Mark II ESTHETIC LINE TriLuxe

VITABLOCS®

for CEREC®
VITABLOCS® – Clinical Remarks*

VITABLOCS® for CEREC® are indicated for the CAD/CAM manufacturing of inlays, onlays, overlays, partial crowns, full crowns, endo-crowns on molars and veneers.

The above mentioned indications for ceramic restorations made of VITABLOCS apply exclusively for adhesive cementation with a recognized and correctly used functional enamel-dentine adhesive bonding system (Total Bonding).

The occlusion should be completely free of interferences, i.e. without any premature contacts in static and dynamic occlusion. Particularly the marginal contacts should be carefully adjusted. In the case of pronounced convex approximal surfaces of which the margin made of Mark II ceramic is not supported by the shoulder, no marginal contacts should be positioned. Occlusal contacts should not be positioned on the margins of restorations. Occlusally exposed dentine should, if possible, be integrated into the restoration.

In the main fissure the following should be observed: while the occlusal margins taper off thinly, the minimum layer thickness of the ceramic below the deepest part of the fissure is 1.0 mm. Care should be taken during preparation to ensure that the cavity dimensions are sufficient. Establishing a functional dentine adhesion does away with the need for cavity lining and avoids reduction of the wall thickness of the ceramic at a given preparation depth. The layer thickness must be verified with the milling preview function of the CEREC 3 software. Reduction of the minimum layer thickness through manual processing of the fissure after seating must be avoided. In the case of normal function, restoration with cuspal coverage is recommended for thin-cavity walls (< 2 mm) and cavity walls without dentine support in the area of centric cusps of vital teeth. The minimum wall thickness of the ceramic in the cuspal area is 2.0 mm. Use the following procedure for the cuspal coverage of devitalized teeth: the existing cusps of devitalized teeth should be shortened by at least 2 mm and restored with cuspal coverage.

Hyperfunctions: restorations made of VITABLOCS are contraindicated for patients diagnosed with excessive masticatory functions, in particular teeth grinders and clenches. An absolute contraindication applies for the restoration of devitalized teeth with restorations made of VITABLOCS in the case of patients with hyperfunctions. Endo-crowns on premolars: endo-crowns on premolars are contraindicated on account of the small adhesive surface area and the small root cross sections.

Restorations made of VITABLOCS fine-structure feldspar ceramics must on no account be processed using tungsten carbide instruments, since this damages the ceramic by causing microcracks. Only fine-grained diamond abrasives (40 µm) should be used for contouring, and finishing diamonds (8 µm) for pre-polishing. Polishing is best carried out with Al₂O₃-coated flexible discs, polishing brushes and diamond polishing paste. Reworking/finishing should be carried out under low pressure and ample water cooling.

*In friendly collaboration with Prof. Dr. W. H. Mörmann and Dr. A. Bindl, Department of Tooth-Coloured and Computer-Aided Restorations of the University Dental Clinic of Zurich, Switzerland.
VITABLOCS® by VITA for the CEREC® System by Sirona

Sirona Dental Systems and VITA Zahnfabrik have been operating in close collaboration in the domain of CAD/CAM since 1986. As market leaders in their core areas of competence, the most experienced enterprises in the field have joined forces in order to develop the VITABLOCS and CEREC® in cooperation and for mutual benefit. By pooling their knowledge and resources in this successful manner, VITA and Sirona lead the way for the future in dentistry.

The Sirona CEREC® CAD/CAM system offers you perfect processing of the VITABLOCS (Mark II, ESTHETIC LINE, TriLuxe) at the highest level of expertise. The CEREC method combines the adhesive technique with the fastest method possible to date of manufacturing direct chairside anterior and posterior all-ceramic inlays, onlays, partial crowns, veneers and crowns out of the VITABLOCS. The results are defect-oriented, biocompatible, metal-free tooth coloured restorations made of high-quality, long lasting ceramic. The decisive advantage of the VITABLOCS is that the restorations can be seated immediately after the milling procedure – there is no need for subsequent firing. Dentists value the good polishing characteristics of the VITABLOCS and the excellent, enamel-like wear characteristics of the VITABLOCS.

VITA and Sirona – the perfect match. Two strong partners you can count on for the future of all-ceramic technology.
The fine structure of the Mark II ceramic and the industrial sintering process are the reasons for the good polishing properties and the excellent, enamel-like abrasion characteristics of restorations made of VITABLOCS Mark II.

The advantages of the material and working properties of the feldspar ceramic correlate with the over 9 million restorations made of Mark II fine-structure feldspar ceramic blocks in clinical use today. They have a high degree of translucency, which guarantees excellent shade matching with the remaining natural tooth substance (clinical survival rate of 90% after 10 years).

A new development is the further aesthetic improvement by individualizing with the special VITAVM.9 ESTHETIC KIT.

VITABLOCS® Mark II
The all-round talent proven a million times over

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The VITABLOCS ESTHETIC LINE are fine-structure feldspar ceramic blocks with an especially high degree of translucency. They are especially suitable for the manufacture of veneers and anterior crowns. Patients whose teeth have a low degree of chroma will benefit particularly from this variant of VITABLOCS.

No matter whether you use Mark II, ESTHETIC LINE or TriLuxe, the CEREC system enables you to perform all steps of the treatment right up to the seating of the definitive restoration. Seating is possible immediately after milling. Any necessary intra-oral corrections can be carried out easily and precisely using diamond abrasive instruments. Glaze firing of the restoration is not required, only polishing. Just design it, mill it, polish it - and go!

VITABLOCS® ESTHETIC LINE
The blocks with extra translucency

VITABLOCS ESTHETIC LINE – Sizes and Shades

<table>
<thead>
<tr>
<th>Designation</th>
<th>Dimensions (mm)</th>
<th>VITA SYSTEM 3D-MASTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>K12</td>
<td>10 x 12 x 15</td>
<td>EL-1M1C</td>
</tr>
<tr>
<td>K14</td>
<td>12 x 14 x 18</td>
<td>EL-1M1C</td>
</tr>
<tr>
<td>V7</td>
<td>7 x 12 x 18</td>
<td>EL-1M1C</td>
</tr>
</tbody>
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„Real chairside material with natural translucency and fluorescence that correspond to natural teeth.“

Dr. Christof Ellerbrock, Idar-Oberstein, Germany

Photographs: Dr. Helmut Götte
Thanks to a special manufacturing process, VITA Zahnfabrik has succeeded in integrating three different degrees of colour saturation (chroma), and hence three different degrees of translucency into one single VITABLOC TriLuxe. The fine-structured feldspar ceramic is kind to grinding instruments and is distinguished by its antagonist friendly abrasion characteristics that correspond to those of natural tooth substance in addition to its optimum light transmission properties and whitish fluorescence.

These blocks have excellent grinding properties which enable dentists to reproduce at the chairside the characteristic colour variations present in a natural tooth with regard to translucency and shade intensity, and hence to achieve even better integration of the restoration with the patient’s remaining natural tooth substance. The natural aesthetics of the restoration are achieved by means of the three layers within one VITABLOC TriLuxe; the middle (body) layer corresponds to the normal degree of shade intensity, the uppermost enamel layer is the least shade-intensive and at the same time the most translucent, whereas the lower cervical layer is the most strongly shaded and - as in the natural tooth - the least translucent.

VITABLOCs® TriLuxe
Layered blocks with 3 different degrees of chroma just as in natural teeth - for even better chairside aesthetics.

„With the VITABLOCs TriLuxe I can fulfil the patient’s aesthetic requirements to an even higher degree in a very short space of time.“
Dr. Harald Steinbrenner, Heppenheim, Germany

Photographs: Dr. Andreas Kurbad
**VITABLOCS® Accessories**

- VITABLOCS® 3D MASTER Assortment for CEREC® 3
- VITA 3D MASTER Assortment for CEREC® 2
- VITABLOCS® Mark II for CEREC®
- VITABLOCS® Mark II for CEREC® for the reproduction of bleached teeth
- VITABLOCS® ESTHETIC LINE for CEREC®
- VITABLOCS® TriLuxe for CEREC®
- VITABLOCS® Shade sample blades
- VITABLOCS® Storage Box
- VITA CEREC® Propellant
- VITA CEREC® Spray Head for Propellant
- VITA CEREC® Powder
- VITA CEREC® Liquid
- VITA CEREC® DIAMOND DISCS E

**Individualization: Staining Technique, Layering Technique**

- VITA SHADING PASTE Assortment
- VITA SHADING PASTE 3D MASTER Assortment
- VITA Akzent Assortment
- VITA VM®9 ESTHETIC KIT for VITABLOCS®

**Ceramic Furnaces**

- VITA ATMOMAT
- VITA VACUUM 40 T

**Adhesive Technique**

- VITA LUTING SET Complete Adhesive Set
- VITA CEREC® DUO CEMENT KIT Adhesive Composite
- VITA CEREC® A.R.T BOND SET Adhesive Bonding System
- VITA CEREC® A.R.T BOND PRIMER A+B Refill Package
- VITA CEREC® A.R.T BOND BOND Refill Package
- VITA CEREC® ETCHANT GEL KIT 35% phosphoric acid gel
- VITA CERAMICS ETCH 5% hydrofluoric acid gel
- VITASIL® silane bonding agent
- VITA OXY-PREVENT glycerine gel
VITABLOCS are an integral part of the unique VITA SYSTEM 3D-MASTER. This system guarantees shade matching according to the system at all times even for subsequent restorations made of any other VITA material for the purpose of conservative and prosthetic restorations.

This is because all shade-related VITA products are integrated into the VITA SYSTEM 3D-MASTER. It is the only shade system with which all natural tooth shades can be systematically determined and completely reproduced according to the 3 determination criteria of colour - namely lightness (value), colour saturation (chroma) and hue.