



**SLOVENSKI STANDARD**  
**SIST EN ISO 7488:2000**  
**01-januar-2000**

---

**Dental amalgamators (ISO 7488:1991)**

Dental amalgamators (ISO 7488:1991)

Zahnärztliche Amalgamatoren (ISO 7488:1991)

Amalgamateurs dentaires (ISO 7488:1991)

**Ta slovenski standard je istoveten z: EN ISO 7488:1995**

ITEH STANDARD PREVIEW  
(standards.iteh.ai)

---

[SIST EN ISO 7488:2000](https://standards.iteh.ai/catalog/standards/sist/11e9f6ff-1737-4bdb-b99c-f4b42862c839/sist-en-iso-7488-2000)  
<https://standards.iteh.ai/catalog/standards/sist/11e9f6ff-1737-4bdb-b99c-f4b42862c839/sist-en-iso-7488-2000>

**ICS:**

11.060.20      Z[ à[ c @ ã } æ ] ! ^ { æ      Dental equipment

**SIST EN ISO 7488:2000**                      **en**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN ISO 7488:2000

<https://standards.iteh.ai/catalog/standards/sist/11e9f6ff-1737-4bdb-b99c-f4b42862c839/sist-en-iso-7488-2000>

EUROPEAN STANDARD

EN ISO 7488

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 1995

ICS 11.060.20

Descriptors: See ISO document

English version

**Dental amalgamators (ISO 7488:1991)**

Amalgamateurs dentaires (ISO 7488:1991)

Zahnärztliche Amalgamatoren (ISO 7488:1991)

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN ISO 7488:2000

<https://standards.iteh.ai/catalog/standards/sist/11e9f6ff-1737-4bdb-b99c-f4b42862c839/sist-en-iso-7488-2000>

This European Standard was approved by CEN on 1995-10-04. CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

**Central Secretariat: rue de Stassart, 36 B-1050 Brussels**

© 1995

All rights of reproduction and communication in any form and by any means reserved in all countries to CEN and its members.

Ref. No. EN ISO 7488:1995 E

## Foreword

The text of the International Standard from ISO/TC 106 "Dentistry" of the International Organization for Standardization (ISO) has been taken over as a European Standard by the Technical Committee CEN/TC 55 "Dentistry".

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 April 1996, and conflicting national standards shall be withdrawn at the latest by April 1996.

According to the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

## Endorsement notice

The text of the International Standard ISO 7488:1991 has been approved by CEN as a European Standard without any modification.

ITeH STANDARD PREVIEW  
(standards.iteh.ai)

SIST EN ISO 7488:2000

<https://standards.iteh.ai/catalog/standards/sist/11e9f6ff-1737-4bdb-b99c-f4b42862c839/sist-en-iso-7488-2000>



# INTERNATIONAL STANDARD

**ISO  
7488**

First edition  
1991-06-01

---

---

## Dental amalgamators

*Amalgamateurs dentaires*

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 7488:2000](#)

<https://standards.iteh.ai/catalog/standards/sist/11e9f6ff-1737-4bdb-b99c-f4b42862c839/sist-en-iso-7488-2000>



Reference number  
ISO 7488:1991(E)

## ISO 7488:1991(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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 7488 was prepared by Technical Committee ISO/TC 106, *Dentistry*.

**iTeh STANDARD PREVIEW**  
(standards.iteh.ai)

SIST EN ISO 7488:2000  
<https://standards.iteh.ai/catalog/standards/sist/11e9f6ff-1737-4bdb-b99c-f4b42862c839/sist-en-iso-7488-2000>

© ISO 1991

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization  
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

## Introduction

Electrically powered amalgamators are machines used primarily for mixing (trituration) of amalgam alloys and mercury to produce dental amalgams but they may also be used for mixing other dental materials.

In many amalgamators a removable capsule is used to contain the alloy and mercury. Although the capsule must be considered as part of the amalgamator when in use or under test, the requirements for capsules are not dealt with in this International Standard; they may be the subject of a separate Standard.

Some amalgamators may incorporate a mechanism for dispensing the alloy or mercury or both. These devices may be subjected to the test in this International Standard except for the dispensing stage.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 7488:2000](https://standards.iteh.ai/catalog/standards/sist/11e9f6ff-1737-4bdb-b99c-f4b42862c839/sist-en-iso-7488-2000)

<https://standards.iteh.ai/catalog/standards/sist/11e9f6ff-1737-4bdb-b99c-f4b42862c839/sist-en-iso-7488-2000>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

This page intentionally left blank

[SIST EN ISO 7488:2000](#)

<https://standards.iteh.ai/catalog/standards/sist/11e9f6ff-1737-4bdb-b99c-f4b42862c839/sist-en-iso-7488-2000>



# Dental amalgamators

## 1 Scope

This International Standard specifies requirements, test methods to determine compliance with these requirements and details of marking of electrically powered mixing amalgamators suitable for mixing dental amalgam alloy and mercury for dental amalgams.

It provides methods of comparing uniformity of operation and performance of these amalgamators and is intended to ensure reproducibility of amalgamation.

## 2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 335-1:1976, *Safety of household and similar electrical appliances — Part 1: General requirements.*

## 3 Definitions

For the purposes of this International Standard, the following definitions apply.

**3.1 coherence:** State when all the alloy and the mercury are combined in a single unified mass.

NOTE 1 Small cracks or a dry looking surface do not detract from coherence.

**3.2 working length of capsule:** Maximum internal dimension lying parallel to the direction of the greatest motion or, where uniform circular motion applies, the greatest internal dimension parallel to a principal axis of the capsule in the plane of motion

when the capsule is in its normal working or “activated” configuration.

**3.3 amplitude of capsule motion:** Range of movement, in millimetres, of the midpoint of the capsule while running, measured in the direction of the working length.

## 4 Classification

Amalgamators are classified as follows:

Type 1: Fixed frequency

Type 2: Variable frequency

## 5 Requirements

### 5.1 Electrical safety

Amalgamators shall comply as regards the electrical requirements and the testing with the relevant clauses of IEC 335-1.

NOTE 2 Compliance with IEC 335-1 is required pending development and publication of IEC requirements for laboratory and related equipment.

### 5.2 Mechanical safety

**5.2.1** The amalgamator shall have an enclosure that will contain a capsule, its contents, or a machine part that may become dislodged or broken during use.

**5.2.2** Moving parts with which the user may normally be expected to come into contact shall be free from rough or sharp edges and corners.

**5.2.3** In addition, the following requirements shall apply.

a) During normal operation, insertion, or removal, the capsule shall not be damaged in such a way as to allow leakage of mercury.