
**Dentistry — Bore diameters for rotary
instruments such as discs and wheels**

*Médecine bucco-dentaire — Diamètres d'alésage des instruments
rotatifs tels que disques et roues*



Reference number
ISO 10323:2013(E)

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Foreword

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ISO 10323 was prepared by Technical Committee ISO/TC 106, *Dentistry*, Subcommittee SC 4, *Dental instruments*.

This second edition cancels and replaces the first edition (ISO 10323:1991), which has been technically revised. The following changes were made:

- a) harmonization of nominal diameters with other ISO standards for rotary instruments;
- b) inclusion of definitions for discs and wheels.

Dentistry — Bore diameters for rotary instruments such as discs and wheels

1 Scope

This International Standard specifies bore diameters for rotary instruments such as metallic discs and metallic wheels used in dentistry in order to achieve interchangeability between discs and wheels and the mandrels with which the discs and wheels are operated in a dental handpiece.

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 1942, *Dentistry — Vocabulary*

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

3 Terms and definitions

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

3.1

bore diameter

inner diameter of the central opening in a disc or a wheel which is relevant for connection with a hub-mounted mandrel

3.2

disc

cylindrical rotary instrument used in dentistry where the thickness of the working part is less than 5 % of the diameter

3.3

wheel

cylindrical rotary instrument used in dentistry where the thickness of the working part is 5 % to 100 % of the diameter

4 Dimensions

Dimensions and tolerances of bore diameters for rotary instruments such as discs and wheels shall be as given in Table 1.

Those dimensions of bore diameters for discs and wheels which are not specified in standards relating to the respective rotary instruments shall be as given in Table 1.

Only positive tolerances as given in Table 1 are permissible.

Table 1 — Bore diameters for rotary instruments such as discs and wheels

Dimensions in millimetres

Nominal diameter	Tolerance
1,7	+0,05
1,8	+0,05
2,2	+0,05
3,0	+0,1

5 Testing

Measure the bore diameter of a rotary instrument such as a disc or wheel with measuring instruments as specified in ISO 8325, graduated in divisions of 0,01 mm.

Bibliography

- [1] ISO 7711-2, *Dentistry — Rotary diamond instruments — Part 2: Discs*
- [2] ISO 13295, *Dentistry — Mandrels for rotary instruments*
- [3] ISO 14457, *Dentistry — Handpieces and motors*
- [4] ISO 21671, *Dentistry — Rotary polishers*

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