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Third edition
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Dentistry — Vocabulary

Médecine bucco-dentaire — Vocabulaire

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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).

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).

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.

This document was prepared by Technical Committee ISO/TC 106, *Dentistry*, Subcommittee SC 3, *Terminology*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 55, *Dentistry*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 1942:2009), which has been technically revised.

The main change compared to the previous edition is as follows: a systematic arrangement of terminology necessary for the development of standards related to dentistry according to ISO directives has been integrated.

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.

Introduction

This document is cited in Clause 2 of most of the ISO documents in the field of dentistry. Its content, therefore, is fundamental for the proper understanding of those documents. It is also important to understand the terms and definitions in this document when a new standard is developed, or existing standards are revised in ISO/TC 106.

The content and format of this document have been developed in accordance to References [1] to [5].

Also, terminological entries have been arranged and grouped reflecting the structure and scope/responsibilities of each subcommittee in TC 106. The sub-categorization of terminological entries essentially follows the scope of each working group within the subcommittee, except for general concepts that include anatomical, branches of dentistry, clinical and occupational. [Annex A](#) describes inclusion and exclusion criteria as well as other information helpful to understand the structure and content of this document.

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Dentistry — Vocabulary

1 Scope

This document defines terms used in dental product standards.

This document aims to facilitate the standard development process and the comprehension of standards, and to improve communication with the FDI World Dental Federation, the World Health Organization and other organizations interested in standardization.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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 terminology and general terms

3.1.1 Anatomical concepts

3.1.1.1

dental organ

tissue complex comprising the tooth and its supporting structures

3.1.1.2

anterior teeth

mandibular and maxillary centrals, laterals and canines

3.1.1.3

posterior teeth

mandibular and maxillary molars and premolars

3.1.1.4

clinical crown

part of a tooth not covered by soft or supporting hard tissue

3.1.1.5

anatomical crown

crown

<natural tooth> portion of a tooth normally covered by, and including, the *enamel* (3.1.1.14)

3.1.1.6

visible crown

part of the *anatomical crown* (3.1.1.5) which is accessible to visual examination without manipulation of the surrounding gingival tissues

3.1.1.7

macrodontia

genetic condition resulting in the formation of abnormally large teeth

3.1.1.8

mesial

<tooth> surface nearest the midline along the dental arch

3.1.1.9

distal

<tooth> surface furthest from the midline along the dental arch

3.1.1.10

proximal

<tooth> *mesial* ([3.1.1.8](#)) or *distal* ([3.1.1.9](#)) surface of a tooth

3.1.1.11

predentine

immature fibrillar *matrix* ([3.3.1.35](#)) produced by odontoblasts

3.1.1.12

primary dentine

dentine ([3.1.1.16](#)) formed during tooth development prior to completion of root formation

3.1.1.13

odontogenesis imperfecta

generalized genetic disturbance in the formation of *enamel* ([3.1.1.14](#)) and *dentine* ([3.1.1.16](#))

3.1.1.14

enamel

highly mineralized outermost layer of the normally exposed tooth consisting primarily of hydroxyapatite in orderly crystal structures

3.1.1.15

cementum

calcified outermost layer covering the dentin in the root of a tooth and which attaches to surrounding tissue

3.1.1.16

dentine, GB

dentin, US

mineralized hard tissue that forms the bulk of the tooth and develops from the dental papilla and dental *pulp* ([3.1.1.25](#))

3.1.1.17

mantle dentine

most peripheral part of the *dentine* ([3.1.1.16](#)) adjacent to the *enamel* ([3.1.1.14](#)), characterized by coarsely bundled fibres running parallel to the branching ends of the tubules

3.1.1.18

circumpulpal dentine

inner part of the *dentine* ([3.1.1.16](#)) adjacent to the *pulp* ([3.1.1.25](#)), characterized by the inclusion of fine collagen fibres running approximately at right-angles to the tubules

3.1.1.19

peritubular dentine

orthodentine that constitutes the highly-mineralized *matrix* ([3.3.1.35](#)) immediately around the dentinal tubules

3.1.1.20**intratubular dentine**

mineralized *matrix* (3.3.1.35) that is found in the tubules of orthodentine

3.1.1.21**secondary dentine**

dentine (3.1.1.16) that is formed after complete formation of a tooth as a result of normal or slightly abnormal stimuli

3.1.1.22**tertiary dentine**

irregular *dentine* (3.1.1.16) deposited at sites of the pulpal aspects of *primary dentine* (3.1.1.12) or *secondary dentine* (3.1.1.21), corresponding to areas of external irritation

3.1.1.23**endodontium****pulpo-dental organ**

part of the *dental organ* (3.1.1.1) that pertains to the tissues of the dental *pulp* (3.1.1.25) and the *dentine* (3.1.1.16)

3.1.1.24**odontium**

part of the tooth consisting of *enamel* (3.1.1.14), *dentine* (3.1.1.16) and *pulp* (3.1.1.25) but not *cementum* (3.1.1.15)

3.1.1.25**pulp**

<tooth> soft tissue complex of mesenchymal origin which occupies the pulp chamber and the root canal(s) of a tooth and which provides for dentinogenic, nutritive, neurosensory and defensive functions

3.1.1.26**apical**

pertaining to, or in the direction towards, the root tip (apex)

3.1.1.27**periodontium**

tissue complex comprising the gingivae, *cementum* (3.1.1.15), *periodontal ligament* (3.1.1.28) and alveolar bone, and which attaches, nourishes and supports the tooth

3.1.1.28**periodontal ligament**

alveolodental ligament

bundles of collagen fibres that suspend the tooth in the alveolus by connecting the *cementum* (3.1.1.15) of the root to the alveolar bone

3.1.1.29**desmodontium**

tissue, including *periodontal ligament* (3.1.1.28), that normally occupies the space between *cementum* (3.1.1.15) and alveolar bone

3.1.1.30**desmodontal**

pertaining to the *desmodontium* (3.1.1.29)

3.1.1.31**periodontitis**

inflammation of the *periodontium* (3.1.1.27)

3.1.1.32**periodontopathy**

disease affecting the *periodontium* (3.1.1.27)

3.1.1.33

periodontolysis

process leading to advanced destruction of the *periodontium* (3.1.1.27)

3.1.1.34

osteogenesis

formation of bone or development of bones

3.1.1.35

odontogenic cyst

primordial cyst

cyst, originated from epithelial cells, usually containing fluid or semi-solid material, and which develops during various stages of odontogenesis

3.1.1.36

emergence profile

contour of a tooth or *restoration* (3.1.4.13), such as a *crown* (3.1.1.5) on a natural tooth or a *dental implant body* (3.7.2.4), as it relates to the emergence through the soft tissues and bone

3.1.1.37

masticatory system

organs and structures primarily functioning in mastication

3.1.2 Branches of dentistry

3.1.2.1

oral health

DEPRECATED: dental public health

branch of public general health that addresses matters pertaining to the health of the oral *cavity* (3.1.3.26) and adjacent tissues of the cranio-facial complex

3.1.2.2

dentistry

science of preventing, diagnosing and treating diseases and malfunctions of, and injuries to, the teeth, mouth and jaws, and of replacing lost teeth and associated tissues and promoting *oral health* (3.1.2.1)

3.1.2.3

dental education

education that contribute to the development of the knowledge and skills required for the practice of *dentistry* (3.1.2.2)

Note 1 to entry: The designation of “dentistry” can vary according to the legal usage of the term in the country concerned.

3.1.2.4

oral health programme

activity planned to improve the *oral health* (3.1.2.1) of the community

3.1.2.5

oral status and intervention index

OSI index

index that classifies the oral status and the relating interventions needed, on a ten-point scale from 0 (good health, no need for treatment) to 9 (complicated, invasive and costly care needed)

3.1.2.6

preventive dentistry

part of *dentistry* (3.1.2.2) concerned with promoting *oral health* (3.1.2.1) and function by preventing or reducing the onset and/or development of oral diseases or deformities and the occurrence of orofacial injuries

3.1.2.7**community dentistry**
public health dentistry

part of *dentistry* (3.1.2.2) concerned with *oral health* (3.1.2.1) in relation to the general health of the community

3.1.2.8**cariology**

part of *dentistry* (3.1.2.2) concerned with aetiology, pathology and prevention of *dental caries* (3.1.3.15)

3.1.2.9**pediatric dentistry, US**

DEPRECATED: paedodontic dentistry, GB

DEPRECATED: paedodontics, GB

DEPRECATED: pedodontics, US

branch of *dentistry* (3.1.2.2) concerned with children including the diagnosis, treatment, prevention of oral anomalies, other conditions and injuries

3.1.2.10**orthodontics**

part of *dentistry* (3.1.2.2) concerned with the study of craniofacial growth and development, and the treatment or prevention of malocclusions and other dentofacial anomalies

3.1.2.11**operative dentistry**

part of *dentistry* (3.1.2.2) that focus on the *restoration* (3.1.4.13) of hard tissues of teeth to normal function and aesthetics that could have been compromised by disease, trauma or acquired or non-acquired anomalies

3.1.2.12**endodontics**

part of *dentistry* (3.1.2.2) concerned with the diagnosis and treatment of the diseases of the *pulp* (3.1.1.25) and contiguous periapical tissues

3.1.2.13**periodontics**

periodontology

DEPRECATED: periodontia

part of *dentistry* (3.1.2.2) concerned with the study, prevention, and treatment of diseases affecting the *periodontium* (3.1.1.27)

3.1.2.14**prosthodontics**

part of *dentistry* (3.1.2.2) that is concerned with the functional and aesthetic rehabilitation of the masticatory system by artificial replacement of missing teeth and associated tissues

3.1.2.15**forensic dentistry**

forensic odontology, US

part of *dentistry* (3.1.2.2) which deals with the examination, interpretation and presentation of dental and oral evidence for legal purposes

3.1.3 Clinical concepts**3.1.3.1****intraoral radiography**

radiography whereby the image receptor is positioned intraorally

3.1.3.2

impacted tooth

tooth in a state of partial or total impeded eruption

3.1.3.3

mastication

process of chewing food in preparation for swallowing and digestion

3.1.3.4

occlusion

static and dynamic relationship between the contacting surfaces of the mandibular and maxillary teeth or tooth analogues

3.1.3.5

mottling

uneven patches in the *enamel* (3.1.1.14) or the *dentine* (3.1.1.16) associated with the clinical crown appearing on natural teeth; or similar patches intentionally placed on surfaces of artificial teeth

3.1.3.6

tooth erosion

dental erosion

progressive loss of calcified dental tissue by chemical processes that do not involve bacterial action

3.1.3.7

dentine conditioning

modification of the *dentine* (3.1.1.16) surface by means of chemical substances or other treatment

3.1.3.8

indirect pulp capping

dressing for conserving the vitality of the *pulp* (3.1.1.25) of a tooth infected with a penetrating carious lesion, the complete excision of which could result in exposure of the *pulp* (3.1.1.25)

3.1.3.9

direct pulp capping

dressing of an exposed *pulp* (3.1.1.25) with the aim of maintaining pulpal vitality

3.1.3.10

pulpotomy

DEPRECATED: pulp amputation

surgical removal of a portion of the *pulp* (3.1.1.25) with the aim of maintaining the vitality of the remaining portion by means of adequate dressing

3.1.3.11

pulpectomy

vital pulp extirpation

complete surgical removal of the vital *pulp* (3.1.1.25)

3.1.3.12

anchorage

configuration or preparation suitable for the retention or support of a *dental prosthesis* (3.3.1.19) or *orthodontic appliance* (3.2.6.2)

3.1.3.13

Ante's law

<fixed or removable partial prosthodontics> principle that states that the combined pericemental area of all abutment teeth supporting a partial *denture* (3.3.1.19) should be equal to or greater in the pericemental area than the tooth or teeth to be replaced

3.1.3.14**Ante's law**

<dental implantology> principle that states that the bone contacting the surface of the teeth being replaced should approximate half of the periodontal ligament surface area of the teeth being replaced

3.1.3.15**dental caries**

biofilm-mediated, sugar-driven, multifactorial, dynamic disease that occurs when the net balance of the phasic *demineralization* (3.1.3.27) and *remineralization* (3.1.3.28) of dental hard tissues favours demineralization

3.1.3.16**caries process**

dynamic sequence of biofilm-tooth interactions which can occur over time on and within a tooth surface leading to *dental caries* (3.1.3.15)

3.1.3.17**caries lesion**

change in the tooth structure that results from the *caries process* (3.1.3.16)

3.1.3.18**caries lesion detection****carious lesion detection**

examination by visual or any other relevant means of the tooth structure to detect *caries lesions* (3.1.3.17)

3.1.3.19**caries lesion assessment****carious lesion assessment**

evaluation of the characteristics of a *caries lesion* (3.1.3.17)

3.1.3.20**caries diagnosis**

human professional summation of all the signs and symptoms of disease to arrive at an identification of the past or present occurrence of the disease caries

3.1.3.21**caries lesion severity**

stage of lesion progression along the spectrum of net mineral loss, from the initial loss at a molecular level to total tissue destruction

3.1.3.22**white-spot lesion**

caries lesion severity (3.1.3.21) where the net subsurface mineral loss has produced changes in the optical properties of enamel such that these are visibly detectable as a loss of translucency, resulting in a white appearance of the enamel surface

3.1.3.23**brown-spot lesion**

caries lesion severity (3.1.3.21) where the net subsurface mineral loss in conjunction with the acquisition of intrinsic or exogenous pigments has produced changes in the optical properties of enamel such that these are visibly detectable as a loss of translucency and a brown discolouration, resulting in a brown appearance of the enamel surface

3.1.3.24**non-cavitated lesion**

caries lesion (3.1.3.17) whose surface appears macroscopically to be intact

3.1.3.25

microcavity

microcavitation

initial *caries lesion* ([3.1.3.17](#)) within an occlusal surface which has lost its original contour and integrity, without the formation of a clinico-visually distinct *cavity* ([3.1.3.26](#))

3.1.3.26

cavity

cavitated lesion

caries lesion ([3.1.3.17](#)) with a surface which is not macroscopically intact, with a distinct discontinuity or break in the surface integrity, as determined using optical or tactile means

3.1.3.27

demineralization

loss of calcified material from the structure of the tooth

3.1.3.28

remineralization

net gain of calcified material within the tooth structure, replacing calcified material which was previously lost by *demineralization* ([3.1.3.27](#))

3.1.3.29

caries lesion activity

summation of the dynamics of the *caries process* ([3.1.3.16](#)) resulting in the net loss, over time, of mineral from a *caries lesion* ([3.1.3.17](#))

3.1.3.30

active caries lesion

caries lesion ([3.1.3.17](#)), from which, over a specified period of time, there is net mineral loss

3.1.3.31

caries lesion behaviour

changes, if any, occurring in the status of a lesion over time in response to the balance between *demineralization* ([3.1.3.27](#)) and *remineralization* ([3.1.3.28](#))

3.1.3.32

arrested caries lesion

inactive caries lesion

lesion which is not undergoing net mineral loss—the *caries process* ([3.1.3.16](#)) in a specific location is no longer progressing

3.1.3.33

caries lesion regression

net gain of calcified material to the structure of a caries lesion, replacing that which was previously lost by *caries demineralization* ([3.1.3.27](#))

3.1.3.34

caries lesion prognosis

likely future behaviour of a specific *caries lesion* ([3.1.3.17](#)), over a specified time-period, as assessed by a clinician — taking into account the summation of the multiple factors impacting the possible progression, arrest or regression of the lesion

3.1.4 Devices and occupational concepts

3.1.4.1

dentist

person licensed by a regulatory body to practise *dentistry* ([3.1.2.2](#))

3.1.4.2**dental surgery, GB****dental operatory, US**

room or workspace within the dental office where *oral health* (3.1.2.1) professionals provide dental treatment

3.1.4.3**working area of the oral health care provider**

space organized around the *dentist* (3.1.4.1) and equipped for positioning and treatment of the patient

3.1.4.4**dental technician**

DEPRECATED: dental laboratory technician

qualified professional competent to perform *dental laboratory* (3.1.4.5) work under the prescription of the *dentist* (3.1.4.1)

3.1.4.5**dental laboratory**

facility where dental technical procedures complementing dental clinical treatment are carried out

3.1.4.6**hybrid layer**

resin-reinforced *dentine* (3.1.1.16) layer created by the intermixture of polymerized adhesive resin monomers and dentine collagen

3.1.4.7**dental device**

instrument, apparatus, appliance, software, material or other article, whether used alone or in combination, including the software necessary for its proper application, intended by the manufacturer to be used for human beings for the purpose of:

- diagnosis, prevention, monitoring, treatment or alleviation of oral disease;
- diagnosis, monitoring, treatment, alleviation of or compensation for cranio-facial injury or oral handicap;
- investigation, replacement or modification of the cranio-facial anatomy or of a physiological process and which does not achieve its principal intended action in or on the human body by pharmacological, immunological or metabolic means, but which may be assisted in its function by such means;

Note 1 to entry: This definition was derived from an almost identical definition approved by the Global Medical Devices Nomenclature (GMDN), an agency that is represented in Asia, Australia, New Zealand, Europe, the United States (Food and Drug Administration) and other countries of the Americas.

[SOURCE: Global Medical Devices Nomenclature (GMDN), modified — Note 1 to entry has been added.]

3.1.4.8**dental material**

substance or combination of substances specially formulated and prepared for use in the practice of *dentistry* (3.1.2.2) and/or associated procedures

3.1.4.9**dental product**

dental device (3.1.4.7), *dental material* (3.1.4.8), *dental instrument* (3.4.3.5), item of *dental equipment* (3.5.1), *dental laboratory* (3.1.4.5) product or oral care product

3.1.4.10**filling**

result of obturating a tooth *cavity* (3.1.3.26)

3.1.4.11

filling material

dental material (3.1.4.8) designed for obturating a tooth *cavity* (3.1.3.26), which is not intended to be removed by the patient

3.1.4.12

dental primer

substance that enhances adaptation of resin-based materials to substrate by inducing wettability and/or permeability between the resin-based material and/or the treated *dentine* (3.1.1.16) and enamel surfaces

3.1.4.13

restoration

dental restoration

dental device (3.1.4.7) that replaces excavated or lost tooth structure, teeth or oral tissues

3.1.4.14

temporary filling material

filling material (3.1.4.11) intended to serve until a permanent *restoration* (3.1.4.13) can be placed

3.1.4.15

radicular extension

radicular post

portion of the *endodontic post* (3.2.2.4) which, once inserted, projects in an *apical* (3.1.1.26) direction

3.1.4.16

articulating paper

contact-indicating material

strip or sheet or other media releasing pigments for marking areas of contacts between teeth and/or *restorations* (3.1.4.13) or appliances

3.1.4.17

effective setting time

<materials setting at or near oral or room temperature> time measured from the commencement of mixing components of a material or otherwise activating the chemistry involved, and ending at the time the activated material has developed the properties (e.g. elasticity, hardness) that permits it to be used with optimal effectiveness in a subsequent step or for its intended end purpose

3.1.4.18

functional life

effective life

number of times a dental product can be recycled for use without loss of the properties required to insure the product continues to be fit for the purpose intended if handled and used according to the manufacturer's instructions

3.1.4.19

dental prosthesis

dental device (3.1.4.7) replacing one or more missing teeth and, if required, associated anatomical structures

3.1.4.20

dental orthosis

dental device (3.1.4.7) used to assist or modify the structural and functional characteristics of the neuro-muscular and skeletal systems

3.2 Restorative and orthodontic materials

3.2.1 ZOE cements

3.2.1.1

zinc oxide-EBA cement

dental cement ([3.2.5.5](#)) formed by reaction of zinc oxide powder with eugenol and ethoxy-benzoic acid

3.2.1.2

zinc oxide-eugenol cement

dental cement ([3.2.5.5](#)) formed by reaction between zinc oxide powder and eugenol

3.2.1.3

modified zinc-oxide eugenol cement

dental cement ([3.2.5.5](#)) which sets by a reaction between zinc-oxide and eugenol and that contains other additives

Note 1 to entry: This identical term is also located at [3.2.5.8](#). It is appropriate to collocate this term due to the structure of the systematic arrangement of this document.

3.2.1.4

non-eugenol zinc oxide cement

dental cement ([3.2.5.5](#)) that sets by a reaction between zinc oxide and an oil other than eugenol

Note 1 to entry: This identical term is also located at [3.2.5.9](#). It is appropriate to collocate this term due to the structure of the systematic arrangement of this document.

3.2.1.5

reinforced zinc oxide-eugenol cement

zinc oxide-eugenol cement ([3.2.1.2](#)) to which polymeric and/or inorganic filler has been added

3.2.2 Endodontic materials

3.2.2.1

endodontic absorbent point

root canal absorbent point

paper point

slender cone made of an absorbent material (usually paper) and designed for absorbing liquids during *endodontics* ([3.4.4.2](#))

3.2.2.2

endodontic obturating cone

obturating cone

obturating point

tapered cone made in various sizes and of several materials for use in obturating root canals during endodontic treatment procedures

3.2.2.3

endodontic material

dental material ([3.1.4.8](#)) specifically made for use in the *pulp* ([3.1.1.25](#)) chamber and root canal in endodontic procedures

3.2.2.4

root canal post

endodontic post

post

dental device ([3.1.4.7](#)), one part of which is designed to be inserted into a prepared root canal for retention while another part extends coronally from the root canal to provide support for a *dental restoration* ([3.1.4.13](#))

3.2.2.5

root post flange

projecting ring on certain *root posts*, which demarcates the coronal portion from the part intended to fit into the root canal

3.2.3 Resin-based pit and fissure sealants

3.2.3.1

pit and fissure sealant

dental material (3.1.4.8) specifically designed for application in the prophylactic sealing of pits and fissures of dental enamel

3.2.4 Amalgam/mercury

3.2.4.1

dental amalgam

filling material (3.1.4.11) prepared by mixing mercury with *dental amalgam alloy* (3.2.4.2)

3.2.4.2

dental amalgam alloy

powder or compressed powder pellets of an alloy consisting mainly of silver, tin and copper which, when mixed with mercury, produces a *dental amalgam* (3.2.4.1)

3.2.5 Luting cements, bases and liners

3.2.5.1

calcium hydroxide cement

lining or *pulp* (3.1.1.25) capping material containing calcium hydroxide as its major component

3.2.5.2

cavity lining material

dental material (3.1.4.8) used to line prepared cavities for protection of pulpal tissues

3.2.5.3

cement base

dental cement (3.2.5.5) placed under a *restoration* (3.1.4.13) to provide mechanical support

3.2.5.4

composite dental cement

dental cement (3.2.5.5) consisting of a polymerizable resin and inorganic fillers treated with a bonding or coupling agent

3.2.5.5

dental cement

dental material (3.1.4.8) used for temporary or permanent:

- luting of dental prostheses and lining or base filling of prepared teeth;
- substitution of missing parts of teeth

3.2.5.6

conventional glass-ionomer cement

ionic polymer cement

glass polyalkenoate cement

polyelectrolyte cement

dental material (3.1.4.8) which sets by an acid-base reaction, after mixing a basic powder (mainly a fluoroaluminosilicate glass) with an acidic liquid (mainly a polyalkenoic acid)

3.2.5.7**resin-modified glass-ionomer**

conventional glass-ionomer cement (3.2.5.6) modified by the addition of a polymerizable resin

3.2.5.8**modified zinc-oxide eugenol cement**

dental cement (3.2.5.5) which sets by a reaction between zinc-oxide and eugenol that contains other additives

3.2.5.9**non-eugenol zinc oxide cement**

dental cement (3.2.5.5) which sets by a reaction between zinc oxide and an oil other than eugenol

3.2.5.10**polymeric cement**

dental cement (3.2.5.5) that sets principally by polymerization of resin components

3.2.5.11**resin cement****polymeric cement**

dental cement (3.2.5.5) which sets by a reaction with salicylate ions and resin components

3.2.5.12**resin-modified calcium hydroxide cement**

DEPRECATED: modified calcium hydroxide cement

dental cement (3.2.5.5) designed for *cavity* (3.1.3.26) lining, containing a significant amount of calcium hydroxide and fillers, which sets by an organic chelating agent and resin components

3.2.5.13**zinc phosphate cement**

dental cement (3.2.5.5) formed by reaction between zinc oxide powder and orthophosphoric acid

3.2.5.14**zinc polycarboxylate cement****zinc polyacrylate cement**

polycarboxylate cement

dental cement (3.2.5.5) formed by reaction between zinc oxide and a polycarboxylic acid

3.2.5.15**water-based cement**

dental cement (3.2.5.5) that sets due to an acid-base reaction

3.2.6 Orthodontic products**3.2.6.1****bracket**

<orthodontics> structural unit attached to a band or base that is capable of retaining an archwire

3.2.6.2**orthodontic appliance**

<orthodontics> dental appliance that is wired or otherwise affixed to the teeth and that can be tightened in order to straighten or move the teeth as required

3.2.6.3**fixed orthodontic appliance**

intraoral *orthodontic appliance* (3.2.6.2) with components designed for placement and removal only by the practitioner

3.2.6.4

removable orthodontic appliance

orthodontic appliance (3.2.6.2) designed to be removed and re-inserted periodically by the patient after initial placement by the *dentist* (3.1.4.1)

3.2.6.5

retainer

dental device (3.1.4.7) designed for prevention of tooth migration, stabilization of dentofacial structure or to retain a dentofacial correction

3.2.7 Adhesive and etching components

3.2.7.1

dentine bonding agent

dental material (3.1.4.8) specifically formulated for bonding to *dentine* (3.1.1.16)

3.2.7.2

dentine conditioning

modifying a *dentine* (3.1.1.16) surface by means of chemical substances or other treatment

3.2.7.3

enamel bonding agent

dental material (3.1.4.8) specifically formulated to facilitate bonding to the *enamel* (3.1.1.14)

3.2.7.4

enamel conditioning

modifying an *enamel* (3.1.1.14) surface by means of chemical substances or other treatment

3.3 Prosthodontic materials

3.3.1 General prosthodontics concepts

3.3.1.1

abutment

structure that serves to support or retain a *dental prosthesis* (3.3.1.19)

3.3.1.2

anatomic portion

<model or cast> that portion of a model or cast representing the tissue surfaces or structures

3.3.1.3

anatomical articulator

articulator (3.3.1.7) capable of simulating mandibular lateral and protrusive movements

3.3.1.4

anterior tooth set

set of six artificial *anterior teeth* (3.1.1.2), mandibular or maxillary, matched for shade, shape and size

3.3.1.5

artificial crown

single unit *dental restoration* (3.1.4.13) or *prosthesis* (3.3.1.19) intended to cover or replace the major part or whole of the clinical crown

3.3.1.6

art portion

part of a model/cast, usually the base, that can be trimmed arbitrarily without affecting the anatomical part

3.3.1.7**articulator**

instrument to which maxillary and mandibular models/casts can be attached, in a prescribed relationship, so as to simulate all or parts of the mandibular movements

3.3.1.8**attachment**

prosthetic attachment

part of a *dental prosthesis* (3.3.1.19) that provides *anchorage* (3.1.3.12) by engagement of a *matrix* (3.3.1.35) and a *patrix* (3.3.1.41) component

3.3.1.9**block-out**

<master model/cast> flowing or moulding waxes and/or materials such as cements, clays and other polymeric materials into undercut areas on master models (casts) and then shaping them so as to leave only those undercuts that are essential to the subsequent steps in producing a *dental prosthesis* (3.3.1.19) that fits and functions

3.3.1.10**cantilever extension**

DEPRECATED: cantilever bridge

part of a *fixed partial denture* (3.3.1.25) that extends unsupported beyond the *abutment* (3.3.1.1) to which it is attached

3.3.1.11**cervical resin**

intensely pigmented slightly translucent *polymer-based material* having colours simulating those of cervical parts of natural teeth

3.3.1.12**combination prosthesis**

dental prosthesis (3.3.1.19) in which a removable *denture* (3.3.1.19) is combined with one or more *fixed prostheses* (3.3.1.26)

3.3.1.13**complete denture**

removable *dental prosthesis* (3.3.1.19), made to fit an edentulous mandibular or maxillary arch

3.3.1.14**complete tooth set**

twenty-eight artificial teeth; fourteen maxillary and fourteen mandibular

3.3.1.15**connecting bar**

superstructure supported by multiple *abutments* (3.3.1.1), to which a *dental prosthesis* (3.3.1.19) is to be attached

3.3.1.16**coping**

custom-made or pre-fabricated thimble-shaped core or base layer designed to fit over an *abutment* (3.3.1.1)

3.3.1.17**coping impression**

coping pick-up impression

pick-up impression

impression made with *coping(s)* (3.3.1.16) seated on the *abutments* (3.3.1.1) for the purpose of transferring it (them) to a model (cast)

3.3.1.18

core build-up

restoration made to provide a retentive base for a prosthetic crown

3.3.1.19

dental prosthesis

denture

dental device (3.1.4.7) replacing one or more missing teeth and, if required, associated anatomical structures

3.3.1.20

dental veneer

thin *restoration* (3.1.4.13) fixed to a tooth to alter its shape or colour

3.3.1.21

diagnostic model, GB

diagnostic cast, US

DEPRECATED: study model

DEPRECATED: study cast

model (cast) intended to be used mainly for diagnostic purposes

3.3.1.22

dentine resin

polymer-based material, used to simulate the natural appearance of the *dentine* (3.1.1.16) in a resin-based *restoration* (3.1.4.13) or *dental prosthesis* (3.3.1.19)

3.3.1.23

denture adhesive

dental product (3.1.4.9) placed on the *intaglio surface* (3.3.1.32) of a removable *denture* (3.3.1.19) to temporarily improve its retention to soft supporting tissues

3.3.1.24

enamel resin

translucent, lightly pigmented polymer-based material used to simulate the natural appearance of *enamel* (3.1.1.14), including the incisal portion of a resin-based *restoration* (3.1.4.13) or *dental prosthesis* (3.3.1.19)

3.3.1.25

fixed partial denture

fixed partial prosthesis

DEPRECATED: bridge

fixed prosthesis (3.1.3.13) replacing one or more missing teeth

3.3.1.26

fixed prosthesis

dental prosthesis (3.3.1.19) attached to one or more *abutments* (3.3.1.1), non-removable by the patient

3.3.1.27

fixed/removable prosthesis

combination prosthesis (3.3.1.12), one or more parts of which are fixed and the other(s) attached by devices that allow their detachment, removal and re-insertion by the *dentist* (3.1.4.1) only

3.3.1.28

framework

skeletal portion of a *dental prosthesis* (3.3.1.19) (usually metal) to which other essential components are attached to produce a functional dental prosthesis

3.3.1.29

glazing resin

highly flowable polymer-based *dental material* (3.1.4.8) to be applied as a coating to enhance the surface finish of *dental restorations* (3.1.4.13) and dental prostheses

3.3.1.30**individual die
unit die**

part of a *working model* (3.3.1.46), usually removable, consisting of a reproduction of one tooth

3.3.1.31**initial setting time**

time measured from the commencement of mixing components of a material or otherwise activating the chemistry involved and ending at a time when results of a prescribed test, conducted at a specified temperature, show that the mixture has begun to set, thus indicating that the effective setting time is reached at some predictable time thereafter

3.3.1.32**intaglio surface**

surface of a *dental prosthesis* (3.3.1.19) or other *restoration* (3.1.4.13) resting on and supported by mucosa or tooth structure

3.3.1.33**investment model, GB****investment cast, US**

positive investment reproduction of an object such as a *master model* (3.3.1.34)

3.3.1.34**master model, GB****definitive cast, US**

definitive model

DEPRECATED: master cast, US

model derived from an impression of the natural tissues after those tissues have been evaluated, modified, or treated as might be necessary for optimal performance of a *dental restoration* or appliance resulting from use of this model or cast

3.3.1.35**matrix**

portion of an *attachment* (3.3.1.8) system that receives the *patrix* (3.3.1.41)

3.3.1.36**mixing time**

<dental materials> part of the manipulation time, measured from first contact between different components of a material, required to achieve a homogenous mixture of the components when they have been stored, proportioned, and mixed according to the manufacturer's instructions

3.3.1.37

model, noun GB

cast, noun US

reproduction in a positive form of a complete or partial dental arch made to replicate the tooth and soft tissue surfaces relevant to the construction of a *dental restoration* (3.1.4.13), a prosthesis or some other dental treatment

3.3.1.38**mouth protector****mouth guard, US**

dental device (3.1.4.7) designed primarily to be worn in the mouth for the prevention of injuries to the teeth and their surrounding intra- and extraoral tissues

3.3.1.39**opaquer**

dental material (3.1.4.8) which, when applied to an underlying substructure, acts in such a way as to mask out or alter the underlying colour

3.3.1.40

opaque resin

polymer-based *dental material* (3.1.4.8) which, when applied to a substructure in accordance with the manufacturer's instructions, bonds to the surface and forms a layer that masks the underlying colour

3.3.1.41

patrix

extension of a *dental attachment* system that fits into the *matrix* (3.3.1.35)

3.3.1.42

pattern

<lost wax process> hand-crafted or industrially manufactured polymeric or wax shape used to form all or part of the surfaces of a mould in which a positive copy of the shape can be reproduced by means of the lost wax process

3.3.1.43

pattern material

mouldable wax or polymeric material for free hand-shaping of *patterns* (3.3.1.42) needed for use in the lost wax process of making moulds into which materials can be cast, pressed or poured to form individual *restorations* (3.1.4.13), fixed or removable *denture* (3.3.1.19) parts or splints, or such materials used for making industrially formed *patterns* having a variety of shapes and dimensions such as clasp- and bar-shaped *patterns* (3.3.1.42), cylindrical and half-round rod shapes and flat sheets used in forming *pattern* (3.3.1.42) assemblies

3.3.1.44

plain line articulator

simple type of *articulator* (3.3.1.7) which provides hinge-type movements only

3.3.1.45

removable partial denture

removable *dental prosthesis* (3.3.1.19) that replaces some but not all of the teeth in one arch

3.3.1.46

working model, GB

working cast, US

die dental model on which *dental devices* (3.1.4.7) are fabricated or adjusted

3.3.2 Dental ceramics

3.3.2.1

air-fired dental ceramic

dental ceramic (3.3.2.4) designed for being fired at ambient atmospheric pressure

3.3.2.2

ceramic glaze

dental ceramic (3.3.2.4) having a lower fusing temperature than the ceramic structure to which it is applied in order to provide a thin transparent surface with a reflectivity similar to that of a natural tooth

3.3.2.3

ceramic tooth

DEPRECATED: porcelain tooth

prefabricated artificial tooth made of *dental ceramic* (3.3.2.4)

3.3.2.4

dental ceramic

ceramic material specially prepared for use in the fabrication of *dental prosthesis* (3.3.1.19) and *restorations* (3.1.4.13)

3.3.2.5**dental ceramic for core**

dental ceramic (3.3.2.4) for building up a *dental restoration* (3.1.4.13) or *dental prosthesis* (3.3.1.19)

3.3.2.6**dentine ceramic**

slightly translucent, pigmented *dental ceramic* (3.3.2.4) used to simulate the natural appearance of *dentine* (3.1.1.16) in a *dental ceramic restoration* (3.1.4.13) or *dental prosthesis* (3.3.1.19)

3.3.2.7**enamel ceramic**

slightly translucent, pigmented *dental ceramic* (3.3.2.4) used to simulate the natural *enamel* (3.1.1.14) in a *dental ceramic restoration* (3.1.4.13) or *dental prosthesis* (3.3.1.19)

3.3.2.8**glass-infiltrated ceramic**

DEPRECATED: glass-infused ceramic

dental ceramic (3.3.2.4) core or substructure/base layer which is porous and is subsequently densified by the infiltration of specialized glass at elevated temperature to strengthen a *dental restoration* (3.1.4.13) or *dental prosthesis* (3.3.1.19)

3.3.2.9**natural glaze**

self-glaze

surface finish obtained by firing a previously sintered *dental ceramic* (3.3.2.4) at a temperature that causes fusion of the external surface particles without addition of any fluxes or lower-fusing ceramics

3.3.2.9.10**opalescent ceramic**

dental ceramic (3.3.2.4) containing microfine particulates, with a refractive index significantly different from the ceramic matrix in which they are incorporated

3.3.2.11**opaque ceramic**

opaque bonding ceramic

dental ceramic (3.3.2.4) having opacity characteristics for the purpose of masking the colour of the supporting structure, and having the ability to bond to it

3.3.3 Impression materials**3.3.3.1****agar impression material**

agar hydrocolloid

DEPRECATED: thermally reversible hydrocolloid

hydrocolloid impression material consisting principally of an aqueous solution of the polysaccharide agar-agar and capable of reversibly undergoing the sol-gel thermal transition without deterioration

3.3.3.2**alginate impression material**

alginate hydrocolloid

DEPRECATED: alginate-based impression material

non-reversible hydrocolloid impression material (3.3.3.17) containing soluble alginate and additives which, when mixed with water, form a gel on setting by the precipitation of an insoluble salt

3.3.3.3**dental impression plaster**

beta form of calcium sulfate hemihydrate used for making impressions of edentulous maxillary and mandibular dental arches and for interocclusal records or as a *wash material* (3.3.3.20)

3.3.3.4

duplicating material

impression material for *dental laboratory* (3.1.4.5) procedures

3.3.3.5

elastic impression material

impression material that develops the elastic properties needed for removal of impressions from the mouth without portions being fractured or with only minimal distortions

3.3.3.6

elastomeric impression material

elastic impression material (3.3.3.6) based on polymers which, after setting, exhibits rubber-like characteristics

3.3.3.7

functional impression material

slow-setting or thermoplastic impression material used to record soft tissues under muscular activity and conditions simulating those occurring when a patient chews or flexes cranio-facial and lingual muscles

3.3.3.8

hydrocolloid impression material

colloidal impression material such as agar or alginate, the dispersing phase of which is water

3.3.3.9

impression tray

dental device (3.1.4.7) for containing and controlling the flow of impression material during impression procedures and for supporting the impression material in steps thereafter

3.3.3.10

jaw relation recording material

DEPRECATED: jaw relation recording paste

DEPRECATED: bite registration material

DEPRECATED: bite registration paste

dental material (3.1.4.8) used for registering the relationship of opposing mandibular and maxillary structures

3.3.3.11

non-aqueous impression material

impression material such as zinc oxide-eugenol, elastomeric or compound impression material, not containing water as a solvent or dispersing medium

3.3.3.12

non-reversible hydrocolloid

DEPRECATED: irreversible hydrocolloid

alginate-based hydrocolloid that cannot be returned to a paste-like state after it sets

3.3.3.13

polyether impression material

elastomeric impression material (3.3.3.6) including a compound based on a polyether

3.3.3.14

polysulfide impression material

polysulfide-based impression material

elastomeric impression material (3.3.3.6) based on an organic polymer in which the repeating units are linked by disulfide groups

3.3.3.15

polyvinylsiloxane impression material

elastomeric impression material (3.3.3.6) setting by a polyaddition reaction of vinylpolysiloxanes and hydrogenpolysiloxanes

3.3.3.16**reversible duplicating material**

duplicating material (3.3.3.4) that can be recycled for more than one use

3.3.3.17**reversible/non-reversible hydrocolloid impression material system**

agar-alginate combination impression system

DEPRECATED: irreversible-reversible impression material system

DEPRECATED: agar-alginate material

agar and alginate material identified as being compatible for use together in making an impression

3.3.3.18**rigid impression material**

non-elastic materials such as plaster, zinc oxide-eugenol or impression compound used primarily for making impressions of edentulous mandibular and maxillary dental arches

3.3.3.19**silicone impression material**

silicone-based impression material

elastomeric impression materials (3.3.3.6) based on polysiloxane

3.3.3.20**wash material**

low-viscosity impression material used to improve the precision of a pre-existing impression

3.3.3.21**water-cooled impression tray**

water-cooled tray

impression tray for reversible hydrocolloid materials fitted with conduits for circulation of water to hasten cooling of the impression material to the gel state

3.3.3.22**working time**

total working time

period of time measured from the commencement of mixing components of a material or otherwise activating the chemistry of the material and ending before the material has developed properties that prevents it from being manipulated as required to achieve its purpose in a subsequent procedure or in its intended end function

3.3.4 Noble metal casting alloys**3.3.4.1****noble metal**

gold and metals of the platinum group

3.3.4.2**noble metal alloy**

DEPRECATED: precious metal alloy

DEPRECATED: semi-noble alloy

alloy having gold and/or elements of the platinum group as principal ingredient(s)

3.3.4.3**base metal**

any metallic element with the exception of *noble metals* (3.3.4.1) and silver

3.3.4.4**base metal alloy**

alloy having a *base metal* (3.3.4.3) as the principal element

3.3.5 Resilient lining materials

3.3.5.1

denture base lining material

denture base lining material (3.1.4.8) designed to be used on the intaglio surface of a *denture base* (3.3.6.1) to modify its adaptation to soft tissues

3.3.5.2

denture base relining material

denture base relining material (3.1.4.8) used for replacing an existing *intaglio surface* (3.3.1.32) of a *denture base* (3.3.6.1), or adding to it, so as to improve fit or function

3.3.5.3

denture base temporary lining material

denture base lining material (3.3.5.1) intended to remain serviceable for a period up to 30 days in the patient's mouth

3.3.5.4

denture rebasing

process of providing a new *denture base* (3.3.6.1) without replacing the artificial teeth of the *denture* (3.3.1.19)

3.3.5.5

denture relining

process of providing a new *intaglio surface* (3.3.1.32) of a *denture base* (3.3.6.1)

3.3.5.6

short-term denture base lining material

denture base lining material (3.3.5.1) intended to remain serviceable in the patient's mouth for a period up to 7 days

3.3.5.7

tissue-conditioning material

viscoelastic *denture base lining material* (3.3.5.1) intended to permit the physiological recovery of soft tissues with the *denture* (3.3.1.19) in place

3.3.6 Denture base polymers

3.3.6.1

denture base

part of a removable *denture* (3.3.1.19) which carries the artificial teeth and is usually in contact with the soft tissues

3.3.6.2

denture base material

denture base material (3.1.4.8) designed to form a *denture base* (3.3.6.1)

3.3.6.3

packing time

period of time during which a material can be expected to remain at the packing consistency after mixing or other preparatory treatment

3.3.6.4

trial denture

preliminary arrangement of *denture* (3.3.1.19) teeth that has been prepared for placement in the patient's mouth to evaluate the appearance and maxillo-mandibular relationships

3.3.6.5

trial packing

<denture base material> one or more series of procedures conducted to ensure that the *denture base material* (3.3.6.2) is properly packed into a *denture base* (3.3.6.1) forming mould

3.3.7 Dental waxes

3.3.7.1

casting wax

DEPRECATED: inlay wax

dental wax (3.3.7.2) that, because of its minimal ash residue and controlled dimension variations, is suitable for making *patterns* (3.3.1.42) for cast *dental restorations* (3.1.4.13) or *dental prostheses* (3.3.1.19) using the lost wax process

3.3.7.2

dental wax

mixture having properties similar to those of natural waxes, consisting mostly of hydrophobic, weak, low-melting-point solids, and formulated for use in dental procedures

3.3.7.3

modelling wax

dental wax (3.3.7.2) that, by its composition, is designed for forming *patterns* (3.3.1.42) to be reproduced in non-metallic materials, or for other uses such as forming *occlusion rims* (3.3.7.5), or *denture base* (3.3.6.1) patterns, or wax patterns of non-metallic parts of *dental restorations* (3.1.4.13) or *dental prosthesis* (3.3.1.19)

3.3.7.4

non-adhesive wax

flat preformed wax *pattern* (3.3.1.42) that has not been formulated or treated to make it adhesive

3.3.7.5

occlusion rim

record rim

DEPRECATED: bite rim

straight and/or curved wax components attached to a permanent or temporary baseplate, later to be shaped in a subsequent denture development step

3.3.7.6

occlusion rim wax

occlusion wax

dental wax (3.3.7.2), other than tooth-coloured, that is soft enough at mouth temperature, or that can be warmed to make it soft enough for use in registering intercuspal tooth relationships

3.3.7.7

pattern wax

DEPRECATED: dental wax

wax used for forming shapes of *restorations* (3.1.4.13) and prostheses (or parts thereof) to be reproduced in metal or polymeric material via the lost wax process

3.3.7.8

plasticized wax

pattern wax (3.3.7.7) containing natural or synthetic resins that make it more adaptable for manipulation at submelting temperatures to which they are exposed during formation of a *pattern* (3.3.1.42) or pattern assembly

3.3.7.9

preformed patterns

manufactured wax or polymeric *pattern* (3.3.1.42) forms provided in a variety of standard sizes and shapes such as for clasps and bars, occlusal surfaces or teeth and flat sheets, some of which are adhesive-backed and/or stippled on one surface, and all of which are designed to reduce the amount of free-hand waxing required for producing fixed or removable denture components

3.3.7.10

sticky wax

dental wax (3.3.7.2) formulated to be adhesive when melted and rigid at room or mouth temperature

3.3.7.11

tooth mounting wax

modelling wax designed for securing artificial teeth in desired positions on a *denture base* (3.3.6.1) pattern so that, when lower-melting-range waxes are added to complete the *patterns* (3.3.1.42), the teeth remain in the positions of their original arrangement

3.3.8 Artificial teeth

3.3.8.1

mould chart, GB

mold chart, US

detailed illustration of all of the shapes and sizes of artificial teeth marketed under the same brand name by one manufacturer

3.3.8.2

ridge lap

surface of an artificial tooth shaped to fit nearest to an intaglio surface of a *denture* (3.3.1.19) or in contact with the alveolar ridge

3.4 Instruments

3.4.1 Rotary instruments

3.4.1.1

air turbine

air rotor

air-driven rotor capable of high speed used as the propulsive unit of a *dental handpiece* (3.4.2.2)

3.4.1.2

friction grip

FG

rotary instrument fixation system, centring and driving achieved through an elastic deformation of the gripping device

3.4.1.3

rotary instrument

instrument, consisting of a shank and a working part, used with a continuous rotation in a handpiece used for dental procedures

3.4.1.4

oscillating instrument

instrument, consisting of a shank and a working part, used with an alternate (cyclic) movement, including vibrating used in a handpiece for dental procedures

Note 1 to entry: All movements can be combined with axial movements.

3.4.1.5

shank

part of the shaft of a rotary or oscillating instrument used in *dentistry* (3.1.2.2) which is designed to fit into the chuck of a handpiece or a handpiece for laboratory use

3.4.2 Dental handpieces

3.4.2.1

dental bur

rotary cutting instrument consisting of a head, neck, and shank, designed to fit into a *dental handpiece* (3.4.2.2)

3.4.2.2**dental handpiece**

handheld instrument used in *dentistry* (3.1.2.2) for use in patient treatment

[SOURCE: IEC 80601-2-60:2012,201.3.203]

3.4.2.3**micromotor**

small motor used to power a *dental handpiece* (3.4.2.2) through direct connection

3.4.3 Dental hand instruments**3.4.3.1****amalgam carrier**

dental instrument (3.4.3.5) designed for the collection, transport and deposition of *dental amalgam* (3.2.4.1) in a plastic state into prepared cavities

3.4.3.2**amalgam condenser**

amalgam plugger

hand instrument used for consolidating *dental amalgam* (3.2.4.1)

3.4.3.3**burnisher**

hand-held or rotary instrument with a smooth or ribbed working head designed for refining margins of metallic *restorations* (3.1.4.13) or bands

3.4.3.4**dental elevator**

hand instrument designed for loosening or extracting teeth or tooth roots by displacement or lever action

3.4.3.5**dental instrument**

hand-held tool specially designed for use in *dentistry* (3.1.2.2)

3.4.3.6**excavator**

hand-held *dental instrument* (3.4.3.5) with curved cutting edge designed for cutting and removing caries

3.4.3.7**excavating bur**

dental bur (3.4.2.1) designed for removal of carious *dentine* (3.1.1.16)

3.4.3.8**dental explorer****probe**

hand-held *dental instrument* (3.4.3.5) with a pointed tip designed for tactile examination of tooth surfaces

3.4.3.9**extraction forceps**

type of pincers used for the extraction of teeth

3.4.3.10**laboratory cutter**

DEPRECATED: laboratory bur

rotary cutting instrument used for *dental laboratory* (3.1.4.5) procedures, designed to fit into a *dental handpiece* (3.4.2.2)

3.4.3.11

periodontal curette

hand-held instrument designed for the removal of concretions from the subgingival surfaces of teeth

3.4.3.12

periodontal probe

dental instrument (3.4.3.5) designed to measure subgingival pocket depth

3.4.3.13

three-way syringe

combination syringe

air-water syringe

hand-held device designed to deliver a spray of either compressed air or water or a combination of air and water to the site required by the operator

3.4.4 Endodontic instruments

3.4.4.1

endodontic handpiece

contra-angled handpiece, for use in *endodontics* (3.4.4.2), in association with specially designed endodontic instruments

3.4.4.2

endodontics

part of *dentistry* (3.1.2.2) concerned with the diagnosis and treatment of the diseases of the *pulp* (3.1.1.25) and the contiguous periapical tissues

3.4.4.3

root canal enlargement

operation of widening the pulpal *cavity* (3.1.3.26) of a root by mechanical or mechano-chemical means

3.4.4.4

endodontic instrument

DEPRECATED: root canal instrument

instrument made for the exploration, penetration, preparation or filling of root canals

3.4.4.5

radicular extension

portion of the *endodontic post* (3.2.2.4) which, once inserted, projects in an *apical* (3.1.1.26) direction

3.4.4.6

syndesmotome

dental surgical instrument for cutting *desmodontal* (3.1.1.30) fibres and detaching the alveolodental ligaments

3.5 Dental equipment

3.5.1

dental equipment

furniture, machines, apparatus and accessories thereto, specially made for use in the practice of *dentistry* (3.1.2.2) and/or its associated procedures

3.5.2

operating light

device designed for use by an operator for illuminating the oral *cavity* (3.1.3.26), which distributes, filters and/or transforms the light transmitted from one or more light sources and which includes all parts necessary for supporting, fixing and protecting the light sources, and circuit auxiliaries together with the means of connecting them to the supply

3.5.3**dental unit**

assembly of devices designed to provide utilities and amenities for dental treatment, such as compressed air, water or other liquids, suction, electricity, hand- or foot-activated controllers, work surfaces, tray supports, cuspidor and gasses

3.5.3.1**patient chair**

dental chair

device designed to support and position the patient for treatment and therefore provided with a range of movements

3.5.4**operator stool**

movable seat, adjustable in height, which satisfies the general requirements relevant to the performance of *dentistry* (3.1.2.2) by a seated operator

3.5.5**amalgamator**

amalgam mixer

mechanical device for mixing dental *amalgam alloy* (3.2.4.2) with mercury

3.5.5.1**amalgam separator**

device designed to prevent waste amalgam from entering the main drainage system, also called an amalgam trap

3.5.6**intraoral radiography**

radiography whereby the image receptor is positioned intraorally

3.5.6.1**panoramic radiography**

radiography whereby the coordinated motion of a scanning fan-shaped X-ray beam and an X-ray image receptor, both rotating around the head

[SOURCE: IEC 60601-2-63:2012+AMD1:2017, 201.3.211, modified — This IEC definition was modified for simplicity as this document already provides dental context that is otherwise explicitly embedded in the original IEC 60601 term.]

3.5.6.2**dental cone beam computed tomography****dental CBCT**

radiography whereby the reconstruction of a volume from a series of 2-dimensional projections produced by a cone-shaped X-ray beam on an X-ray image receptor rotating around the head

[SOURCE: IEC 60601-2-63:2012+AMD1:2017, 201.3.203, modified — the IEC term is “dental volumetric reconstruction” whereas this document uses the context modified definition to define the term “dental cone beam computed tomography”.]

3.6 Oral care products**3.6.1****powered toothbrush**

hand-held powered device, the brush head of which carries filaments, used primarily for removing dental plaque and oral debris from exposed tooth and *dental restoration* (3.1.4.13) surfaces

3.6.2

mouth spray

liquid formulation for oral care purposes in spray form for direct spraying into the oral *cavity* (3.1.3.26) and which does not require dilution with water

3.6.2.1

oral rinse

mouthwash

mouth rinse

liquid used by the public for oral care purposes

3.6.3

dentifrice

substance or combination of substances specially prepared for the public for hygiene of the accessible surfaces of teeth and surrounding tissues

3.6.3.1

toothpaste

semi-solid *dentifrice* (3.6.3) preparation presented in the form of a paste, cream or gel

3.6.4

dental floss

thread or tape, commonly synthetic fibre, used for the removal of plaque and/or debris from the proximal surfaces of teeth and the gingival surface of *fixed prostheses* (3.3.1.26)

3.6.5

bleaching

DEPRECATED: whitening

<natural teeth> removal of intrinsic or acquired discolorations from natural teeth through the use of chemicals, sometimes in combination with the application of external energy

3.6.6

fluoride gel

dental product (3.1.4.9) containing fluoride compound, in gel form for topical application, intended to prevent tooth caries and decrease sensitivity

3.6.7

manual toothbrush

hand-powered device, the working end of which carries filaments, for primarily cleaning surfaces within the oral *cavity* (3.1.3.26)

3.6.8

manual interdental brush

hand-powered device composed of filaments emanating radially from a stem, intended for cleaning of interdental surfaces

3.7 Dental implants

3.7.1

dental implant

device especially designed to be placed within, through or upon the bones of the cranio-facial complex, the primary purposes of which are to support and/or to resist displacement of a *dental prosthesis* (3.3.1.19)

3.7.1.1

endosseous dental implant

DEPRECATED: endosteal implant

dental implant (3.7.1) placed partially or entirely within the bone

3.7.1.2**transendodontic implant
endodontic endosseous implant**

DEPRECATED: transradicular implant

rod, specially made to be inserted longitudinally either through a root canal or through a root segment which extends through the apex into the surrounding bone to stabilize a tooth

3.7.1.3**intramucosal implant
oral mucosal insert**

submucosal implant

DEPRECATED: button implant

dental implant (3.7.1) placed in the soft tissue lining of the oral cavity (3.1.3.26)**3.7.1.4****frame implant**

DEPRECATED: ramus frame endosteal implant

endosseous implant and/or subperiosteal implant, placed in or on the mandibular bone and connected to an *implant superstructure* (3.7.4.15)**3.7.1.5****subperiosteal dental implant**

DEPRECATED: subperiosteal implant abutment

dental implant (3.7.1) that is placed beneath the periosteum and overlying the bony cortex**3.7.1.6****transmandibular implant***dental implant* (3.7.1) consisting of a plate and posts designed so that the posts can be placed to extend vertically from the inferior border of the mandible through the plate, bone and mucosa and into the oral cavity (3.1.3.26) usually in the anterior region**3.7.1.7****orthodontic implant***dental implant* (3.7.1) intended primarily for use in orthodontic treatment**3.7.1.8****subperiosteal implant superstructure**superior part of a *dental implant* (3.7.1) consisting of a multiple layer prosthesis that includes the replacement teeth and associated structures**3.7.1.9****surgical implant**medical or *dental device* (3.1.4.7) implanted in the body by surgical means**3.7.2****dental implant system**

implant kit

implant system

integrated system of components, specific equipment and ancillary instruments necessary for the clinical and laboratory procedures required for the placement of the *dental implant* (3.7.1) and the construction and insertion of an implant-supported *dental prosthesis* (3.3.1.19)**3.7.2.1****implant interface**junction of the surface of a *dental implant body* (3.7.2.4) and the surrounding host tissues