

BS ISO 6265:2013



BSI Standards Publication

Alpine skis — Determination of deformation load and breaking load

bsi.

...making excellence a habit.™

National foreword

This British Standard is the UK implementation of ISO 6265:2013.

The UK participation in its preparation was entrusted to Technical Committee SW/136/7, Snowsports equipment.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2013.
Published by BSI Standards Limited 2013

ISBN 978 0 580 77190 3

ICS 97.220.20

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 March 2013.

Amendments issued since publication

Date	Text affected
------	---------------

INTERNATIONAL
STANDARD

BS ISO 6265:2013

ISO
6265

Third edition
2013-03-01

**Alpine skis — Determination of
deformation load and breaking load**

*Skis alpins — Détermination de la charge de déformation et de la
charge de rupture*



Reference number
ISO 6265:2013(E)

© ISO 2013



COPYRIGHT PROTECTED DOCUMENT

© ISO 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested 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

Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Testing machine	1
5 Determination of the load application point	3
6 Conditioning	4
7 Test procedure	4
8 Evaluation	4
8.1 Deformation load	4
8.2 Breaking load	4
9 Test report	4

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 6265 was prepared by Technical Committee ISO/TC 83, *Sports and recreational equipment*, Subcommittee SC 4, *Snowsports equipment*.

This third edition cancels and replaces the second edition (ISO 6265:1992), which has been technically revised.

Alpine skis — Determination of deformation load and breaking load

1 Scope

This International Standard specifies a method for determining the resistance of alpine skis to permanent deformation and breaking. In this International Standard no attempt is made to relate the measurement data to the quality of the ski.

It is applicable to all alpine skis for adults, juveniles and children.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 8364, *Alpine skis and bindings — Binding mounting area — Requirements and test methods*

ISO 868, *Plastics and ebonite — Determination of indentation hardness by means of a durometer (Shore hardness)*

3 Terms and definitions

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

3.1

deformation load

F_D

load which, when applied at the load application point, causes a permanent deformation of 1 mm of the ski between the supports

3.2

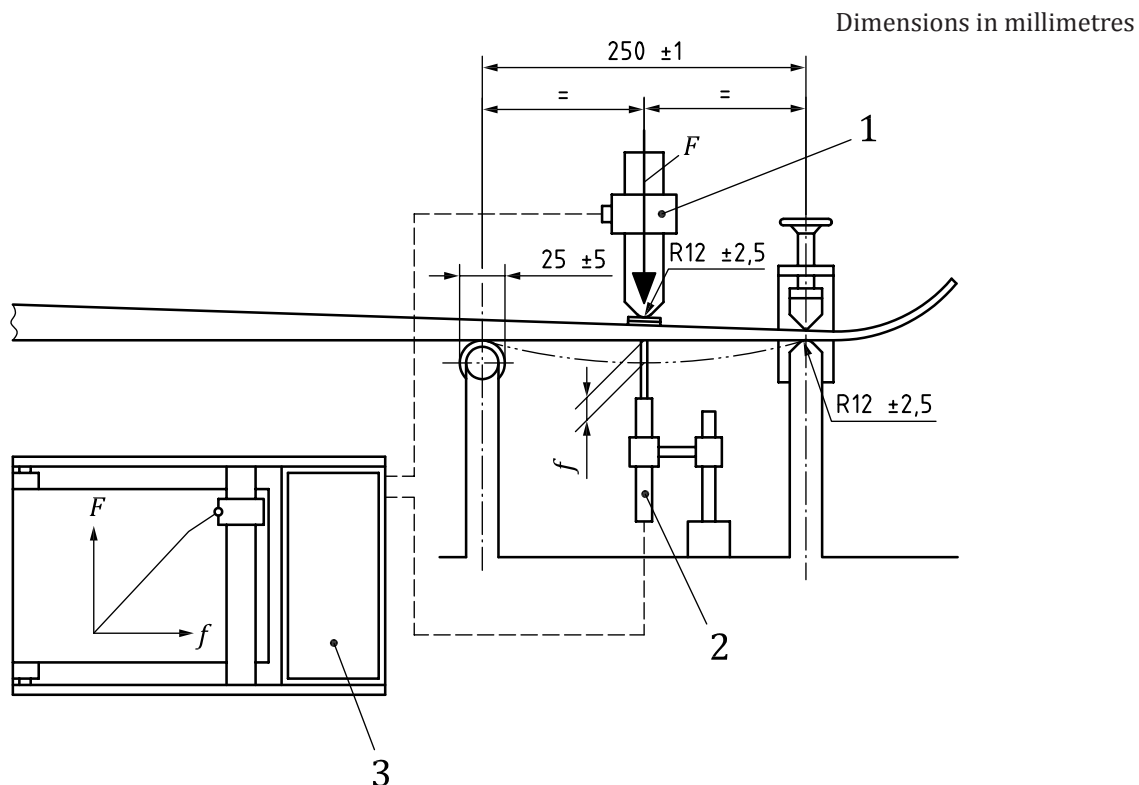
breaking load

F_B

maximum load which, when applied at the load application point, causes failure of the ski (breaking, delamination, buckling, etc.)

4 Testing machine

The general arrangement of the bending testing machine is shown in [Figure 1](#).



Key

- 1 dynamometer
- 2 displacement measurement gauge
- 3 recorder

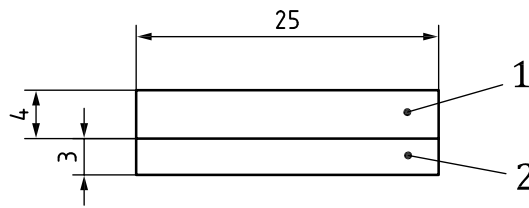
Figure 1 — Testing machine

The bending testing machine (universal tension and compression testing machine with bending fixture) shall comprise:

- a) two specimen supports, at least 250 mm apart, at least one of which shall be a low friction roller;
- b) a dynamometer, having a range of at least 20 000 N, for measurement of the load, F ;
- c) a displacement measurement gauge for the deflection, f .

The load shall be applied to the ski via a ram plate (see [Figure 2](#)), which shall consist of a steel plate, 4 mm thick, and a hard rubber layer, 3 mm thick and having a Shore A hardness of 95 ± 5 . Hardness shall be determined in accordance with ISO 868.

Dimensions in millimetres

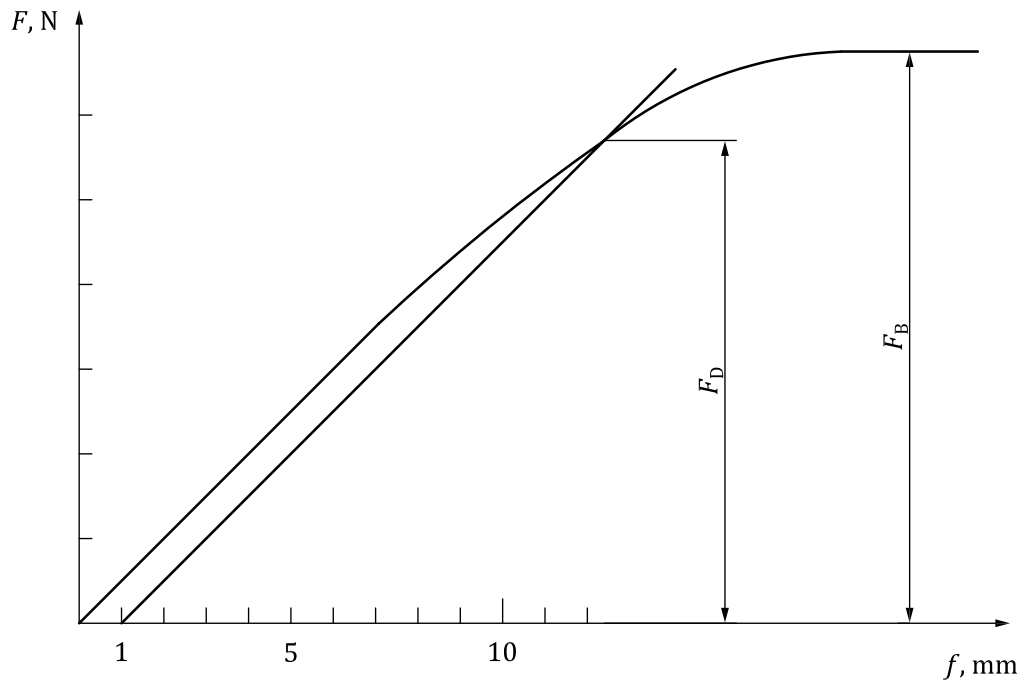


Key

- 1 steel plate
- 2 hard rubber

Figure 2 — Ram plate

Measurement data shall be recorded by means of a load-displacement recorder (see [Figure 3](#)).



Key

- F load
- f deflection
- F_D deformation load
- F_B breaking load

Figure 3 — Typical load-deflection curve and method of evaluation

The specimen supports, as well as the ram plate, shall reach over the whole width of the ski.

5 Determination of the load application point

The test shall be carried out at the load application point with a separation between the supports of $250 \text{ mm} \pm 0,5 \text{ mm}$.

Determine the load application point by moving the ski in a longitudinal direction on the supports until a deflection of:

2 mm ± 0,03 mm – for group 1;

4 mm ± 0,03 mm – for group 2;

6 mm ± 0,03 mm – for group 3;

8 mm ± 0,03 mm – for group 4;

is obtained under a load of 600 N ± 5 N.

If under this procedure more than one load application point can be determined, the load application point which is nearest to the front shall be used.

6 Conditioning

Condition the ski at a temperature of 23 °C ± 5 °C.

7 Test procedure

Insert the ski in the testing machine and fix it on the supports in such a way that the load application point is located midway between the supports.

It is important that the stiffness of the ski at the load application point lies within the tolerance range of ± 3 %.

NOTE Testing at positions other than the load application point will result in false values for the deformation load and the breaking load.

Load the ski at a rate sufficient to increase the deflection by 25 mm/min, until the ski breaks.

Record the load-deflection values by means of the load-displacement recorder.

8 Evaluation

Determine the deformation load and the breaking load from the load-deflection chart above (see [Figure 3](#)).

8.1 Deformation load

From the point of the abscissa corresponding to a 1 mm deflection, draw a straight line parallel to the linear portion of the load-deflection curve. The value of the deformation load, F_D , is given by the point of intersection of this line with the curve (see [Figure 3](#)).

8.2 Breaking load

The breaking load, F_B , is the maximum load measured during the test, i.e. the maxima of the curve.

9 Test report

The test report shall include the following information:

- a) reference to this International Standard, i.e. ISO 6265;
- b) the brand of ski tested;
- c) the designation of the model;
- d) the group of the ski according to ISO 8364;
- e) the manufacturer's registration number;

- f) the load-deflection chart together with the deformation and breaking loads;
- g) any deviation from the procedure of this International Standard and the reasons for this deviation.

British Standards Institution (BSI)

BSI is the national body responsible for preparing British Standards and other standards-related publications, information and services.

BSI is incorporated by Royal Charter. British Standards and other standardization products are published by BSI Standards Limited.

About us

We bring together business, industry, government, consumers, innovators and others to shape their combined experience and expertise into standards-based solutions.

The knowledge embodied in our standards has been carefully assembled in a dependable format and refined through our open consultation process. Organizations of all sizes and across all sectors choose standards to help them achieve their goals.

Information on standards

We can provide you with the knowledge that your organization needs to succeed. Find out more about British Standards by visiting our website at bsigroup.com/standards or contacting our Customer Services team or Knowledge Centre.

Buying standards

You can buy and download PDF versions of BSI publications, including British and adopted European and international standards, through our website at bsigroup.com/shop, where hard copies can also be purchased.

If you need international and foreign standards from other Standards Development Organizations, hard copies can be ordered from our Customer Services team.

Subscriptions

Our range of subscription services are designed to make using standards easier for you. For further information on our subscription products go to bsigroup.com/subscriptions.

With **British Standards Online (BSOL)** you'll have instant access to over 55,000 British and adopted European and international standards from your desktop. It's available 24/7 and is refreshed daily so you'll always be up to date.

You can keep in touch with standards developments and receive substantial discounts on the purchase price of standards, both in single copy and subscription format, by becoming a **BSI Subscribing Member**.

PLUS is an updating service exclusive to BSI Subscribing Members. You will automatically receive the latest hard copy of your standards when they're revised or replaced.

To find out more about becoming a BSI Subscribing Member and the benefits of membership, please visit bsigroup.com/shop.

With a **Multi-User Network Licence (MUNL)** you are able to host standards publications on your intranet. Licences can cover as few or as many users as you wish. With updates supplied as soon as they're available, you can be sure your documentation is current. For further information, email bsmusales@bsigroup.com.

BSI Group Headquarters

389 Chiswick High Road London W4 4AL UK

Revisions

Our British Standards and other publications are updated by amendment or revision.

We continually improve the quality of our products and services to benefit your business. If you find an inaccuracy or ambiguity within a British Standard or other BSI publication please inform the Knowledge Centre.

Copyright

All the data, software and documentation set out in all British Standards and other BSI publications are the property of and copyrighted by BSI, or some person or entity that owns copyright in the information used (such as the international standardization bodies) and has formally licensed such information to BSI for commercial publication and use. Except as permitted under the Copyright, Designs and Patents Act 1988 no extract may be reproduced, stored in a retrieval system or transmitted in any form or by any means – electronic, photocopying, recording or otherwise – without prior written permission from BSI. Details and advice can be obtained from the Copyright & Licensing Department.

Useful Contacts:

Customer Services

Tel: +44 845 086 9001

Email (orders): orders@bsigroup.com

Email (enquiries): cservices@bsigroup.com

Subscriptions

Tel: +44 845 086 9001

Email: subscriptions@bsigroup.com

Knowledge Centre

Tel: +44 20 8996 7004

Email: knowledgecentre@bsigroup.com

Copyright & Licensing

Tel: +44 20 8996 7070

Email: copyright@bsigroup.com



...making excellence a habit.™