



SLOVENSKI STANDARD SIST EN ISO 9801:2010

01-marec-2010

Nadomešča:
SIST EN ISO 9801:2000

Oftalmični instrumenti - Poskusne leče (ISO 9801:2009)

Ophthalmic instruments - Trial case lenses (ISO 9801:2009)

Ophthalmische Instrumente - Refraktionsgläser (ISO 9801:2009)

Instruments ophtalmiques - Verres de boîte d'essai (ISO 9801:2009)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: EN ISO 9801:2009

<https://standards.iteh.ai/catalog/standards/sist/32f1eecd-bc81-4893-bf91-5f77ea161e87/sist-en-iso-9801-2010>

ICS:

11.040.70 Oftalmološka oprema Ophthalmic equipment

SIST EN ISO 9801:2010 **en**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 9801:2010

<https://standards.iteh.ai/catalog/standards/sist/32f1eecd-bc81-4893-bf91-5f77ca161e87/sist-en-iso-9801-2010>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 9801

December 2009

ICS 11.040.70

Supersedes EN ISO 9801:1999

English Version

Ophthalmic instruments - Trial case lenses (ISO 9801:2009)

Instruments ophtalmiques - Verres de boîte d'essai (ISO 9801:2009)

Ophthalmische Instrumente - Refraktionsgläser (ISO 9801:2009)

This European Standard was approved by CEN on 4 December 2009.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

IT IS STANDARD PREVIEW
(standards.iteh.ai)

<https://standards.iteh.ai/catalog/standards/sist/32f1eecd-bc81-4893-bf91-5f77ca161e87/sist-en-iso-9801-2010>



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....3

**iTeh STANDARD PREVIEW
(standards.iteh.ai)**

SIST EN ISO 9801:2010

<https://standards.iteh.ai/catalog/standards/sist/32f1eecd-bc81-4893-bf91-5f77ca161e87/sist-en-iso-9801-2010>

Foreword

This document (EN ISO 9801:2009) has been prepared by Technical Committee ISO/TC 172 "Optics and photonics" in collaboration with Technical Committee CEN/TC 170 "Ophthalmic optics" 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 June 2010, and conflicting national standards shall be withdrawn at the latest by June 2010.

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.

This document supersedes EN ISO 9801:1999.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
Endorsement notice

The text of ISO 9801:2009 has been approved by CEN as a EN ISO 9801:2009 without any modification.

SIST EN ISO 9801:2010

<https://standards.iteh.ai/catalog/standards/sist/32f1eecd-bc81-4893-bf91-5f77ca161e87/sist-en-iso-9801-2010>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 9801:2010

<https://standards.iteh.ai/catalog/standards/sist/32f1eecd-bc81-4893-bf91-5f77ca161e87/sist-en-iso-9801-2010>

INTERNATIONAL STANDARD

**ISO
9801**

Second edition
2009-12-15

Ophthalmic instruments — Trial case lenses

Instruments ophtalmiques — Verres de boîte d'essai

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 9801:2010](https://standards.iteh.ai/catalog/standards/sist/32f1eecd-bc81-4893-bf91-5f77ca161e87/sist-en-iso-9801-2010)

<https://standards.iteh.ai/catalog/standards/sist/32f1eecd-bc81-4893-bf91-5f77ca161e87/sist-en-iso-9801-2010>



Reference number
ISO 9801:2009(E)

© ISO 2009

ISO 9801:2009(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 EN ISO 9801:2010](https://standards.iteh.ai/catalog/standards/sist/32f1eecd-bc81-4893-bf91-5f77ca161e87/sist-en-iso-9801-2010)

<https://standards.iteh.ai/catalog/standards/sist/32f1eecd-bc81-4893-bf91-5f77ca161e87/sist-en-iso-9801-2010>

**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2009

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

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Requirements	2
4.1 General	2
4.2 Optical requirements	2
4.3 Construction	4
4.4 Material and surface quality	5
5 Test methods	5
5.1 General	5
5.2 Checking the optical requirements	5
5.3 Checking material and surface quality	6
5.4 Checking construction	6
6 Functional marking	6
7 Information supplied by the manufacturer	6
7.1 Accompanying documents	6
7.2 Identification of the trial case lens set	7
Annex A (informative) Example of test device for checking accuracy of trial case lens elements	8
Annex B (informative) Example of test device and method for checking material and surface quality	10
Bibliography	11

ISO 9801:2009(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 9801 was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 7, *Ophthalmic optics and instruments*.

This second edition cancels and replaces the first edition (ISO 9801:1997), which has undergone a minor revision to update normative references and to include a second standard diameter (see 4.3.2).

SIST EN ISO 9801:2010

<https://standards.iteh.ai/catalog/standards/sist/32f1eecd-bc81-4893-bf91-5f77ca161e87/sist-en-iso-9801-2010>

Ophthalmic instruments — Trial case lenses

1 Scope

This International Standard specifies requirements for mounted ophthalmic full and/or reduced aperture trial case lenses for the determination of the refractive error of the eye.

This International Standard takes priority over ISO 15004-1, if differences exist.

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 7944, *Optics and optical instruments — Reference wavelengths*

ISO 13666, *Ophthalmic optics — Spectacle lenses — Vocabulary*

ISO 15004-1:2006, *Ophthalmic instruments — Fundamental requirements and test methods — Part 1: General requirements applicable to all ophthalmic instruments*

<https://standards.iteh.ai/catalog/standards/sist/32f1eecd-bc81-4893-bf91-5f77ca161e87/sist-en-iso-9801-2010>

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 13666 and the following apply.

3.1

trial case lens

lens, in a mount, used to assess the refractive error of the human eye

3.2

full-aperture trial case lens

trial case lens with a protective mount of maximal practical wall thickness of approximately 1 mm, allowing the maximum available free lens aperture

3.3

reduced-aperture trial case lens

trial case lens with the designated free lens aperture significantly less than the mount outer diameter, allowing for considerable reductions in lens thicknesses to be made

3.4

additive power trial case lens set

train of spherical, cylindrical or spherocylindrical combination of trial case lenses, in which the measured back-vertex power at the last surface equals the meridional sums of the labelled values of the train lenses when each element is placed in its specified frame cell

NOTE See ISO 12867.