

**Dentistry - Implants - Dynamic fatigue test for
endosseous dental implants**

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EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 14801:2008 sisaldab Euroopa standardi EN ISO 14801:2007 ingliskeelset teksti. Standard on kinnitatud Eesti Standardikeskuse 28.01.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas. Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.11.2007. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 14801:2008 consists of the English text of the European standard EN ISO 14801:2007. This standard is ratified with the order of Estonian Centre for Standardisation dated 28.01.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation. Date of Availability of the European standard text 15.11.2007. The standard is available from Estonian standardisation organisation.
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ICS 11.060.15

Võtmesõnad:

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Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:
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English Version

Dentistry - Implants - Dynamic fatigue test for endosseous dental implants (ISO 14801:2007)

Art dentaire - Implants - Essai de fatigue dynamique pour implants dentaires endosseux (ISO 14801:2007)

Zahnheilkunde - Implantate - Dynamische Ermüdungsprüfung für endossale dentale Implantate (ISO 14801:2007)

This European Standard was approved by CEN on 4 November 2007.

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 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 Management Centre has the same status as the official versions.

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

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Foreword

This document (EN ISO 14801:2007) 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 May 2008, and conflicting national standards shall be withdrawn at the latest by May 2008.

This document supersedes EN ISO 14801:2003.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 14801:2007 has been approved by CEN as a EN ISO 14801:2007 without any modification.

Dentistry — Implants — Dynamic fatigue test for endosseous dental implants

1 Scope

This International Standard specifies a method of fatigue testing of single post endosseous dental implants of the transmucosal type and their premanufactured prosthetic components. It is most useful for comparing endosseous dental implants of different designs or sizes.

While this International Standard simulates the functional loading of an endosseous dental implant body and its premanufactured prosthetic components under “worst case” conditions, it is not applicable for predicting the *in vivo* performance of an endosseous dental implant or prosthesis, particularly if more than one implant is used for a prosthesis.

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 1099, *Metallic materials — Fatigue testing — Axial force-controlled method*

ISO 1942 (all parts), *Dental vocabulary*

ISO 4965, *Axial load fatigue testing machines — Dynamic force calibration — Strain gauge technique*

ISO 7500-1, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*

3 Terms and definitions

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

3.1

endosseous dental implant system

device that consists of integrated components including the ancillary instruments and specific equipment necessary for the clinical and laboratory preparation and placement of the implant, and for the construction and insertion of the dependent prosthesis

NOTE 1 In addition to providing resistance to displacement of a dental prosthesis, an endosseous dental implant may be used as an anchorage for orthodontic appliances.

NOTE 2 An endosseous dental implant may consist of one or more parts.

NOTE 3 The term dental prosthesis includes crowns and fixed and removable prostheses.