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BSI Standards Publication

Dentistry — Shanks for rotary and oscillating instruments

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National foreword

This British Standard is the UK implementation of EN ISO 1797:2017. It is identical to ISO 1797:2017. It supersedes BS EN ISO 1797-2:1995, BS EN ISO 1797-1:2011 and BS EN ISO 1797-3:2013, which are withdrawn.

The UK participation in its preparation was entrusted to Technical Committee CH/106/4, Dental Instruments and 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.

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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.

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

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

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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of an identical text or by endorsement, at the latest by November 2017, and conflicting national standards shall be withdrawn at the latest by November 2017.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.

Endorsement notice

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

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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

This is a preview of "BS EN ISO 1797:2017". [Click here to purchase the full version from the ANSI store.](#)

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.

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

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](#).

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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*

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>