

**Vertex** Dental

# The Vertex Quint tooth range

A premium denture solution



**Vertex-Dental, a globally active company with its headquarters in Zeist, the Netherlands, has been a leader in the area of innovative, customer-oriented denture products for more than 70 years.**

**The company's vision is to lead the market and be regarded by dental professionals as the company that sets the standard when it comes to premium denture solutions that can be reliably worked.**

We are proud to announce our latest innovation: Vertex Quint, a completely new 5-layer range of acrylic teeth, available in the following colours A1, A2, A3, A3.5, A4, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, and D4.

**Mammelons**



## Five-layer morphological construction

Through an innovative 5-layer morphological\* construction technique we have succeeded in giving diversity to the element, resulting in a considerably richer perception of colour. Vertex Quint elements are made up of five layers with different opacities and cielab\* values, rather than just an opaque and a translucent layer. This generates a metameric\* effect in the element, as is seen with natural teeth. With Vertex Quint elements, the highly prized chameleon effect is achieved whether the denture is used in combination with natural teeth or as full dentures.

## Comfort

Denture wearers no longer have the sensation of wearing a prosthetic device, it is more like a copy of a natural tooth, comparable to a constructed ceramic crown. We believe the look is improved even further as the element is constructed from the core outwards using warm colour pigments, similar to those that occur naturally. We have used slightly darker shades in the

**The five layers**



cervical area of the elements. This ensures that the element stands out less where it comes into contact with the acrylic of the denture base.

## Colour retain

Where lack of space is an issue, the dental technician sometimes has to polish off part of the cervical or palatal side. In this case, the Vertex Quint retains its colour as sufficient opacity\* remains. Even in different lighting conditions the Vertex Quint offers an extraordinary colour match when compared to natural teeth.

## Five layers of different materials

This new product developed by Vertex-Dental's R&D department combines five layers made of different combinations of materials to construct a durable, wear-resistant material on one side of the element and a material that offers outstanding bonding with Vertex denture base acrylics on the other side.

For the denture base acrylics, we recommend using Vertex Rapid Simplified for the pressing technique, Vertex Castavaria or Vertex Castapress for the casting technique and Vertex Implacryl for dentures fitted to implants with bar and Dalbo structures.

**Polished cervical edge**



## Durable and wear-resistant

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## Outstanding test results

The result is a successful combination of PMMA and DCL materials without fillers, giving the element superior characteristics when it comes to durability, wear-resistance and bonding. These characteristics are borne out by the outstanding test results. The Vertex Quint elements demonstrate 40% less absorption (intake of moisture by the material), 56% less discolouration by foods and higher wear-resistance compared to the average test result for well-known international tooth ranges.



## International research

The Vertex Quint elements have been tested in accordance with various international standards, such as ISO 22112:2005 "Artificial teeth for dental prostheses" and ISO/TS 14569-2:2001 "Dental materials – guidance on testing of wear". In addition, they satisfy the various biocompatibility\* tests, including cytotoxicity\*, mutagenicity\* (Ames test), sensitivity and short-term toxicity. The stimulating effect in the mouth has also been tested and the results do not reveal any stimulation of the mucosa. These results are supported by various studies conducted by renowned dental research institutes, such as the NIOM in Norway.

## Large range of Quint elements

The Vertex Quint elements are part of a range of models that meet all everyday requirements. The range comprises 10 different male anterior upper forms, both athletic and leptosomic, 4 female anterior upper forms (pyknic) and 8 anterior lower forms. In addition, there are 9 complete upper and lower posteriors (7 form sets with an angle between 22 and 28 degrees and 2 sets with a 0 degree angle).



## Boards with GTIN registration

The Vertex Quint boards feature the latest type of barcode, the data matrix that ensures easy compliance with the GTIN (Global Trade Item Number) registration of medical devices, which will become compulsory in the future. All the necessary data is recorded in this data matrix, such as the item code, model, colour, batch number and expiry date. These details can be scanned and added to the patient's file, ensuring full traceability.

The diverse range of models means dental technicians always have the right materials on hand to manufacture the artificial tooth. There are 40 different boards in 16 different colours (A1 to D4).



Vertex denture acrylics

## Glossary

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Morphological	Structures of materials on a microscopic scale
Cielab values	The coordinates within the three-dimensional colour sphere
PMMA	Polymethyl methacrylate
DCL	Double cross-linked polymer matrix
Metamerism	Perception of colour under different conditions
Opacity	The extent to which the element appears filled
Biocompatibility	Stimulation of little or no immune response
Cytotoxicity	Toxic effect during use
Mutagenicity	The modification of genetic material

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