



NEW

Partial Dentures

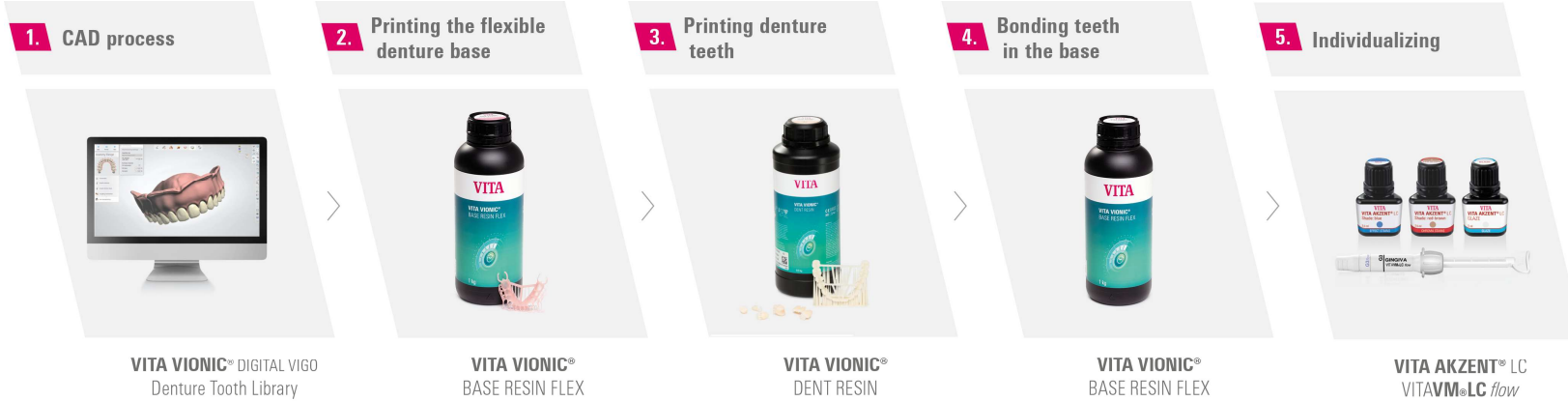


VITA VIONIC® BASE RESIN FLEX

Your Workflow Options for Partial Dentures



Economy Workflow: Print it



Smart Workflow: Mix it



VITA VIONIC® BASE RESIN FLEX



VITA VIONIC® BASE RESIN FLEX

- 3D printing material for manufacturing removable, flexible denture bases
- Recommended wearing time of up to 1.5 years
- 2 Shades:
 - Clear
 - Pink translucent
- 1kg bottle



Validated Devices

Available print templates at market launch



- There is a **separate print template for each color.**
- The validation list is online: [VITA VIONIC RESINS | Validated devices](#)

Available at market launch Feb 2026:

Printer	Post-curing Device	Washing unit
Asiga Max/Mini, Max 2, Ultra, PRO 4K	Otoflash G171 N2 & 250	Ultrasonic bath e.g. Ultrasonic
RapidShape ONE, Pro 20/D20+, D30+, D50+ Serie → Quarterly update expected in April 2026	RapidShape RS Cure	RapidShape RS wash
Formlabs Form 4B	Straumann	
	Asiga Cure	

Print it

VITA
PERFECT MATCH.



The workflow for printed partial dentures

The ECONOMY LEVEL

Print it...

VITA
PERFECT MATCH.

Economy-Workflow

1. CAD process



VITA VIONIC® DIGITAL VIGO
Denture Tooth Library



2. Printing the flexible denture base



VITA VIONIC®
BASE RESIN FLEX



3. Printing denture teeth



VITA VIONIC®
DENT RESIN



4. Bonding teeth in the base



VITA VIONIC®
BASE RESIN FLEX

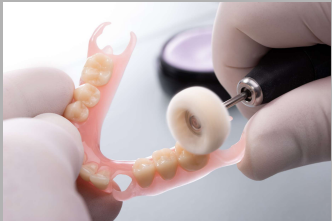
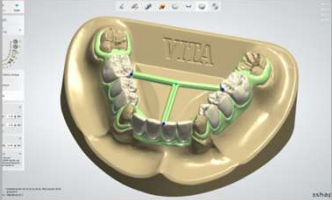


5. Individualizing



VITA AKZENT® LC
VITAVM® LC flow

Workflow for printed partial dentures



Your Economy Level



- 1) CAD design in exocad/3Shape
 - Generate a STL file
 - Select process & material parameters in the printer software
 - Transfer the prepared data
 - Prepare + start the 3D printing process
- 2) Post processing
- 3) Cleaning
- 4) **Bonding**
- 5) **Post exposure**
- 6) Surface treatment
- 7) Final cleaning

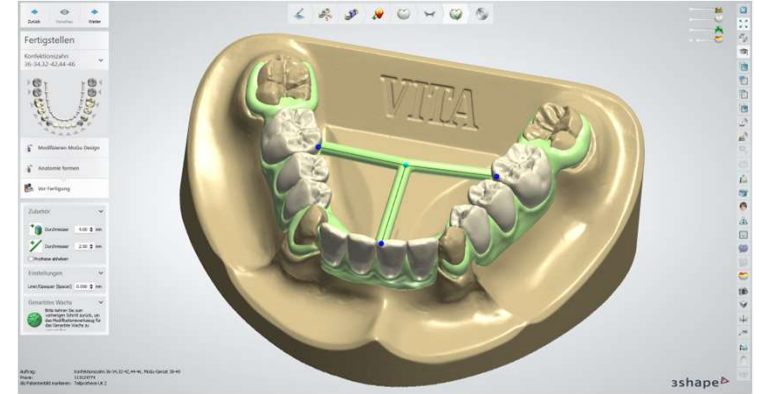
Workflow flexible partial dentures with VITA VIONIC® RESINS



1) Prepare the data

1. CAD-Design.

- Generate an STL-File
- Enter recommended bonding gap (exocad/ 3Shape) 150µm
- Convert the data to the CAM software and create the support structures



2. Select the process- and material parameter in the printer software

- VITA VIONIC DENT RESIN - layer thickness 50 µm
- VITA VIONIC BASE RESIN FLEX – layer thickness 100 µm

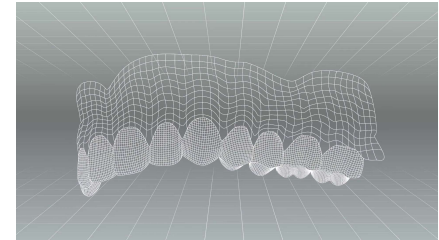


Workflow
VITA VIONIC®
BASE RESIN
FLEX
in CAD



1) Generate the printing data

1. CAD Design
 - Generate a STL file
 - Enter **recommended bonding gap**
(exocad/ 3Shape)



Teeth
Composite system
Bonding gap

Printed flexible denture base	
DENT DISC	DENT RESIN
Resin	Resin
150µm	150µm

Workflow with VITA VIONIC® BASE RESINS FLEX

CAD Design



Design recommendations

- **Clasps:** Ideally 1-1.5mm
- **Minimum thickness of tooth pockets:** 0.8-1mm
- **Bonding gap for teeth:** 150µm
- **Palatal plates:** 2-3mm
- **Sublingual plates:** 3-5mm



Workflow with VITA VIONIC® BASE RESINS FLEX

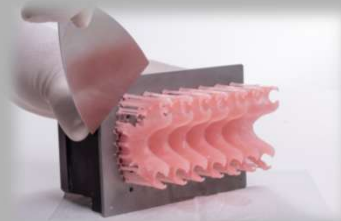
VITA
PERFECT MATCH.

1) Preparing for 3d printing

- **The material in the bottle must be shaken well and/or homogenized with a bottle roller to avoid any color deviations or misprints.**
- If the resin is stored in the tank, homogenize the resin with silicone spatula.
- Fill the resin tank of the 3D printer in accordance with the instructions of the printer manufacturer.
- Start the printing process.



Workflow with VITA VIONIC[®] RESINS



2) Post processing

- Allow the printed objects **to drain for approx. 10 min.** in the printer. Reworking should take place as soon as possible after the design process.
- Remove the platform from the printer and remove the printed objects from the platform. In the case of multiple objects, separate from each other.
- Before cleaning, **remove excess resin with compressed air.**
- **Remove the outer supporting structure.**

Workflow with VITA VIONIC® RESINS

3) Cleaning

- finished printed object
 - VITA VIONIC BASE RESIN FLEX **2x 3min**
 - VITA VIONIC DENT RESIN **2x 1min**

each time in an ultrasonic bath with fresh isopropanol $\geq 98\%$, according to the device manufacturer's instructions.

- 1) Rough cleaning
- 2) Intense cleaning

→ Alternatively: Select validated washing units and their template for the respective product

- **Dry the cleaned printed objects** until there are no longer any traces of isopropyl alcohol. **Check** openings, hollow spaces and gaps for residue and blow out with compressed air to speed up the drying process. The surface may no longer be sticky and shiny after cleaning.
- **Store printed denture bases protected from light at room temperature for 30 minutes before post-exposure.**



Workflow with VITA VIONIC® RESINS

4) Bonding of printed base with printed teeth

- **IMPORTANT:** Leave the printed denture base and teeth in their **green body state** (not post-exposed).
 - Outer structures are removed
 - Objects are cleaned
- Place the printed denture teeth in the corresponding tooth receptacles of the denture base, check the correct seating of the teeth and remove them again.



Workflow printed flexible partial denture

with VITA VIONIC[®] BASE RESIN FLEX



- Apply liquid VITA VIONIC BASE RESIN FLEX to the cavities with a small brush or a syringe.
- Spread excess resin with a brush



Workflow printed flexible partial denture

4) Bonding printed dentures base with printed denture teeth

Connect the denture teeth by exposure in a Xenon flash unit

Using Otoflash G171 N2:

Step 1:

Fix the denture teeth with **400 flashes** under inert gas conditions (nitrogen).

→ If necessary, apply liquid VITA VIONIC BASE RESIN FLEX.

Step 2:

Finally post-cure the complete denture in a xenon flash unit (Otoflash G171) with **2 × 1800 flashes** under inert gas conditions (nitrogen).

Alternatively, carry out post-curing in a validated device



Workflow with VITA VIONIC® RESINS



4) Bonding printed dentures base with printed denture teeth

Using Rapid Shape Cure

Step 1:

Fix the denture teeth by using a hand lamp.

→ This is necessary to avoid the creation of bubbles due to the vacuum used by the Rapid Shape Cure.

Step 2:

Finally, post-cure the complete denture by putting the object into the Rapid Shape Cure device and selecting the “VITA VIONIC BASE RESIN FLEX” template.



Workflow printed flexible partial denture

5) Post-exposure

- Perform post-curing with a suitable light-curing device according to the manufacturer's instructions.
 - The properties and shade effects of the end product depend on a number of factors, such as the reworking process.
 - Correct post-exposure is important for **biocompatibility**. For this reason, it must be ensured that the exposure device is in proper condition and that the moulds are completely hardened.



Polish



Done

Printed, flexible partial denture made of

VITA VIONIC[®] BASE RESIN FLEX

VITA VIONIC[®] DENT RESIN



Mix it

VITA
PERFECT MATCH.



Printed base + milled teeth

SMART LEVEL the mixed workflow

Smart Level Workflow



Mix it...

VITA
PERFECT MATCH.

Smart-Workflow

1. CAD process



VITA VIONIC® DIGITAL VIGO
Denture Tooth Library

2. Printing the flexible denture base



VITA VIONIC®
BASE RESIN FLEX

3. Fabricating tooth elements



VITA VIONIC®
DENT DISC multiColor

4. Bonding teeth in the base



OR



VITA VIONIC®
BASE RESIN FLEX

VITA VIONIC®
BOND

5. Individualizing



VITA AKZENT® LC
VITAVM®LC flow

Workflow: printed denture base + milled teeth

VITA

Your Smart Level

1) CAD design in exocad/3Shape

- Generate a STL file
- Create support structures in the slicing software
- Select process & material parameters in the printer software
- Transfer the prepared data
- Prepare + start the 3D printing process

2) Post-processing

3) Cleaning

4) Post-exposure

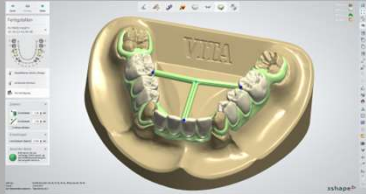
5) Bonding

6) Surface treatment

7) Final cleaning



Workflow Smart Level – Printed base



1) Prepare the data

1. CAD-Design

- Generate an STL-File
- Enter recommended bonding gap (exocad/3Shape)
- Convert the data to the CAM software and create the support structures

2. Select the process- and material parameter in the printer software

- VITA VIONIC BASE RESIN FLEX- layer thickness 100 μm

Workflow Smart Level – Printed base

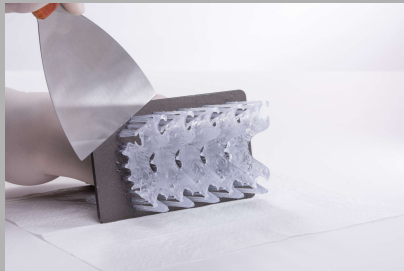
2) Preparing for 3d printing

- **The material in the bottle must be shaken well and/or homogenized with a bottle roller to avoid any color deviations or misprints.**
- If the resin is stored in the tank, homogenize the resin with silicone spatula.
- Fill the resin tank of the 3D printer in accordance with the instructions of the printer manufacturer.
- Start the printing process.



Workflow Smart Level – Printed base

3) Post processing



- Allow the printed objects to **drain for approx. 10 min.** in the printer. Reworking should take place as soon as possible after the design process.
- Remove the platform from the printer and remove the printed objects from the platform. In the case of multiple objects, separate from each other.
- Before cleaning, remove excess resin with compressed air.
- Remove the outer supporting structure.

Workflow Smart Level – Printed base

4) Cleaning

- Clean the finished printed object

- VITA VIONIC BASE RESIN FLEX **2x 3min**

each time in an ultrasonic bath with fresh isopropanol $\geq 98\%$, according to the device manufacturer's instructions.

- 1) Rough cleaning
- 2) Intense cleaning

→ Alternatively: Select validated washing units and their template for the respective product

- Dry the cleaned printed objects until there are no longer any traces of isopropyl alcohol. Check openings, hollow spaces and gaps for residue and blow out with compressed air to speed up the drying process. The surface may no longer be sticky and shiny after cleaning.
- **Store printed denture bases protected from light at room temperature for 30 minutes before post-exposure.**



Workflow Smart Level – Printed base

5) Post-exposure

- Perform post-curing with a suitable light-curing device according to the manufacturer's instructions.
 - The properties and shade effects of the end product depend on a number of factors, such as the reworking process.
 - Correct post-exposure is important for **biocompatibility**. For this reason, it must be ensured that the exposure device is in proper condition and that the moulds are completely hardened.
- For example: **2 x 2000 flashes** under inert gas | turnaround components after 2000 flashes.
- Rapidshape RS cure: Use the settings for the VITA VIONIC RESINS.

VITA
PERFECT MATCH.



VITA VIONIC® BASE RESINS FLEX

Bonding VITA VIONIC® DENT DISC multiColor with resin



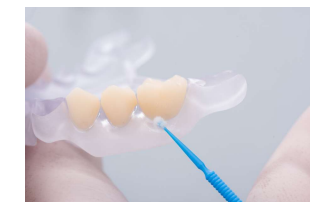
VITA

1. Check the fit : Ensure an absolutely tension-free fit of the tooth in the denture base
2. Ensure that the bonding surfaces of the denture base is clean
3. Carefully sandblast the cavities in the printed denture bases and the milled teeth with Al₂O₃ (50 µm, 2 bar)
4. Residues are removed with oil- and water-free compressed air
5. Preconditioning of the milled dental arch and the cured, printed base using

VITA VM LC Primer II

Use a disposable brush to apply a uniform thin layer of the Primer. Then polymerize with an approved light-curing unit according to VITA VMLC polymerization instructions

6. Apply liquid denture base resin to cavities using a small brush
7. Assemble elements & remove excess resin with a brush
8. Post-exposure in a validated device



Polish



Done



Clever combined

Printed flexible denture bases



With **printed Teeth:**

VITA VIONIC® DENT RESIN



With **milled teeth:**

VITA VIONIC® DENT DISC multiColor



Workflow options compared

Economy Level

- 1) Print denture base + teeth
- 2) Wash
- 3) Check the fit
- 4) Bond by using resin
- 5) Post-cure
- 6) Polish



Your advantage:

Printed partial dentures in solid quality, produced cost-effectively and time-efficiently

Smart Level

- 1) Print, wash, post-cure the denture base
- 2) Mill and extract teeth
- 3) Check the fit
- 4) Preconditioning using primer
- 5) Bond by using resin
- 6) Post-cure
- 7) Polish



Your advantage:

Integrated color gradient and easy polishing of teeth for improved aesthetics.

Statements from our customers

“I am impressed by the flexible denture base material from VITA because it is so easy to polish. I can achieve a high gloss finish twice as fast as with Valplast.”

Marcus Beuchelt
L. Schanz Dentallabor
Germany



“The printed clasp denture convinces with its simple processing: no embedding, no retention as with Valplast, for example - instead, it offers better millability, a significantly faster high-gloss polish, and a strong chemical bond between the base and the teeth.”

Anna-Lena Lüber
L. Schanz Dentallabor
Germany



“With VITA VIONIC BASE RESIN FLEX, I can design and produce complex partial dentures faster, more precisely, and more economically. Patients will love the comfort and natural look – no metal clasps, no compromises. It’s innovation that benefits everyone.”

Darius Northey
Jade Dental Laboratory Pty Ltd
All Smiles Denture Clinic
Australia



Thank you for your attention!