



BSI Standards Publication

**Dentistry — Vocabulary of process chain from dental  
CT to CAD/CAM for implant prosthetic restorations  
— Backward planning in the digital process chain**

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## National foreword

This Published Document is the UK implementation of ISO/TR 22710:2019.

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A list of organizations represented on this committee can be obtained on request to its secretary.

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## **Dentistry — Vocabulary of process chain from dental CT to CAD/CAM for implant prosthetic restorations — Backward planning in the digital process chain**



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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 (see [www.iso.org/directives](http://www.iso.org/directives)).

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 [www.iso.org/patents](http://www.iso.org/patents)).

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

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 106, *Dentistry*, Subcommittee SC 9, *Dental CAD/CAM systems*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## 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, dental CT systems and prosthetic implant systems differ from each other, thus creating confusion among dentists and dental technicians. In order to overcome these ambiguities, it was decided to produce this document for terminology used in the digital process chain for backward planning.

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

In [Clause 3](#), there are some entries with more than one term. The first term is the preferred term, followed by admitted term(s). In the future, it is recommended to use the first term.





# Dentistry — Vocabulary of process chain from dental CT to CAD/CAM for implant prosthetic restorations — Backward planning in the digital process chain

## 1 Scope

This document specifies terms, synonyms of terms and definitions used in the process chain from initial implant treatment imaging until the placement of the finished prosthesis. This process chain includes different steps from dental CT to CAD/CAM for implant prosthetic restorations.

Some aspects of this process chain are also called backward planning.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1942, *Dentistry — Vocabulary*

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

ISO 18739, *Dentistry — Vocabulary of process chain for CAD/CAM systems*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1942, ISO 16443, ISO 18739 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 3.1

#### **dental CT**

cone beam CT

dental computed tomography

X-ray 3D-computed tomography for dental applications

### 3.2

#### **voxel**

volume element in a virtual three-dimensional space

Note 1 to entry: This term is the combination of "volumetric" and "pixel".

Note 2 to entry: This corresponds to a pixel in a 2D image.

### 3.3

#### **sectional plane**

plane cutting through region of interest in which a view of the corresponding image data is generated

Note 1 to entry: For *dental CT* (3.1) the three main projection planes are referred to as sagittal, axial and coronal sections.