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

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

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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)

This European Standard was approved by CEN on 1 March 2023.

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**EN ISO 8325:2023 (E)**

<b>Contents</b>	<b>Page</b>
<b>European foreword.....</b>	<b>3</b>

## **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of an identical text or by endorsement, at the latest by September 2023, and conflicting national standards shall be withdrawn at the latest by September 2023.

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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.



# INTERNATIONAL STANDARD

**ISO  
8325**

Third edition  
2023-03

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## Dentistry — Test methods for rotary instruments

*Médecine bucco-dentaire — Méthodes d'essai pour instruments  
rotatifs*



Reference number  
ISO 8325:2023(E)

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# Contents

Page

<b>Foreword</b>	<b>iv</b>
<b>Introduction</b>	<b>v</b>
<b>1 Scope</b>	<b>1</b>
<b>2 Normative references</b>	<b>1</b>
<b>3 Terms and definitions</b>	<b>1</b>
<b>4 Measurement and test methods</b>	<b>2</b>
4.1 General	2
4.2 Ambient conditions	2
4.3 Measurements	2
<b>5 Measurement of single characteristics</b>	<b>2</b>
5.1 Measuring instrument	2
5.2 Shape of the working part	2
5.3 Diameter of the working part	2
5.3.1 Location of measurement points	2
5.3.2 Procedure	3
5.3.3 Evaluation of test results	3
5.4 Neck diameter	3
5.4.1 Location of measurement points	3
5.4.2 Procedure	3
5.5 Dimensions of shanks	3
5.5.1 Shank diameter	3
5.5.2 Shank length	4
5.6 Dimensions of mandrels	4
5.7 Length of working part	4
5.7.1 Location of measurement points	4
5.7.2 Procedure	4
5.8 Overall length	4
5.8.1 Location of measurement points	4
5.8.2 Procedure	4
5.9 Angle of taper of working part	4
5.9.1 Location of measurement points	4
5.9.2 Procedure	4
5.10 Run-out of the working part	5
5.10.1 Apparatus	5
5.10.2 Location of measurement points	6
5.10.3 Procedure	6
5.11 Neck strength test	6
5.11.1 Apparatus	6
5.11.2 Test force	7
5.11.3 Procedure	7
5.11.4 Calculation of test force for neck strength	7
5.11.5 Evaluation	8
5.12 Surface roughness	8
<b>6 Test report</b>	<b>8</b>
<b>Annex A (informative) Deduction of the neck strength formula</b>	<b>9</b>

# ISO 8325:2023(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](http://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](http://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 of 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 [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

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 \(3\)](#).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## **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*

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