter-nut).
- **6.2.2 Handheld torque gauge,** able to read to  $\pm$  2,5 N·m.
- 6.2.3 C-Clamps, able to hold the snowboard stationary on a flat surface.

#### 7 Test procedures

8 Marking

#### 7.1 Retention-strength test procedure

- **7.1.1** Test the snowboards at room temperature,  $(23 \pm 5)$  °C.
- **7.1.2** Cycle the UTM at a crosshead rate of 20 mm/min  $\pm$  20 %.
- 7.1.3 Stop the test at a load of 4 500 N, respectively 3 500 N as appropriate.

#### 7.2 Spin-resistance test procedure

- **7.2.1** Test the inserts at room temperature,  $(23 \pm 5)$  °C.
- 7.2.2 Clamp the snowboard to a flat surface.
- 7.2.3 Insert the test screw into the insert, engaging to the full depth of the insert.
- 7.2.4 Torque the insert up to the required torque of 20 Nm. s.iten.ai)

#### ISO 10958-2:1999

https://standards.iteh.ai/catalog/standards/sist/dd48f933-e520-49b8-8f66-

97296567368a/iso-10958-2-1999 Snowboards with a suggested rider mass between 25 kg and 45 kg shall be marked with a clearly visible, permanent sign of minimum size 10 mm, placed outside the binding mounting area. The sign shall be as follows:



25 kg - 45 kg

#### 9 Test report

The test report shall include the following information:

- a) a reference to this part of ISO 10958;
- b) snowboard/binding insert manufacturer, model/style and length;
- c) snowboard serial number;
- d) compliance with the requirements according to clause 5;
- e) any deviations from this part of ISO 10958;
- f) date of tests.

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>ISO 10958-2:1999</u> https://standards.iteh.ai/catalog/standards/sist/dd48f933-e520-49b8-8f66-97296567368a/iso-10958-2-1999

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>ISO 10958-2:1999</u> https://standards.iteh.ai/catalog/standards/sist/dd48f933-e520-49b8-8f66-97296567368a/iso-10958-2-1999 © ISO

ICS 97.220.20

Ξ

Price based on 5 pages