

# Digital Dentures: Your Smart Level

# VITA VIONIC® SOLUTIONS

# **Your Next Level**

Fabricate cost-optimized and esthetic digital dentures with a mix of printed and milled materials.





# **Cost-optimized manufacturing**

The intelligent processing combination of printing and milling with VITA VIONIC materials guarantees fast and costeffective fabrication.

### **High esthetics**

You will find the VITA PERFECT MATCH for natural-looking esthetics in the prefabricated VITA VIONIC VIGO denture teeth, as well as in the milled teeth from VITA VIONIC DENT DISC multiColor.

## **Reliable quality**

All of the materials meet high quality standards and have impressive material properties.

Digital Dentures – Your Next Level

# VITA VIONIC® SOLUTIONS

Your Smart Level.

Are you following the exciting journey of digital dentures? No matter where you start, **VITA VIONIC SOLUTIONS** will help you take your digitally fabricated dentures to the next level – in terms of cost optimization, impressive esthetics and reliable quality. We offer perfectly coordinated system components for your workflow, tailored to your individual requirements.

**Flexible and intuitive handling:** The VITA VIONIC tooth databases offer seven predefined setup concepts for all common milling and 3D printing systems. This means that manual reworking in the software is rarely necessary.

**The best of both worlds:** By combining printed and milled elements, VITA VIONIC SOLUTIONS enable flexible and efficient use of equipment with the Smart Level. The try-in and denture base are printed cost effectively, while the prefabricated teeth and milled tooth elements meet the highest quality and esthetic standards. This allows you to optimize your workflow and reduce costs without compromising on the tooth quality.

**Process reliability:** The "all-in-one solution" with perfectly coordinated system components ensures a smooth process. Benefit from over 100 years of VITA expertise – we will support you on your way to the next level.





### Go to case reports

VITA VIONIC SOLUTIONS materials perfectly complement our workflow, and the quality of digital dentures is equal to that of analog dentures."

> Lukas Wichnalek HIGHFIELD.DESIGN – Zahntechnik Wichnalek Germany

# Clever combination.

Efficiently printed denture bases combine with natural-looking esthetics and the impressive material properties of the milled tooth elements.

# Efficient 3D printing

VITA VIONIC BASE RESIN Impact offers a balanced property profile where impact strength particularly stands out. Fast printing with a precision fit integrates seamlessly into the digital workflow. The matching try-in material completes the VITA VIONIC portfolio.

# Your requirements

- Increase production volume and save time by printing multiple denture bases simultaneously on a single build platform
- Take advantage of the cost benefits offered by resin material prices and short printing times
- Printing material for the production of stable and impact-resistant denture bases
- Fabricate replacement dentures quickly and easily

# Esthetic milling results

VITA VIONIC DENT DISC multiColor is flexible in its use for partial and full dentures with efficient processing and impressive material qualities. The integrated shade guide with PERFECT MATCH to the VITA shade guide is also convincing.

# Your requirements

- Fabricating full and partial dentures
- The same impressive material properties as with analog denture teeth
- Efficient overall workflow for milling denture teeth
- Flexibility for customizing the tooth design to individual patient cases







### Flexible

# Supports the digital setup of partial and full dentures with seven concepts for all bite classes. Can be used with both the VITA VIONIC VIGO denture tooth and with milled or printed restorations.

## Easy

Preset initial suggestions minimize the need for manual reworking.

### Fast

Dentures can be quickly and easily fabricated using a variety of conventional open milling and 3D printing systems.

# 1. CAD process

# **VITA VIONIC® Denture Tooth Libraries**

Time-saving denture setups with seven presets.

VITA VIONIC VIGO denture tooth libraries: seven predefined setup concepts are available for designing full dentures using VITA VIONIC VIGO denture teeth. That means that monoblock try-ins and denture bases can be fabricated quickly and easily using conventional open milling and 3D printing systems. The VITA VIONIC VIGO denture tooth can then be inserted easily and accurately. Make the most of the VITA tooth design expertise and the largest selection of setup concepts.

VITA VIONIC DIGITAL VIGO denture tooth libraries: the extended version of the VITA Denture Tooth Library also includes an STL data export function for complete denture setups (try-in dentures) or for separate tooth elements and base designs. Depending on preference, dentures fabricated using the multifunctional tooth geometries can be milled from discs or fabricated using a 3D printer. In this way, VITA VIONIC DIGITAL VIGO provides new, flexible

options for digital workflows.

VITA VIONIC tooth databases are the only ones worldwide that include four different occlusion concepts. In addition to the curved variants, there are two straight setup variants. Here I have the unique opportunity to digitally plan and produce well over 80% of my patient cases."

> Urban Christen, Switzerland



**Dental prosthetics practice** 



VITA VIONIC® DIGITAL VIGO

# One database. Endless possibilities.

The VITA VIONIC DIGITAL VIGO denture tooth library is fantastic. It saves us about 15 minutes of design time, and that's a lot! With the design, we establish the foundation for a predictable and smooth workflow. Our recommendation: Everybody should use the VITA library to design digital dentures."

Frans Delfos **Cordent Group** The Netherlands

# Your options for denture design

Multifunctional tooth data: seven denture concepts and four bite classes combined in a single library





**2.** Try-in printing

# VITA VIONIC® TRY-IN RESIN

3D printing material for fabricating try-ins.

# **Cost effective**

Fast, material-saving and cost-effective fabrication of functional try-ins for partial and full dentures.

# Easy to process

Easy to check for fit, function, occlusion and phonetics, as well as easy to polish. Easy individualization for esthetic try-ins possible.





# **Odorless and long shelf life**

Odorless resin that stands out from its competitors due to its long life of three years (Ø BBD two years).



# VITA VIONIC® TRY-IN RESIN



## Long lasting

Patients benefit from long-lasting dentures, thanks to the impact resistance of the material, which reduces the risk of breaking under stress. Low plaque adhesion contributes to wearing comfort.

### Well balanced

The well-balanced mechanical property profile is impressive in terms of fracture work, flexural strength and modulus of elasticity.

### **Excellent processing**

Short printing times, low shrinkage and high fitting accuracy are just as compelling as the great polishing characteristics.



**3.** Printing denture bases

# **VITA VIONIC®** BASE RESIN IMPACT

of final denture bases.

Take 3D printing to the next quality level with VITA VIONIC BASE RESIN IMPACT, an impactresistant printing material for removable denture bases. The excellent impact resistance of the product reduces the risk of breaking under stress.

In addition to the fracture work, the high flexural strength and optimized modulus of elasticity values ensure a balanced property profile, forming the basis for long-lasting dentures.

Available shades pink and pink translucent

Available package size 1 kg bottles



# Impact-resistant 3D printing material for the fabrication



# VITA VIONIC® BASE RESIN IMPACT



**4.** Fabricating tooth elements

# **VITA VIONIC® DENT DISC multiColor**

Flexible use for partial and full dentures, efficient processing and esthetics without compromise: VITA VIONIC DENT DISC multiColor offers a natural shade gradient with PERFECT MATCH to the VITA shade guide. Tooth elements from the composite disc feature high abrasion stability.

## Available shades

• 16 VITA classical A1–D4 and two Bleach shades:

**Available geometries** 

• Ø 98.4 mm/h 20 mm

**Technology partner** and validated milling machines

# Material quality

Abrasion resistant for durable denture teeth.

# **Esthetic**

Integrated shade gradient for a more natural effect. Impressive and fast results, thanks to good polishing characteristics.

# Flexibility

Simple, safe processing. Compatible with all conventional milling systems.





# Composite milling blanks for partial and full dentures.

0M1, 0M3, A1, A2, A3, A3.5, A4, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4



# VITA VIONIC® DENT DISC



Milling is currently the best approach to digital denture fabrication. With VITA VIONIC DENT DISC multiColor, impressive esthetics are possible. The transitions between the shade layers are incredibly seamless. Now you can fabricate premium quality, esthetically milled dentures that are just as good as their analog counterparts."

> Eelco van Wort Dental Design Centrum the Netherlands

# Consistently impressive quality.









# Mimics nature. True-to-shade.

# . Integrated shade gradient $\_$

dentition with a shade gradient covering four levels of chromatic intensity. The impressive esthetics are immediately visible, thanks to the effective polishing



The VITA VIONIC DENT DISC is comparable to the proven VITA premium denture teeth. The polishing result is excellent and the effect is highly individualized, thanks to the shade gradient. As far as I am concerned, the disc is the link that brings the digital and analog approaches in line with one another."

> Arbnor Saraci HIGHFIELD.DESIGN – Zahntechnik Wichnalek Germany



>



## Esthetic

The three-dimensional layered structure of the VITA VIONIC VIGO denture tooth combines translucency, fluorescence and opalescence to create a convincing esthetic appearance.

## Material quality

The mechanical characteristics of the tooth material distinguish VITA VIONIC VIGO as a VITA premium tooth.

### **Process reliability**

Thanks to a tooth design which has been optimized for the digital workflow, VITA VIONIC VIGO helps you save time and work more efficiently.



**VITA VIONIC VIGO** the highly esthetic "digital" tooth for full dentures. Thanks to VITA quality, a digitally manufactured denture can meet the same high standards as an analog version. This requires a tooth that optimally supports the digital fabrication process, while meeting high esthetic expectations at the same time. This means that the prefabricated VITA VIONIC VIGO denture tooth can be used,

reduced tooth dimensions, radiated tooth neck

conical-oval tooth neck shape with rotation protection

Easy-Centric: automatic interdigitation and controlled centric occlusion

# Natural shape – fascinating play of colors

• Natural shape with multi-faceted texture and pronounced palatal ridges • Impressive light dynamics, thanks to translucency, opalescent play of colors and natural fluorescence

# Available shades and moulds

• Seven VITA classical A1–D4 including a Bleach shade: 0M1, A1, A2, A3, A3.5, B3, D3 • Eight anterior tooth moulds for the upper jaw, four for the lower jaw • Four posterior tooth moulds



VITA VIONIC® VIGC



## **Reliable bonding**

The self-curing, two-component system provides for a secure bond.

### **Precise bonding**

A small film thickness in the cavity makes precise, seamless bonding possible.

# Quick and easy

A fast, clean workflow for a reliable bond.

5. Bonding teeth in the base

# VITA VIONIC® BOND

elements.

VITA VIONIC BOND is a self-curing, two-component bonding system based on MMA, which has a thin consistency for precise application to the bonding surfaces. For a secure bond, VITA VIONIC BOND forms a reactive boundary layer on the adhesive surfaces. First-class solution for VITA VIONIC dentures.

# The right dosage for your requirements:



Sufficient for approx. two applications (bonding of 2 x 14 denture teeth) • VITA VIONIC BOND I, jar, 2 ml • VITA VIONIC BOND II, bottle, 1 ml • Microbrush, three pcs.

Sufficient for approx. 25 applications (bonding of 25 x 14 denture teeth) • VITA VIONIC BOND I multiDose (20 ml) • VITA VIONIC BOND II multiDose (10 ml) • 50 pc disposable brush tips • VITA VIONIC BOND multiDose measuring cup, 3 ml; reusable



# Efficient adhesive bonding of denture teeth and tooth

# **1. VITA VIONIC BOND KIT**

# 2. VITA VIONIC BOND multiDose COMPLETE KIT



# VITA VIONIC® BOND

# Alternative bonding of VITA VIONIC DENT DISC multiColor and VITA VIONIC BASE RESIN IMPACT

- Used for bonding and filling gaps between the printed denture base with VITA VIONIC DENT DISC multicolor
- Condition: Preconditioning of the milled tooth arch and the cured, printed base using VITA Primer II
- Apply liquid denture base resin to the cavities using a small brush
- Followed by full curing in a validated post-curing device



# 6. Individualizing

# VITAVM®LC flow

Composite for sealing interdental spaces.

VITA VM LC *flow* is a low-viscosity, light-curing veneering composite for permanent and removable restorations for extraoral application. The flowable consistency and high stability enable precise modelling of the composite. The special material composition ensures simple polishing and produces homogeneous surfaces with brilliant high gloss.

In the field of digital dentures, VITA VM LC *flow* is used primarily for the reconstruction of gingival areas. The VITA VM LC flow GINGIVA materials were developed especially to reproduce the original gingival situation. The shade spectrum for the materials makes it possible to easily and reliably reproduce the patient's individual gum color. The transparent WINDOW material can then be used to mix the VITA VM LC *flow* materials.

To ensure an optimal transition between denture teeth and base material, the use of VITA VM LC flow is recommended for the interdental spaces.



The balanced combination of stability and flowability makes precise modeling easy and efficient.

## Natural

Natural-looking gum reconstruction, thanks to a selected shade spectrum of the gingiva material.

# Durable

The material is characterized by its high durability and surface resistance.





VITA VM®LC flov



## Reliable

Reliably true-to-life reproduction of shade facets of natural dentition, thanks to a wide range of brilliant effect stains and intuitive processing.

### Easy

Extremely simple shade modification with a brush stroke, thanks to chroma shades for plannable, systematic control of chromaticity and ideal gingiva esthetics.

## Efficient

Efficient processing, thanks to shade effects with pinpoint precision or highly efficient shades applied across a large surface area with ideally matched viscosities.



# VITA AKZENT<sup>®</sup> LC Stain/Glaze system for optional characterization.

**VITA AKZENT LC** are light-curing composite stains for reproducing individual shade effects and applying shade corrections. In addition to offering a variety of nuances, the stain system impresses with precise shade application and good shade and gloss retention.

**VITA AKZENT LC GINGIVA KIT** is ideal for individualizing dental materials that contain polyacrylics. This kit is particularly suitable for denture bases, printed bases made of 3D printing materials and milled bases.

VITA AKZENT LC allows you to customize your prosthesis in detail.

Reliable: The numerous brilliant effect shades of the product line make it possible to reproduce all the shade nuances of natural dentition and gingival areas. A wide range of 14 EFFECT STAINS and eight CHROMA STAINS are available, as well as a glaze. The material also has an impressive gloss and resistance to wear and discoloration.

**Simple:** The stains can be precisely applied with brushes. Necessary shade adjustments and natural gingival esthetics can be easily achieved.

**Efficient:** All VITA AKZENT LC line shades have finely tuned viscosities that simplify the workflow. The material can be dosed quickly and safely - whether it is applied as a flat shade or a precise shade effect.





VITA AKZENT® LC

# Suitable solutions for processes.





VITA VIONIC BASE RESIN IMPACT



OR





VITA VIONIC DENT DISC multiColor





More workflow solutions found here



# 5. Bonding

Milled dentures: VITA VIONIC BOND Printed dentures: VITA VIONIC BASE RESIN IMPACT



# 6. Individualizing

VITA AKZENT LC. VITA VM LC flow















# We are happy to help.

## **Hotline Sales Support**

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VITA Zahnfabrik has been certified, and the following products bear the CE mark

# **C**€0124

VITA VIONIC VIGO®, VITA VIONIC® DENT DISC multiColor, VITA VIONIC® BOND, VITAVM®LC flow, VITA AKZENT® LC

gebdi DENTAL-PRODUCTS GmbH has been certified in accordance with the Medical Devices Directive, and the following product bears the CE mark

CE VITA VIONIC® WAX



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# **C**€0483

VITA VIONIC® BASE RESIN IMPACT

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## References

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Additional information at VITA VIONIC SOLUTIONS https://hs.vita-zahnfabrik.com/en/vita-vionic-solutions



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