



SLOVENSKI STANDARD SIST EN ISO 1797:2017

01-september-2017

Nadomešča:

SIST EN ISO 1797-1:2011

SIST EN ISO 1797-2:2000

SIST EN ISO 1797-3:2013

Zobozdravstvo - Tulci za vrtilne in oscilacijske instrumente (ISO 1797:2017)

Dentistry - Shanks for rotary and oscillating instruments (ISO 1797:2017)

Zahnheilkunde - Schäfte für rotierende und oszillierende Instrumente (ISO 1797:2017)
iTeh STANDARD PREVIEW
(standards.iteh.ai)

Médecine bucco-dentaire - Queues pour instruments rotatifs et oscillants (ISO 1797:2017)

<https://standards.iteh.ai/catalog/standards/sist/94de567b-a4bb-4706-b57c-146ddd53e30b/sist-en-iso-1797-2017>

Ta slovenski standard je istoveten z: EN ISO 1797:2017

ICS:

11.060.25 Zobotehnični instrumenti Dental instruments

SIST EN ISO 1797:2017

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 1797:2017](https://standards.iteh.ai/catalog/standards/sist/94de567b-a4bb-4706-b57c-146ddd53e30b/sist-en-iso-1797-2017)

<https://standards.iteh.ai/catalog/standards/sist/94de567b-a4bb-4706-b57c-146ddd53e30b/sist-en-iso-1797-2017>

EUROPEAN STANDARD

EN ISO 1797

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2017

ICS 11.060.20

Supersedes EN ISO 1797-1:2011, EN ISO 1797-2:1995,
EN ISO 1797-3:2013

English Version

Dentistry - Shanks for rotary and oscillating instruments (ISO 1797:2017)

Médecine bucco-dentaire - Queues pour instruments
rotatifs et oscillants (ISO 1797:2017)Zahnheilkunde - Schäfte für rotierende und
oszillierende Instrumente (ISO 1797:2017)

This European Standard was approved by CEN on 1 March 2017.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents	Page
European foreword.....	3

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 1797:2017

<https://standards.iteh.ai/catalog/standards/sist/94de567b-a4bb-4706-b57c-146ddd53e30b/sist-en-iso-1797-2017>

European foreword

This document (EN ISO 1797:2017) has been prepared by Technical Committee ISO/TC 106 “Dentistry” in collaboration with Technical Committee CEN/TC 55 “Dentistry” 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 November 2017, and conflicting national standards shall be withdrawn at the latest by November 2017.

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 1797-1:2011, EN ISO 1797-2:1995 and EN ISO 1797-3:2013.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Full STANDARD PREVIEW
(standard@itih.ai)

Endorsement notice

The text of ISO 1797:2017 has been approved by CEN as EN ISO 1797:2017 without any modification.

<https://standards.itih.ai/catalog/standards/sist/94de567b-a4bb-4706-b57c-146ddd53e30b/sist-en-iso-1797-2017>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 1797:2017](https://standards.iteh.ai/catalog/standards/sist/94de567b-a4bb-4706-b57c-146ddd53e30b/sist-en-iso-1797-2017)

<https://standards.iteh.ai/catalog/standards/sist/94de567b-a4bb-4706-b57c-146ddd53e30b/sist-en-iso-1797-2017>

INTERNATIONAL
STANDARD

ISO
1797

Third edition
2017-05

**Dentistry — Shanks for rotary and
oscillating instruments**

*Médecine bucco-dentaire — Queues pour instruments rotatifs et
oscillants*

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 1797:2017](https://standards.iteh.ai/catalog/standards/sist/94de567b-a4bb-4706-b57c-146ddd53e30b/sist-en-iso-1797-2017)

<https://standards.iteh.ai/catalog/standards/sist/94de567b-a4bb-4706-b57c-146ddd53e30b/sist-en-iso-1797-2017>



Reference number
ISO 1797:2017(E)

© ISO 2017

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 1797:2017

<https://standards.iteh.ai/catalog/standards/sist/94de567b-a4bb-4706-b57c-146ddd53e30b/sist-en-iso-1797-2017>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2017, Published in Switzerland

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
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms, definitions and symbols	1
3.1 Terms and definitions.....	1
3.2 Symbols.....	2
4 Classification	3
5 Requirements	4
5.1 Dimensions.....	4
5.1.1 Dimensions of shanks made of metal, tungsten carbide or ceramic material.....	4
5.1.2 Dimensions of Type 1 plastic shanks.....	5
5.1.3 Shank cylindricity.....	6
5.1.4 Surface roughness.....	7
5.1.5 Location of marking.....	7
5.1.6 Colour code of plastic shanks.....	7
5.2 Material requirements.....	7
5.2.1 Shanks made of metal or tungsten carbide.....	7
5.2.2 Shanks made of ceramic materials.....	7
5.2.3 Shanks made of plastic materials.....	8
6 Sampling and pass/fail evaluation	8
7 Measurement and test methods	8
7.1 Shank diameter.....	8
7.2 Other dimensions.....	9
7.3 Shank cylindricity.....	9
7.4 Surface roughness.....	9
7.5 Vickers hardness.....	9
7.6 Tensile strength (only for shanks made of plastic materials).....	9
7.7 Heat resistance, colour stability and stability against swelling (only for shanks made of plastic materials).....	9
7.7.1 Apparatus.....	9
7.7.2 Procedure.....	9
7.7.3 Swelling resistance during reprocessing.....	9
Annex A (informative) Quality control	10
Bibliography	11

ISO 1797:2017(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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html. (standards.iteh.ai)

This document was prepared by Technical Committee ISO/TC 106, *Dentistry*, Subcommittee SC 4, *Dental instruments*.

<https://standards.iteh.ai/catalog/standards/sist/94de567b-a4bb-4706-b57c-b440151797-1/sist-iso-1797-2017>

This third edition cancels and replaces ISO 1797-1, ISO 1797-2, and ISO 1797-3, which have been technically revised with the following changes:

- a) combination of three material parts into one International Standard;
- b) reprocessing requirements for plastic shanks have been added;
- c) AQL-values have been deleted;
- d) quality control concept was moved to [Annex A](#).

Dentistry — Shanks for rotary and oscillating instruments

1 Scope

This document specifies the requirements for dimensions and material properties of shanks used in dentistry for rotary or oscillating instruments. It describes the measurement methods for the verification of the requirements.

This document is not applicable to tips fixed to the handpiece with a screw, e.g. scaler tips.

Information about the location of marking is also given. [Annex A](#) on quality control is included in order to ensure a high quality level.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 527-2, *Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics*

ISO 1101, *Geometrical product specifications (GPS) — Geometrical tolerancing — Tolerances of form, orientation, location and run-out*

ISO 1942, *Dentistry — Vocabulary* [SIST EN ISO 1797:2017
https://standards.iteh.ai/catalog/standards/sist/94de567b-a4bb-4706-b57c-](https://standards.iteh.ai/catalog/standards/sist/94de567b-a4bb-4706-b57c-17972017)

ISO 3274, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Nominal characteristics of contact (stylus) instruments*

ISO 4288, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Rules and procedures for the assessment of surface texture*

ISO 6507-1, *Metallic materials — Vickers hardness test — Part 1: Test method*

ISO 8325, *Dentistry — Test methods for rotary instruments*

ISO 14457, *Dentistry — Handpieces and motors*

3 Terms, definitions and symbols

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1942, ISO 14457 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>