



SLOVENSKI STANDARD

SIST EN 15638:2009

01-julij-2009

Drsalke - Varnostne zahteve in preskusne metode

Ice skates - Safety requirements and test methods

Eislaufkomplets - Sicherheitstechnische Anforderungen und Prüfverfahren

Patins a glace - Exigences de sécurité et méthodes d'essai

Ta slovenski standard je istoveten z: EN 15638:2009

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ICS:

97.220.20 Oprema za zimske športe Winter sports equipment

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 15638

April 2009

ICS 97.220.20

English Version

Ice skates - Safety requirements and test methods

Patins à glace - Exigences de sécurité et méthodes d'essai

Eislaufkomplets - Sicherheitstechnische Anforderungen
und Prüfverfahren

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN 15638:2009) has been prepared by Technical Committee CEN/TC 136 “Sports, playground and other recreational facilities and equipment”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2009, and conflicting national standards shall be withdrawn at the latest by October 2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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Introduction

When elaborating this document, it was assumed that dimensions cannot be specified for the functional grinding of the blade mentioned in 4.2.7.2, as they depend on the use the ice skates are intended for and differ from user to user.

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1 Scope

This standard applies to ice skates intended for users with a body mass up to 100 kg for ice skating excluding the field of sports competitions.

It specifies the minimum safety requirements for ice skates as well as requirements for test methods, marking and information supplied by the manufacturer to reduce the risk of injuries to both third parties and the user during their normal use.

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.

EN ISO 6508-1, *Metallic materials — Rockwell hardness test — Part 1: Test method (scales A, B, C, D, E, F, G, H, K, N, T)* (ISO 6508-1:2005)

3 Terms and definitions

For the purposes of this document the following terms and definitions apply.

3.1

ice skate

unit (assembly) of boot and runner, intended for ice skating

3.2

runner

part of the ice skate comprised of the blade and a holder

3.3

holder

part of the ice skate for the attachment of the blade

NOTE Holders can be blade holder, sole plate, heel plate or any other suitable holding device.

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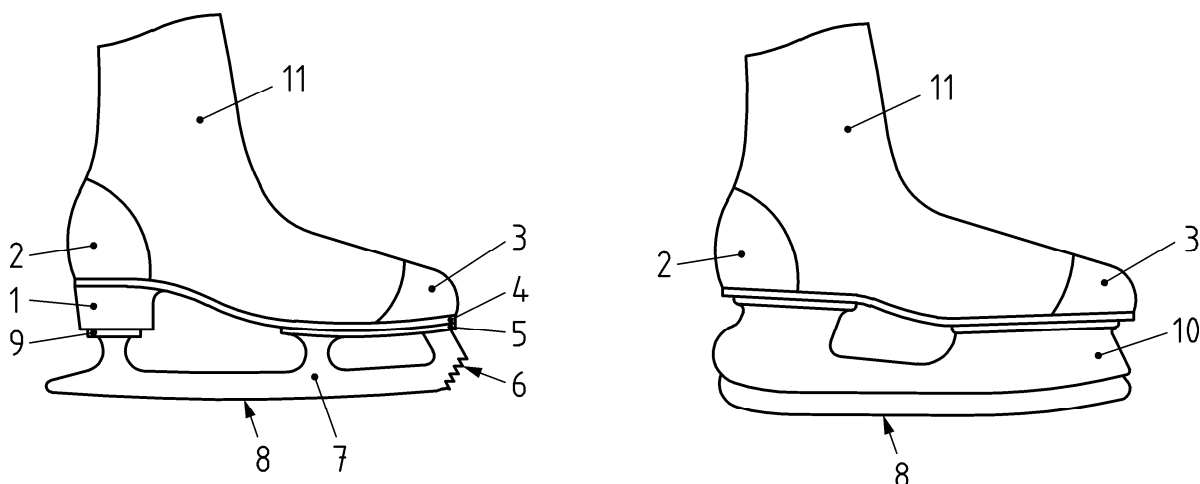
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4 Design

4.1 General

The typical components of an ice skate are shown in Figure 1.



Key

- | | | | |
|---|------------|----|-------------------------------|
| 1 | Heel | 7 | Runner |
| 2 | Heel cap | 8 | Blade (surface of the runner) |
| 3 | Toe cap | 9 | Heel plate |
| 4 | Sole | 10 | Blade holder |
| 5 | Sole plate | 11 | Boot shaft |
| 6 | Teeth | | |

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Figure 1 — Examples of ice skates

NOTE Figure 1 is provided only for representation of the individual components and does not specify any shapes for an ice skate.

4.2 Requirements for design

4.2.1 Connection of the runner to the boot

Binding elements shall prevent unintentional disconnection of the runner from the user's boot.

This requirement is considered to be fulfilled, if the correct functioning of the ice skate is not impeded by broken, disconnected or loosened binding elements after the tests specified in Clause 5.

4.2.2 Attachment of the blade in the blade holder

If blade and blade holder form a unit, it shall be so designed that when tested according Clause 5 the blade neither loosens nor disconnects.

4.2.3 Linearity of the runner

The runner of the ice skate shall not have a deviation from linearity of more than 0,5 mm over a length of 150 mm.

4.2.4 Position of the runner

Any part of the runner shall not protrude over the toe cap of the boot by more than 15 % of the sole length.

4.2.5 Impact resistance

The ice skate shall be designed so as to withstand the impact loads to which it is exposed during normal use. This requirement is considered to be fulfilled if the correct functioning of the ice skate is not impeded by any breaking, disconnection or loosening of the runner after the tests specified in Clause 5.

4.2.6 Surface condition

All protruding components and edges on the ice skate which can come into contact with body parts during normal use shall be deburred or shall be designed so as to prevent any injuries.

Protruding fastening elements shall not stand out by more than the diameter of the fastening element.

4.2.7 Condition of the blade

4.2.7.1 Hardness

The blade shall have an effective hardening depth of at least 2,5 mm. The hardness value shall be at least 52 HRC on all hardening depth.

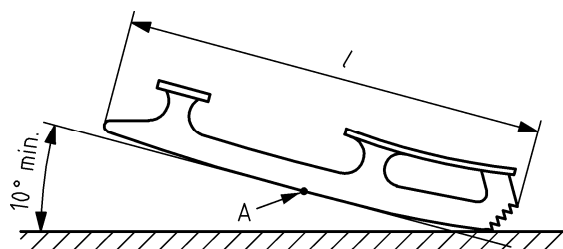
These requirements do not apply, if the blade is not intended for regrinding.

4.2.7.2 Grinding (sharpening)

The blade shall be grinded so as to be functional. The necessity to regrind or replace the blade shall be indicated in the information supplied by the manufacturer.

4.2.7.3 Teeth

If a blade is equipped with teeth, the bottom teeth shall only come into contact with the ice, when the ice skate has an inclination of at least 10° towards the front, measured at the tangent of the runner at point A. See Figure 2.



Key

A $\frac{1}{2} l$

Figure 2 — Ice contact of the bottom tooth

4.2.7.4 Shape of blade end

The end of the blade shall either be rounded or shaped in such a manner that there is no angle smaller than 90°.