

VITABLOCS®

Proven a million times over



VITA shade determination

VITA shade communication

VITA shade reproduction

VITA shade control



VITA – perfect match.

VITA

A close-up, profile view of a woman with short, straight blonde hair. She is smiling, showing her teeth, and looking towards the right. The background is a soft, out-of-focus blue and white. A semi-transparent white box with a blue border is positioned in the lower-left quadrant, containing text.

CONCEPT AND BENEFITS

VITABLOCS® are clinically proven feldspar ceramic blanks for highly esthetic restorations. Read more about the optical properties and clinical long-term stability on the following pages.



VITABLOCS® – RELIABLE, HIGHLY ESTHETIC AND COST-EFFECTIVE



What?

- tooth-colored feldspar ceramic blanks for very good integration of the shade, clinically proven over many years

What for?

- restorations for esthetic reconstructions of minor defects and for highly esthetic restorations in the visible region

With what?

- VITABLOCS blanks are available in the following versions
 - monochromatic, tooth-colored: VITABLOCS Mark II
 - polychromatic, tooth-colored: VITABLOCS TriLuxe forte/Reallife

PROVEN OVER MANY YEARS. BRILLIANT PLAY OF SHADE AND LIGHT



VITABLOCS® Mark II

- Monochromatic, tooth-colored feldspar blanks for small, defect-oriented restorations, with shades that integrate very well into the remaining teeth.

VITABLOCS TriLuxe forte®

- polychromatic, tooth-colored feldspar blanks with integrated four-layer shade gradient to reproduce the natural play of colors in the esthetic region

VITABLOCS RealLife®

- polychromatic, tooth-colored feldspar blanks with integrated 3D-layer structure to reproduce the natural shade gradient in the anterior region



Reliable

- fabricating reliable restorations:
 - thanks to a durable material with very good clinical long-term reliability

Highly esthetic

- highly esthetic restorations:
 - thanks to a material with superior play of colors and light

Cost effective

- cost-effective reconstruction:
 - thanks to time-saving CAM fabrication and fast finishing by polishing without any firing process





CLINICAL EXAMPLES

With **VITABLOCS®**, practices and laboratories achieve predictable results with natural appearance and increased durability for high patient satisfaction. See for yourself!



VITABLOCS® IN THE CLINICAL USE

CASE STUDY 1: Natural anterior reconstruction using a polychromatic VITABLOCS RealLife blank



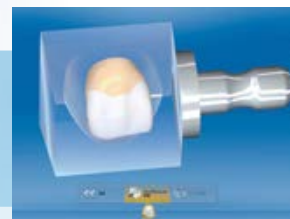
1. Highly rotated and non-vital central incisor 11.



2. Leveling of the dental arch within the scope of preparation.



3. Optimum adjustment of the shade and translucency gradient.



4. Positioning of the crown restoration before milling.

Photos provided by: Dr. Shoji Nakamura, dentist, Tokyo, Japan

CASE STUDY 2: Lifelike anterior restoration using a polychromatic VITABLOCS TriLux forte blank



1. Discoloration of the root canal treated incisor.



2. Virtual copy of the original morphology of tooth 11.



3. Adjusting the shade and translucency gradient.



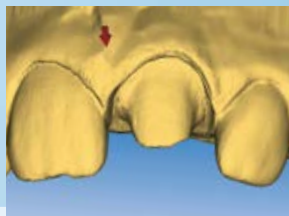
4. Natural appearance of the monolithic restoration on the model.

Photos provided by: Dr. Mon Li, dentist/Sally Hsieh, dental technician, CEREC Asia, Taipei, Taiwan

CASE STUDY 3: Highly esthetic anterior reconstruction using a polychromatic VITABLOCS RealLife blank



1. Clinical situation prior to the optical impression.



2. Optical impression.



3. Initial crown after fine morphological adjustments in situ.



4. Adhesive bonding: light-curing.

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

CASE STUDY 4: Permanent inlay restoration using a monochromatic VITABLOCS Mark II blank



1. Initial situation with insufficient composite restorations.



2. CAD/CAM-specific inlay preparation of the teeth.



3. Try-in of the VITABLOCS Mark II inlays.



4. Application of the adhesive.

Photos provided by: Dr. Alessandro Devigus, Bülach, Switzerland



5. Final integration of the monolithic crown into the esthetic region.



6. The permanently bonded VITABLOCS RealLife restoration in situ.



5. The highly esthetic, monolithic result in situ.



6. Exact reproduction of the shade effect with VITABLOCS.



5. Completed crown after endodontic treatment and with post-core construction.



6. Final result in situ on tooth 21.



5. Removal of excess material in the approximal area using flexible discs.



6. Final VITABLOCS Mark II inlays after polishing in situ.



FACTS AND EVIDENCE

In clinical long-term studies and test series, **VITABLOCS®** ceramics demonstrate excellent stability. Additional positive features include being cost-efficient and offering precise processing. Key facts and evidence can be found on the following pages.



EVIDENCE FOR LONG-TERM RELIABILITY

1. VITABLOCS® – Thirty years of clinical experience

VITABLOCS posterior crowns



Initial situation



Result after 20.5 years

Source: PD Dr. Andreas Bindl, dentist, Zurich, Switzerland

VITABLOCS inlays



Initial situation



Result

Source: Dr. A. Devigus, dentist, Bülach, Switzerland

*"I've been successfully using VITABLOCS ceramics
in my practice for more than 20 years."*

Dr. A. Devigus, Bülach, Switzerland, 03/19

1985

VITABLOCS®

Treatment of first patient

1991

VITABLOCS® Mark II



2003

VITABLOCS® TriLuxe



VITABLOCS veneer

Initial situation



Result

Source: PD Dr. A. Bindl, dentist, Zurich, Switzerland;
G. Lombardi, dental technician, Dübendorf, Switzerland

VITABLOCS anterior crown

Initial situation



Result

Source: Dr. A. Kurbad, dentist, Viersen, Germany

"I really enjoy working with VITABLOCS TriLux forte because I can quickly achieve an esthetic result."

Dr. A. Reiger, Tübingen, Germany, 12/18

"The unique thing about VITABLOCS RealLife is the natural shade effect."

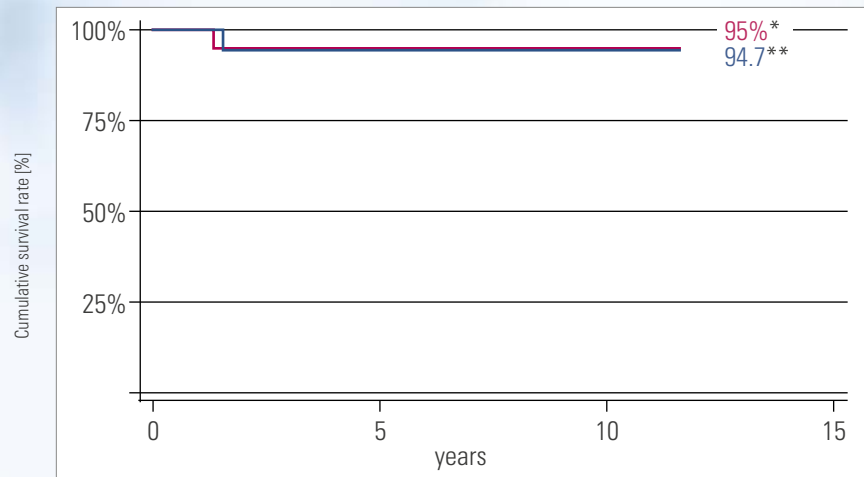
Dr. G. Kade, Waldkirch, Germany, 11/18

2007**VITABLOCS TriLux forte®****2010****VITABLOCS RealLife®**

EVIDENCE FOR LONG-TERM RELIABILITY

2. Very good long-term durability of VITABLOCS® ceramics

12-year results of VITABLOCS Mark II crowns



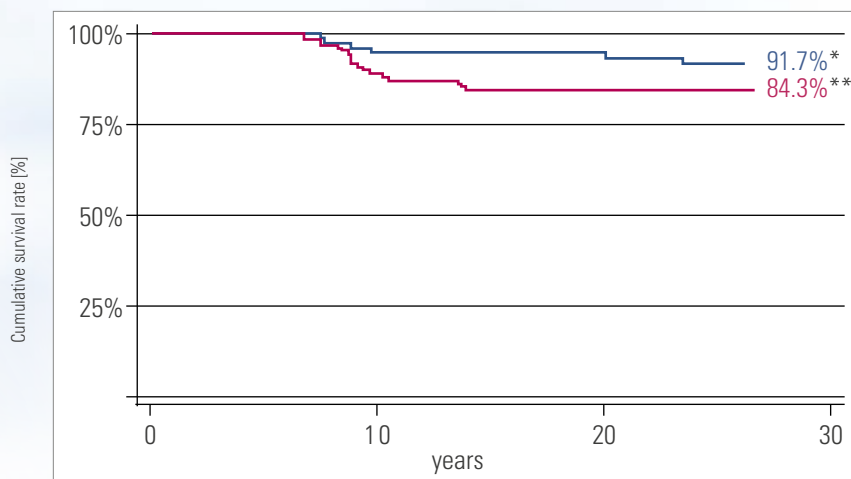
N = 61 (39 molar crowns, 22 premolar crowns)

* ■ Molars 95 %

** ■ Premolars 94.7 %

Source: Otto T, Mörmann WH. Clinical performance of chairside CAD/CAM feldspathic ceramic posterior shoulder crowns and endocrowns up to 12 years. International Journal of Computerized Dentistry 2015;18(2): 147-161 [1] (see back of brochure)

27-year results of VITABLOCS inlays and onlays



N = 141 (84 inlay/onlays on molars, 57 inlay/onlays on premolars)/

* ■ premolars 91.7 % ** ■ molars 84.3 %

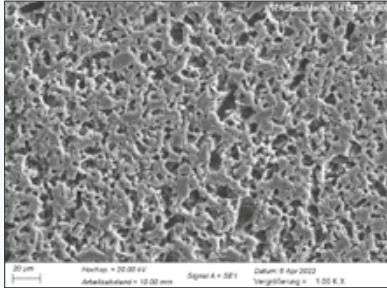
Source: Otto T. Up to 27-years clinical long-term results of chairside Cerec 1 CAD/CAM inlay and onlays. International Journal of Computerized Dentistry 2017;20(3): 315-329 [2] (see back of brochure)

VITABLOCS

- show very good clinical long-term durability in studies, and often achieve what is considered the gold standard for success/survival rates.

EVIDENCE FOR MATERIAL DURABILITY/ABRASION RESISTANCE

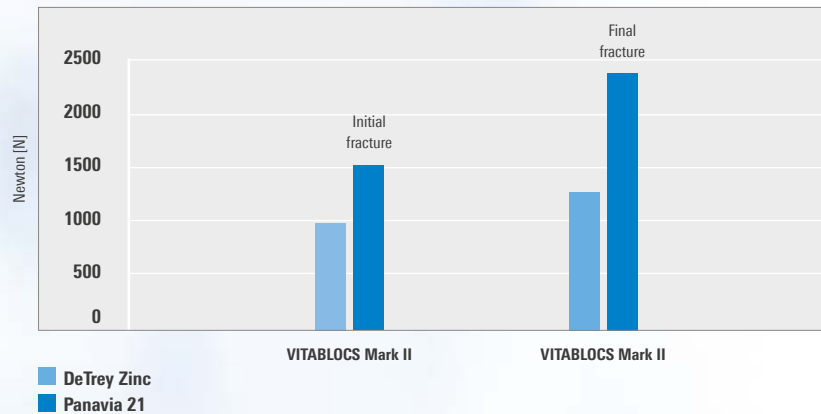
1. Good load capacity after adhesive bonding



SEM picture of the VITABLOCS surface (magnification 1000 x), etched with 5 % hydrofluoric acid for 60 seconds. The uniform and highly retentive etching pattern can be seen through the homogeneous distribution of the crystal and glass phase.

Source: Internal study, VITA R&D ((3 see back of brochure)

Fracture load study: VITABLOCS crowns



Source: External study 2006, Strength and Fracture Pattern of Monolithic CAD/CAM-Generated Posterior Crowns (Bindl, A., Lüthy, H., Mörmann, W. H., Dental Materials, 22(1), 29 – 36, [4], see back of brochure)

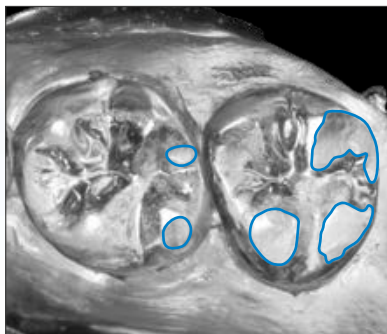
Note: The use of conventional bonding for VITABLOCS restorations has not been approved by VITA!



VITABLOCS

- feldspar ceramic crowns feature high load capacity after adhesive bonding and achieve fracture load values of more than 2,000 Newton (= final fracture) in tests.
- after hydrofluoric acid etching, feldspar ceramics reveal a retentive surface for good micromechanical retention.

2. Enamel-like wear resistance

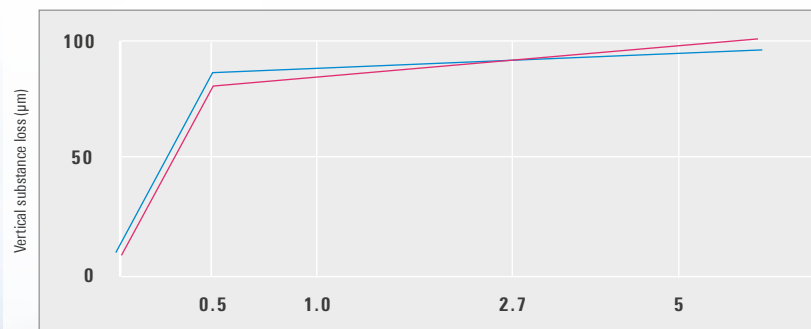


Abraded surfaces after 14.5 years

SEM photo; functionally intact occlusal surfaces of VITABLOCS crowns after 14.5 years

Source: External study 2016, University of Zurich/practice am Zürichberg, Epoxymodell von Abdruck nach 14,5 Jahren mit Gold bedampft, S/W-Fotografie des Modells (PD Dr. Andreas Bindl, [1], see back of brochure)

Natural abrasion behavior



VITABLOCS Mark II Enamel

Source: Krejci, I., Lutz, F., & Reimer, M. (1994). Wear of CAD/CAM ceramic inlays: restorations, opposing cusps and luting cements. Quintessence International, 25(3). [5] (see back of brochure)

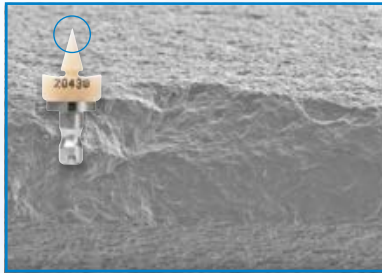


VITABLOCS

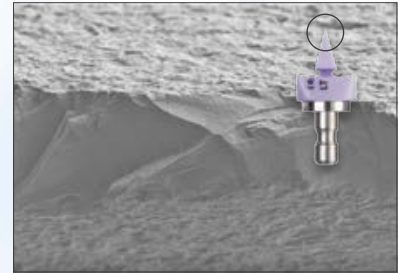
- in tests, feldspar ceramics reveal natural, enamel-like wear resistance, thanks to the particularly fine crystal structure.

EVIDENCE FOR PRECISE AND EFFICIENT CAM FABRICATION

1. Precise results for exact marginal fit

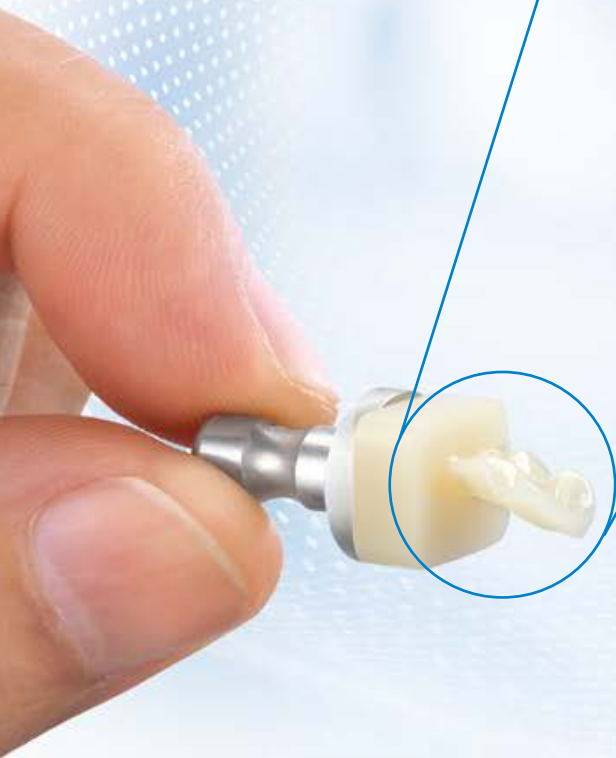


VITABLOCS



IPS e.max CAD

Source: Internal study VITA R&D, Study of standardized triangular-shaped bodies (30° wedge, top view) from material samples mentioned above, magnification x 500, report 06/22 [3], (see back of brochure)



VITABLOCS

- enables restorations with precise marginal areas to achieve an exact marginal seal, thanks to high edge stability.
- produces high marginal precision in tests for objects with thinning marginal areas.

2. Fast fabrication in a few minutes



		Inlay (min:sec)	Molar (min:sec)
VITABLOCS Mark II	normal	12:50	15:28
	fast	08:11	09:59
IPS e.max CAD	normal	12:46	14:04
	fast	— *	11:37

Source: Internal study VITA R&D, Milling times for two restoration types with Dentsply Sirona Primemill, report 04/23, [3], (see back of brochure)

VITABLOCS

- enables fast fabrication of restorations, since seating can be done immediately after the CAM process and polishing.
- demonstrated fast processing properties with CAM techniques/ equipment within a few minutes.

* Not integrated in the CAM software

A man and a woman, both wearing blue medical scrubs, are shown in profile, looking towards the right. They are smiling and appear to be engaged in a collaborative task. The background is a soft, out-of-focus white.

SYSTEMS AND COMPONENTS

VITABLOCS® blanks are available in numerous versions, geometries and shades. Perfectly matched system components enable efficient processing. Read on to learn more.

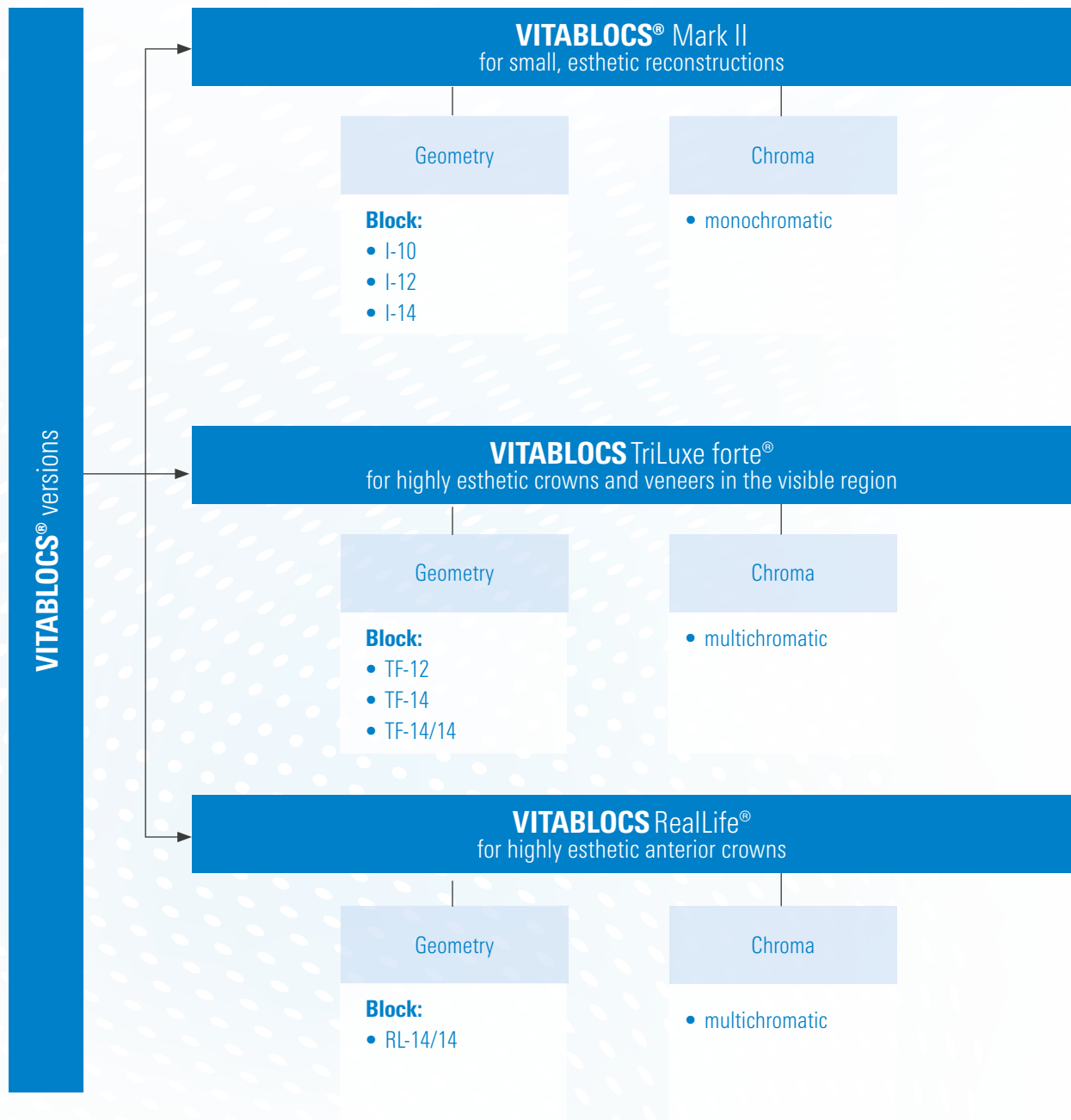


Charakterisierung
mit VITA AKZENT Plus

Individualisierung
mit VITA LUMEX AC

Befestigung mit
VITA ADIVA LUTING SOLUTIONS

AVAILABLE VERSIONS, GEOMETRIES, CHROMATICITIES









AVAILABLE SHADES

VITA SYSTEM 3D-MASTER range of shades										
Shades	0M1C	1M1C	1M2C	2M1C	2M2C	2M3C	3M1C	3M2C	3M3C	4M2C
VITABLOCS® Mark II	*									
VITABLOCS TriLux forte®										
VITABLOCS RealLife®										

VITA classical A1–D4										
Shades	A1C	A2C	A3C	A3.5C	A4C	B2C	B3C	C2C	C3C	D3C
VITABLOCS® Mark II										
VITABLOCS TriLux forte®										

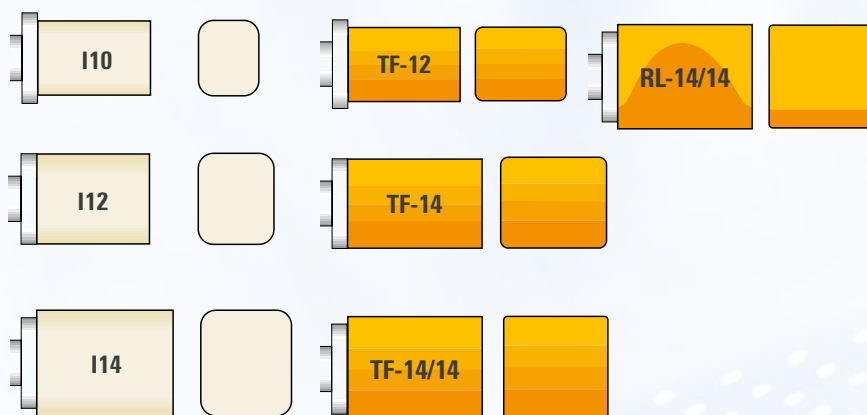
*) Only for I12, I14

RECOMMENDED INDICATIONS

VITABLOCS®			
Indication	VITABLOCS Mark II	VITABLOCS TriLux forte	VITABLOCS RealLife
 Inlay	●	○	○
 Onlay	●	○	○
 Veneer	○	●	●
 Endo-crown ¹⁾	○	○	○
 Anterior crown ²⁾	○	●	●
 Posterior crown ²⁾	○	○	○

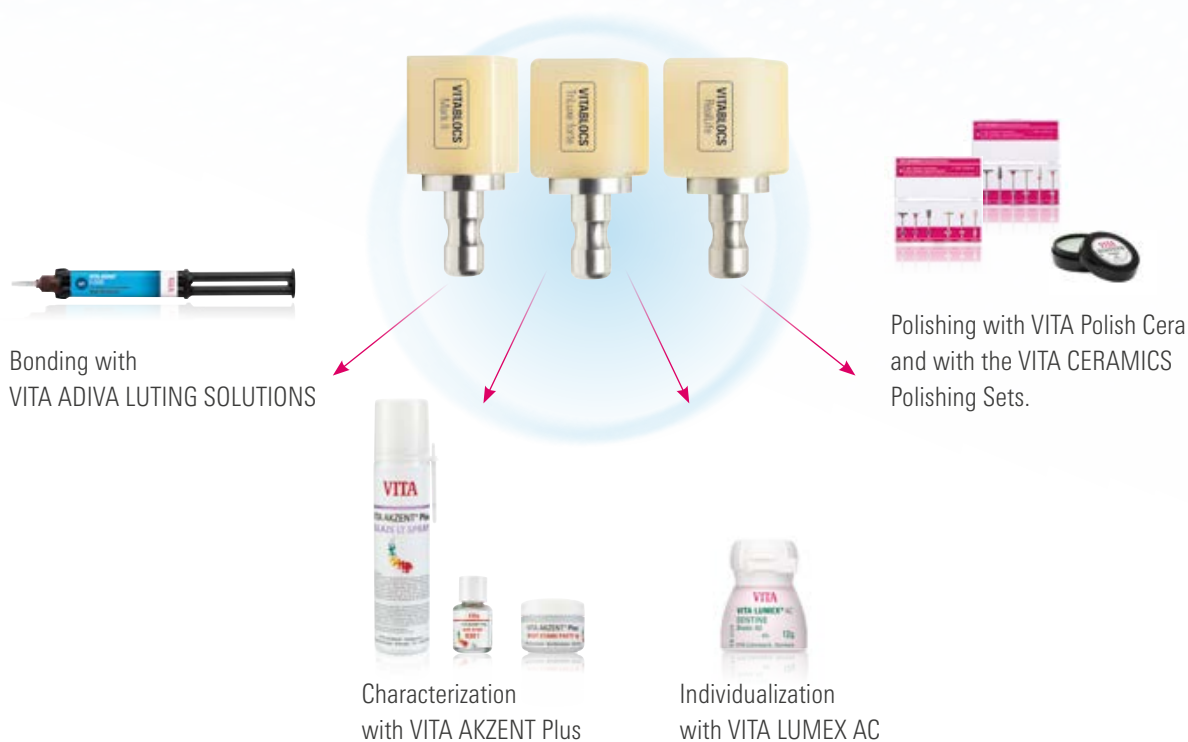
● recommended ○ possible 1) molars only 2) not recommended for implant restorations

AVAILABLE GEOMETRIES (geometries in mm)



- **VITABLOCS** Mark II: **I10**: 8 x 10 x 15; **I12**: 10 x 12 x 15; **I14**: 12 x 14 x 18
- **VITABLOCS** TriLuxe forte: **TF-12**: 10 x 12 x 15; **TF-14**: 12 x 14 x 18; **TF-14/14**: 14 x 14 x 18
- **VITABLOCS** RealLife: **RL-14/14**: 14 x 14 x 18

AVAILABLE SYSTEM COMPONENTS



SYSTEM COMPATIBILITY

VITABLOCS – SYSTEM SOLUTIONS*

VITA offers VITABLOCS with specific holder systems for the CAD/CAM systems:

- CEREC/inLab (Dentsply Sirona), PlanMill 40/PlanMill 40 S (Planmeca),
- Ceramill mikro IC/Ceramill Motion 2/Ceramill Matik (Amann Girrbach AG),

VITABLOCS – UNIVERSAL SOLUTIONS*

VITA offers VITABLOCS with the universal holder system for the CAD/CAM systems:

- CORiTEC line (imes-icore GmbH), DGSHAPE DWX-4W (DGSHAPE Corporation),
- CS 3100 (Carestream Dental, Inc.), N4/S1/S2/Z4/R5 (vhf camfacture AG)
- Zfx Inhouse5x (Zfx GmbH), Organical Desktop line (R+K CAD/CAM Technologie GmbH & Co. KG)

*) Note: The range of VITA CAD/CAM material versions/geometries/shades available may vary for individual CAD/CAM system partners or systems.

ADHESIVE BONDING SYSTEMS



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)
- PANA VIA V5 (Kuraray), DuoCem (Coltène)

*) Self-adhesive systems may only be used for crown restorations.

IDEAL SOLUTIONS IN THE PROCESS



*) Note "Optional process steps"

The feldspar ceramic material can be inserted immediately after milling and polishing. As a result, the process steps mentioned above are optional for feldspar ceramics.

NOTES

SYSTEMS AND COMPONENTS

NOTES

This image shows a single page of white paper with horizontal blue lines. The lines are evenly spaced and run across the width of the page, typical of notebook or legal stationery. There are no margins, text, or other markings on the page.

WE ARE HAPPY TO HELP

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



Hotline Sales Support

The Internal Sales Department team will be glad to assist you with orders or questions about delivery, product data and marketing materials.

► Phone +49 (0) 7761 / 56 28 84
Fax +49 (0) 7761 / 56 22 99
8 a.m. to 5 p.m. CET
E-mail: info@vita-zahnfabrik.com



Technical Hotline

If you have any technical questions concerning VITA product solutions, you can contact our Hotline team.

► Phone +49 (0) 7761 / 56 22 22
Fax +49 (0) 7761 / 56 24 46
8 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



Bibliography:

1. T. Otto, W.H. Mörmann, 2015

Clinical performance of chairside CAD/CAM feldspathic ceramic posterior shoulder crowns and endocrowns up to 12 years. International Journal of Computerized Dentistry 2015;18(2): 147-161

REM-Foto nach einer Liegezeit von 14,5 Jahren, Universität Zürich/Praxis am Zürichberg, Schweiz.

2. T. Otto, 2017

Up to 27-years clinical long-term results of chairside Cerec 1 CAD/CAM-Inlay and Onlays. International Journal of Computerized Dentistry 2015;18(2): 147-161

3. Internal studies, VITA R&D

VITA Zahnfabrik H. Rauter GmbH & Co. KG
Ressort Forschung und Entwicklung
Spitalgasse 3, 79713 Bad Säckingen, Germany

Dr. Enno Bojemüller, Leiter Festkörperanalytik VITA F&E,
VITA Zahnfabrik, Bad Säckingen

Dr. Andreas Oberländer, Leiter Innovationsmanagement VITA F&E,
VITA Zahnfabrik, Bad Säckingen

Dr. Berit Gödiker, project manager for VITA R&D,
VITA Zahnfabrik, Bad Säckingen

Detailed test data can be provided upon request.

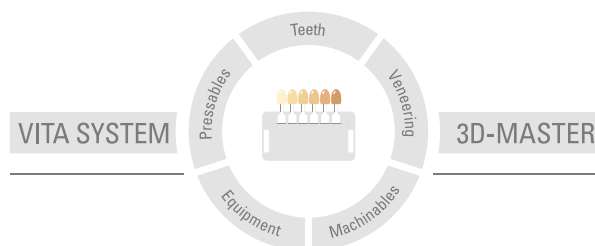
4. Dr. A. Bindl, H. Lüthy, W. H. Mörmann 2006

Strength and Fracture Pattern of Monolithic CAD/CAM-Generated Posterior Crowns. Dent Mat, 22(1), 29-36, 1/2006.

5. I. Krejci et al., 1994

Wear of CAD/CAM ceramic inlays: restorations, opposing cusps, and luting cements. Quintessence International, 25(3).

More information about VITABLOCS
can be found at: www.vita-zahnfabrik.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: 2023-08

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 mark

CE 0124

VITABLOCS® Mark II, **VITABLOCS** TriLuxe forte®, **VITABLOCS** RealLife®,
VITA LUMEX AC, **VITA AKZENT®** Plus

The products/systems of other manufacturers mentioned in this document are registered trademarks of the respective manufacturers.

MD

VITA

 VITA Zahnfabrik H. Rauter GmbH & Co.KG
Spitalgasse 3 · 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