

### SLOVENSKI STANDARD SIST EN ISO 7494-2:2015

01-julij-2015

Nadomešča:

SIST EN ISO 11144:2000 SIST EN ISO 7494-2:2003

Zobozdravstvo - Zobozdravstvene enote - 2. del: Zrak, voda, sukcija (aspiracija) in sistemi odpadnih voda (ISO 7494-2:2015)

Dentistry - Dental units - Part 2: Air, water, suction and wastewater systems (ISO 7494-2:2015)

### iTeh STANDARD PREVIEW

Zahnheilkunde - Zahnärztliche Behandlungseinheiten - Teil 2: Luft, Wasser, Absaugung und Abwassersystem (ISO 7494-2:2015)

#### SIST EN ISO 7494-2:2015

Médecine bucco-dentaire Units dentaires Partie 2. Systèmes d'alimentation en air et en eau, d'aspiration et d'évacuation des eaux usées (ISO 7494-2:2015)

Ta slovenski standard je istoveten z: EN ISO 7494-2:2015

ICS:

11.060.20 Zobotehnična oprema Dental equipment

SIST EN ISO 7494-2:2015 en

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 7494-2:2015

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM **EN ISO 7494-2** 

April 2015

ICS 11.060.20

Supersedes EN ISO 11144:1996, EN ISO 7494-2:2003

#### **English Version**

### Dentistry - Dental units - Part 2: Air, water, suction and wastewater systems (ISO 7494-2:2015)

Médecine bucco-dentaire - Units dentaires - Partie 2: Systèmes d'alimentation en air et en eau, d'aspiration et d'évacuation des eaux usées (ISO 7494-2:2015) Zahnheilkunde - Zahnärztliche Behandlungseinheiten - Teil 2: Luft, Wasser, Absaugung und Abwassersystem (ISO 7494-2:2015)

This European Standard was approved by CEN on 10 January 2015.

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 CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

SIST EN ISO 7494-2:2015

https://standards.iteh.ai/catalog/standards/sist/e90c953a-9a8c-4c0b-86e1-f4a6543b36b0/sist-en-iso-7494-2-2015



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

### EN ISO 7494-2:2015 (E)

Contents	F	Page
Foreword		3

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

<u>SIST EN ISO 7494-2:2015</u> https://standards.iteh.ai/catalog/standards/sist/e90c953a-9a8c-4c0b-86e1-f4a6543b36b0/sist-en-iso-7494-2-2015

EN ISO 7494-2:2015 (E)

#### **Foreword**

This document (EN ISO 7494-2:2015) 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 October 2015, and conflicting national standards shall be withdrawn at the latest by October 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 7494-2:2003 and EN ISO 11144:1996.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### **Endorsement notice**

The text of ISO 7494-2:2015 has been approved by CEN as EN ISO 7494-2:2015 without any modification. (standards.iteh.ai)

<u>SIST EN ISO 7494-2:2015</u> https://standards.iteh.ai/catalog/standards/sist/e90c953a-9a8c-4c0b-86e1f4a6543b36b0/sist-en-iso-7494-2-2015

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 7494-2:2015

## INTERNATIONAL STANDARD

ISO 7494-2

Second edition 2015-04-01

### Dentistry — Dental units —

Part 2:

Air, water, suction and wastewater systems

Médecine bucco-dentaire — Units dentaires —

iTeh STPartie 2: Systèmes d'alimentation en air et en eau, d'aspiration et d'évacuation des eaux usées (standards.iteh.ai)

SIST EN ISO 7494-2:2015



ISO 7494-2:2015(E)

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

<u>SIST EN ISO 7494-2:2015</u> https://standards.iteh.ai/catalog/standards/sist/e90c953a-9a8c-4c0b-86e1f4a6543b36b0/sist-en-iso-7494-2-2015



#### COPYRIGHT PROTECTED DOCUMENT

© ISO 2015

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents			Page		
Fore	word			v	
Intr	oductio	n		vi	
1	Scop	e		1	
2	-		ferences		
3			finitions		
4	Class 4.1		cation of suction systems		
	4.1		cation of suction air volume flow rate		
_					
5	<b>Kequ</b> 5.1	Require	sements for supply connections	4 	
	5.2		ements for water and wastewater systems		
	J. <b>_</b>	5.2.1	Incoming water		
		5.2.2	Materials used for construction of procedural water systems within the dental unit		
		5.2.3	Backflow prevention device for dental units connected to the external		
		E 0.4	drinking water supply		
		5.2.4 5.2.5	CuspidorsWater venturi		
		5.2.5			
		5.2.7	Particle filter ANDARD PREVIEW Bacterial filter		
		5.2.8	Bottled water system supplying procedural water or solutionRetraction	7	
		5.2.9	Retraction Retraction	7	
		5.2.10	Water disinfection systems	7	
		5.2.11	Water sampling connection point was water sampling connection point was a water sampling connection point with a water sampling connection point was a water sampling connection was a water sampling connection point was a w	88	
	5.3	5.2.11 Water sampling connection point 015 5.2.12 Wastewater drain connection point 015 5.2.12 Wastewater drain connection sixtee 0c953a-9a8c-4c0b-86e1- 5.3 Requirements for the air system conso-7494-2-2015			
	5.5	5.3.1	Incoming air (dental air)	8	
		5.3.2	Particle filters		
		5.3.3	Bacterial filters		
	5.4	_	ements for dental unit suction systems		
		5.4.1	Static vacuum pressure		
		5.4.2 5.4.3	Head lossAir separators		
		5.4.4	Cannula connectors and cannula		
		5.4.5	Operating hoses with cannula connectors		
		5.4.6	Solids filter	11	
	5.4.7	Noise level			
		5.4.8	Dental unit suction source connection point	11	
6	Samp	oling		11	
7	Tests			11	
	7.1		ors		
	7.2	Water venturi			
	7.3	Systems directly connected to external drinking water supply			
	7.4 7.5	Bottled water system supplying procedural water or solution			
	7.5 7.6				
	7.0	Bacterial filters			
	7.8		disinfection systems		
	7.9	Tests fo	or dental unit suction systems	13	
		7.9.1	Static vacuum pressure test		
		7.9.2 7.9.3	Head loss test Measurement of noise level		
		1.7.3	IMICASUI CIIICIIL UI IIUISC ICVCI	14	

### ISO 7494-2:2015(E)

	7.10	Water sampling connection point	1	5	
	7.11 Incoming water and air quality				
		Supply connections			
8	Manufacturer's instructions for use				
9	Technical description				
Annex		ormative) Schematic diagram of possible components and connections in a			
	denta	l unit	1	8	
Annex	<b>B</b> (info	ormative) <b>Test sequences</b>	2	0	
Biblio	graphy		2	5	

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

SIST EN ISO 7494-2:2015

#### 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 <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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 <a href="www.iso.org/patents">www.iso.org/patents</a>).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 106, Dentistry, Subcommittee SC 6, Dental equipment.

This edition of ISO 7494-2 cancels and replaces ISO 7494-252003 and ISO 11144, of which it constitutes a technical revision, while only replacing certain requirements specific to dental units given in ISO 10637. In addition, it consolidates and updates requirements formerly specified in

- ISO 10637:1999, Dental equipment High- and medium-volume suction systems, and
- ISO 11144:1995, Dental equipment Connections for supply and waste lines.

ISO 7494 consists of the following parts, under the general title *Dentistry — Dental units*:

- Part 1: General requirements and test methods
- Part 2: Air, water, suction and wastewater systems

ISO 7494-2:2015(E)

### Introduction

This part of ISO 7494 specifies requirements and test methods pertaining to components of the dental unit which convey air, water, suction, and wastewater. The requirements in this part of ISO 7494 focus on certain technical aspects regarded by the working group to be appropriate for international standardization. The working group acknowledges that requirements for microbiological aspects of the fluids transported by dental units are also worthy of standardization and is working to develop requirements pertaining to the prevention, inhibition, and removal of dental unit waterline biofilm. Additional projects to develop microbiological requirements for air, water, and/or suction may follow.

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

<u>SIST EN ISO 7494-2:2015</u> https://standards.iteh.ai/catalog/standards/sist/e90c953a-9a8c-4c0b-86e1f4a6543b36b0/sist-en-iso-7494-2-2015