

Dentistry - Vocabulary of process chain for CAD/CAM systems (ISO 18739:2016)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

Dentistry - Vocabulary of process chain for CAD/CAM
systems (ISO 18739:2016)

Médecine bucco-dentaire - Vocabulaire de la chaîne de
procédé applicable aux systèmes de CFAO (ISO
18739:2016)

Zahnheilkunde - Vokabular der Prozesskette für
CAD/CAM-Systeme (ISO 18739:2016)

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European foreword

This document (EN ISO 18739:2016) 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of an identical text or by endorsement, at the latest by October 2016, and conflicting national standards shall be withdrawn at the latest by October 2016.

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Endorsement notice

The text of ISO 18739:2016 has been approved by CEN as EN ISO 18739:2016 without any modification.

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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.

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. www.iso.org/directives

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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 9, *CAD/CAM-Systems*.

Introduction

Terms and designations for individual system parts and process steps used in product descriptions and instructions for use provided by the manufacturers of dental CAD/CAM systems differ from each other, thus creating confusion among dentists and dental technicians. In order to overcome these ambiguities, it was decided to prepare an International Standard for terminology used in the process chain for CAD/CAM systems.

For the purposes of illustrating the logic sequence of the process chain for CAD/CAM systems, a flow chart of this process chain is shown in [Annex A](#).

Dentistry — Vocabulary of process chain for CAD/CAM systems

1 Scope

This International Standard specifies terms, synonyms for terms and definitions used in the process chain for CAD/CAM systems in dentistry.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1942, *Dentistry — Vocabulary*

ISO 5725-1, *Accuracy (trueness and precision) of measurement methods and results — Part 1: General principles and definitions*

ISO 16443, *Dentistry — Vocabulary for dental implants systems and related procedure*

ISO/ASTM 52900, *Additive manufacturing — General principles — Terminology*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1942, ISO 5725-1, ISO 16443, ISO/ASTM 52900 and the following apply.

NOTE In the following, first the preferred term and then the synonyms which have been in use so far are given. For the future it is recommended to use the preferred terms instead of the synonyms.

3.1 Process step terms

3.1.1

3D data acquisition

three dimensional data acquisition

3D digitization and generation of a digital data set

3.1.2

3D data acquisition system

three dimensional data acquisition system

hardware and software used for 3D data acquisition

3.1.3

3D scanning

3D digitizing

raw data acquisition

method of acquiring the shape and size of an object as a 3-dimensional representation by recording x,y,z coordinates on the objects surface and through software the collection of points is converted into digital data

Note 1 to entry: This collection of data via the scanning process creates a raw *data set* ([3.1.14](#)).