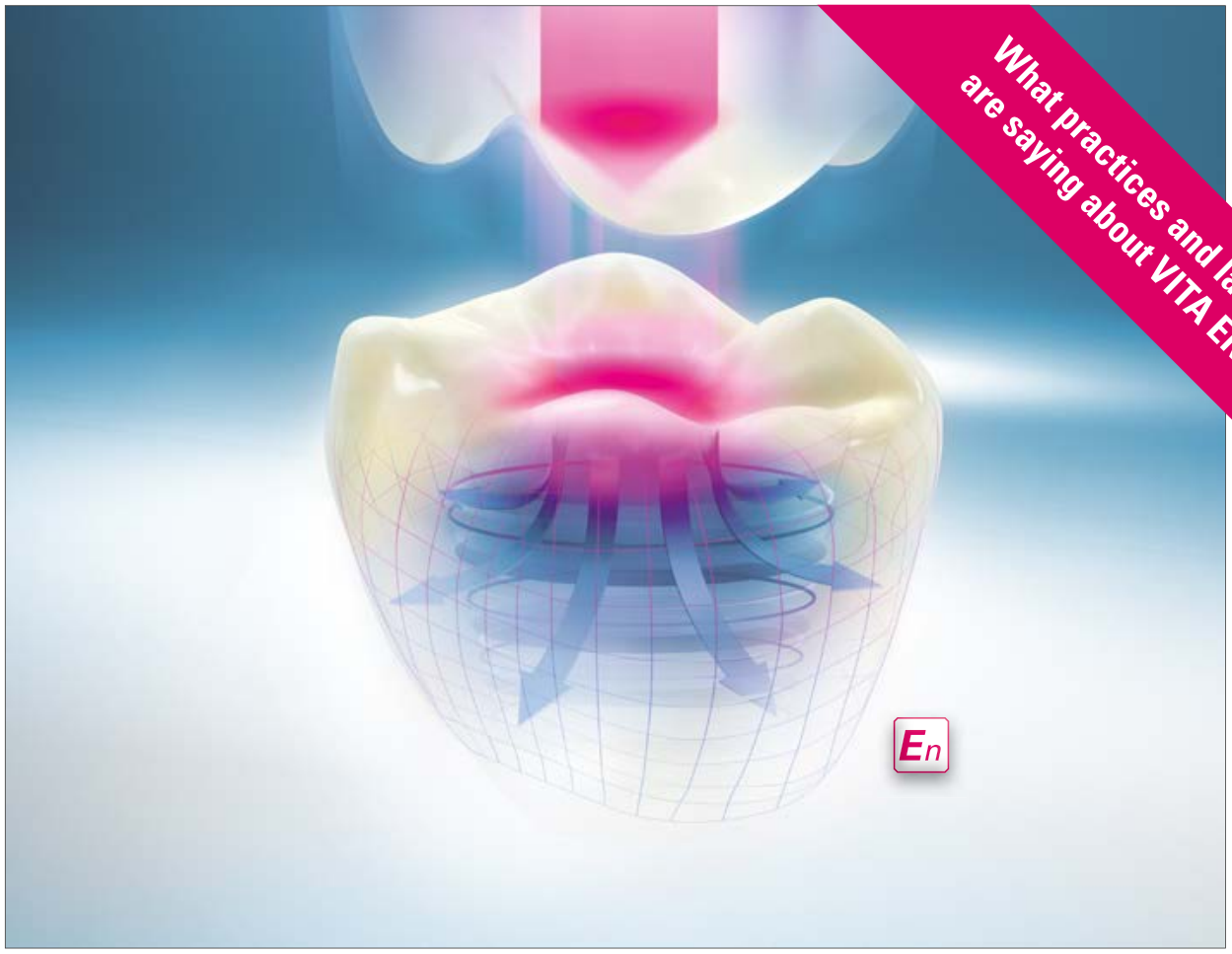
VITA ENAMIC®

Expert opinions on hybrid ceramics



VITA shade, VITA made. VITA

The En formula for success: strength + elasticity = reliability[2]

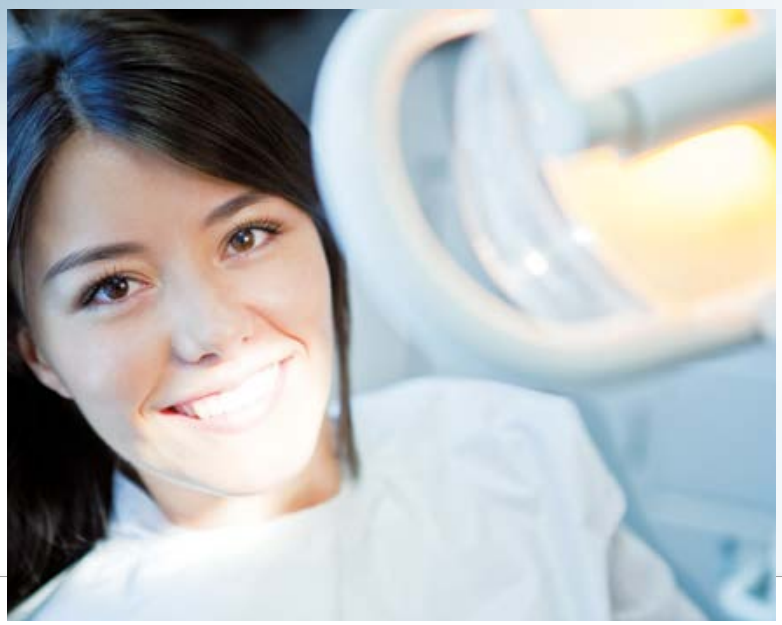
This is what makes VITA ENAMIC unique!

"The VITA ENAMIC veneering ceramic offers all the properties of a modern ceramic restorative material. Furthermore, thanks to its hybrid components, it is considerably more stable. With regard to the compressive and shear forces of the stomatognathic system it shows greater elasticity than traditional ceramics. VITA ENAMIC is suitable for all applications. It is especially well-suited for specific risk groups on account of its unique material properties.
Previous experience shows a high degree of wearing comfort for the patient. I generally expect even lower fracture and failure rates than in the case of traditional ceramics."

Dr. Berthold Kratzenstein

"The VITA ENAMIC material is distinguished by material properties which very closely resemble those of natural teeth. For instance, it is far less brittle than traditional dental ceramic, and its flexibility is similar to that of natural dentine. Furthermore, it shows better abrasion characteristics than composite - it resembles those of natural tooth enamel. All in all, it offers an ideal balance between load-bearing capacity and elasticity. This unique combination of the beneficial properties of ceramics and composites is achieved with the aid of an innovative infiltration process which results in this hybrid ceramic with a dual network structure."

Dr. Kambiz Dibah



"With respect to the compressive and shear forces of the stomatognathic system it exhibits greater elasticity than traditional ceramics."

Dr. Berthold Kratzenstein

"As in the industrial sector, it can be assumed also in the field of dentistry that the future of materials technology lies in the combination of materials. With the development of VITA ENAMIC, this has now been achieved par excellence by uniting the beneficial properties of the two material groups ceramic and composite in order to combine the best of two worlds. In VITA ENAMIC the aesthetic potential of ceramic is combined with the elasticity of composite. It is no longer a problem to model more delicate wall thicknesses, as the brittleness characteristic of ceramic has been eliminated."

Dr. Andreas Kurbad

"The ceramic and composite materials used in dentistry to date exhibit all their material-specific characteristics in the form of advantages as well as disadvantages.
The traditional disadvantages of ceramic include the risk of marginal fractures and chipping. For instance, the inadequate shade stability and the less than ideal dimensional stability values can be named in this respect in the case of composite. In the development of VITA ENAMIC, solely the advantages of both material classes were combined to form a new material in order to neutralize their respective disadvantages."

Univ.-Prof. Dr. Gerwin Arnetzl

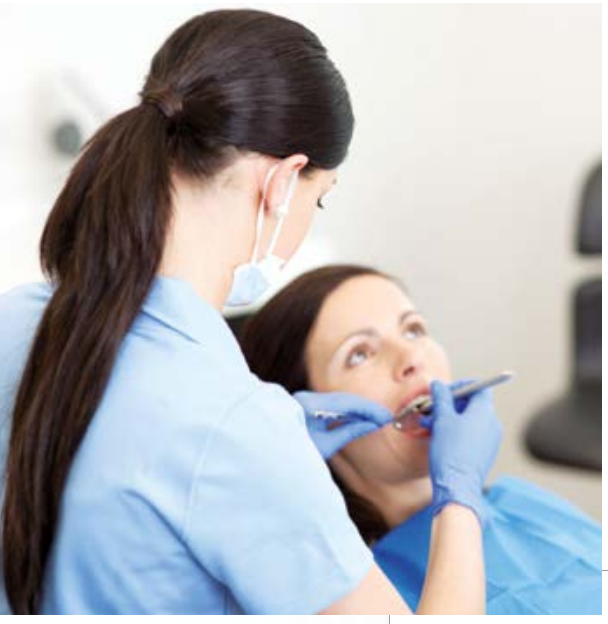
These are the advantages VITA ENAMIC offers you!

"The respective advantages of ceramic and composite were combined in the development of VITA ENAMIC - without the typical disadvantages of each of these materials used alone, such as discoloration of composite or chipping of ceramic. The dimensional stability of the material is impressive, it can be tapered very thinly towards the margins. And at last we have a restorative material at our fingertips that exhibits an integrated spring effect."

DT Jens Richter

"For one thing, I benefit from the shorter treatment times, as the material has excellent milling properties and requires hardly any reworking. And for another, a considerably reduced failure rate can be observed. For the high elasticity reduces the risk of material breakage during the milling process, reworking and seating, and ensures improved stability in situ with regard to shear and compressive forces. Furthermore, in addition to classical single tooth restorations, VITA ENAMIC offers me the possibility of fabricating very thin walled restorations and enables me to use a significantly wider indication range at the chairside."

Dr. Helmut-Peter Müller



"The dimensional stability is impressive, it can be tapered very thinly towards the margins. And at last we have a restorative material at our fingertips that exhibits an integrated spring effect."

DT Jens Richter

"For me as a user, VITA ENAMIC has many different advantages. I would first of all like to mention its good price/performance ratio. In addition to this, the material can be incorporated easily into the workflow of chairside treatments. The first thing that strikes one is that the restorations are comparatively easy to polish after intraoral seating. Characterization with stains is possible, but not mandatory. The material blocks are available in a well balanced selection of shades, and demonstrate light transmission behavior resembling that of natural teeth in order to achieve natural, aesthetic results."

Dr. Gerhard Werling

"Experience shows that the new VITA ENAMIC blocks can be milled very quickly from the digital designs using the CEREC system. The material already exhibits a surprisingly good surface quality after milling; this simplifies the further manual processing required by the user as well as saving time. A glaze firing, for instance, is not necessary, and on account of the material structure, it is not possible either. The required polishing is particularly quick and simple using the corresponding polishing set. The surface quality of the material is due to the excellent milling properties and the properties of the hybrid ceramic VITA ENAMIC, which, according to the manufacturer, are similar to those of natural teeth."

Dentist (Dipl.-Stom.) Hermann Loos

Why we need a new definition of load-bearing capacity.

"For too long the dental community has considered strength to be the most significant determining factor for the behavior of a material in the oral cavity. According to this view, natural enamel and dentine, the main constituents of the human tooth, could in fact be considered as unsuitable for their nature-given function. In my opinion we must take more into account the question of whether a restorative material, with regard to its elasticity behavior including its fracture resistance, is suitable for the structure of the tooth on which it is being used."

Prof. Dr. Michael Swain

"With the development of the CAD/CAM material VITA ENAMIC, the combination of an inorganic ceramic supportive structure with an elastifying organic polymer material was achieved analog to the natural hard tooth substances enamel and dentine. If VITA ENAMIC is processed to a single tooth restoration such as a crown, it reacts after adhesive bonding with the prepared tooth to loading of the hard tooth substance with adequate strength, and also shows comparable behavior with regard to durability."

Prof. Dr. Werner Mörmann

"We must give more consideration to the question of whether a restorative material is suited to the structure of the tooth on which it is used with regard to its elastic properties and its fracture resistance."

Prof. Dr. Michael Swain

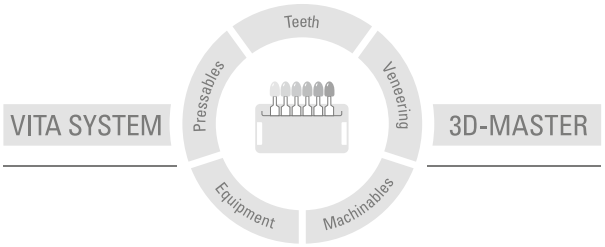
"VITA ENAMIC is the first material which exhibits properties similar to those of natural teeth. The elasticity of the material plays an essential part in this context. After all, the human tooth is not rigidly fixed, but is always subject to a certain degree of movement. When a restoration made of VITA ENAMIC is cemented in situ, it forms a reliable bond with the natural tooth substance and adapts perfectly thanks to its elasticity. In this way, ideal conditions are given for a long-lasting restoration."

Master Dental Technician Vanik Kaufmann-Jinoian

"The problem to date was - influenced by industry - the often one-sided focus of users on the flexural tensile strength. The message was: the higher the MPa value the better. The flexural tensile strength test setup, however, has little to do with the real-life conditions in situ. More attention should be given to the constellation of all physical parameters as a whole. The goal should be to obtain materials which, in the interplay of their properties, correspond to natural teeth. „With VITA ENAMIC, a decisive step has now been taken in this direction."

Dr. Andres Baltzer

With the unique VITA SYSTEM 3D-MASTER, all natural tooth shades can be systematically determined and perfectly reproduced.



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After the publication of these information for use any previous versions become obsolete. The current version can be found at www.vita-zahnfabrik.com

VITA Zahnfabrik has been certified in accordance to the Medical Device Directive and the following products bear the CE mark CE 0124 :
VITA ENAMIC®

1938 E – 0214 (X.) S – Version (02)

VITA

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