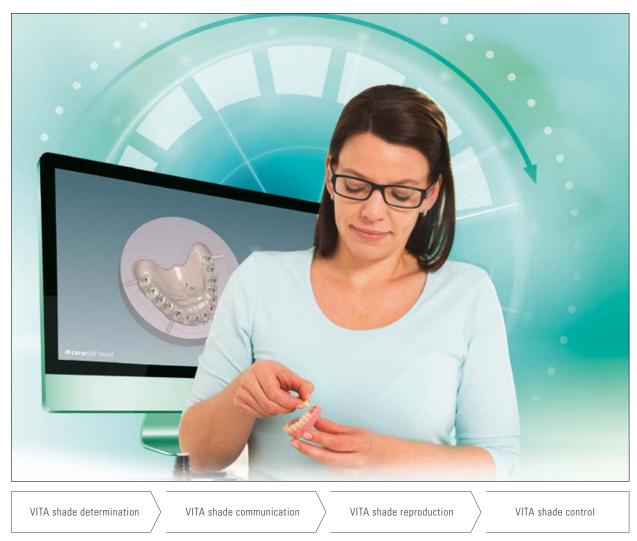
VITA VIONIC® FRAME

Instructions for use for digital denture fabrication with Ceramill® FDS



Date of issue: 03.20

VITA – perfect match.



The dental framework solution with an ideally coordinated material system



Dear customers,

Congratulations and thank you for choosing the dental framework solution with an ideally coordinated material system!

VITA VIONIC SOLUTIONS is a comprehensive material system for each process step of CAD/CAM denture fabrication for the time-saving, digital manufacture of dentures that are tailored to the individual patient.

To process all system components safely and simply, please read these instructions all the way through before the first use. For detailed information on the CAD/CAM fabrication of full/partial dentures using the Ceramill System, please see the Ceramill FDS user manual from Amann Girrbach.

We hope you enjoy VITA VIONIC SOLUTIONS and achieve great results!

Your VITA Product Management Team

Explanation of symbols:



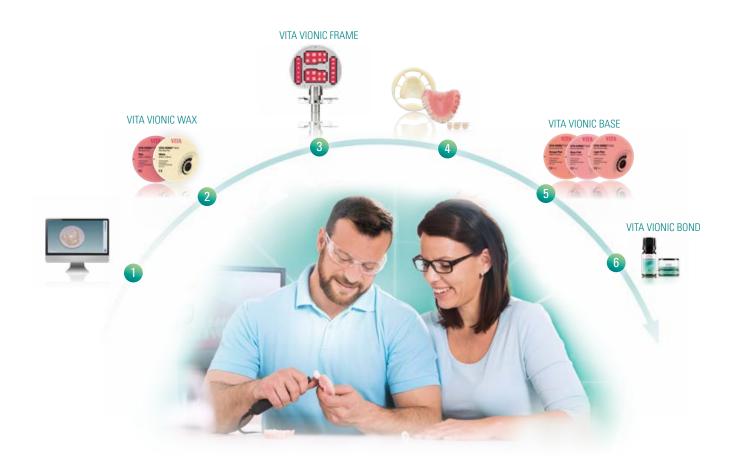
-System/technology info







1. The Material System



Note:

- What? VITA VIONIC is a coordinated material system for process-reliable CAD/CAM denture manufacturing at the touch of a button
- With what? The VITA VIONIC material system includes:
 - o VITA VIONIC WAX: wax discs for the fabrication of full-sized wax try-ins and wax setups
 - \circ VITA VIONIC BASE: PMMA discs for the manufacturing of final denture bases
 - \circ VITA VIONIC FRAME: Tooth frame solutions for CAM tooth modification
 - o VITA VIONIC BOND: Bonding solution for fixing denture teeth in the base

2. The System Components

2.1 VITA VIONIC® WAX













Note:

- What? VITA VIONIC WAX is a millable blank made of a high-quality, millable and dimensionally stable synthetic wax, with a high melting temperature.
- What for?
 - VITA VIONIC WAX, white, is used for the economic fabrication of full-sized try-ins. They are milled completely from wax (base, incl. teeth) and are used to test the midline, occlusion plane and phonetics.
 - VITA VIONIC WAX, pink, is used for the fabrication of denture bases for try-in. For this purpose, denture teeth are fixed in the milled cavities. All parameters can be checked, and if necessary, corrections can be implemented.
- With what? VITA VIONIC WAX is available in the colors pink and white.

- Not suitable for the direct fabrication of final prostheses.
- Must be processed at room temperature.
- Must be protected from direct sunlight.

2.2 VITA VIONIC® BASE



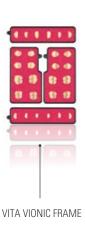
Note:

- What? VITA VIONIC BASE is a millable blank made of a high-quality, industrially polymerized acrylic polymer that features shade stability (PMMA) for the CAD/CAM fabrication of denture bases for full/partial dentures.
- What for? For the CAD/CAM fabrication of final denture bases in conjunction with VITA denture teeth (VITA VIONIC FRAME).
- With what? VITA VIONIC BASE is available in three colors (Deep Pink, Light Pink, Orange Pink) and in two different heights (26 and 30 mm).

- Must not be used in patients who are allergic to PMMA.
- Suitable only for the manufacture of full/partial dentures with VITA denture teeth (VITA VIONIC FRAME).
- Can be lined and repaired with a commercially available cold polymer:
 Manufacturing recommendation: Cold polymer FuturaGen (Schütz Dental GmbH) in the colors orange, transparent pink and opaque pink.

1. The Material System > 2. The System Components 3. The Overall Workflow

2.3 VITA VIONIC® FRAME







Tooth frames in the holder system

CAM-processed denture teeth

Note:

- What? VITA VIONIC FRAME is a tooth frame solution for VITA denture teeth, which are embedded in a polymer frame
 using wax.
- What for? For the CAM modification of VITA denture teeth (VITAPAN EXCELL DD FRAME/
 VITAPAN LINGOFORM DD FRAME) with Ceramill FDS (Amann Girrbach) for the digital manufacture of full/partial dentures.
- With what? VITAPAN EXCELL DD FRAME (anterior): 9 x maxilla and 4 x mandible anterior tooth moulds.
- VITAPAN LINGOFORM DD FRAME (posterior): 4 x maxilla and 4 x mandible posterior tooth moulds.
- Available in: 6 x VITA classical A1-D4 shades (A1, A2, A3, A3.5, B3, D3).

- Store and process at room temperature.
- · Protect from direct sunlight.



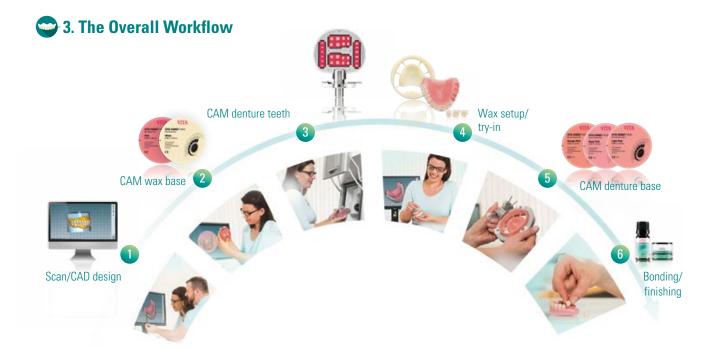
VITA VIONIC BOND bonding system

Bonding of the denture teeth in the base.

Note:

- What? VITA VIONIC BOND is a self-curing, two-component bonding system (BOND I + II) based on methyl
 methacrylate (MMA).
- What for? It is used for the final bonding of VITA denture teeth in the milled cavities of CAD/CAM fabricated denture bases made of VITA VIONIC BASE.
- With what? The VITA VIONIC BOND KIT consists of VITA VIONIC BOND I (glass vial), VITA VIONIC BOND II (glass bottle) and an applicator (microbrush).

- Store in the refrigerator between 5 and 10°C where it is dark and dry, observe the expiration date and protect from sunlight.
- VITA VIONIC BOND contains methyl methacrylate (MMA). MMA is a hazardous substance that is highly flammable and has a sensitizing effect. Avoid contact with skin and inhalation of the fumes.
- You can find detailed instructions in the Safety Data Sheets at www.vita-zahnfabrik.com



Note:

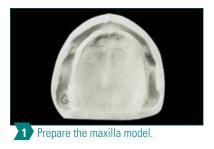
- 1. Scan/CAD design with Ceramill Map and Ceramill Mind
- 2. CAM processing with VITA VIONIC WAX
- 3. CAM modification with VITA VIONIC FRAME
- 4. Wax setup / full-sized try-in with VITA VIONIC WAX
 Note: You can choose from two different processes for Step 4!
- 5. Fabrication of the denture base with VITA VIONIC BASE
- 6. Bonding of the denture teeth with VITA VIONIC BOND

Please note:

System requirements for VITA VIONIC SOLUTIONS:

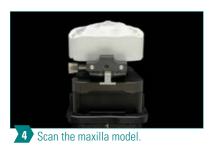
- CAD software: Ceramill D-Flow Software Module
- CAM hardware: Ceramill Motion 2 (5X) incl. Coolstream
- Scanner: Ceramill Map 300/400

4. The Scan Process









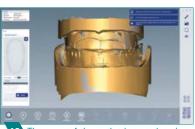














Note:

- Prepare the models so that no larger shadows are visible in the area of the vestibular fold.
- Spray the esthetic template with scanspray (e.g., VITA Scan Spray) to prevent reflections and record all necessary information.

Please note:

• For detailed information on the scan process, please see the Ceramill FDS processing instructions.

5. The CAD Process



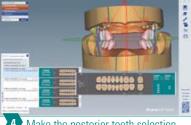
Determine the occlusion plane.



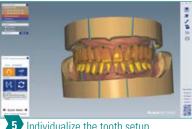
2 Conduct the model analysis according to TiF (maxilla and mandible).



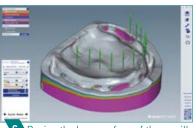
Make the anterior tooth selection (VITAPAN EXCELL anterior).



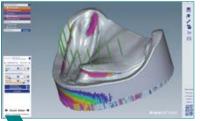
Make the posterior tooth selection (VITAPAN LINGOFORM posterior).



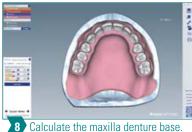
5 Individualize the tooth setup, if necessary.



Design the base surface of the maxilla prosthesis (blocking the model out).

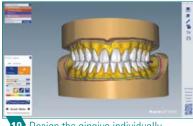


7 Design the base surface of the mandible prosthesis (blocking the model out).

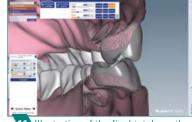


8 Calculate the maxilla denture base.





10 Design the gingiva individually with the free-form function.



11 Illustration of the final total prosthesis in the step view.



12 Nesting of the denture bases (maxilla and mandible).

- Select the suitable anterior and posterior teeth and the desired setup concept according to the TiF model analysis.
- Design the gingiva individually, as needed, according to your desires with the free-form function of the wizard.

Please note:

• For detailed information on the CAD process, please see the Ceramill FDS working instructions.

6. The (CAM) Processing

6.1 Fabrication of full-sized wax try-ins (Process 1)



1 Clamp the white wax disc in the holder system.



2 Mill the wax disc for the full-sized wax try-in (maxilla).



3 Mill the wax disc for the full-sized wax try-in (mandible).



4 Separate out the try-in with a hot wax knife.



The full-sized try-ins on the master models.



6 Conduct the intraoral try-in.

Note:

- This process is used to manufacture full-sized wax try-ins (note: there are two processes for the fabrication of try-ins; see 2.1 VITA VIONIC WAX).
- For the full-sized try-in, blend in or smooth out excess (protrusions) flush with the denture base.
- Central parameters, such as the midline, course of the occlusion plane and phonetics, must be examined during the try-in.
- If all parameters are in order, you can mill the final denture base and conduct the CAM modification of the denture teeth.
- Any necessary adjustments after the try-in are performed digitally with the CAD software.
 The final prosthesis is then fabricated using the CAM process (based on the modified and finalized setup).

- Based on CAM technology, a final prosthesis can only be fabricated after checking the wax try-in.
- In the case of comprehensive adjustments after the wax try-in, conduct another try-in as a control, if necessary.
- The full-sized try-ins must be disinfected before and after the try-in.

6.2 Fabrication of the wax try-in with denture teeth (process 2)



Clamp the pink wax disc in the holder



2 Mill the wax disc (maxilla and mandible) for the try-in.



3 Separate out the try-in with a hot wax knife.



Modify the denture teeth using CAM (see 6.3).



5 Fix the denture teeth in the cavities with wax.



6 The finished wax discs with denture teeth secured with wax.

Note:

- This process is used to manufacture denture bases for wax try-ins. The denture teeth are fixed in the milled cavities (note: there are two processes for the fabrication of try-ins, see 2.1 VITA VIONIC WAX).
- Blend in and smooth out the excess (protrusions) flush with the denture base and fix the denture teeth for the try-in in the cavities.
- Modify the denture teeth with the aid of the CAM process (see 6.3).
- Central parameters, such as the midline, course of the occlusion plane and phonetics, must be examined during the try-in.
- If all parameters are in order, you can mill the final denture base or perform the conventional fabrication.
- Any necessary adjustments after the try-in can be conducted digitally (CAD software) or manually (by hand).
- In the case of manual adjustment, the fabrication is done conventionally using tamping or pressing technology. VITA VIONIC WAX, pink, can be completely extracted.
- The wax dentures must be disinfected before and after the try-in.

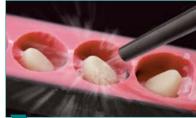
6.3 Modification of the denture teeth using CAM



Clamp the tooth framework in the holder system.



The denture teeth after CAM modification.



3 Sandblast the processed surfaces of the anterior teeth.



4 Sandblast the processed surfaces of the posterior teeth.



Separate the denture teeth from the dental framework.



6 Clean the tooth blanks and remove any residual wax.

Note:

- The basal and circular CAM modification of each individual denture tooth guarantees a high, cut-back-free fit between tooth and base.
- Carefully sandblast the CAM-modified glued surfaces with Al_2O_3 (50 μ m, 2 3 bar) and observe the operating instructions for the blasting unit used.
- You can place the VITA VIONIC FRAME in the freezer for a short time or spray it with a cold spray to make it easier to remove the teeth.
- In order to completely remove any wax residue, you must clean the denture teeth with steam and blow them dry with separated pressurized air (water separator) prior to bonding.

6.4 Fabrication of the final denture bases



Clamp the PMMA disc in the holder system.



2 Mill the final maxilla denture base.



3 Mill the final mandible denture base.



Separate the denture bases from the



5 Final milled denture bases (here, maxilla).



Sandblast the milled cavities of the denture bases.

- Separate the denture bases from the discs with a mill suitable for PMMA and grind the excess (protrusions) flush with the base.
- Carefully sandblast the milled cavities in the denture bases with Al_2O_3 (50 µm, 2 3 bar) and remove the millings with separated pressurized air (water separator). Observe the operating instructions for the blasting unit used.

Please note:

• Please use appropriate safety glasses and wear face protection/respiratory protection.

7. Bonding

7.1 Bonding of the denture teeth in the base



Check the fit of the teeth for any slight proximal interferences.



Mix VITA VIONIC BOND I and II with each other.



Mix the two components for 30 seconds.



Apply the adhesive system to the glue surfaces of the teeth.



Moisten the milled cavities generously with the adhesive system.



Position the denture teeth in the cavities.



7 Attach the denture teeth using light pressure.



8 Complete the dental row with denture teeth.



9 Final bonded denture teeth (here, maxilla).

Note:

- Position all teeth one after the other in the cavities of the denture base to remove any occurring proximal interference
- Mix the two components using the applicator, bubble-free, for 30 seconds.
- After that, immediately apply and process the bonding systems at room temperature (>20 C).
- Adhesive with a low viscosity may evaporate if it is handled for too long. To ensure that the adhesive surface is completely moistened, it is recommended to apply a generous amount.
- To create a secure bond, the denture must rest without strain for at least 30 minutes after the teeth have been inserted.
- Curing is finally complete after 20 minutes in the water bath of a pressure pot (55 C, 2 bar). Alternatively, the curing can take place by storing the denture without strain for 12 hours at room temperature.
- Any excess can be removed by careful blast polishing (1-2 bar) after bonding the teeth.

- The mixing ratio of the two components is ideally matched to both of them and may not be changed.
- If the low-viscosity consistency of the bonding system changes and threads begin to appear, for example,
 VITA VIONIC BOND can no longer be used.
- Please use appropriate safety glasses and wear face protection/respiratory protection.

8. Finalization

8.1 Finalization of the final denture bases



1 Sandblast the interdental spaces.



2 Clean the sandblasted surfaces.



3 Use VITA VM LC MODELLING LIQUID for moistening.



Moisten the sandblasted areas with VITA VM LC MODELLING LIQUID.



Use VITA VM LC flow materials for closing interdental spaces.



Close the interdental spaces with VITA VM LC flow.



7 Finalize and polish the denture surfaces.



8 Final digitally-fabricated full dentures.



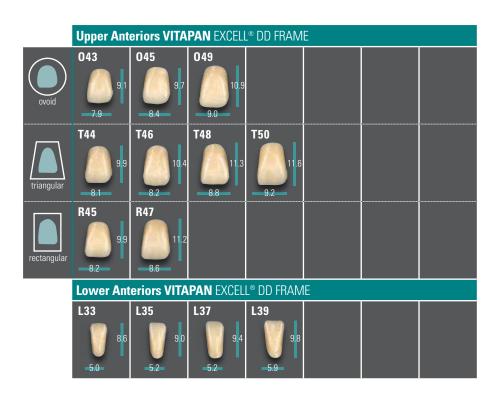
Note:

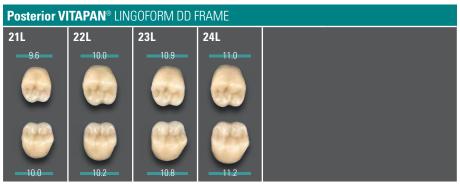
- Sandblast the interdental spaces with Al_2O_3 (50 μ m, 2 3 bar) to ensure a good bond of VITA VM LC flow to the base material and the denture teeth.
- Clean the sandblasted surfaces with separated pressurized air (water separator).
- Moisten the sandblasted areas with VITA VM LC MODELLING LIQUID for the bond between the denture teeth and VITA VM LC flow materials.
- Then use VITA VM LC flow (5 gingiva shades) to close the interdental spaces.
- Please conduct the surface processing and polishing according to the analogous full denture.
- Check the occlusion in the articulator. After adjusting the muscle balance, reocclusion by the practitioner is recommended after a wearing time of approximately two days.

- When using the light-curing microparticle composite VITA VM LC flow, please observe the processing instructions
 of this product.
- The curing parameters may vary depending on the device used. Please observe the manufacturer's recommendations (detailed instructions can be found at www.vita-zahnfabrik.com).
- Please use appropriate safety glasses and wear face protection/respiratory protection.

9. Moulds and Information

9.1 Overview of available tooth moulds





VITAPAN EXCELL Anterior	UJ/No.	043 43.1	045 45.1	049 49.1	T44 44.1	T46 46.2	T48 48.1	T50 50.0	R45 45.4	R47 47.0
	LJ / No.	L33 33.2	L35 35.3	L39 39.0	L33 33.2	L35 35.3	L37 37.3	L39 39.0	L35 35.3	L37 37.3
VITAPAN LINGOFORM Posterior	UJ / No.	21L 30.1	22L 31.6	23L 34.2	21L 30.1	22L 31.6	22L 31.6	24L 35.8	22L 31.6	22L 31.6
	LJ / No.	21L 30.7	22L 32.1	23L 34.8	21L 30.7	22L 32.1	22L 32.1	24L 36.4	22L 32.1	22L 32.1

9.2 Information and explanations on symbols

VITA VIONIC BOND I					
(3)	Danger	H225 Highly flammable liquid and vapor.			
(! >	Important	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.			
VITA VIONIC BOND II					
(*)	Danger	H225 Highly flammable liquid and vapor.			
<u>(1)</u>	Important	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.			
VITA VM LC MODELLING LIQUID					
(1)	Important	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation.			
VITA VM LC flow GINGIVA					
<u>(1)</u>	Important	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects.			

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Safety at work and health protection

When working with the product, wear suitable safety goggles/face protection and light respiratory protection.

Manufacturer VITA Zahnfabrik	***	Manufacturing date	<u>~</u>
Medical device	MD	Shelf life	
For professionals only	Rx only	Product number	REF
See Instructions for Use	Ţ i	Lot number (batch)	LOT

🤏 9.3 General notes on handling

Information regarding general risks of dental treatments

- These risks are not specifically related to VITA products and their handling and are well known to all dental practitioners.
- Dental treatment and the integration of dental restorations entail the general risk of iatrogenic damage to hard tooth substance, pulp and/or oral soft tissue. The use of bonding systems and the integration of dental restorations involve the general risk of postoperative hypersensitivity.
- Product characteristics cannot be guaranteed if the instructions for use for the products are not followed. A product defect and an irreversible injury to the natural hard substance of the tooth, the dental pulp and/or the oral soft tissue may result.
- The success of a tooth restoration always depends on its fit onto the underlying tooth structure.
- The ability to produce a routinely smooth, sound and well-fitting restoration requires strict adherence to certain fundamentals.
- A deficient margin leads to plague formation, resulting in gingival inflammation and marginal cracks, which can lead to secondary caries, sensitivity, gingival recession, cement dissolution and debonding or discoloration of the restoration.
- Our products must be used in accordance with the actual version of the instructions for use.
- Any misuse may cause 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.
- If serious incidents have occurred in connection with the product, they must be reported to VITA Zahnfabrik H. Rauter GmbH & Co. KG and the competent authority of the Member State in which the user and/or patient is established.

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WE ARE GLAD TO HELP

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

Hotline Sales Support

Mrs. Carmen Holsten and her 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 84 Fax +49 (0) 7761 / 56 22 99 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

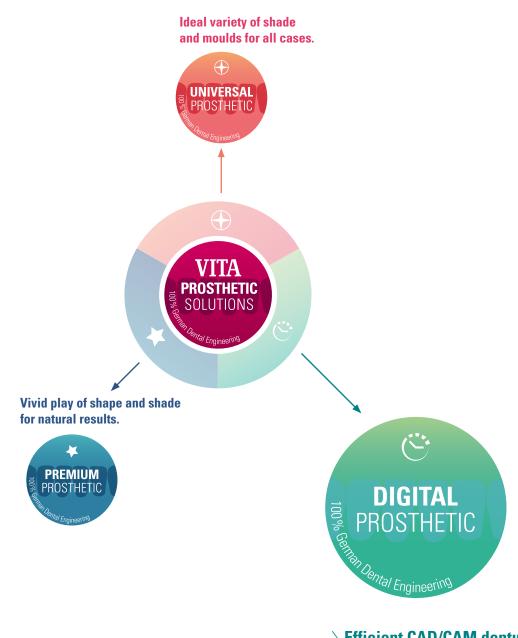
E-mail: info@vita-zahnfabrik.com

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



VITA PROSTHETIC SOLUTIONS –

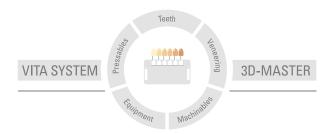
For ideal dental prosthetics: natural, reliable, rich in variation.



> Efficient CAD/CAM dentures for greater productivity.

Increasing productivity with digital technology

The VITA DIGITAL PROSTHETIC unifies innovation, efficiency and precision with custom-fit, coordinated material and CAD/CAM system solutions for full dentures.



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: 06.20

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

C € 0124

VITAPAN EXCELL® DD FRAME, VITAPAN® LINGOFORM DD FRAME, VITA VIONIC® BOND, VITAVM®LC *flow*, VITAVM®LC MODELLING LIQUID

The company GDF Gesellschaft für dentale Forschung und Innovationen GmbH is certified in accordance with the Medical Device Directive and the following product bears the mark

C € 0297: VITA VIONIC® BASE

VITA Zahnfabrik is certified and the following products bear the mark ${\bf C}$ ${\bf E}$

VITA VIONIC® WAX

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