

VITA VIONIC VIGO®

Instructions for use for workflow with 3Shape™ I Full Version



VITA shade determination

VITA shade communication

VITA shade reproduction

VITA shade control

Date of issue: 04.20

VITA – perfect match.

VITA

The material system for digital dentures



Dear customers,
Thank you for choosing VITA VIONIC VIGO as your digital tooth solution of choice!

VITA VIONIC VIGO is a new generation of digital denture teeth, which are optimized to support digital workflows. The VITA VIONIC open material system optimizes each process step of CAD/CAM denture fabrication. Natural toothlike esthetic properties and time saving production steps deliver functional and individualized patient restorations.

To ensure the simple and safe use of this product, we ask that you read this entire booklet carefully.

For detailed information on the CAD/CAM fabrication of full dentures, please refer to the manual provided by your CAD CAM System manufacturer.

We hope you enjoy VITA VIONIC SOLUTIONS and we are sure that you will achieve great results!

Your VITA Product Management Team

Explanation of symbols:

 System/technology info

 Process

 Please note

 Links/Tutorials

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1. The Material System



Information:

- What? VITA VIONIC is a compatible material system for process-reliable CAD/CAM denture manufacturing at the touch of a button.
- With what? The VITA VIONIC material system includes:
 - VITA VIONIC VIGO: Denture tooth for CAD / CAM dentures.
 - VITA VIONIC WAX: Wax discs for the fabrication of full-sized wax try-ins and wax setups.
 - VITA VIONIC BASE: PMMA discs for the manufacturing of final denture bases.
 - VITA VIONIC BOND: Bonding solution for fixing denture teeth in the base.

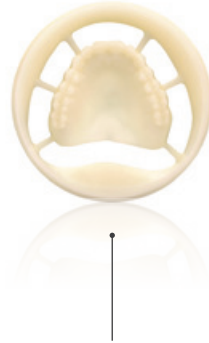
*) For the fabrication of the (wax) try-in and the denture base, milling and 3D printing methods from VITA technology partners can be used.

2. System Components

2.1 VITA VIONIC® WAX



VITA VIONIC WAX disc, white



Full-sized, milled wax try-in



VITA VIONIC WAX disc, pink



Milled wax base for try-in

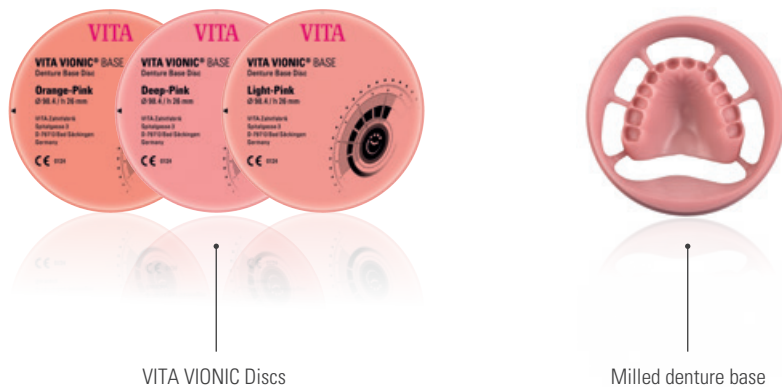
Information:

- 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.

Please note:

- 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



Information:

- 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 dentures.
- What for? For the CAD/CAM fabrication of final denture bases in conjunction with VITA denture teeth (VITA VIONIC VIGO).
- 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).

Please note:

- Must not be used in patients who are allergic to PMMA.
- Suitable only for the manufacture of full dentures with VITA denture teeth (VITA VIONIC VIGO).
- 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.

2.3 VITA VIONIC VIGO®



Information:

- What? VITA VIONIC VIGO is a VITA tooth specially designed for digital denture workflows.
- What for? For manufacturing dentures using milled or printed denture bases*.
- With what? VITA VIONIC VIGO is available in the following moulds and shades:
 - VITA VIONIC VIGO (anterior): 9 x maxilla and 4 x mandible anterior tooth moulds.
 - VITA VIONIC VIGO (posterior): 4 x maxilla and 4 x mandible posterior tooth moulds.
 - Available in: VITA classical A1–D4/Bleach shades (0M1, A1, A2, A3, A3.5, B3, D3)

Please note:

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

*) For compatible materials and systems please visit: www.vita-zahnfabrik.com/vionic_compatibility

2.4 VITA VIONIC® BOND



VITA VIONIC BOND bonding system



Information:

- 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 VIONIC VIGO teeth in the 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).



Please note:

- 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.

*) Compatible materials and systems please visit: www.vita-zahnfabrik.com/VIONIC_compatibility

3. Overall Workflow



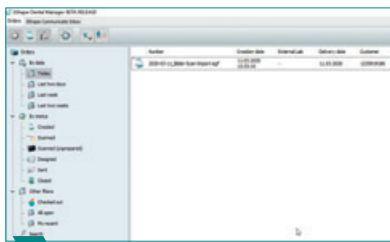
Information:

1. Scan and model analysis.
2. Selection of VITA VIONIC VIGO denture teeth and CAD-design.
3. Manufacturing of a wax setup or a full-sized try-in with VITA VIONIC WAX or a recommended printing material.
4. Fabrication of a denture base with VITA VIONIC BASE or a recommended printing material.
5. Bonding of the denture teeth with VITA VIONIC BOND und finishing.

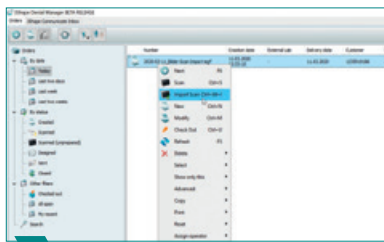
Please note:

System requirements for VITA VIONIC SOLUTIONS:
Please visit the following URL: www.vita-zahnfabrik.com/vionic_compatibility.

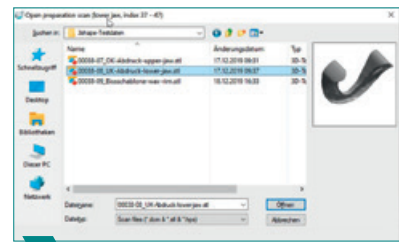
4. Scan Import Process



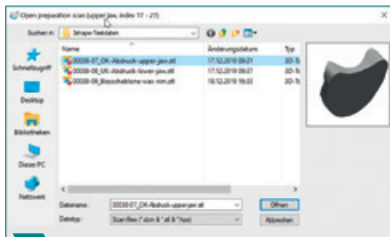
1 Case icon shows „order sheet“. Select patient case for scan upload



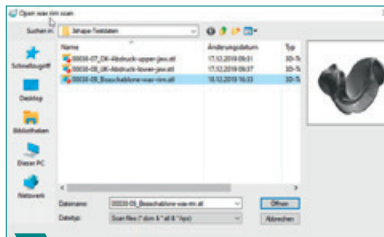
2 Open import scan dialog



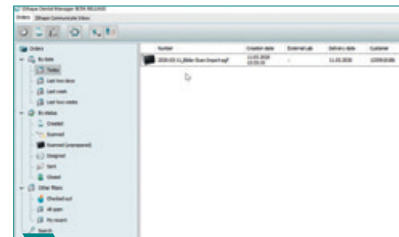
3 Navigate to desired folder. Select lower jaw and click „open“



4 Select upper jaw and click „open“



5 Select bite rim and click „open“



6 After the scan files are imported, the case icon changes to „scanner“

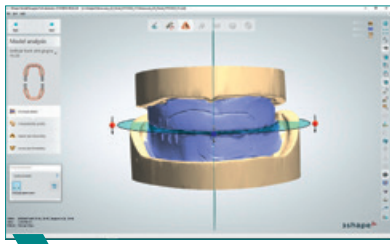
Information:

- During scan process, please prepare the models so that no larger shadows are visible in the area of the vestibular fold.
- Spray the bite rim with scan spray (e.g., VITA Scan Spray) to prevent reflections and record all necessary information.
- Please follow the instructions of your scanner manufacturer.

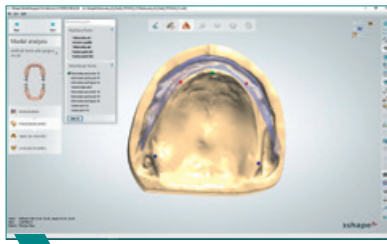
Please note:

- For detailed information on the scan process, please see the processing instructions of the scanner manufacturer.

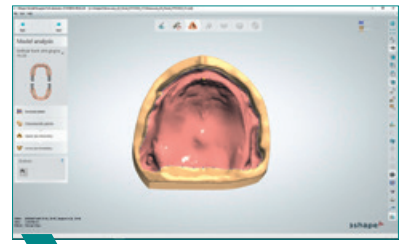
5. CAD Process



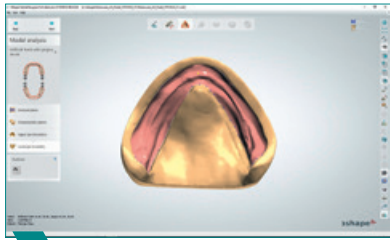
1 Determine the occlusion plane.



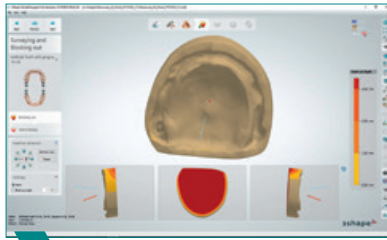
2 Conduct the model analysis according to TiF (maxilla and mandible).



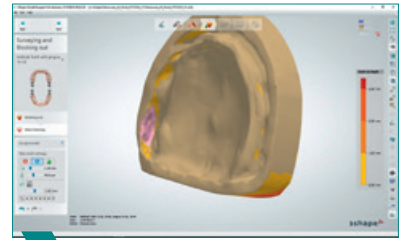
3 Design upper jaw boundary dimension.



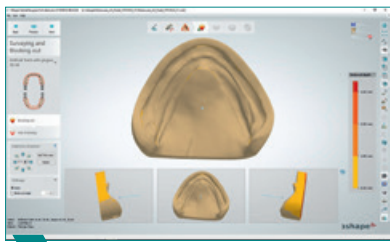
4 Design lower jaw boundary dimension.



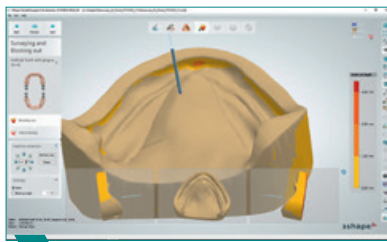
5 Define insertion direction. Pay attention to undercuts.



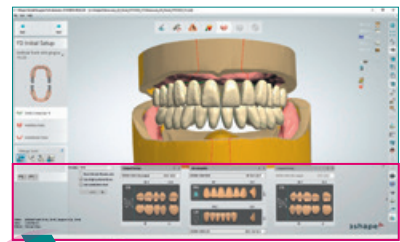
6 Block out undercuts/wax trimming of upper jaw.



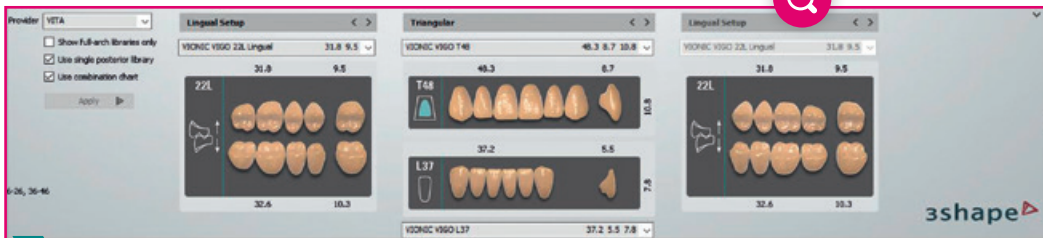
7 Define insertion direction. Pay attention to undercuts.



8 Block out undercuts/wax trimming of lower jaw.



9 Selection of VITA VIONIC VIGO teeth according to set up concept.



! Note: Different set up concepts are available by clicking the selection arrow. Please select for left and right quadrat separately. Bilateral and/or unilateral cross bite set up is available.

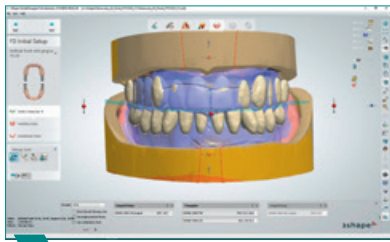
Information:

- Use bite rim landmarks like canine position or lip line to set accurate markings for model analysis.
- The set up concept is selected by quadrant. Upper and lower of corresponding quadrants always have the same functional set up.
- VITA VIONIC VIGO tooth library supports different set up concepts and all angle classes.
- Support of bilateral and unilateral cross bite selection.
- Select the suitable anterior and posterior teeth and the desired setup concept, according to the TiF model analysis.
- Keep functional relation of teeth by using group function or symmetric movement function. Single tooth movement function should be limited to anterior esthetic modifications.

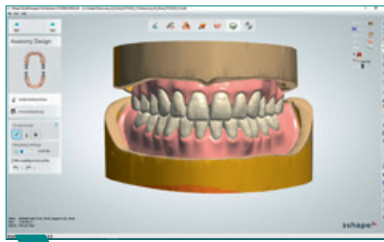
Please note:

- For detailed information on the CAD process, please see the working instructions of your software provider.

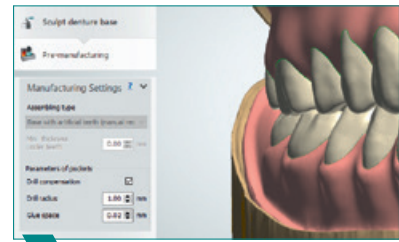
5. CAD Process



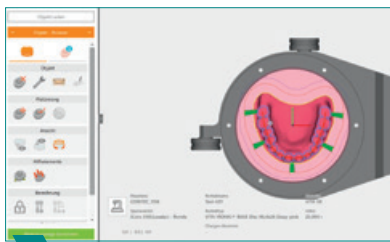
11 Use Smile Composer to modify esthetic and functional position of teeth. Use wax rim for orientation.



12 Use the sculpture kit to modify the gingiva morphology.



13 Set glue space to 0.02 mm as default. Drill compensation is 1 mm.



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

Information:

- Use the bite rim to modify the set up suggested by the software.
 - Design the gingiva individually, as needed, according to your desires with the sculpture kit of the wizard.
 - Set glue space to 0.02 mm for milling denture bases.
 - Set drill compensation to 1 mm. Smallest recommended tool for VITA VIONIC VIGO is 2 mm. Smaller tools are not necessary to mill the tooth pockets.
 - Printed denture bases may recommend a different settings.
- For further information, please contact your printing material provider and / or visit the following URL:
www.vita-zahnfabrik.com/vionic_compatibility.

Please note:

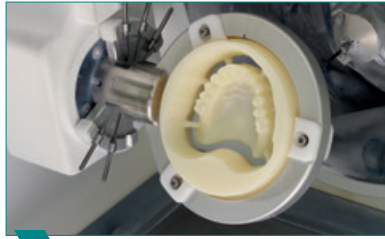
- For detailed information on the CAD process, please see the working instructions of your software provider.

6. (CAM) Processing

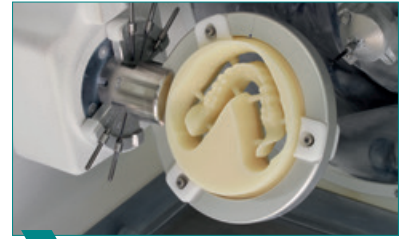
6.1 Fabrication of full-sized wax try-ins (Alternative Process 1)



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.



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



6 Conduct the intraoral try-in.

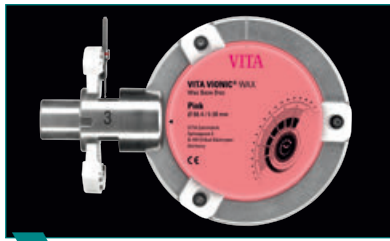
Information:

- 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).

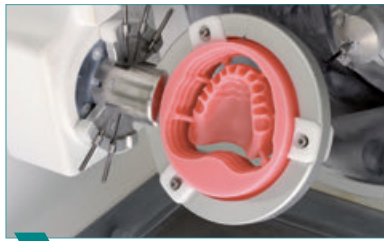
Please note:

- 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.

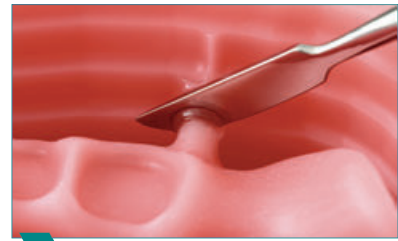
▶ 6.2 Fabrication of the wax try-in with denture teeth (Alternative process 2)



1 Clamp the pink wax disc in the holder system.



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



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



4 Preparation of VITA VIONIC VIGO (see 6.3).



5 Fix the denture teeth in the cavities with wax.

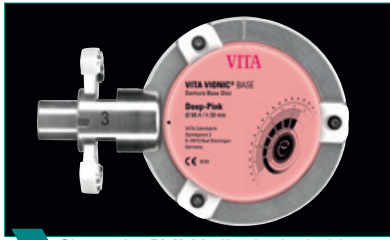


6 The finished wax discs with denture teeth secured with wax.

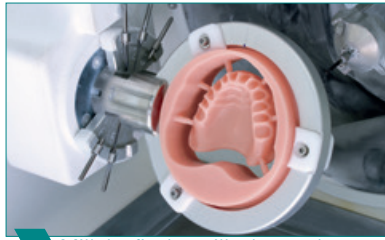
💡 Information:

- This process is used to manufacture denture bases for wax try-ins. The VITA VIONIC VIGO 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 cavities try-in.
- 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).
- If significant changes have been applied to the anterior setting, the try in is scanned as a new bite rim and the setup of teeth will be modified using the CAD software.
- The wax dentures must be disinfected before and after the try-in.

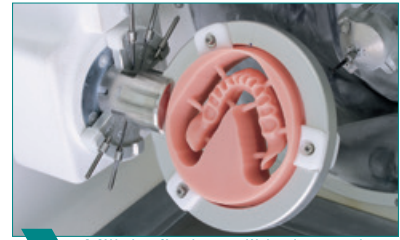
6.3 Fabrication of the final denture bases



1 Clamp the PMMA disc in the holder system.



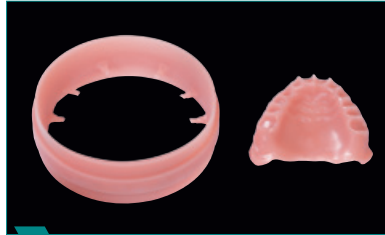
2 Mill the final maxilla denture base.



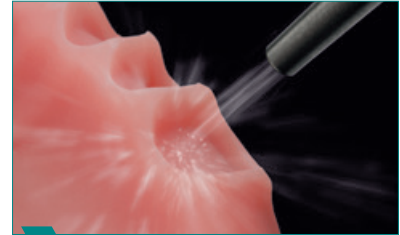
3 Mill the final mandible denture base.



4 Separate the denture bases from the disc.



5 Final milled denture bases (here, maxilla).



6 Sandblast the milled cavities of the denture bases.

Information:

- 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 material 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.

Links/Tutorials:

- Learn more in tutorial videos: www.vita-zahnfabrik.com/tutorial/vionic/all/vigo/denturebase

6.4 Unpacking of the VITA VIONIC VIGO denture teeth



1 Check labeling to ensure correct tooth selection.



2 Open the blister lid carefully to avoid teeth falling out.



3 You'll find the product related tooth number in the instructions for use.



4 Please use forceps to remove teeth from the blister.

Explanation of VITA VIONIC VIGO labeling



Information:

- To avoid any contamination of the VITA VIONIC VIGO teeth, please wear talcum powder free examination gloves.
- Please open the single blister pockets carefully to avoid teeth falling out.
- Please read the instruction for use
- The product tooth number is documented in the instructions for use.

Please note:

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

7. Bonding

7.1 Bonding of the VITA VIONIC VIGO denture teeth in the base



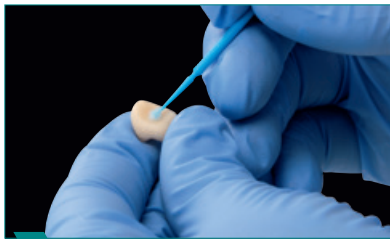
1 Check the fit of the teeth for any slight proximal interferences.



2 Mix VITA VIONIC BOND I and II with each other.



3 Mix the two components for 30 seconds.



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



5 Moisten the milled cavities generously with the adhesive system.



6 Position the denture teeth in the cavities.



7 Attach the denture teeth using light pressure.



8 Final bonded denture teeth ready for curing.

Information:

- Position all teeth one after the other in the cavities of the denture base to remove any occurring proximal interference.
- One portion of glue supports two full dentures (1 upper & 1 lower)
- 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). Glue begins curing after 10 minutes.
- 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.

Please note:

- 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.

Links/Tutorials:

- Learn more in tutorial videos: www.vita-zahnfabrik.com/tutorial/vionic/all/vigo/bond

8. Finalization

8.1 Finalization of the final denture bases



1 Use VITA VM LC MODELLING LIQUID for moistening.



2 Moisten the sandblasted areas with VITA VM LC MODELLING LIQUID.



3 Use VITA VM LC flow materials for closing interdental spaces.



4 Close the interdental spaces with VITA VM LC flow.



5 Finalize and polish the denture surfaces.



6 Final digitally-fabricated full dentures.



7 Check occlusion in the articulator.

Information:

- Consider additional sandblasting of the interdental spaces with Al_2O_3 (50 μm , 2 – 3 bar) to ensure a good bonding 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 and/or Window) 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 about two days.

Please note:

- 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.

Links/Tutorials:

- Learn more in tutorial videos: www.vita-zahnfabrik.com/tutorial/vionic/all/vigo/finalization



SYSTEM AND WORKFLOW

SCAN / CAD PROCESS

(CAM) PROCESSING

BONDING AND FINALIZATION

MOULDS AND INFORMATION

9. Moulds and Information










9.1 Overview of available tooth moulds

OK-Anterior VITA VIONIC VIGO*						
 schaufel- förmig	O43 9,3 7,9	O45 9,7 8,3				
	T44 9,9 8,1	T46 10,2 8,2	T48 10,8 8,7	T50 10,8 9,2		
 dreieckig						
	R47 9,8 8,6	R49 10,7 8,9				
 rechteckig						
	UK-Anterior VITA VIONIC VIGO*					
	L33 7,2 4,9	L35 7,5 5,2	L37 7,8 5,5	L39 8,1 5,8		

Posterior VITA VIONIC VIGO*				
21L 9,0 	22L 9,5 	23L 10,2 	24L 10,7 	
 9,8	 10,3	 11,0	 11,6	

VITA VIONIC VIGO Anterior	OK/Nr. mm	R47 47,0	R49 49,0	O45 44,5	T50 49,9	T46 46,2	O43 43,3	T44 44,0	T48 48,3
	UK/Nr. mm	L37 37,2	L39 39,2	L35 35,2	L39 39,2	L35 35,2	L33 33,2	L33 33,2	L37 37,2
VITA VIONIC VIGO Posterior	OK/Nr. mm	22L 31,8	23L 34,3	22L 31,8	24L 35,9	22L 31,8	21L 30,3	21L 30,3	22L 31,8
	UK/Nr. mm	22L 32,6	23L 35	22L 32,6	24L 36,9	22L 32,6	21L 31	21L 31	22L 32,6

 **9.2 Information and explanations on symbols**

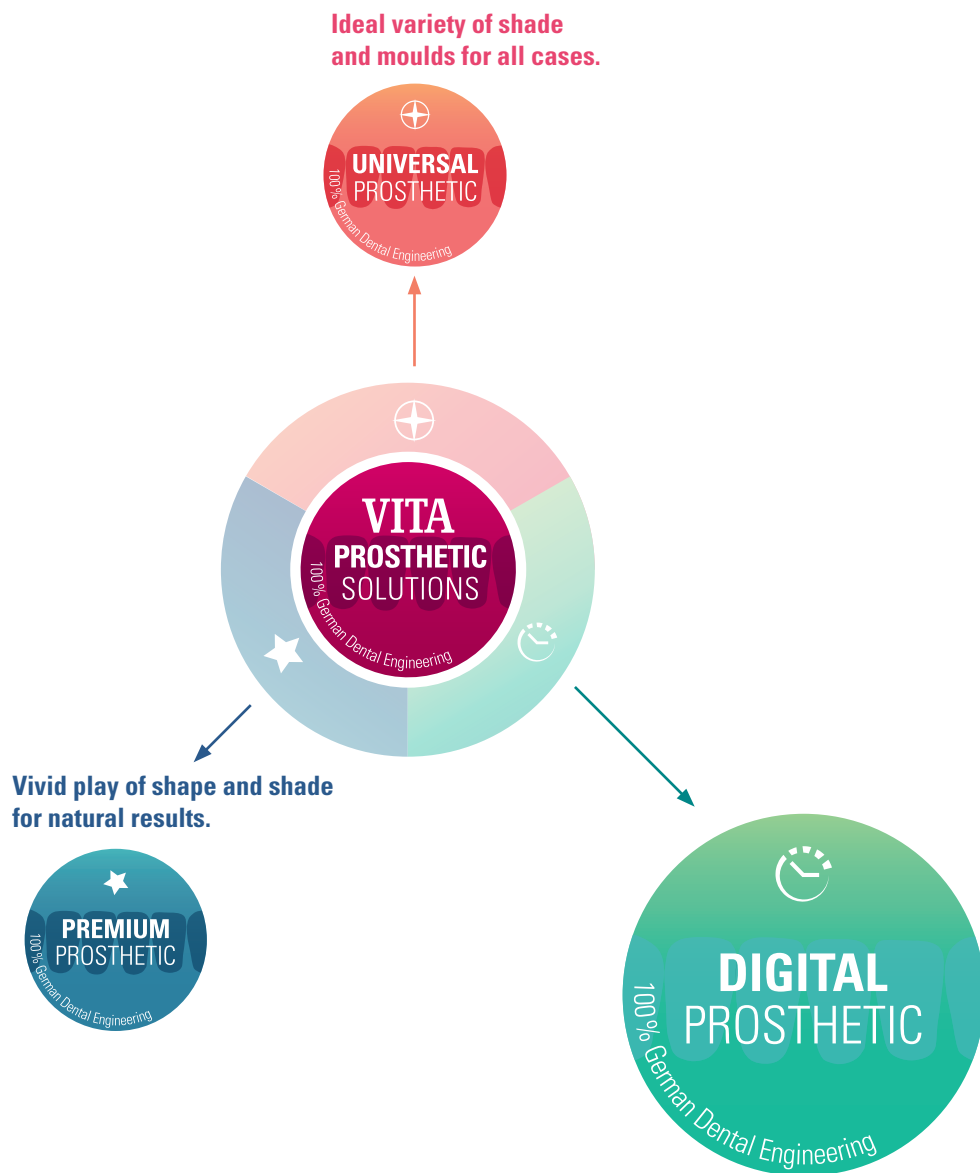
VITA VIONIC BOND I		
	Danger	H225 Highly flammable liquid and vapor.
	Important	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.
VITA VIONIC BOND II		
	Danger	H225 Highly flammable liquid and vapor.
	Important	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.
VITA VM LC MODELLING LIQUID		
	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		
	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.
VITA VM LC flow WINDOW		
	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.
 	Safety at work and health protection	When working with the product, wear suitable safety goggles/face protection and light respiratory protection.

- 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.
- In the event of non-compliance with the processing instructions of the products in use, the product characteristics can not be ensured so that product failure and irreversible damage to the natural hard tooth substance, pulp and/or oral soft tissue may result.

Notes

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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.

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Fax +49 (0) 7761 / 56 22 99

8:00 a.m. to 5 p.m. CET

E-mail: info@vita-zahnfabrik.com

For additional international contact information please visit www.vita-zahnfabrik.com/contacts



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

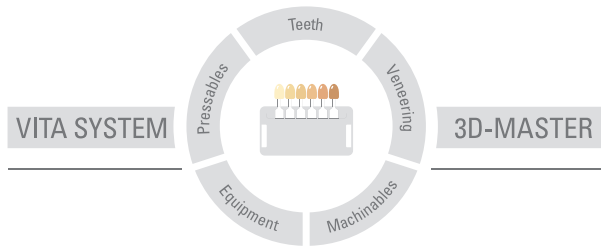
8:00 a.m. to 5 p.m. CET

E-mail: info@vita-zahnfabrik.com

For additional product informations please visit www.vita-zahnfabrik.com/vionicvigo



More information about VITA VIONIC VIGO®
is available at www.vita-zahnfabrik.com/vioniccvigo



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: 04.20

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 **CE 0124**:

VITA VIONIC VIGO®, **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 **CE 0297: VITA VIONIC® BASE**

Rx only

VITA Zahnfabrik is certified and the following products bear the mark **CE 0124**

VITA VIONIC® WAX, **VITA VIONIC® VIGO**, **VITA VIONIC® BOND**

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VITA

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