



**SLOVENSKI STANDARD**  
**oSIST ISO 7331:2011**  
**01-januar-2011**

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**Palice za alpsko smučanje - Zahteve in preskusne metode**

Ski-poles for alpine skiing - Requirements and test methods

Bâtons de skis alpins - Exigences et méthodes d'essai

**Ta slovenski standard je istoveten z: ISO 7331:2005**

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**ICS:**

97.220.20      Oprema za zimske športe      Winter sports equipment

**oSIST ISO 7331:2011**

**en**



INTERNATIONAL  
STANDARD

**ISO**  
**7331**

Third edition  
2005-07-15

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**Ski-poles for alpine skiing —  
Requirements and test methods**

*Bâtons de skis alpins — Exigences et méthodes d'essai*



Reference number  
ISO 7331:2005(E)

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Published in Switzerland

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**ISO 7331:2005(E)****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 2.

The main task of technical committees is to prepare International Standards. 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.

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.

ISO 7331 was prepared by Technical Committee ISO/TC 83, *Sports and recreational equipment*, Subcommittee SC 3, *Ski bindings*.

This third edition cancels and replaces the second edition (ISO 7331:1990), Clauses 1 and 8 of which, and also 7.4, 7.5.2, 7.5.3, 7.5.6, 7.6.3, 7.7.3, 7.8.4 have been technically revised.

# Ski-poles for alpine skiing — Requirements and test methods

## 1 Scope

This International Standard specifies the minimum requirements for safety in ski-poles for alpine skiing and gives test methods to check conformity with these requirements.

It applies to ski-poles for alpine skiing in the following ranges of total length,  $l_T$  (see Clause 3):

- group A,  $l_T \geq 1\ 050$  mm (adults' poles);
- group B,  $1\ 050$  mm  $> l_T \geq 700$  mm (junior poles);
- group C,  $l_T \leq 700$  mm (children's toy-poles).

Special designs may deviate from this International Standard, but are required to be marked durably as special designs (see 8.2).

## 2 Normative references

The following referenced documents are indispensable for the application 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 554:1976, *Standard atmospheres for conditioning and/or testing — Specifications*

ISO 6508:1986, *Metallic materials — Hardness test — Rockwell test (scales A — B — C — D — E — F — G — H — K)*

## 3 Terms, symbols and units

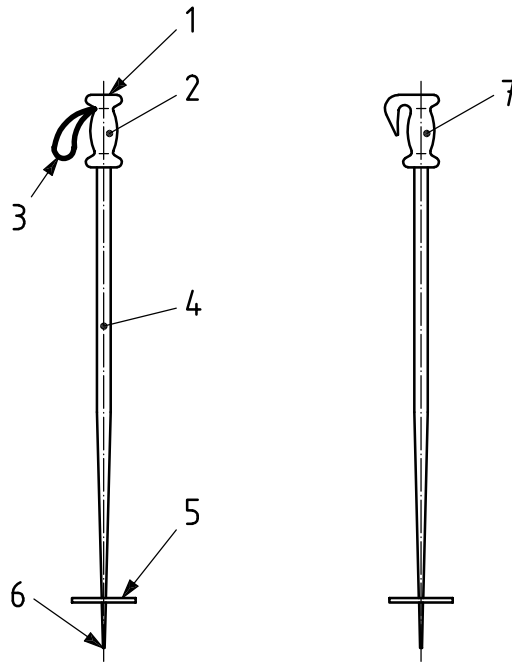
### 3.1 Terms

Terms used to designate the different parts of a ski-pole are given in Figure 1.

There are two types of grips for ski-poles:

- grips with a strap;
- strapless grips.

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**Key**

- 1 upper surface of the grip,  $A_G$
- 2 grip
- 3 strap
- 4 shaft
- 5 basket
- 6 tip
- 7 strapless grip

**Figure 1 — Ski-pole — Terms****3.2 Symbols and units**

The symbols used in Figures 1 and 2 relate to the following concepts, which shall be expressed in the units given:

- $A_G$  is the upper surface of the grip, in square centimetres (impact area);
- $-F_z$  is the compressive force in the axis of the ski-pole, in newtons;
- $l_T$  is the total length, in millimetres;
- $l_H$  is the length measured from the tip to the middle of the hand, in millimetres;
- $l_B$  is the length measured from the tip to the lower surface of the basket, in millimetres;
- $d_B$  is the maximum diameter of the basket, in millimetres.

The length  $l_H$  is determined by means of an average hand, with a width of

- group A: 93 mm;
- group B: 73 mm;
- group C: 57 mm.