VITA ENAMIC® HYBRID CERAMIC

Information for dentists

VITA shade determination | VITA shade communication | VITA shade reproduction | VITA shade control

Date of issue: 02.19

VITA – perfect match.

VITA

The VITA ENAMIC formula for success:
elasticity + strength = reliability²

VITA ENAMIC® – A NEW DEFINITION OF LOAD CAPACITY*

What?

- VITA ENAMIC is the world's first and only hybrid dental ceramic featuring a dual-network structure.
- The innovative material combines enormous load capacity with high elasticity, allowing fabrication of highly precise restorations that preserve natural tooth structure.

What for?

VITA ENAMIC is particularly suited for:

- minimally invasive, delicate and implant-supported reconstructions

With what?

Is available in three variations and several translucency levels:

- VITA ENAMIC, VITA ENAMIC multiColor, VITA ENAMIC IS
- T (Translucent), HT (High Translucent), ST (Super Translucent)

*) In addition to a high degree of elasticity, this hybrid ceramic guarantees particularly high load capacity after adhesive bonding.

A MATERIAL FOR A VARIETY OF SOLUTIONS

VITA ENAMIC®

- Monochromatic CAD/CAM blanks in three translucency levels for restorations that preserve natural tooth structure.

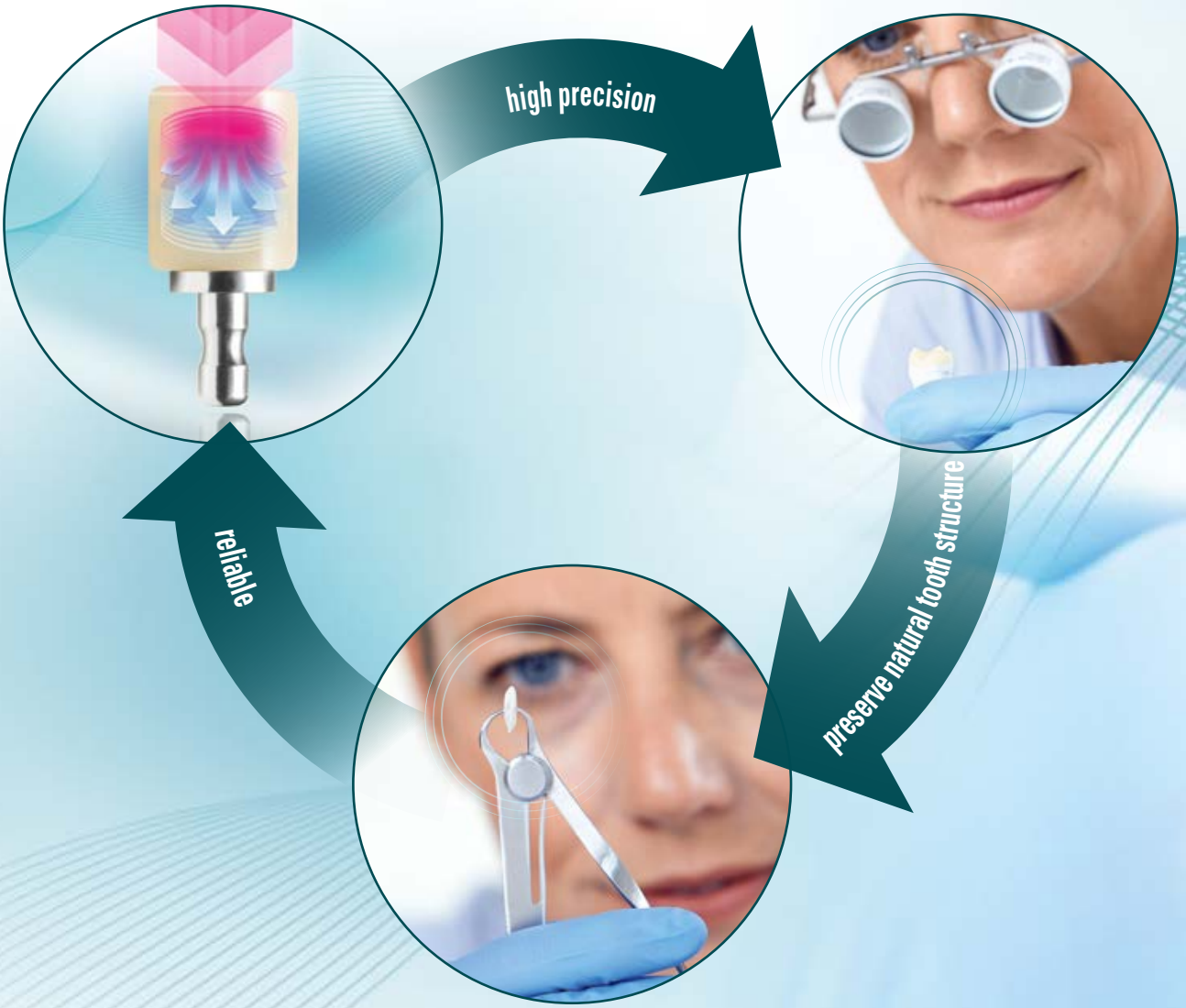
VITA ENAMIC® multiColor

- Multichromatic CAD/CAM blanks with integrated tooth color gradient for esthetic reconstructions at the push of a button.

VITA ENAMIC® IS

- CAD/CAM blanks with an integrated interface to an adhesive/titanium base for efficient fabrication of implant-supported superstructures.

THE ADVANTAGES



Reliable

- Fabricating durable restorations using a high-load capacity hybrid ceramic with absorption of masticatory forces.

Preserves natural tooth structure

- Non-/minimally invasive restorations possible since the elastic hybrid ceramic enables reduced wall thicknesses.

High precision

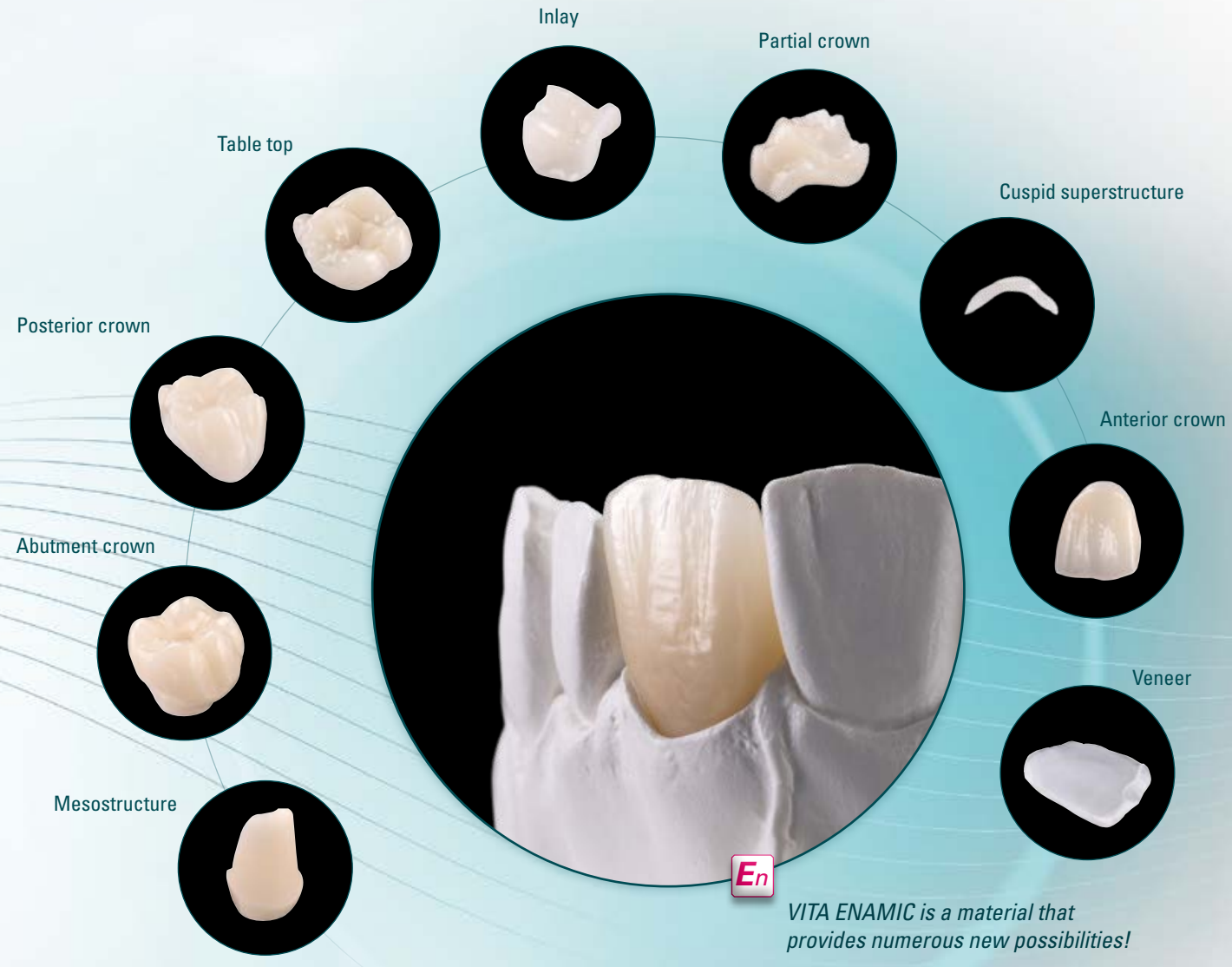
- Accurate, precise and reliable restorations, thanks to a hybrid material with integrated elasticity.

Cost-effective

- Cost-effective reconstruction, thanks to time-saving CAM fabrication and efficient polishing without any firing process.

VITA ENAMIC:
Just polish and
seat immediately!

EXTENDED TREATMENT RANGE – DENTISTRY 4.0



VITA ENAMIC is a material that provides numerous new possibilities!

Why?

VITA ENAMIC provides new possibilities and extends the dental CAD/CAM treatment range – for digital dentistry 4.0.

What for?

VITA ENAMIC: Recommended indications
- reconstructions with reduced wall thicknesses that preserve natural tooth structure
- posterior crowns that offer high load capacity in cases with limited space availability
- precise repair of small defects (e.g., indirect cervical fillings)
- non-/minimally-invasive reconstruction of occlusal surfaces (table tops)

VITA ENAMIC multiColor: Recommended indications
- esthetic crown restorations with vivid play of color/light
- delicate (non-prep) veneers for cosmetic reconstructions

VITA ENAMIC IS: Recommended indications
- Implant-supported abutment crowns and mesostructures

PROVEN MATERIAL CONCEPT

The unique hybrid ceramic with a dual ceramic-polymer network structure

Proven material concept

- With VITA ENAMIC, the proven concept of reinforced hybrid materials already employed in the construction industry and in aircraft construction, is now also available for dental use.

Reinforced ceramic structure

- In VITA ENAMIC, the dominant ceramic network is reinforced by a polymer network to ensure improved mechanical properties.

Used a million times over

- Since 2013, VITA ENAMIC hybrid ceramic has been used to fabricate approximately 1.5 million units in practices and laboratories all over the world.

NATURAL RESTORATIONS – ENTHUSIASTIC PATIENTS

"My VITA ENAMIC restoration feels like my natural tooth substance, which makes me really happy!"
H. Kimmich, Lörrach, Germany

Source: Internal study VITA R&D; Berechnung der Elastizitätsmodule o. g. Materialien aus Spannungs-Dehnungs-Diagrammen von Biegefestigkeitsmessungen, report 03/12 ([1], see back of brochure)

Tooth-like properties

- VITA ENAMIC is a biomimetic material that has convincing natural properties, such as elasticity that is similar to dentin.*

High patient satisfaction

- Patients with VITA ENAMIC restorations appreciate the chewing comfort that is comparable to natural teeth.

Various possibilities

- Thanks to its elasticity, the material allows a broad spectrum of therapeutic options (e.g., for functional therapy), which are still being reviewed.

*) Note: With an elasticity of 30 GPa, VITA ENAMIC is in the same range as human dentin. Information provided in literature about human dentin varies considerably.
Source: Kinney JH, Marshall SJ, Marshall GW. The mechanical properties of human dentin: a critical review and re-evaluation of the dental literature. Critical Reviews in Oral Biology & Medicine 2003; 14:13-29.

CLINICAL EXAMPLES

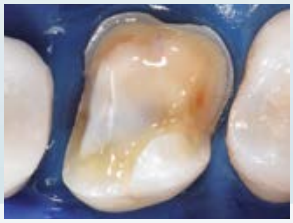
In addition to classic single tooth restorations, **VITA ENAMIC®** hybrid ceramic is particularly suited for minimally invasive, delicate and implant-supported reconstructions. Learn more now.

VITA ENAMIC:
The hybrid ceramic has been used to fabricate approximately 1.5 million units since 2013!

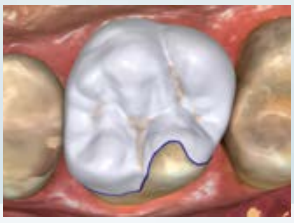
VITA ENAMIC® IN CLINICAL USE

CASE STUDY 1: PARTIAL CROWN RESTORATION

1. Insufficient amalgam filling in tooth 16.



2. Condition after excavation, preparation and adhesive build-up filling.



3. The virtual partial crown created with CEREC software.

4. Final polishing of the partial crown with a VITA ENAMIC high-gloss polisher.

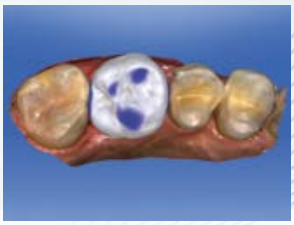
Photos provided by: Dr. Sebastian Horvath, dentist, Jestetten, Germany

CASE STUDY 2: FULL CROWN RESTORATION

1. Insufficient composite and amalgam filling of tooth 16.

2. Build-up of prepared tooth and preparation of tooth 16.

3 The virtual model of the preparation.



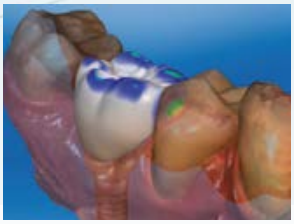
4. Computer aided design of the full crown.

Photos provided by: Dr. Julián Conejo, dentist, Philadelphia, USA

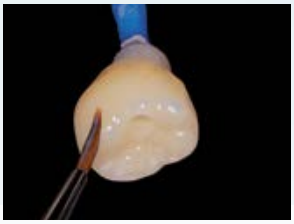
CASE STUDY 3: IMPLANT-SUPPORTED CROWN RESTORATION

1. Implant placement, tooth 46 Intraoral situation with perfectly shaped soft tissue.

2. Post-operative fastened scan body for scanning the implant position.



3. Digitally designed abutment crown.



4. Characterization of the ground restoration with VITA ENAMIC STAINS.

Photos provided by: Dr. Andreas Kurbad, dentist, Viersen-Dülken, Germany

5. Finished restoration before adhesive bonding.

6. Final adhesively bonded VITA ENAMIC partial crown in situ.

5. The virtual restoration placed in the block.

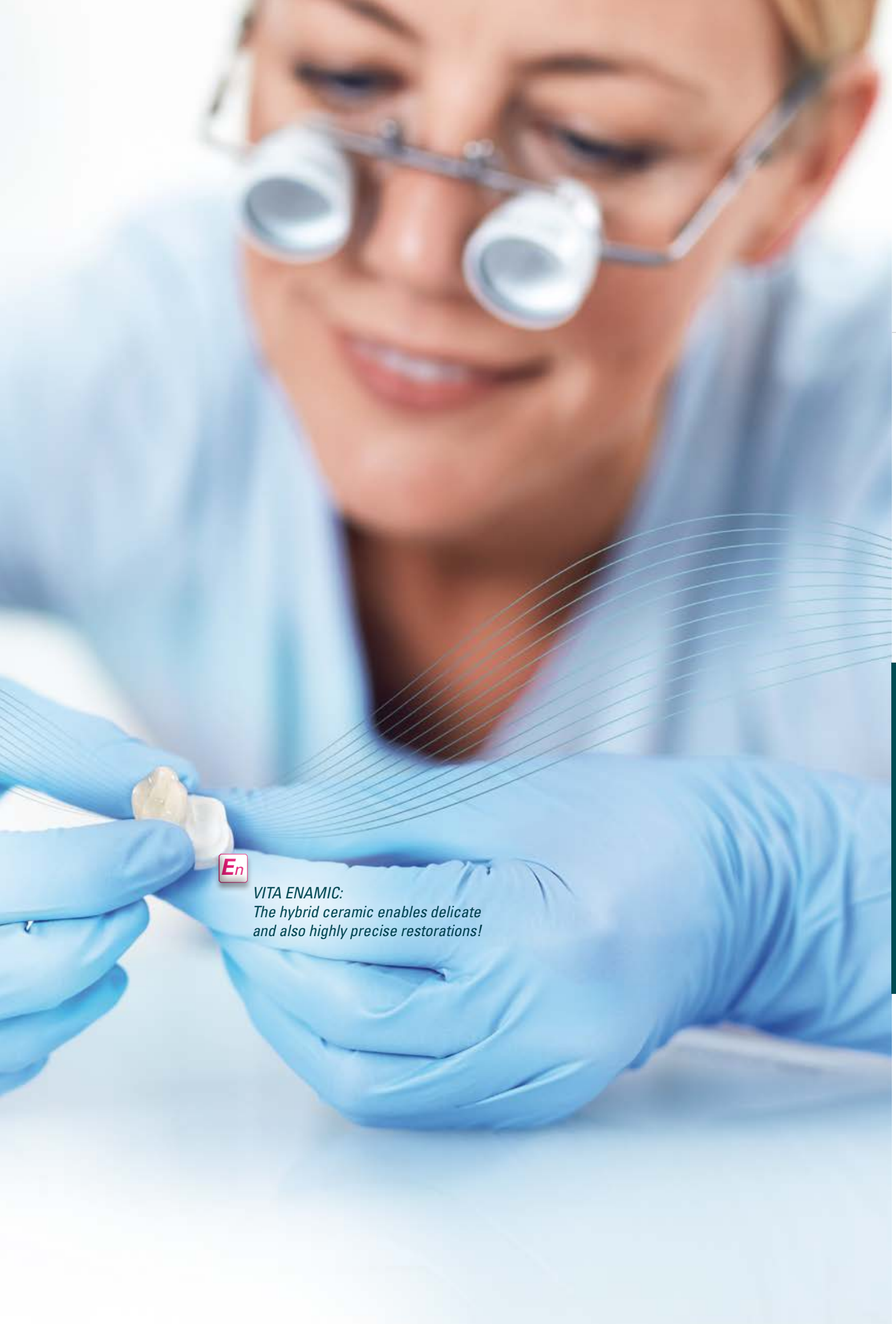
6. The permanently bonded VITA ENAMIC crown in situ.

5. Closure of the screw channel with composite.

6. Red and white harmony following the integration of 46.

FACTS AND FEATURES

VITA ENAMIC® offers high reliability, enables the fabrication of high-precision restorations that preserve natural tooth structure and can be processed efficiently. Key facts and evidence can be found on the following pages.



VITA ENAMIC:
The hybrid ceramic enables delicate and also highly precise restorations!

5 REASONS FOR HIGH RELIABILITY

1. Excellent resilience – hybrid ceramic is able to absorb masticatory forces!

Thanks to its polymer network, VITA ENAMIC offers an integrated "buffer function."

Absorption of masticatory forces compared to zirconia (ZrO_2)

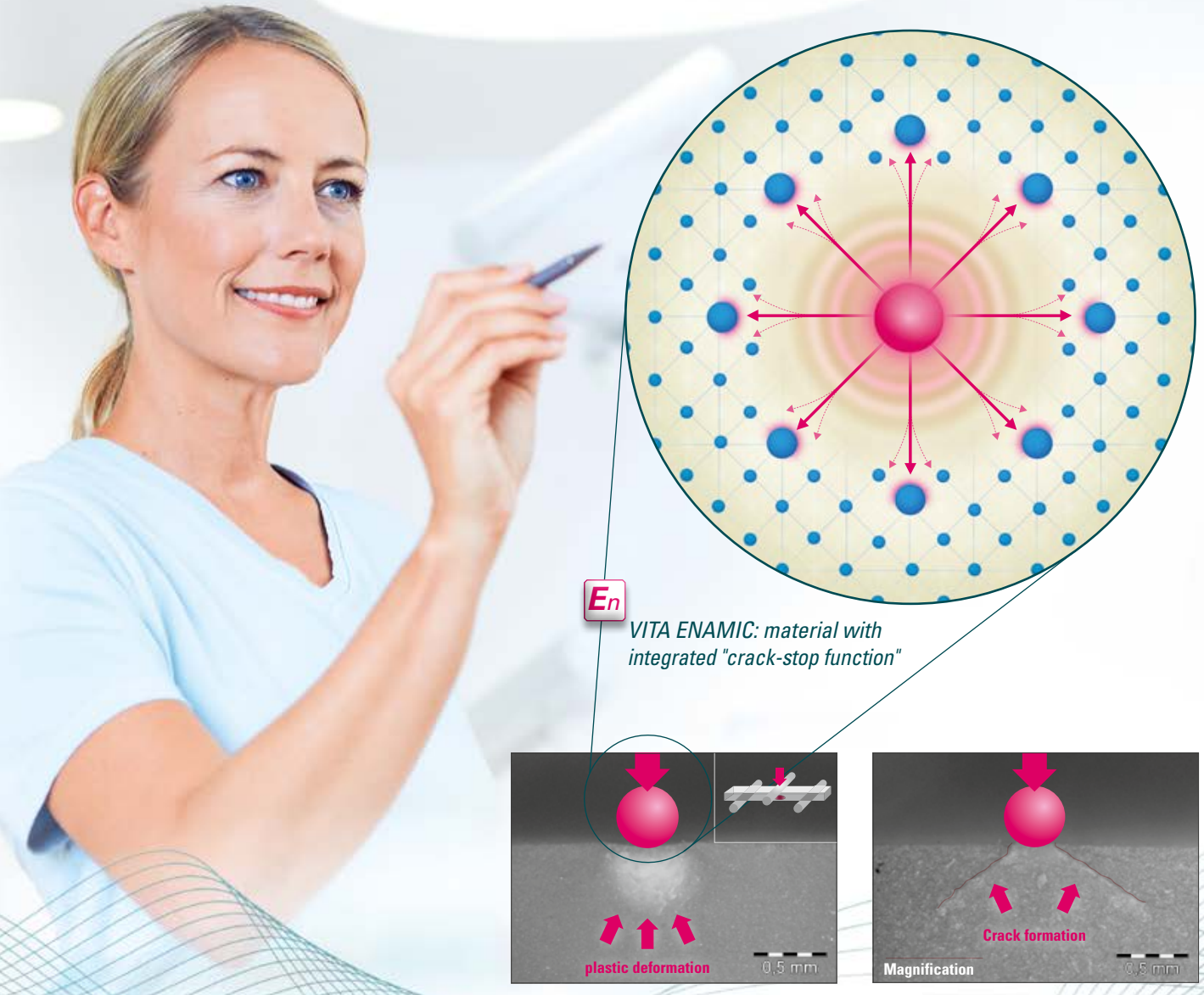
Source: University of Genoa, Dr. Maria Menini et al., Genua, Italy; Messungen zur Kraftübertragung auf den simulierten periimplantaren Knochen mittels monolithischen Kronen aus o. g. Materialien auf einem stilisierten Implantatabutment, report 01/15, ([2], see back or brochure).

VITA ENAMIC

- **enables reconstructions with excellent resilience** since the material features an integrated "buffer function"
- **is able to absorb 70 percent of the forces in the test** compared to very rigid zirconia

5 REASONS FOR HIGH RELIABILITY

2. Reliability, thanks to durable material structure!



VITA ENAMIC: material with integrated "crack-stop function"

VITA ENAMIC hybrid ceramic

Traditional silicate ceramic

Source: Internal study VITA R&D; Analyse des Querschnitts der Bruchflächen o. g. Materialproben nach Vorschädigung mit einer Wolframcarbid-Kugel, report 11/13 ([1], see back of brochure).

VITA ENAMIC

- **exhibits outstanding reliability and durability**
  the polymer network is able to stop crack propagation
- **reveals plastic deformation after prior damage in the test**
  whereas traditional ceramics reveal noticeable cracks

3. Clinical stability, thanks to enormous load capacity!

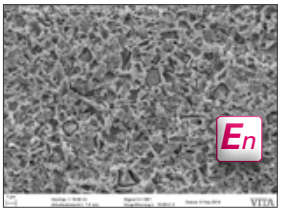
Source: Boston University, Prof. Dr. Russell Giordano, Boston, USA; Statische Bruchlastuntersuchung zu monolithischen, CAD/CAM-gefertigten und adhäsiv befestigten Kronen aus o. g. Materialien, report 07/13 ([3], see back of brochure).

VITA ENAMIC

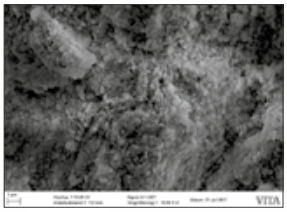
- **indicates very good clinical stability**
  since the material offers enormous load capacity after adhesive bonding
- **reaches the highest average fracture load value of 2,766 N**
  of all CAD/CAM materials examined in the test

5 REASONS FOR HIGH RELIABILITY

4. Reliable bonding, thanks to proven protocol!



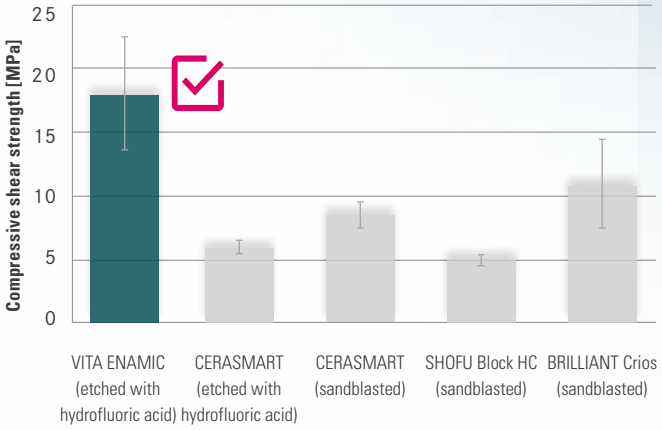
VITA ENAMIC
Etched hybrid ceramic



CERASMART
Sandblasted composite

Photos provided by: VITA R&D, SEM picture (left) of etched hybrid ceramic surface (5% hydrofluoric acid, 60 sec.) plus SEM picture (right) of sandblasted composite surface (Al_2O_3 50 µm, 1.5 bar), magnification x 10,0000.

Adhesive bond of Variolink Esthetic to hybrid ceramics and composites



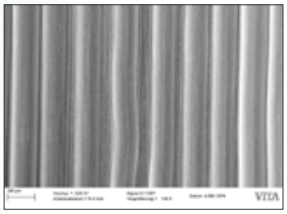
Source: Internal study, VITA R&D , Dr. Berit Müller, Report of 10/17, Test: For each CAD/CAM material, five test specimens of two sample parts were produced, glued, and then the compressive shear strength was determined by means of a universal testing machine (Type Z010 from Zwick) see back of brochure.

VITA ENAMIC

- **can be safely bonded, based on a proven protocol**
  since conditioning is carried out in the same way as for feldspar ceramics
- **allows for excellent micro-mechanical retention**
  by means of hydrofluoric acid etching of the ceramic structure (86 wt %)

5. Resistant to abrasion, thanks to stable ceramic network!

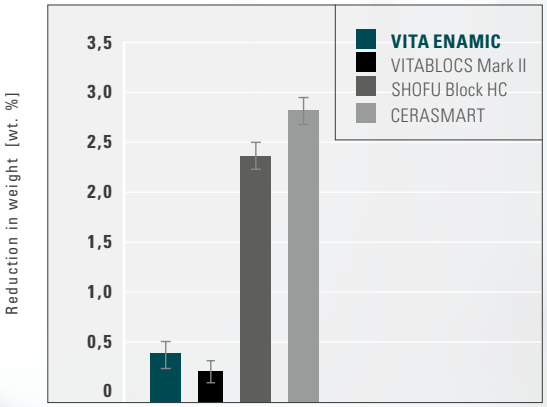
VITA ENAMIC
Hybrid ceramic material sample after the test



CERASMART
Composite material sample after the test

Photos provided by: VITA R&D, SEM pictures of material samples after toothbrush abrasion, samples were mechanically brushed with abrasive toothpaste under a definite load, magnification x 150.

Toothbrush abrasion test



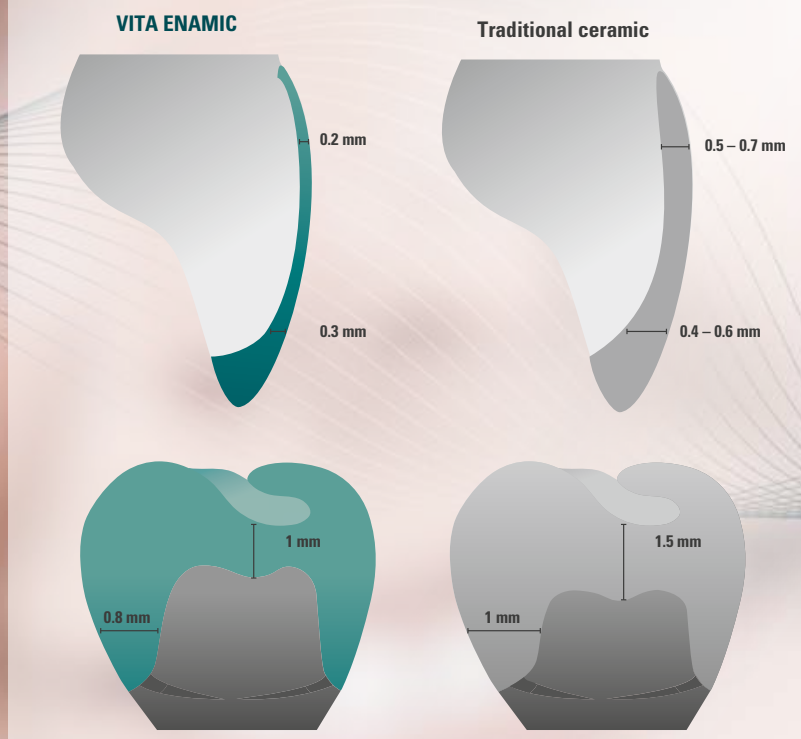
Source: Internal study VITA R&D; Mittelwerte zu Gewichtsverlust nach Zahnbürstenabrieb (32 Std. mit abrasiver Zahncreme) auf Basis von fünf Materialproben je o. g. Werkstoff, report 03/16 ([1], see back of brochure).

VITA ENAMIC

- **reveals outstanding abrasion stability**
  for reliable function, thanks to a stable ceramic network
- **produces very good results in the wear test**
  which can be compared to those of proven dental ceramics

2 REASONS FOR RESTORATIONS THAT PRESERVE NATURAL TOOTH STRUCTURE

1. Minimally invasive restorations, thanks to reduced wall thickness!



VITA ENAMIC

- **thanks to high resilience, VITA ENAMIC enables fabrication of restorations** that preserve natural tooth structure, since reduced wall thickness is possible
- **is especially advantageous in cases of limited space** where natural tooth structure must be preserved

2. Delicate reconstructions, thanks to integrated elasticity!

Source: Internal study VITA R&D; Visuelle Begutachtung von „Non-Prep"-Veneers aus o. g. Materialien mit Wandstärken von ca. 0,2 mm nach CAM-Fertigung mit Sirona MC XL-Einheit, Important: The manufacturer has not approved the use of IPS Empress CAD and IPS e.max CAD for a wall thickness of approx. 0.2 mm; report 10/2011 ([1], see back of brochure).

VITA ENAMIC

- **enables CAM fabrication of extremely delicate reconstructions**
  thanks to the low brittleness of the material
- **exhibits excellent CAM machinability in the test**
  the veneer geometry (approx. 0.2 mm) could only be achieved with hybrid ceramic-polymer materials*

*) Important! The manufacturer has not approved the use of IPS Empress CAD and IPS e.max CAD for a wall thickness of approx. 0.2 mm.

2 REASONS FOR HIGH-PRECISION RESULTS

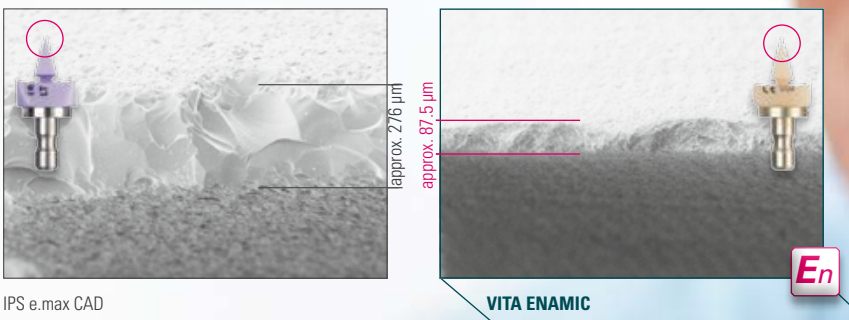
1. Detailed morphology, thanks to ideal CAM machinability!

VITA ENAMIC: The CAD/CAM material for accurate and detailed results!

VITA ENAMIC

- **enables CAM reconstructions with high accuracy**
  for exact reproduction of the function

2. Precise results for exact marginal fit, thanks to edge stability!



IPS e.max CAD

VITA ENAMIC

Source: Internal study VITA R&D, Untersuchung von standardisierten Dreiecksformkörpern (30° Keil, Aufsicht) aus o. g. Materialproben mittels REM nach CAM-Fertigung mit Sirona MC XL-Schleifeinheit, 200-fache Vergrößerung, report 05/10 ([1], see back of brochure).

VITA ENAMIC

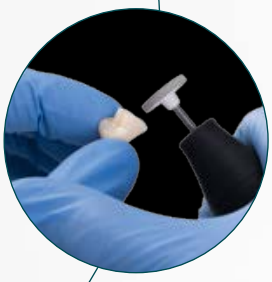
- **enables delicate and precise marginal areas** for exact marginal fit, thanks to high edge stability
- **produces high marginal precision in the test** for objects with thinning marginal areas

2 REASONS FOR HIGH COST-EFFECTIVENESS

1. Fast fabrication in a few minutes!

1. CAM fabrication:
approx. 5 minutes

2. Reworking:
approx. 2 minutes



3. Polishing:
approx. 3 minutes

4. Bonding:
approx. 5 - 10 minutes

VITA ENAMIC

- **enables the fabrication of restorations within a few minutes**
  since seating can be done immediately after the CAM process and polishing
- **reveals extremely fast CAM machinability in the test**
  thanks to high elasticity and perfectly matched milling strategies

2. Cost-effective CAD/CAM fabrication, thanks to long tool life!

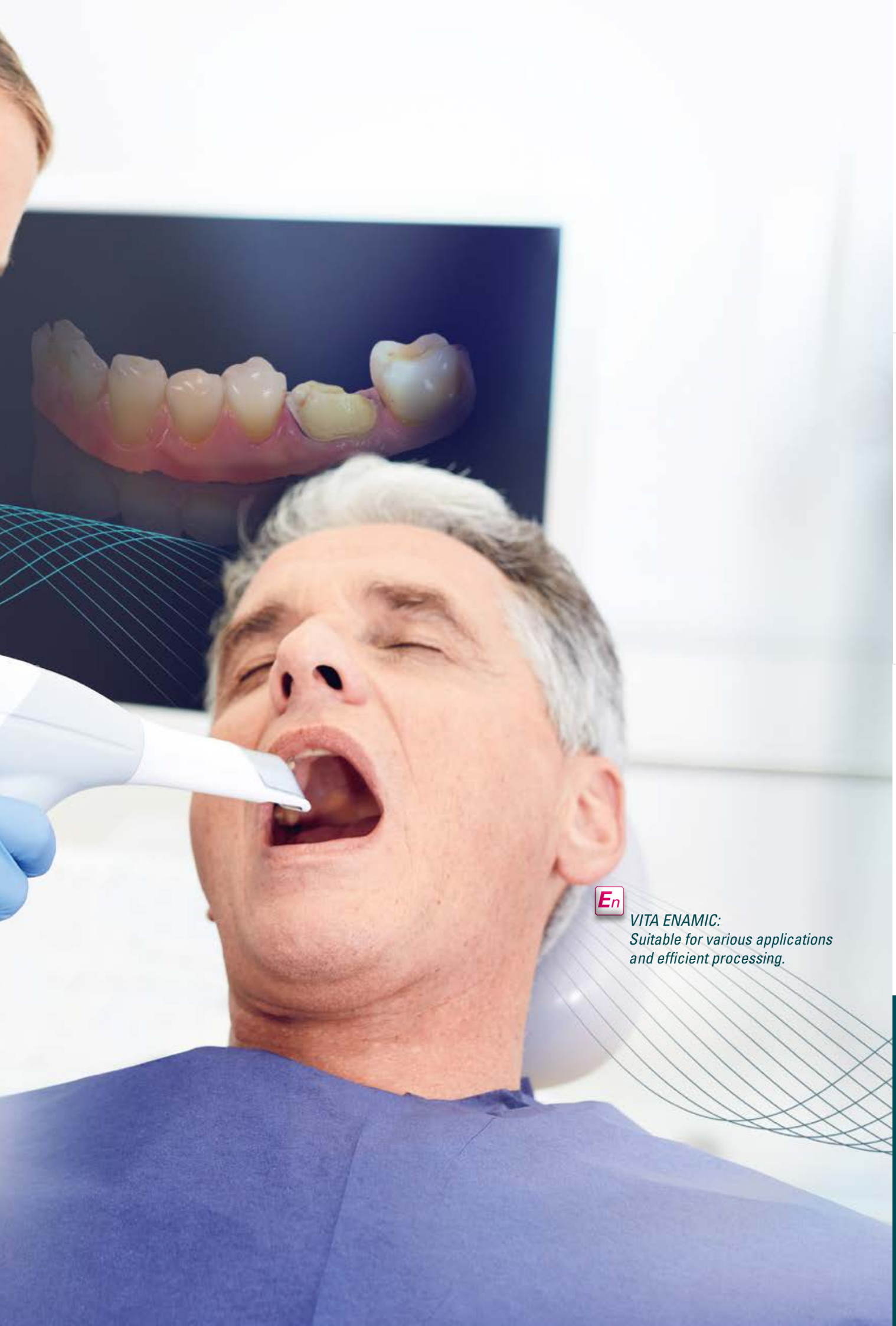
Source: Internal study VITA R&D, Schleiferstandzeitversuche zur CAM-Fertigung von Molarenkronen aus o. g. Materialien mit jeweils einem neuen Schleiferpaar mittels Sirona MC XL-Schleifeinheit, Software 3.8 x, report 03/10 ([1] see back of brochure)

VITA ENAMIC

- **enables cost-effective processing with numerous systems**
  the hybrid ceramic allows long tool life
- **milling tools last up to seven times longer when tested**
  compared to glass ceramics, when fabricating crowns with Sirona MC XL

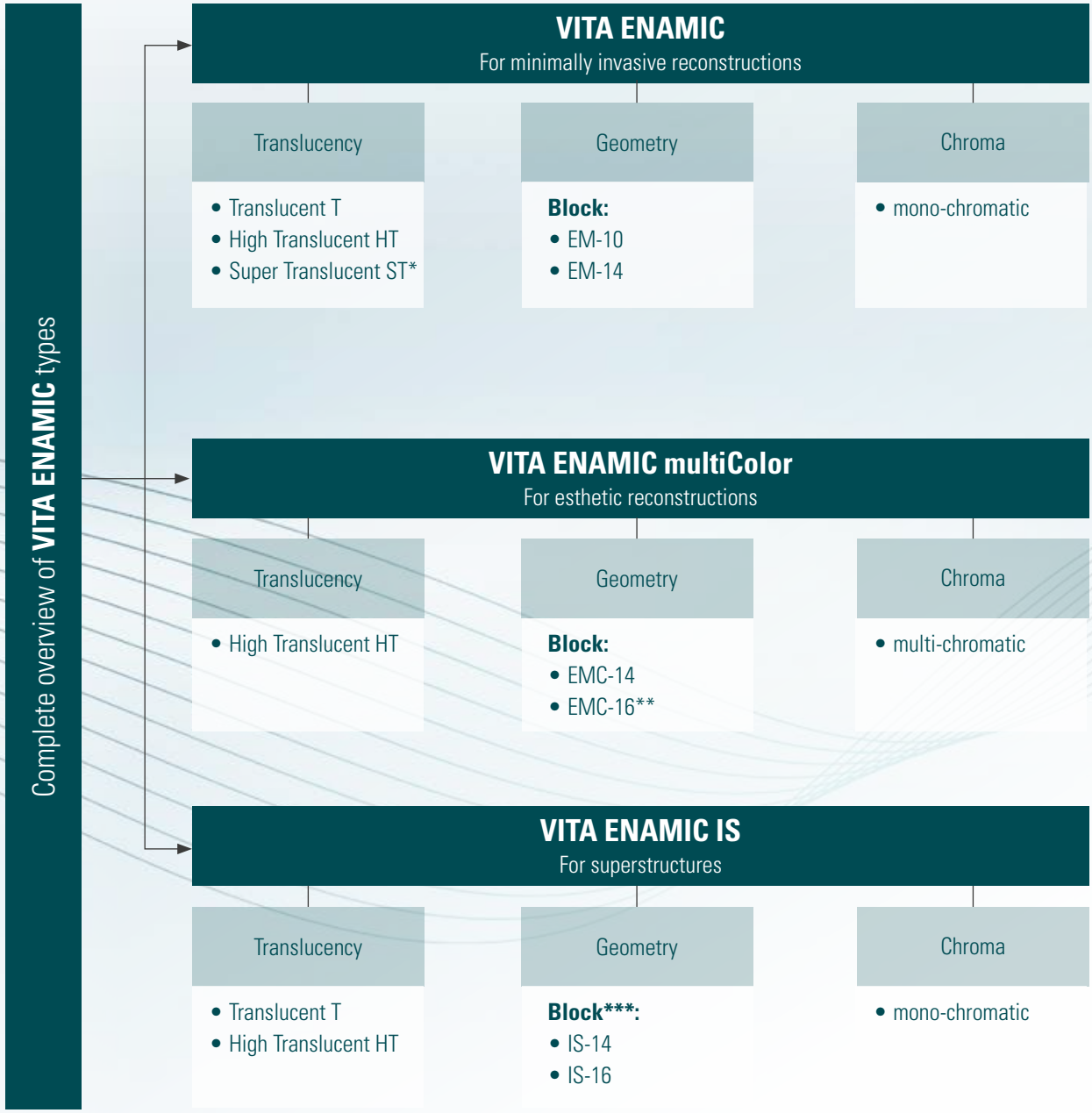
SYSTEM AND COMPONENTS

VITA ENAMIC® is available in a variety of geometries, translucency levels and shades. Perfectly matched system components enable efficient processing. Read on to learn more.



VITA ENAMIC:
Suitable for various applications and efficient processing.

TYPES, GEOMETRIES, TRANSLUCENCY LEVELS



*) The ST type is only offered in the geometry EM-14.
**) Available from spring 2019
***) The IS-14 geometry is available in T, and the IS-16 geometry is available in HT.

AVAILABLE SHADES

Translucency levels	VITA SYSTEM 3D-Master range of shades									
	0M1	1M1	1M2	2M1	2M2	2M3	3M1	3M2	3M3	4M2
Super Translucent*										
High Translucent**										
Translucent***										

*) Super Translucent (ST) is available in the EM-14 type.
**) Limited range of shades for VITA ENAMIC multiColor EMC-14, IS-16 and discs: available in 1M1-HT, 1M2-HT, 2M2-HT, 3M2-HT and 4M2-HT.
***) Limited range of shades for VITA ENAMIC IS-14/Discs: IS-14 available in 1M1-T, 1M2-T, 2M2-T, 3M2-T and 4M2-T; discs available in 1M2-T, 2M2-T and 3M2-T.

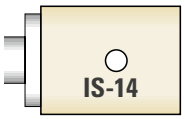
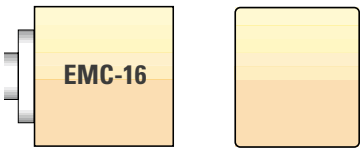
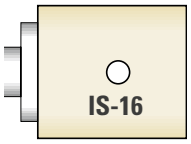
RECOMMENDED INDICATIONS (for each type/level of translucency)

	VITA ENAMIC			VITA ENAMIC multiColor	VITA ENAMIC IS	
Degree of translucency	T Translucent	HT High Translucent	ST Super Translucent	HT High Translucent	T Translucent	HT High Translucent
Indication						
	–	○	●	○	–	–
	–	○	●	○	–	–
	–	●	○	–	–	–
	–	●	○	○	–	–
	–	●	●	●	–	–
	–	●	○	●	–	–
	●*	●	–	●	–	–
	○	–	–	–	●	○
	●*	○	–	–	○	●

● recommended ○ possible

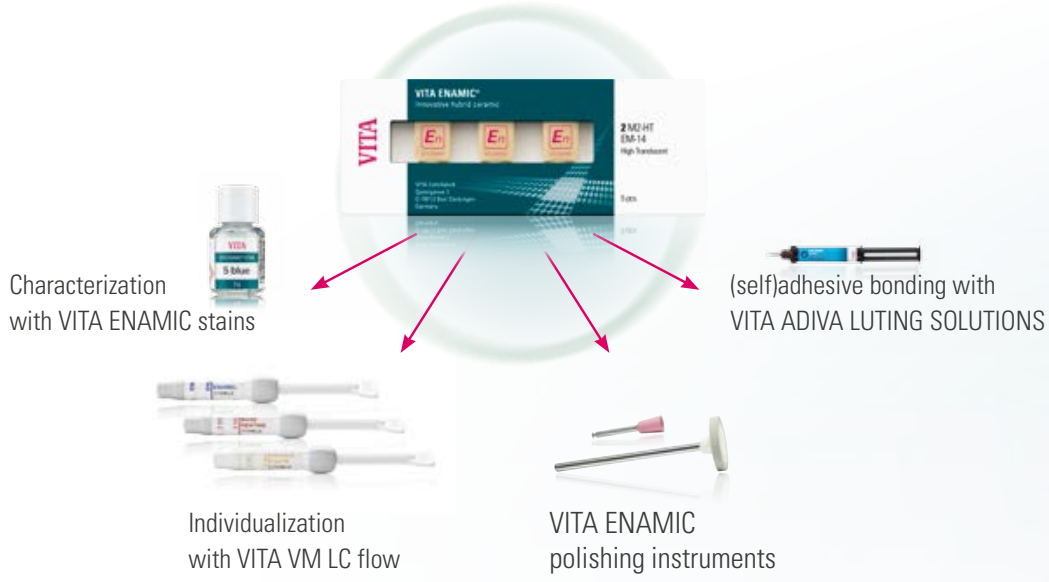
*) Due to the comparatively high opacity, Translucent is recommended when metal structures or discolored natural tooth substance need to be masked.

AVAILABLE GEOMETRIES

VITA ENAMIC	VITA ENAMIC multiColor	VITA ENAMIC IS
		
EM-14: 12 x 14 x 18 mm	**EMC-14**: 12 x 14 x 18 mm	**IS-14:** 18 x 14 x 12 mm (for mesostructures)
		
EM-10: 8 x 10 x 15 mm	**EMC-16*:** 18 x 16 x 18 mm	**IS-16:** (18 x 16 x 18 mm) (for abutment crowns)
		Note: with an integrated S- or L-interface for each geometry size

*) Available from spring 2019

AVAILABLE SYSTEM COMPONENTS



DESCRIPTION OF COMPONENTS

VITA ENAMIC blanks
Pack of five VITA ENAMIC hybrid ceramic blanks.

VITA ENAMIC Starter Set clinical
10 packs of five VITA ENAMIC blanks in five shades and two translucency levels and one VITA ENAMIC Polishing Set clinical.

VITA ENAMIC Polishing Set clinical/technical
Two-stage polishing system with a total number of six or eight pre- and high-gloss polishers for the contra-angle or the handpiece.

VITA ENAMIC STAINS KIT
Includes six light-curing stains and accessories for the reproduction of natural shade nuances of VITA ENAMIC restorations.

VITA VM LC *flow*
Light-curing, low-viscous composite materials for individualizing restorations, including VITA ENAMIC.

VITA ADIVA LUTING SOLUTIONS
Luting system for full-adhesive, self-adhesive and temporary luting of restorations.

SYSTEM COMPATIBILITY

CAD/CAM systems

VITA ENAMIC – SYSTEM SOLUTIONS*

VITA offers VITA ENAMIC with specific holder systems for these CAD/CAM systems:

- CEREC/inLab (Dentsply Sirona)
- Ceramill mikro IC/Ceramill Motion 2 (Amann Girrbach AG)
- KaVo ARCTICA/Everest (KaVo Dental GmbH)
- Planmill 40/PlanMill 40S (Planmeca)
- TS150 (Glidewell Laboratories)
- MyCrown Mill (FONA Dental s.r.o.)

VITA ENAMIC – UNIVERSAL SOLUTIONS*

VITA offers VITA ENAMIC with a universal holder system for these CAD/CAM systems:

- CORiTEC line (imes-icore GmbH)
- DGSHAPE DWX line (DGSHAPE Corporation)
- CS 3000 (Carestream Inc.)
- N4/R5/S1/S2/Z4/R5 (vhf camfacture AG)
- DMG ULTRASONIC line (DMG Mori AG)
- Röders RXD line (Röders GmbH)
- Zfx Inhouse5x (Zfx GmbH)
- MILLING UNIT M line (Zirkonzahn S.r.l.)
- Organical Desktop line (R+K CAD/CAM Technologie GmbH & Co. KG)

BONDING SYSTEMS**

VITA ENAMIC restorations can be fully and self-adhesively bonded. Bonding is carried out based on the proven protocol for feldspar ceramics. The hybrid ceramic is etched (60 sec) with hydrofluoric acid (VITA ADIVA CERA-ETCH), cleaned and then silanized (VITA ADIVA C-PRIME).

Recommended system

- **VITA ADIVA** LUTING SOLUTIONS (full-/self-adhesive)

Other systems

- Variolink Esthetic (Ivoclar Vivadent), Vitique (DMG)
- NX3 (KerrHawe), Calibra Ceram (DENTSPLY), RelyX Ultimate (3M ESPE), Bifix QM (VOCO)
- PANAVIA F2.0/PANAVIA V5 (Kuraray), DuoCem (Coltène/Whaledent)

IMPLANT SYSTEMS***

VITA IMPLANT SOLUTIONS (VITA ENAMIC IS, VITA CAD-Temp IS) are compatible with implant systems from the manufacturers listed below via the integrated interface for the adhesive/titanium base (TiBase, Sirona Dental GmbH):

- Nobel Biocare
- Straumann
- Dentsply Sirona
- Zimmer
- Medentika
- CAMLOG
- BIOMET *3i*
- BioHorizons
- Osstem
- Henry Schein

*) The range of geometries/shades of VITA CAD/CAM materials available may vary for the individual CAD/CAM system partners or systems.
**) Self-adhesive systems may only be used for crown restorations.
***) A comprehensive, up-to-date overview of the implant systems compatible with TiBase is available at www.vita-zahnfabrik.com/VITA_ENAMIC_IS#titan_compatibility

IDEAL SOLUTIONS IN THE PROCESS

Shade determination

- For digital shade determination, use **VITA Easyshade V**, and for traditional shade determination, the **VITA Linearguide 3D-MASTER**, for example.

CAD/CAM fabrication

- Various geometries, translucency and chroma levels of **VITA ENAMIC** blanks are available for CAD/CAM fabrication.

Shade modification*

- Use the light-curing **VITA ENAMIC STAINS** for the hybrid ceramic and **VITA VM LC *flow*** veneering composite for individualization.

Polishing

- Use the recommended **VITA ENAMIC Polishing Sets** for the hybrid ceramic.

Luting

- Full-adhesive or self-adhesive bonding with **VITA ADIVA** LUTING SOLUTIONS is possible for restorations made of hybrid ceramic.

* Note Optional process steps: The hybrid ceramic can be seated directly after milling and polishing.
Characterization with light-curing stains and individualization with veneering composite are optional process steps.

NOTES

CONCEPT AND BENEFITS

VITA ENAMIC® hybrid ceramic combines enormous load capacity with high elasticity. The material has natural, tooth-like properties and enables a natural play of color. Read on to learn more.

NOTES

WE ARE HAPPY TO HELP

More information about the products and processing is also available at **www.vita-zahnfabrik.com**

Hotline Sales Support

Mr. Udo Wolfner and his team (Internal Sales Department) will be glad to assist you with orders or questions about the delivery, product data and marketing materials.

Phone +49 (0) 7761 / 56 28 90
Fax +49 (0) 7761 / 56 22 33
8:00 a.m. to 5 p.m. CET
E-mail: info@vita-zahnfabrik.com

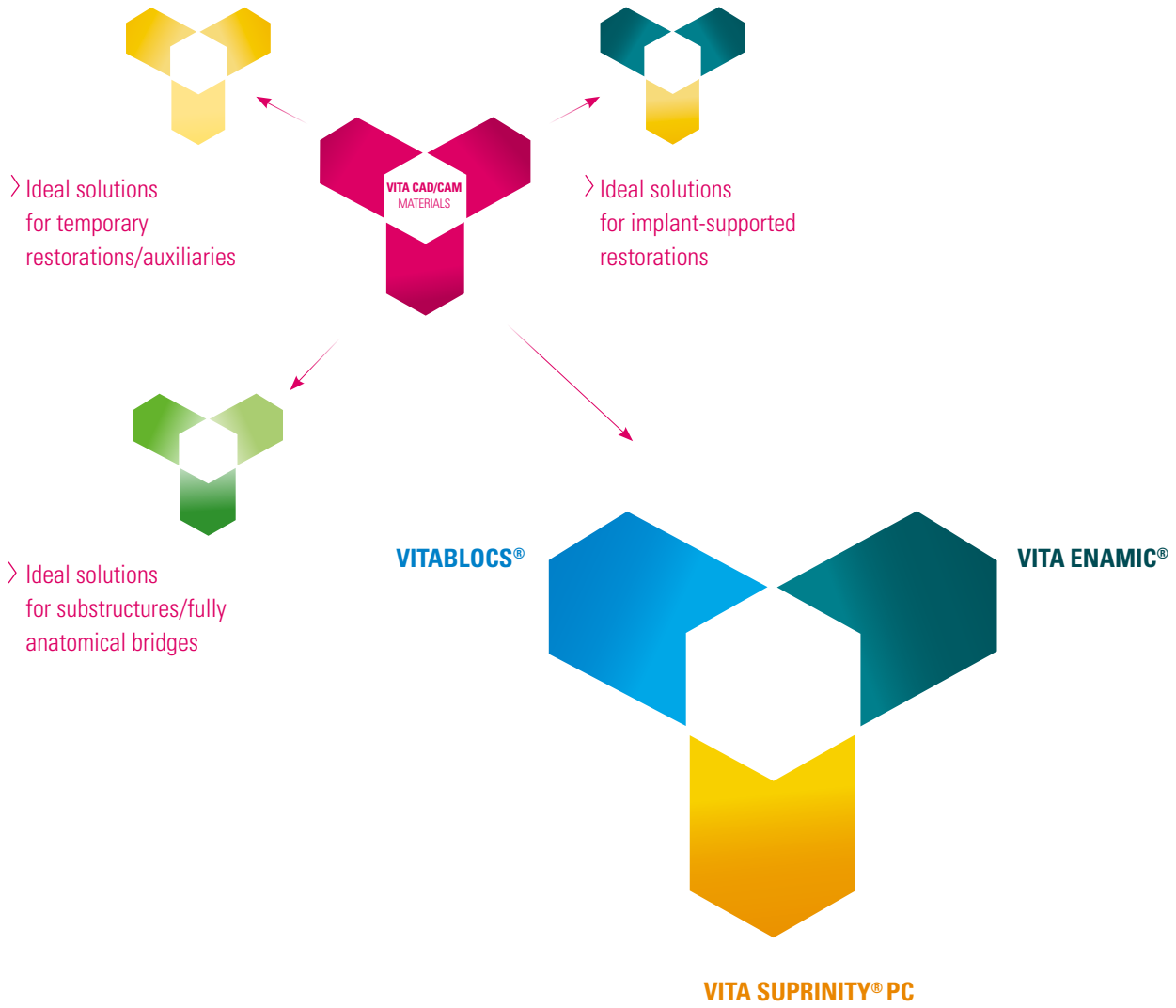
Technical Hotline

If you have technical questions concerning VITA product solutions, you can contact our technical specialists, Mr. Ralf Mehlin or Mr. Daniel Schneider.

Phone +49 (0) 7761 / 56 22 22
Fax +49 (0) 7761 / 56 24 46
8:00 a.m. to 5 p.m. CET
E-mail: info@vita-zahnfabrik.com

Additional international contact information can be found at **www.vita-zahnfabrik.com/contacts**

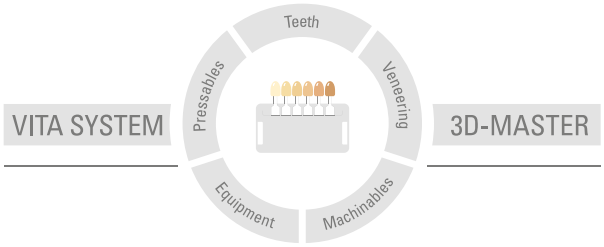
VITA CAD/CAM MATERIALS – for ideal solutions. Proven a million times over.



Ideal solutions for single-tooth restorations

Over the course of 30 years, more than 20 million single-tooth restorations have been fabricated using esthetic tooth-colored VITA CAD/CAM ceramics. Today, practices and laboratories can choose the ideal material solution for their individual needs, from highly esthetic feldspar ceramics, high-strength glass ceramics and innovative hybrid ceramics to treat a variety of single-tooth indications. In addition, these CAD/CAM ceramics are distinguished by simple and efficient processing.

More information about VITA ENAMIC
is available at www.vita-enamic.com



Bibliography:

1. Internal studies, VITA R&D:

VITA Zahnfabrik H. Rauter GmbH & Co. KG
Research and Development Division
Spitalgasse 3, 79713 Bad Säckingen, Germany
Dr. Enno Bojemüller, head of Solid State Analysis VITA R&D, VITA Zahnfabrik, Bad Säckingen
Dr.-Ing. Andrea Coldea, Material Development, R&D Inorganic Chemistry, Bad Säckingen
Dr. Berit Müller, project manager for VITA R&D, VITA Zahnfabrik, Bad Säckingen
Prof. Dr. Dr. Jens Fischer, R&D division director, Bad Säckingen

2. Menini M.

In-vitro-Test zur Fähigkeit der Hybridkeramik,
Kräfte zu absorbieren, January 2015.
Investigator: Dr. Maria Menini, Department for fixed and implant-prosthetic restorations, University of Genoa, Italy

3. Giordano R.

Development of Novel All-Ceramic Restorations and Wear, Strength, and Fatigue of Restorative Materials
Research Report, Juli 2013
Principal Investigator: Russell Giordano, D.M.D., D.M.Sc., Director of Biomaterials Boston University, Goldman School of Graduate Dentistry, Department of Biomaterials, Boston MA, USA

For detailed test data see Technical and scientific documentation VITA ENAMIC®
Download at www.vita-enamic.com

Please note: Our products must be used in accordance with the instructions for use. We accept no liability for any damage resulting from incorrect handling or usage. The user is furthermore obliged to check the product before use with regard to its suitability for the intended area of applications. We cannot accept any liability if the product is used in conjunction with materials and equipment from other manufacturers that are not compatible or not authorized for use with our product and this results in damage. The VITA Modulbox is not necessarily a component of the product. Date of issue of this information: 02.19

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

VITA Zahnfabrik has been certified and the following products bear the CE mark CE 0124:
VITA ENAMIC®

Sirona CEREC® and inLab® MC XL are registered trademarks of Sirona Dental Systems GmbH, Bensheim, Germany. IPS Empress CAD®, IPS e.max CAD®, Tetric EvoCeram® and Variolink® II are registered trademarks of Ivoclar Vivadent AG, Schaan, Liechtenstein. Lava® Ultimate, Sinfony™ and RelyX Unicem™ are registered trademarks of 3M Company or 3M Deutschland GmbH and CERASMART™ is a registered trademark of GC.

Acknowledgements
We would like to thank MDT Maurice T. Anderson (Bad Säckingen, Germany) for the fabrication of numerous VITA ENAMIC reconstructions.
and Dr. med. dent. Sebastian Horvath (Jestetten, Germany) for the provision of his practice rooms for photographs.

10445E - 0219 (x.x) S - Version (02)

VITA

VITA Zahnfabrik H. Rauter GmbH & Co.KG
Spitalgasse 3 · D-79713 Bad Säckingen · Germany
Tel. +49(0)7761/562-0 · Fax +49(0)7761/562-299
Hotline: Tel. +49(0)7761/562-222 · Fax +49(0)7761/562-446
www.vita-zahnfabrik.com · info@vita-zahnfabrik.com
facebook.com/vita.zahnfabrik