



SLOVENSKI STANDARD
SIST ISO 8061:2005

01-januar-2005

JUfbcgfbYj Yn]nJUdg_Y'ga i]'E'A YrcXY'nU]nVcf`a Y'b]`j fYXbcgh]`bUj cfU
cXdYb^Ub^

Alpine ski-bindings -- Selection of release torque values

Fixations de skis alpins -- Sélection des valeurs du couple de déclenchement
(standards.iteh.ai)

Ta slovenski standard je istoveten z: ISO 8061:2004

<https://standards.iteh.ai/catalog/standards/sist/c5f991c3-5b5a-4d6e-b39e-0710164db3bb/sist-iso-8061-2005>

ICS:

97.220.20 Oprema za zimske športe Winter sports equipment

SIST ISO 8061:2005

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ISO 8061:2005](#)

<https://standards.iteh.ai/catalog/standards/sist/c5f991c3-5b5a-4d6e-b39e-0710164db3bb/sist-iso-8061-2005>

INTERNATIONAL STANDARD

ISO
8061

Third edition
2004-04-01

Alpine ski-bindings — Selection of release torque values

*Fixations de skis alpins — Sélection des valeurs du couple de
déclenchement*

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ISO 8061:2005](https://standards.iteh.ai/catalog/standards/sist/c5f991c3-5b5a-4d6e-b39e-0710164db3bb/sist-iso-8061-2005)

<https://standards.iteh.ai/catalog/standards/sist/c5f991c3-5b5a-4d6e-b39e-0710164db3bb/sist-iso-8061-2005>



Reference number
ISO 8061:2004(E)

© ISO 2004

ISO 8061:2004(E)**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST ISO 8061:2005](https://standards.iteh.ai/catalog/standards/sist/c5f991c3-5b5a-4d6e-b39e-0710164db3bb/sist-iso-8061-2005)

<https://standards.iteh.ai/catalog/standards/sist/c5f991c3-5b5a-4d6e-b39e-0710164db3bb/sist-iso-8061-2005>

© ISO 2004

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 either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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 8061 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 8061:1991), which has been technically revised.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ISO 8061:2005](https://standards.iteh.ai/catalog/standards/sist/c5f991c3-5b5a-4d6e-b39e-0710164db3bb/sist-iso-8061-2005)

<https://standards.iteh.ai/catalog/standards/sist/c5f991c3-5b5a-4d6e-b39e-0710164db3bb/sist-iso-8061-2005>

ISO 8061:2004(E)**Introduction**

This International Standard is one of a series of International Standards dealing with the safety of ski-bindings; the other International Standards in this series are ISO 9462:1993, *Alpine ski-bindings — Safety requirements and test methods* and ISO 9465:1991, *Alpine ski-bindings — Lateral release under impact loading — Test method*.

National standards, complying with legal regulations, may be more extensive, for example regarding

- combined loading, and/or
- deflexion of the ski.

International Standards covering these aspects are being prepared.

To verify the safety of ski-bindings, it is necessary to use all three International Standards of the series and also national standards covering aspects which are not yet standardized internationally.

In recommending the release torques, it is necessary to take into account the abilities of the skier concerned by applying skier-type correction factors. For this purpose, three types of skier are defined, as described in Annex A.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ISO 8061:2005](https://standards.iteh.ai/catalog/standards/sist/c5f991c3-5b5a-4d6e-b39e-0710164db3bb/sist-iso-8061-2005)

<https://standards.iteh.ai/catalog/standards/sist/c5f991c3-5b5a-4d6e-b39e-0710164db3bb/sist-iso-8061-2005>

Alpine ski-bindings — Selection of release torque values

1 Scope

This International Standard specifies methods for the selection of the release torques for alpine ski-bindings in current use, and gives information necessary to determine the release torques.

It applies to torque-measuring binding-test machines.

It may be inappropriate for non-mechanical bindings or bindings used with boots which reach more than half-way up the lower leg.

NOTE Manufacturers may use either of the two specified methods as the basis for their recommended release torques.

Release torques are to be recommended for use by ski-binding manufacturers in their instructions for installation and use, and by ski shops for the adjustment of already mounted ski-bindings.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

2 Symbols

For the purposes of this document, the following symbols apply.

[SIST ISO 8061:2005](https://standards.iteh.ai/catalog/standards/sist/c5f991c3-5b5a-4d6e-b39e-0710164db3bb/sist-iso-8061-2005)

See Figure 1.

<https://standards.iteh.ai/catalog/standards/sist/c5f991c3-5b5a-4d6e-b39e-0710164db3bb/sist-iso-8061-2005>

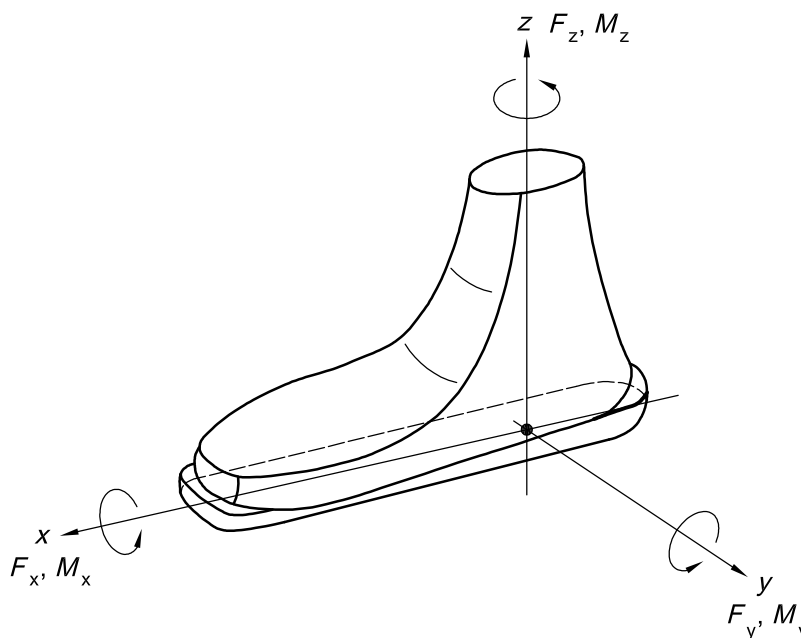


Figure 1 — Symbols

All imaginable loads on the ski boot can be referred to a force F acting along the x , y or z axes of a system of coordinates, and a moment of rotation M about that axis.

ISO 8061:2004(E)

The origin of the system of coordinates is fixed at approximately the bottom of the boot sole.

The torques and forces shown in Figure 1 are positive. Torques and forces in the opposite directions are negative.

3 Release force

The release force, F_r , in newtons, is given by the equation

$$F_r = \frac{M}{l}$$

where

M is the release torque, in newton metres;

l is the lever arm, in metres (i.e. the distance from the point of force application by the test machine to the point about which the boot or plate pivots).

The value of l should be determined empirically by measuring F_r for several values of M .

If force-measuring test machines are used, report F_r .

4 Weight method

iTeh STANDARD PREVIEW
(standards.iteh.ai)

4.1 Calculation of release torques

4.1.1 A range of release torques based on the mass of the skier can be calculated from the equation given in 4.1.2 to 4.1.4 for both twist release, M_Z , and forward lean release, M_Y .

Ski-binding manufacturers shall not recommend release torques higher than the upper limit of this range; they may recommend torques below the lower limit. Manufacturers may provide additional information to guide the fitter and user in the selection of such values.

4.1.2 The upper limit for M_Z , in newton metres, is given by the following equations:

a) if the mass of the skier is less than 70 kg:

$$M_Z = 0,84 m_s + 4$$

b) if the mass of the skier is equal to or greater than 70 kg:

$$M_Z = 0,69 m_s + 15$$

where m_s is the mass of the skier, in kilograms.

4.1.3 The lower value for M_Z , in newton metres, is given by the following equations

a) if the mass of the skier is less than 75 kg:

$$M_Z = 0,71 m_s$$

b) if the mass of the skier is equal to or greater than 75 kg:

$$M_Z = 0,59 m_s + 9$$

where m_s is the mass of the skier, in kilograms.

4.1.4 The release torque M_Y , in newton metres, is given by the equation

$$M_Y = M_Z (3,6 + 0,006 5M_Z)$$

4.2 Release torques corresponding to user's maximum recommended mass

If the actual mass of the skier is greater than the maximum recommended mass for his/her height, h , the release torque values shall be calculated using the maximum recommended mass, $m_{T,max}$, which is given by the equation

$$m_{T,max} = 100 (h - 1)$$

for $h \geq 1,50$ m, where h is the height of the skier, in metres.

4.3 Correction of the release torque

4.3.1 The recommended release torque values shall be corrected for skier-type (see Annex A) and age (see 4.3.2 and 4.3.3 respectively).

The result may be eventually lowered or raised upon request of the skier (see 4.3.4 and 4.3.5).

4.3.2 The skier-type correction factor should be

For skier type 1: -15% for M_Z and M_Y ;

For skier type 2: 0;

For skier type 3: $+15\%$ for M_Z and M_Y ;

4.3.3 The age correction is determined as follows.

- Skiers under 10 years: -15% for M_Z and M_Y ;
- Skiers aged 50 years and above: -15% for M_Z and M_Y ;

4.3.4 Release torque values other than those recommended above may be used in the following cases:

- a) Skiers who have satisfactory experience with lower settings regarding these recommendations may request settings based on their experience.
- b) Skiers who have skiing experience without inadvertent releases may request a setting up to 15% lower than that recommended above.
- c) Skiers having certain characteristics, such as a neutral skiing technique, defensive attitude, high degree of control, etc. may request a setting up to 15% lower than that recommended above.
- d) Skiers who have experienced inadvertent releases may request a setting up to 15% higher than that recommended above.

4.3.5 Skiers may request settings that are different for twist and forward lean.

4.3.6 If the skier's style requires greater corrections than those indicated above, the skier may change the setting at his/her own risk.