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Dentistry — Dental tweezers

Médecine bucco-dentaire — Précettes dentaires

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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.

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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 second edition cancels and replaces the first edition (ISO 15098:2020), which has been technically revised.

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

- the previously normatively cited reference ISO 7153-1 has been removed;
- "?" has been replaced with "12" in [Table 1](#);
- "b3" has been reworded and clarified in [Table 2](#).

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.

Dentistry — Dental tweezers

1 Scope

This document specifies general requirements and test methods for metallic dental tweezers of Meriam type and College type.

This document is not applicable to anatomical tweezers and surgical tweezers.

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

ISO 1942, *Dentistry — Vocabulary*

ISO 2768-1, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

ISO 6508-1, *Metallic materials — Rockwell hardness test — Part 1: Test method*

ISO 15223-1:2021, *Medical devices — Symbols to be used with information to be supplied by the manufacturer — Part 1: General requirements*

ISO 17664-1, *Processing of health care products — Information to be provided by the medical device manufacturer for the processing of medical devices — Part 1: Critical and semi-critical medical devices*

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

3 Terms and definitions

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

dental tweezer

hand-guided dental instrument designed to grasp, hold or transfer items and/or material into and out of the oral cavity

Note 1 to entry: Dental tweezers are also known as cotton forceps and pliers and are different from anatomical tweezers.

3.2

College type dental tweezer

special design of dental tweezers with straight shank and angled or curved working end

3.3

Meriam type dental tweezer

special design of dental tweezers with angulated shank and contra-angulated working end

3.4

guide pin

pin for guiding the tweezers' halves when the tweezers are pressed together

4 Classification

Dental tweezers are classified into the following types according to the shape of the shank and working end:

- Meriam type dental tweezers, i.e. with an angulated shank and a contra-angulated working end (see [Figure 1](#)).
- College type dental tweezers, i.e. with a straight shank, subdivided according to the shape of the working end:
 - angled (see [Figure 2](#));
 - curved (see [Figure 3](#)).

5 Requirements

5.1 Design and dimensions

5.1.1 General

Meriam type dental tweezers shall have the designs shown in [Figure 1](#) and the dimensions given in [Table 1](#).

College type dental tweezers shall have the designs shown in [Figure 2](#) and [Figure 3](#) and the dimensions given in [Table 1](#).

Table 1 — Dimensions for dental tweezers

Tweezer type	b_1	b_2	b_3	h_1	h_2	l	r	α
	mm	mm	mm	mm	mm	mm	mm	°
	with a tolerance of							
	±0,2	±0,2	±1	±1	±1	±5	reference	±5
Meriam type 1	1,3	1,1	12	6	6	160	—	40
Meriam type 2	1,6	1,3	13	6,2	6,2	162	—	43,4
College type 1, angled	1,3	1,1	10	8	—	150	—	40
College type 2, angled	1,5	1,2	12	10	—	152	—	45,7
College type 3, curved	1,3	1,1	10	8	—	150	15	—

Key

- b_1 blade width
- b_2 blade thickness
- b_3 blade length
- h_1 blade height
- h_2 shank height
- l length
- r radius of blade
- α blade angle