

**BUREAU OF INDIAN STANDARDS**

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*भारतीय मानक मसौदा*  
**दंत चिकित्सा — दंत भट्टी**  
**भाग 3 एक अलग थर्मोकपल के साथ उच्च तापमान सिन्टरिंग भट्टी माप के**  
**मूल्यांकन के लिए परीक्षण पद्धति**

*Draft Indian Standard*  
**Dentistry — Dental Furnace**  
**Part 3 Test method for the evaluation of high temperature sintering**  
**furnace measurement with a separate thermocouple**

**[ICS 11.060.01]**

Dentistry Sectional Committee, MHD 08

Last date for comments: **1 June 2025**

**NATIONAL FOREWORD**

*(Adoption clause will be added later)*

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are however not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’; and
- Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards which are to be substituted in their respective places are listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 1942 Dentistry — Vocabulary	IS 17895 : 2023/ISO 1942 : 2020 Dentistry — Vocabulary	Identical
IEC 60584-1:2013 Thermocouples — Part 1: EMF specifications and tolerances	IS 16923 (Part 1) : 2018/IEC 60584-1 : 2013 Thermocouples Part 1 EMF specifications and tolerances ( <i>first revision</i> )	Identical

IEC 60584-3 Thermocouples — Part 3: Extension and compensating cables — Tolerances and identification system	IS 16923 (Part 3) : 2023/IEC 60584-3 : 2021 Thermocouples Part 3 Extension and compensating cables — Tolerances and identification system	Identical
ISO 6872, Dentistry — Ceramic materials	IS 18813 : 2024, Dentistry — Ceramic materials	Identical

In reporting the result of a test or analysis made in accordance with this standard, is to be rounded off, it shall be done in accordance with IS 2 : 2022 ‘Rules for rounding off numerical values (*second revision*)’. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

## **Scope**

This document specifies a test method for the calibration of resistance-heated high temperature sintering furnaces that are suitable for the sintering of dental restorations in the temperature range up to 1 700 °C.

NOTE A test method for the calibration of dental furnaces that are suitable for the heat treatment of silica-based dental ceramic restorations in the temperature range between 600 °C and 1 050 °C is specified in ISO 13078:2013. ISO 13078:2013 does not include the calibration of sintering furnace used for sintering of oxide ceramics or sintered metal, in whose firing chamber restorations are sintered at temperatures of 1 000 °C to 1 700 °C.

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The technical content of the document has not been enclosed as it is identical with the corresponding ISO standard.  
For details, please refer to ISO 13078-3 : 2023 or kindly contact:

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