

Dentistry - Test methods for rotary instruments (ISO 8325:2023)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 8325:2023 sisaldab Euroopa standardi EN ISO 8325:2023 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 8325:2023 consists of the English text of the European standard EN ISO 8325:2023.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
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English Version

Dentistry - Test methods for rotary instruments (ISO
8325:2023)

Médecine bucco-dentaire - Méthodes d'essai pour
instruments rotatifs (ISO 8325:2023)

Zahnheilkunde - Prüfverfahren für rotierende
Instrumente (ISO 8325:2023)

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

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European foreword

This document (EN ISO 8325:2023) 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of an identical text or by endorsement, at the latest by September 2023, and conflicting national standards shall be withdrawn at the latest by September 2023.

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

This document supersedes EN ISO 8325:2004.

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Endorsement notice

The text of ISO 8325:2023 has been approved by CEN as EN ISO 8325:2023 without any modification.

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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).

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This document was prepared by Technical Committee ISO/TC 106, *Dentistry*, Subcommittee SC 4, *Dental instruments*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 55, *Dentistry*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 8325:2004), which has been technically revised.

The main changes compared to the previous edition are as follows:

- a) some definitions have been added such as for rotary instruments;
- b) list of suitable measuring instruments have been deleted from [4.3](#);
- c) tolerances for the measuring instruments have been clarified in [5.1](#);
- d) the formula for neck strength test has been replaced in [5.11](#) by a technically based Formula in [5.11.4](#);
- e) [Annex A](#) has been added for the deduction of [Formula \(3\)](#).

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Introduction

To check the conformity of dental rotary instruments against relevant instrument standards, it is indispensable to conduct tests on the basis of harmonized test methods in order to achieve comparable test results. In the respective instrument standards for dental rotary instruments, reference is made to the test methods specified in this document.

Dentistry — Test methods for rotary instruments

1 Scope

This document specifies general test methods for rotary instruments used in dentistry. These test methods are used for measuring the dimensional characteristics, neck strength and surface roughness of rotary instruments, such as burs, cutters, polishers, grinding instruments and rotary instruments used for oral surgery such as drills and countersinks.

Specific tests are specified in the respective instrument standards, if available.

This document does not specify test methods for materials used for rotary instruments.

NOTE For materials used for rotary instruments, see ISO 21850-1 and respective instrument standards.

This document is not applicable to endodontic instruments. For endodontic instruments, see ISO 3630-1.

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 1797, *Dentistry — Shanks for rotary and oscillating instruments*

ISO 1942, *Dentistry — Vocabulary*

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

ISO 13295, *Dentistry — Mandrels for rotary instruments*

ISO 21850-1, *Dentistry — Materials for dental instruments — Part 1: Stainless steel*

ISO 21920-3, *Geometrical product specifications (GPS) — Surface texture: Profile — Part 3: Specification operators*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1942, ISO 21850-1 and the following apply.

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

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

3.1

rotary instrument

instrument used with a continuous rotation in a handpiece used for dental procedures

[SOURCE: ISO 1942:2020, 3.4.1.3, modified — “consisting of a shank and a working part,” has been deleted from the definition.]