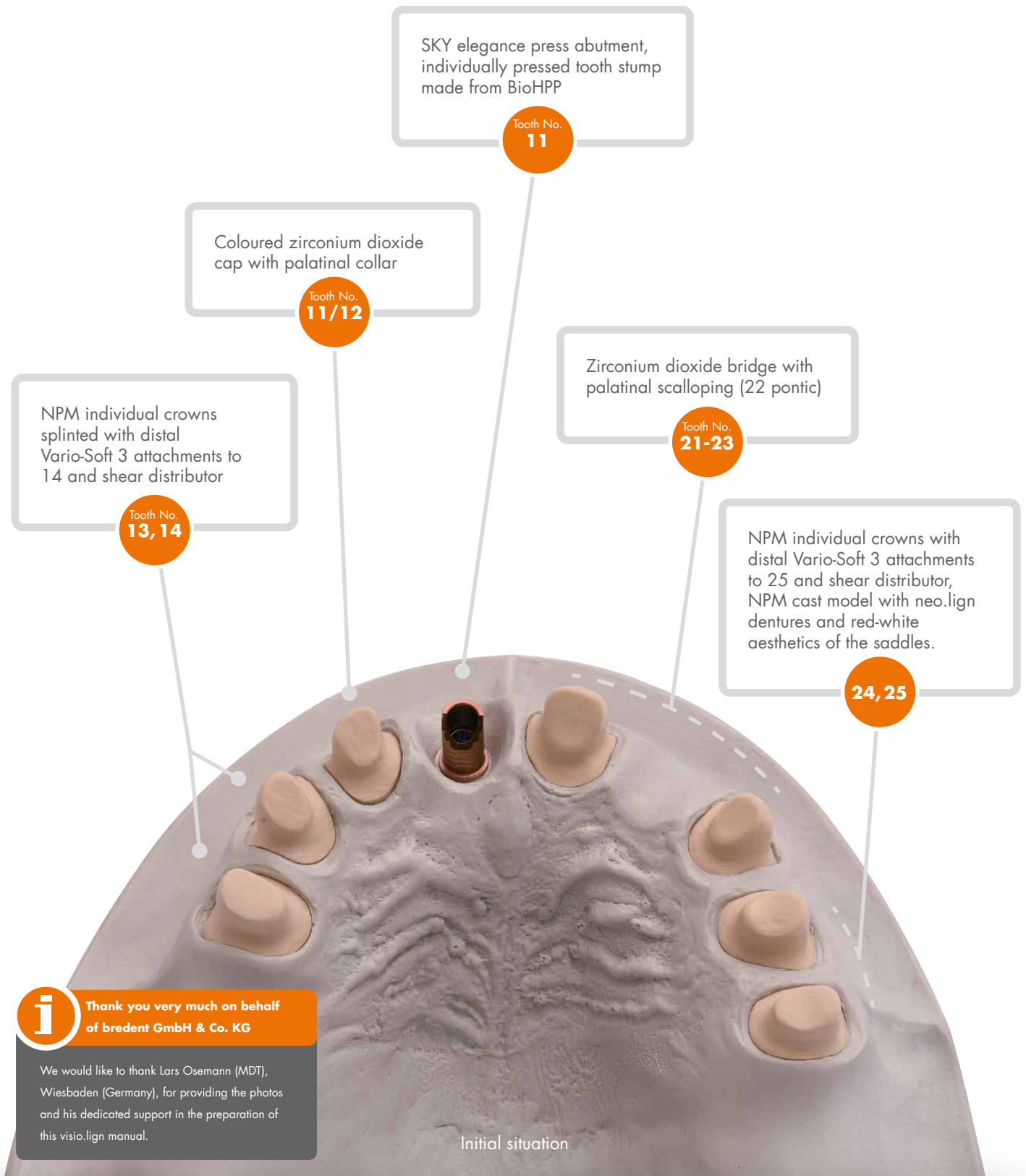


visio.lign®
Manual
Composite processing techniques

Standardized harmony. Individualized aesthetics.

The following restorations and veneering techniques to be fabricated and employed with visio.lign® are described in this manual.



i Thank you very much on behalf of bredent GmbH & Co. KG

We would like to thank Lars Osemann (MDT), Wiesbaden (Germany), for providing the photos and his dedicated support in the preparation of this visio.lign manual.

Symbols used in the manual



Sandblasting



Waiting time



Light-curing time



Do not clean with steam!



Attention!

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1. Aesthetic preparation

Aesthetic preparation is when the shape, colour and occlusion of the dentures are checked. Aesthetic preparation is done

using neo.lign anterior and posterior teeth and novo.lign anterior and posterior veneers.



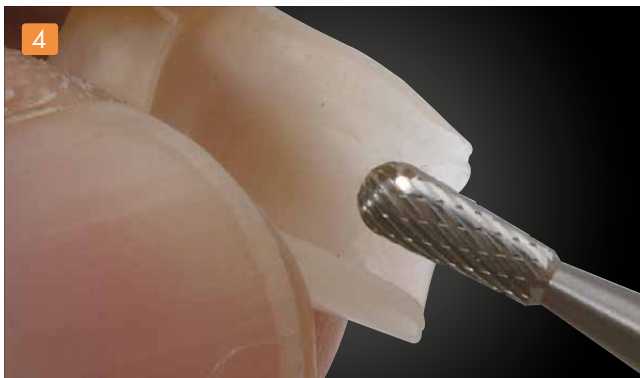
Find the right novo.lign A (anterior) tooth shape.



Find the right novo.lign P (posterior) tooth shape.



Model to be prepared in the articulator.



If required, the neck area of novo.lign veneers can be thinned.



The veneers are prepared using tooth-coloured Beauty Set Up wax.



The prepared anterior section is checked in the articulator.



The completed model in the articulator.



Model using a combination of novo.lign veneers and neo.lign dentures.

Illustrations not true to scale. Subject to errors and changes.

2. Matrix technique

The completed model is fixed using a silicone key. This silicone matrix can be made from opaque or translucent silicone.

(See matrix technique brochure REF 000465GB).

2.1 Translucent matrix

visio.sil ILT matrix (75 Shore A)



Apply visio.sil to the model.



The mixing cannula must be left in the material to avoid the formation of bubbles.



visio.sil ILT is also applied to the occlusal areas.



◀ To smooth out the visio.sil ILT, use a finger coated with washing-up liquid.



Combination of kneading silicone (haptosil D) and visio.sil.



This gives the matrix more rigidity and allows for better repositioning.

2.2 Opaque matrix/kneading silicone



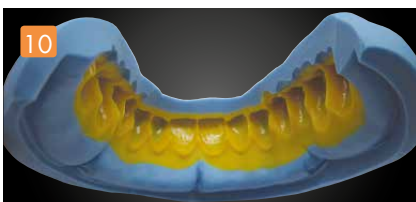
The visio.sil fix is applied in order to create a finely detailed mould.



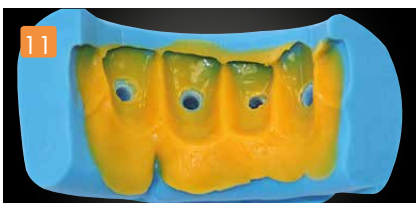
Both the vestibular and oral surfaces of the model must be overmoulded.



Haptosil D (90 Shore A) is pressed into the soft, uncured visio.sil fix.



◀ The visio.sil fix produces a very precise mould of the interdental spaces. Veneers can be fixed without the use of adhesive, just suction.



◀ Holes are bored into the silicone double mix matrix so that the veneers can be polymerised.

Illustrations not true to scale. Subject to errors and changes.

3. Framework design

The wax-up is prepared in order to check the spaces. The preparation matrix was poured using modelling wax, creating the wax-up.

This wax-up is anatomically reduced to produce the best possible framework.

3.1 Wax-up



The wax-up in the articulator so that the spaces can be checked.



The anatomically modelled wax-up showing the oral surface.

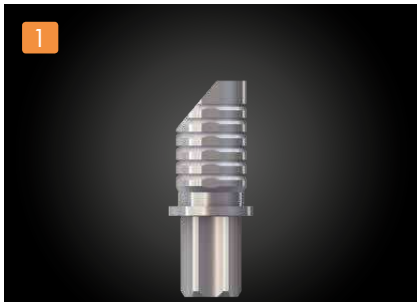


Anatomically reduced wax-up.



The anatomically reduced wax-up is checked using the matrix and the veneers in it.

3.2 Framework manufacture Making the BioHPP abutment



1
Titanium press base.



2
Wax model.

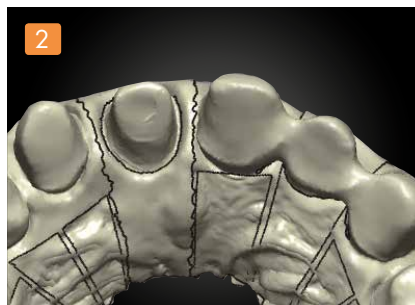


3
Pressed BioHPP abutment.

Manufacture of zirconium oxide framework (12/11/21–23)



1
Wax model.



2
CAD construction/double scan.



3
Completed crown and bridge frameworks.

Manufacture of NPM crowns (13,14/24,25)



1
Wax model with retention crystals.



2
Completed crown framework.

Manufacture of NPM cast model



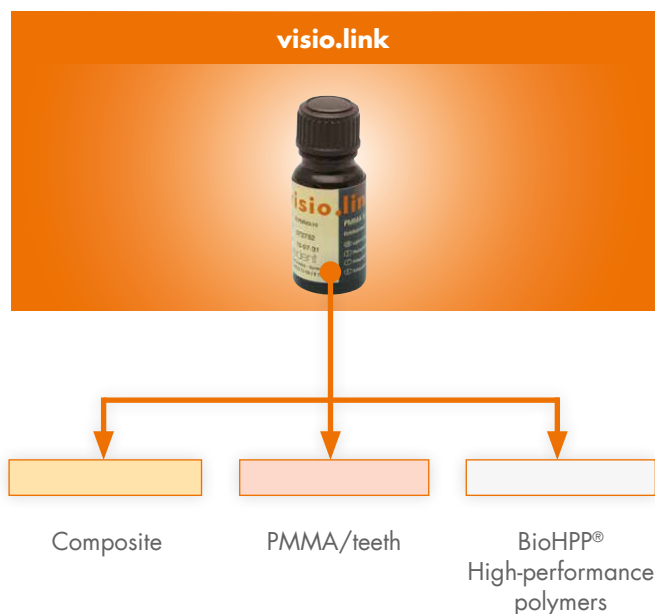
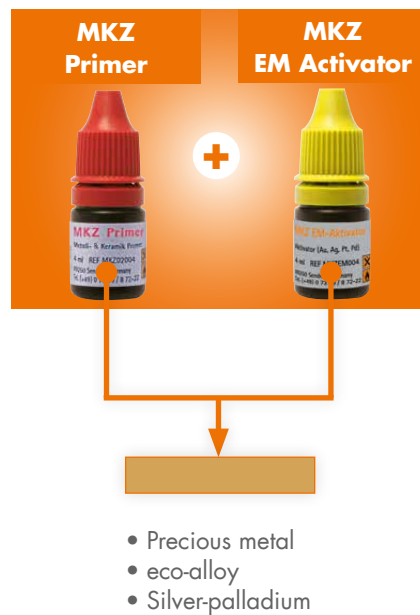
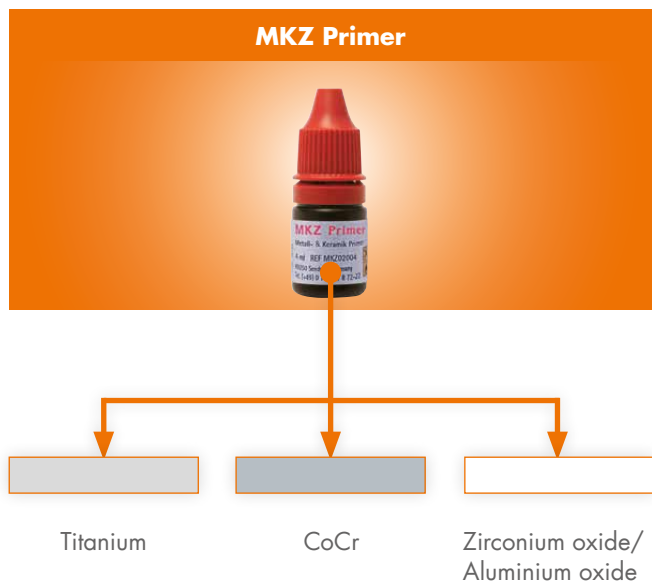
1
Wax model.



2
Moulded cast model.

Illustrations not true to scale. Subject to errors and changes.

4. Veneering technique/indication of visio.lign primer




5. Framework conditioning



Preparation of the adhesive bond of composites:

- Titanium alloys
- CoCr (EMF/NPM) alloys
- Zirconium dioxide (Aluminium oxide/spinel ceramic)

 After sandblasting/roughening, the framework must not be cleaned with a steam jet!

Conditioning frameworks (zirconium oxide/aluminium oxide/spinel ceramic):

Sandblast the metal frameworks with aluminium oxide (grit size 110 µm) and a pressure of 3 to 4 bar. Any impurities can be removed with alcohol and a clean brush.


Then apply the appropriate primer and wait until this evaporates.

To condition precious metal, use a 1:1 mix of MKZ Primer and MKZ EM activator.



Preparation of the adhesive bond of composites:


- Precious metal alloys (Au/Ag/Pt/Pd)
- eco-alloys (low precious metal alloys)

 After sandblasting/roughening, the framework must not be cleaned with a steam jet!



Preparation of the adhesive bond of composites:

- Silicate ceramic (CAD blanks/e-max/Mark2/Lithium disilicate/glass ceramic)

 After sandblasting/roughening, the framework must not be cleaned with a steam jet!

Conditioning of oxide ceramic frameworks (aluminium oxide/spinel ceramic):


Sandblast the ceramic frameworks with 110 µm aluminium oxide grit at a maximum pressure of 2 bar or roughen with a diamond grinder.

Any impurities can be removed with alcohol and a clean brush. Then apply the appropriate primer and wait until this evaporates.



Preparation of the adhesive bond of composites:

- Composites (veneer composites/composite teeth)
- PMMA materials
- High-performance polymers (Bio XS/BioHPP®)

 After sandblasting/roughening, the framework must not be cleaned with a steam jet!

Conditioning of plastics (Composite/PMMA materials/high-performance polymers such as BioHPP/ Bio XS):

Sandblast plastics/plastic frameworks with 110 µm aluminium oxide grit at a pressure of 2 to 3 bar. Any impurities can be removed with alcohol and a clean brush. visio.link is then applied thinly and cured in a light polymerisation device for 90 seconds (wavelength range 370 nm–400 nm).

After light-curing, the conditioned area should have a semi-matt finish, making the perfect layer thickness.

5. Framework conditioning

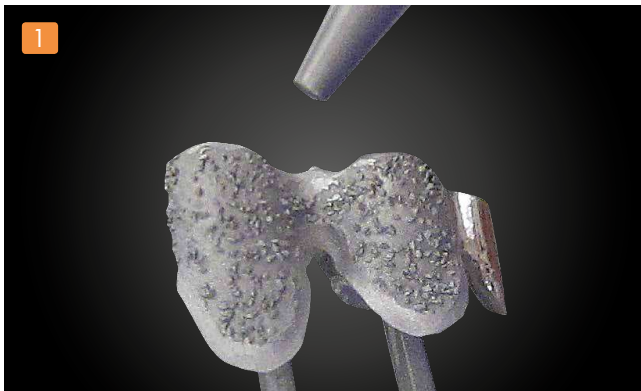
5.1 Zirconium oxide conditioning



Sandblast with 110 µm aluminium oxide grit at a pressure of 2 bar.

- Angle approx. 45°
- Distance approx. 3 cm

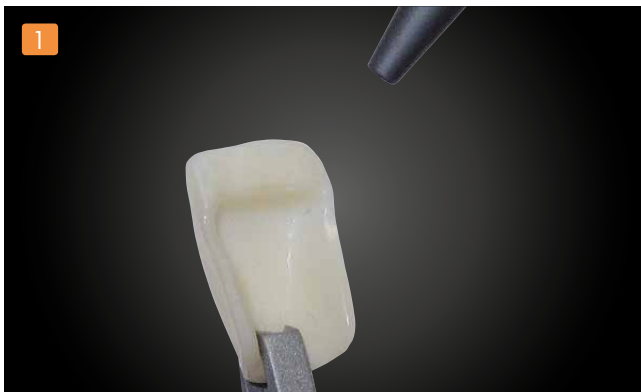
5.2 NPM conditioning



Sandblast with 110 µm aluminium oxide grit at a pressure of 3–4 bar.

- Angle approx. 45°
- Distance approx. 3 cm

5.3 Conditioning of novo.lign veneers



Sandblast with 110 µm aluminium oxide grit at a pressure of 2–3 bar.

- Angle approx. 45°
- Distance approx. 3 cm

6. Applying primer

6.1 Applying MKZ Primer

A clean brush is used to apply the MKZ Primer to the conditioned frameworks, zirconium oxide and NPM. Wait until the

applied primer has evaporated before applying the opaquer.



Drying time.



Drying time.



6.2 Applying visio.link

Thinly coat the sandblasted novo.lign veneers with visio.link and polymerise for 90 seconds in the bre.Lux Power Unit.



Semi-matt finish.



⚠ Too much applied.



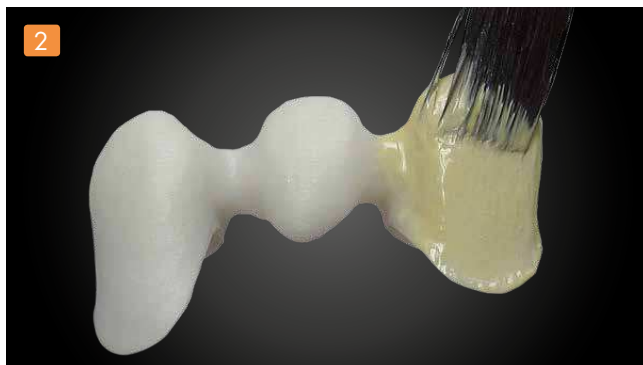
Illustrations not true to scale. Subject to errors and changes.

7. Applying opaker/zirconium liner

7.1 Applying opaker to zirconium oxide

Opaker must be applied in order to create a chemical bond to the zirconium oxide. Once the last coat has been applied,

a final polymerisation for 360 seconds is required.

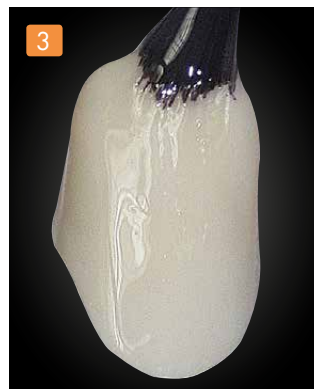
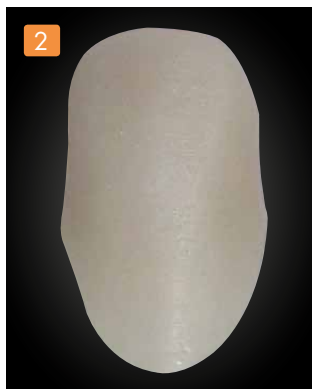


Apply a thin layer of crea.lign opaker and polymerise for 180 seconds in the bre.Lux Power Unit curing device. Repeat until the framework is covered. The final polymerisation for 360 seconds is essential.

7.2 Applying zirconium liner to coloured zirconium oxide

The zirconium liner is a transparent, translucent opaker. This transparent opaker guarantees a chemical bond and

high translucency of the crown.



Apply a thin layer of the crea.lign zirconium liner (transparent opaker) to the coloured zirconium framework and polymerise for 180 seconds.

7.3 Applying opaquer to NPM framework

For mechanical retentions, combo.lign must be used as the first layer of dual-curing opaquer so that the curing reaches the shaded areas. The colour of combo.lign opaquer was de-

veloped specially for use with veneers. The light-curing crea.lign opaquer can be used for free-form layering as well as for veneering with novo.lign veneers.

⚠ Final polymerisation of crea.lign opaquer: 360 seconds



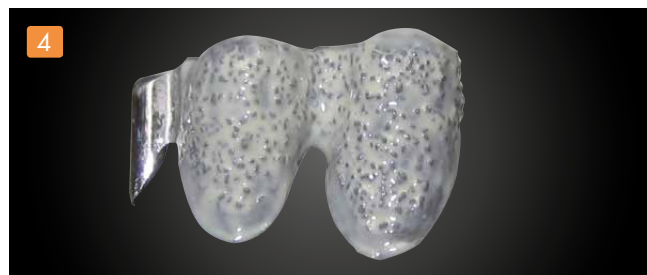
Opaker combo.lign colour paste.



Opaker combo.lign catalyst paste.



Prepare a 1:1 mix of the dual-curing combo.lign opaquer (opaquer paste: catalyst paste).



The mixed opaquer is applied thinly as a wash opaquer and polymerised for 180 seconds.



Apply a thin layer of crea.lign opaquer and polymerise for 180 seconds. Repeat until the framework is covered. The final polymerisation for 360 seconds is essential.

Illustrations not true to scale. Subject to errors and changes.

8. Veneering using novo.lign veneers (12–23)

8.1 Bonding veneers to the framework

The sandblasted novo.lign veneers, treated with visio.link, are bonded using the colour-matched, dual-curing combo.lign luting composite. combo.lign should not sit on the surface, as

it is not easily polished and can discolour. combo.lign must always be polymerised with light in order to achieve the maximum mechanical stability possible!



The spacing of the conditioned veneers is checked in the matrix.



The colour-matched combo.lign is sprayed onto the veneers.



The matrix is placed onto the model and any excess combo.lign squeezed out.



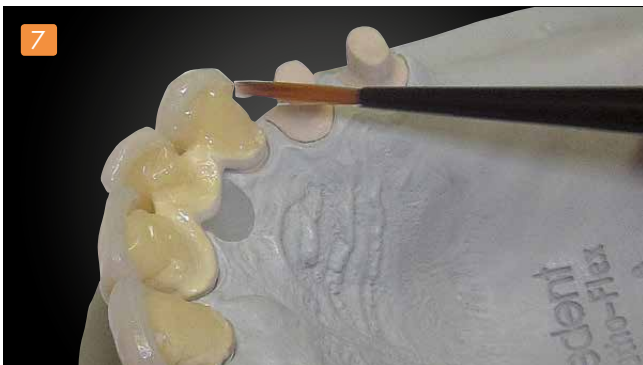
Any excess is removed using a brush soaked in Modelling Liquid so that the combo.lign does not stick to the brush. The construction then undergoes final polymerisation for 180 seconds in the bre.Lux Power Unit curing device.



In the matrix, the combo.lign is polymerised for 15 seconds using a hand-held lamp before a final polymerisation for 180 seconds in the bre.Lux Power Unit light curing device. We recommend that it sits for 10 minutes to enable complete chemical curing.



combo.lign can be added later if required.



Carefully apply the combo.lign and polymerise for 180 seconds in the bre.Lux Power Unit curing device.



The bonded veneers on the framework.

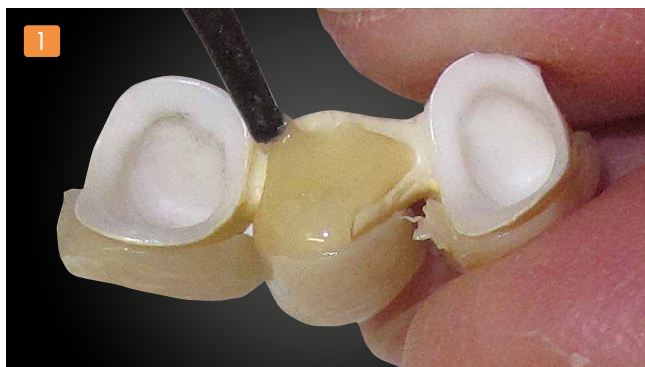
Illustrations not true to scale. Subject to errors and changes.

8. Veneering using novo.lign veneers

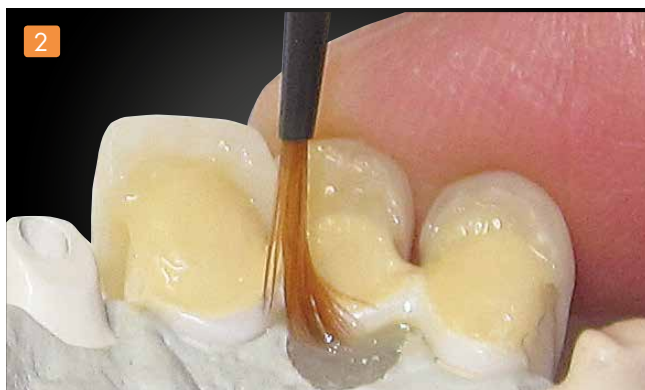
8.2 Adding crea.lign to novo.lign veneers - harmonious

The tooth shape is added using the gel-like crea.lign composite. The thickness of all crea.lign incisor, GUM, modifier and dentine materials must not exceed 1 mm, without a 180-se-

cond intermediate polymerisation. Once the last coat has been applied, a final polymerisation for 360 seconds is required.



crea.lign is applied to the basal area of the pontic and the bridge is placed on the model.



Any excess crea.lign is removed.



The transparent gingival mask means that the base of the model can be cured for 15 seconds using the hand-held lamp. Final polymerisation for 360 seconds in the bre.Lux Power Unit curing device.



The cured basal area just needs to be polished again.



crea.lign is applied where the veneers meet the edge of the crown and polymerised for 180 seconds in the bre.Lux Power Unit curing device.



The completed veneers undergo final polymerisation for 360 seconds.



The dispersion layer is removed with crea.lign surface cleaner and a tooth-brush.



The completed veneers.



➔ For preparation and polishing see page 34.

Illustrations not true to scale. Subject to errors and changes.

8. Veneering using novo.lign veneers

8.3 Realistic staining of veneers (21–23) - harmonious



The bridge was sandblasted with 110 µm aluminium oxide grit and 2 bar pressure.



visio.link is applied and polymerised for 90 seconds



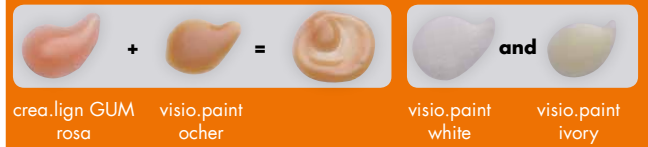
Apply Stains orange as well as a 1:1 mix of Stains brown and visio.paint ebony next to each other in the neck area.

Layering



Mix crea.lign pink and visio.paint ochre to highlight mamelons. Use visio.paint white and ivory to simulate calcium deposits and lines.

Layering





Mix visio.paint blue, crea.lign GUM purple and crea.lign Transpa clear. This mixture is used for staining the marginal ridges and the incisal edge.

Layering



Finally, a thin coating of crea.lign Transpa Clear is applied to the whole surface.

Layering



The dispersion layer is removed with crea.lign surface cleaner and a tooth-brush.

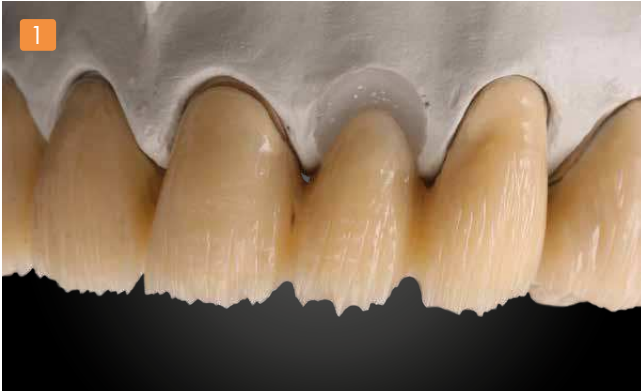


➔ For preparation and polishing see page 34.

Illustrations not true to scale. Subject to errors and changes.

9. Free-form layering

9.1 Free-form layering 21-23 - aesthetic



Dentin layering with crea.lign paste A3.



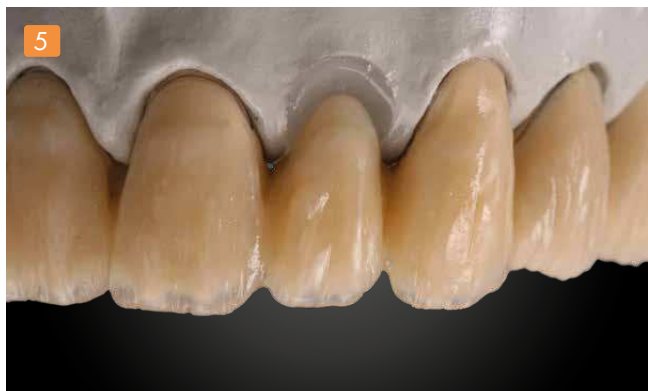
Accentuating the mamelons with crea.lign paste A3,5.



Application of BL3 in the body.



The incisal edge is built up with Transpa clear, Incisal blue and Incisal rose.



Application of crea.lign umbra in the cervical area.



Completion of the incisal edge with E2 and accentuating the marginal ridges with BL3.



The dispersion layer is removed with crea.lign surface cleaner and a tooth-brush.



➔ For preparation and polishing see page 34.

Illustrations not true to scale. Subject to errors and changes.

9. Free-form layering

9.2 Free-form layering 13/14 using crea.lign paste - harmonious

crea.lign paste is applied after the crea.lign opaker.
The maximum layer thickness is 2 mm in order to ensure successful curing.



Final polymerisation of the crea.lign opaker for 360 seconds is essential.



OptraSculpt Pad



i We recommend the use of
OptraSculpt Pad
Composite modelling instrument

crea.lign paste
Dentine A3 is
applied and
polymerised.

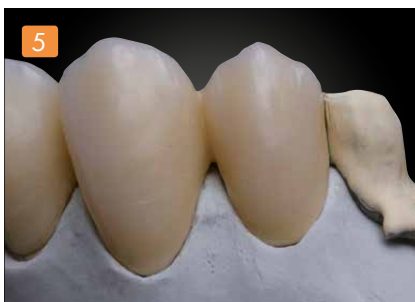


The E2 incisal materials are applied and final polymerisation is carried out for 360 seconds in the bre.Lux Power Unit curing device.

⚠ crea.lign overhangs without framework support, combo.lign support or crea.lign paste support must have a thickness of no more than 1.5 mm.



The dispersion layer is removed with crea.lign surface cleaner and a toothbrush.



➔ For preparation and polishing see page 34.

9. Free-form layering

9.3 Free-form layering 13/14 using crea.lign paste - aesthetic

crea.lign paste is applied after the crea.lign opaker.
The maximum layer thickness is 2 mm in order to ensure successful curing.



The dentin body was created with crea.lign Paste Dentin A3. The mamelons were accentuated with A3,5.



Application of BL3 in the body area. The incisal edge was built up with Transpa clear, Incisal blue and Incisal rose.



crea.lign Modifier umbra was applied in the cervical area. Completion of the incisal edge with E2 and accentuating the marginal ridges with BL3.



The dispersion layer is removed with crea.lign surface cleaner and a toothbrush.



➔ For preparation and polishing see page 34.

Illustrations not true to scale. Subject to errors and changes.

9. Free-form layering

9.4 Free-form layering 24/25 using Gnathoflex - harmonious

Gnathoflex silicone occlusal surfaces can be used to make a veneer very quickly. To do so, the silicone occlusal surface

has to be layered in reverse order.



First apply E2 incisal material and polymerize with the hand lamp for 15 seconds; then apply A3 dentine material and polymerize with the hand lamp for 15 seconds.



Add more Dentine onto the occlusal surface so that this can be positioned on the crown.



Polymerisation with the bre.Lux LED N hand-held lamp.



The Gnathoflex silicone occlusal surfaces were removed and the veneer polymerised for 180 seconds in the bre.Lux Power Unit curing device.



The tooth shape can be added to using crea.lign paste Dentine A3.

⚠ crea.lign overhangs without framework support, combo.lign support or crea.lign paste support must have a thickness of no more than 1.5 mm



The shape of the veneer was completed with crea.lign Incisal E2 and end polymerisation was carried out in the bre. Lux Power Unit polymerisation device for 360 sec.



The dispersion layer is removed with crea.lign surface cleaner and a toothbrush.



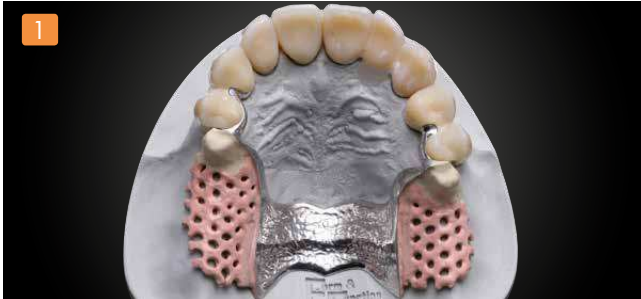
➔ For preparation and polishing see page 34.

Illustrations not true to scale. Subject to errors and changes.

10. Model casting

The dentures that have been sandblasted at 2–3 bar with 110 µm aluminium oxide grit are placed in the matrix, put

on the model and cast using uni.lign denture acrylic. This is then polymerised and prepared in the pressure pot.



The model is ready for bonding the novo.lign veneers to the attachment cases. The dual-curing combo.lign GUM opaque material is used for masking the model cast retention grids.



Both attachments are covered.



The neo.lign teeth were sandblasted and are in the matrix. The uni.lign denture acrylic can be poured in.



The dentures have now been prepared and can be polished.



1.1. Red-white-customisation of denture saddle

Using crea.lign GUM materials which are part of the red-white aesthetics set, the gingival section of artificial dentures can be customised. The red-white aesthetics set contains layer-

ing instructions that will enable quick and easy customisation. The layer thickness of the GUM materials should not exceed 1 mm without intermediate polymerisation of 180 sec.



crea.lign Paste GUM PC40 is applied to the saddle conditioned with visio.link.



The recesses are filled with GUM red. Then the gingival margin is shaped with crea.lign Paste GUM PC30.



The remaining recesses are sealed with crea.lign Transpa.



The dispersion layer is removed with crea.lign surface cleaner and a tooth-brush.



Illustrations not true to scale. Subject to errors and changes.



standardized
Harmony
by **visio.lign**®





individualized
Aesthetics
by **visio.lign**®

Illustrations not true to scale. Subject to errors and changes.



standardized
Harmony
by **visio.lign**®





individualized
Aesthetics
by **visio.lign**®

Illustrations not true to scale. Subject to errors and changes.

13. Preparation and polishing

Preparing and polishing the veneers is done using the instruments and polishing pastes in the visio.lign tool kit.



Highlighting the marginal ridges.



Correcting incisal edges.



Optimising interdental space in the neck area.



Separating veneers with a fine diamond disc.



Smoothing the surface with the rubber polisher.



Pre-polishing using the star-shaped brush and Acrypol polishing paste.



Gloss finish with cotton buff and Abra-so-Starglanz high-gloss polishing paste.



Prepared and polished veneers.

Surface roughness of $0.02 \mu\text{m}$ can be achieved with the visio.lign Toolkit!

Illustrations not true to scale. Subject to errors and changes.

14. Polymerisation times and equipment

14.1 bre.Lux polymerisation times

| Manufacturer | Product name | bre.Lux LED N (manual lamp) | | bre.Lux Power Unit (stationary unit) | | |
|--------------|-----------------------------------|-----------------------------|-----------------------|--------------------------------------|-------------------------|--------------------------------------|
| | | Final polymerisation | Fixation/Prehardening | Intermediate polymerisation | Final polymerisation | Prepolymerisation function/Reduction |
| bre.dent | visio.link | 30 s | - | - | 90 s | 40 x (50 %) |
| bre.dent | combo.lign luting composite | X | 15 s | 120 s | 180 s | - |
| bre.dent | crea.lign gel | X | 15 s | 180 s | 360 s | 20 x (50%) |
| bre.dent | crea.lign paste | X | 15 s | 180 s | 360 s | - |
| bre.dent | combo.lign Opaquer | X | 15 s | 180 s | 180 s | - |
| bre.dent | crea.lign Opaker | - | 30 s | 180 s | 360 s | - |
| bre.dent | visio.paint | - | 40 s | 90 s | 90 s | - |
| bre.dent | crea.lign Stains | - | 30 s | 90 s | 90 s | - |
| bre.dent | novo.nect | 30 s | - | - | 90 s | 40 x (50%) |
| bre.dent | novo.temp | X | 15 s | 120 s | 180 s | - |
| bre.dent | Ropak UV | X | - | 180 s *** | 360 s | - |
| bre.dent | Compact opaquer | X | - | 180 s *** | 360 s | - |
| bre.dent | Compact opaquer tooth-coloured UV | X | - | 180 s | 360 s | - |
| bre.dent | compoForm UV | 30 s | 15 s | - | 180 s | - |
| bre.dent | Tray material UV * | X | X | 90 s | 2 x 180 s | 40 x (50%) |
| bre.dent | Die varnish, light-curing | 30 s ** | 15 s | 90 s | 180 s | 20 x (50%) |
| bre.dent | SERACOLL UV | 15 s | 15 s | - | 90 s | - |
| bre.dent | Qu-connector | 30 s | - | - | 90 s | 40 x (50%) |
| Heraeus | Signum | X | - | 180 s | 360 s | 20 x (50%) |
| Heraeus | Palatray XL | X | - | 90 s | 2 x 180 s | 40 x (50%) |
| Shofa | Solidex | X | - | 180 s | 360 s | 20 x (50%) |
| GC | Gradia | X | 15 s | 180 s | 360 s | 20 x (50%) |
| Wegold | S-Lay | - | - | 180 s | 360 s | 20 x (50%) |
| VITA | VITA VM IC Opaque | - | 30 s | - | 2 x 360 s | - |
| VITA | VITA VM IC Opaque | - | 30 s | 180 s | Pontics up to max. 2 mm | fix up to 1.5 mm |
| Degudent | in:joy | - | - | 180 s | 360 s | 20 x (50%) |

180 s Polymerisation time not intended
X Contraindication

* If UV tray material is used, polymerisation is carried out from both sides for 180 seconds each. Optionally, pre-hardening for 90 sec. may be carried out (upper side); during final polymerisation, the bottom side is polymerised first

** for a single application
*** Apply opaquer in two layers

14.2 Polymerisation units and times

for the visio.lign® system components visio.link, combo.lign and crea.lign

* manufacturer's data
** new set of lamps is recommended

| Manufacturer | Unit | Wavelength in nm* | Polymerisation time visio.link | Polymerisation time combo.lign | Polymerisation time crea.lign gel Opaquer combo.lign crea.lign Opaker |
|---------------------|--|------------------------|--------------------------------|--------------------------------|---|
| bre.dent | bre.Lux Power Unit | 370 - 500 | 90 s | 180 s | 6 min |
| Dentsply / Degudent | Triat, Triat 2000 Eclipse | 400 - 500 n.s. | 3 min 60 s | 6 min 180 s | 10 min 6 min |
| Heraeus Kulzer | Dentacolor XS, Uni XS Heraflash | 320 - 520 320 - 520 | 90 s 90 s | 180 s 180 s | 6 min 6 min |
| GC | Labolight LV-III | 380 - 490 | 2 min | 5 min | 10 min |
| Ivoclar Vivadent | Targas Power Ofen Lumanat 100 | 400 - 580 400 - 580 | 4 min 4 min | 180 s 180 s | 8 min 6 min |
| Schütz Dental | Spektra 2000 | 310 - 500 | 2 min | 180 s | 6 min |
| Shofu Dental | Solitilte EX | 400 - 550 | 90 s | 180 s | 6 min |
| Kuraray Dental | CS 110 | n.s. | 2 min | 5 min | 8 min |
| Hager & Werken | Speed Labolight | 320 - 550 | 90 s | 180 s | 8 min |
| 3M ESPE | Visio BETA (neu P1 - P4) Visio BETA (alt U0 - U3)** | 400 - 500 400 - 500 | < 4 min (P2) 7 min (U1, U3) | 7 min (P2) 15 min (U0) | 15 min (P1) 15 min (U0) |

15. Layer thickness and shade combination tables

15.1 Layer thicknesses

| Material | max. layer thickness | Intermediate polymerisation bre.Lux Power Unit | Final polymerisation |
|--------------------------------------|----------------------|---|----------------------|
| crea.lign Enamel | 1 mm | 180 sec | 360 sec |
| crea.lign Incisal | 1 mm | 180 sec | 360 sec |
| crea.lign Transpa Clear | 1 mm | 180 sec | 360 sec |
| crea.lign Dentine | 1 mm | 180 sec | 360 sec |
| crea.lign Modifier | 1 mm | 180 sec | 360 sec |
| crea.lign GUM | 1 mm | 180 sec | 360 sec |
| crea.lign Stains | 1 mm | 90 sec | 90 sec |
| visio.paint | 0.3 mm | 90 sec | 90 sec |
| 30% visio.paint mixed with crea.lign | 1 mm | 90 sec | 90 sec |
| crea.lign Paste | 2 mm | 180 sec | 360 sec |
| combo.lign | 2 mm | 120 sec | 180 sec |
| crea.lign opaker | 0,1 mm | 180 sec | 360 sec |
| Opaquer combo.lign | 0,1 mm | 180 sec | 180 sec |

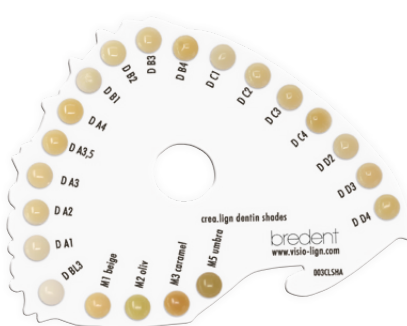
15.2 Shade combination tables

| crea.lign gel Enamel | Traditional A-D shades | | | | | | | | | | | | | | | | |
|----------------------|------------------------|----|----|----|------|----|----|----|----|----|----|----|----|----|----|----|----|
| | BL3 | A1 | A2 | A3 | A3,5 | A4 | B1 | B2 | B3 | B4 | C1 | C2 | C3 | C4 | D2 | D3 | D4 |
| E1 | Univ. | • | | | | | • | | | | • | | | | • | | |
| E2 | | | • | • | | | | • | | | | | | | | | |
| E3 | | | | | • | | | | • | • | | • | • | | | • | • |
| E4 | | | | | | • | | | | | | | | • | | | |

| | crea.lign opaquer system shades | | | | | | | | |
|---------------------------------|---------------------------------|---------|---------|---------------|-------------------|---------|---------|---------|-----|
| | Shade 1 | Shade 2 | Shade 3 | Shade 4 | Shade 5 | Shade 6 | Shade 7 | Shade 8 | GUM |
| Traditional A - D shades | A1 / B2 | A2 | A3 / D3 | B1 / C1 / BL3 | C2 - C3 / D2 / D4 | B3 / B4 | A3.5 | A4 / C4 | - |

| | combo.lign opaquer system shades | | | |
|---------------------------------|----------------------------------|--------------------------|-------------------|-----|
| | light | medium | intensive | GUM |
| Traditional A - D shades | A1 - A3 / B1 - B2 / C1 - C2 | A3.5 / B3 - B4 / D2 - D3 | A4 / C3 - C4 / D4 | - |

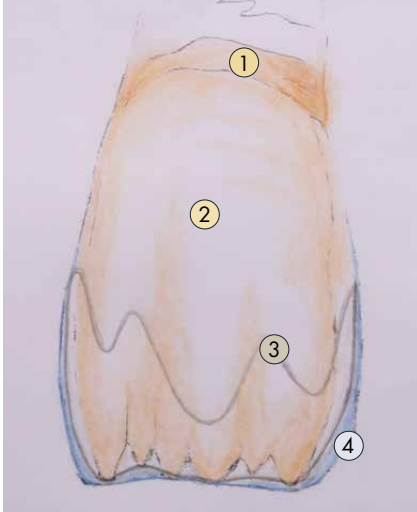
15.3 crea.lign shade guides



Illustrations not true to scale. Subject to errors and changes.

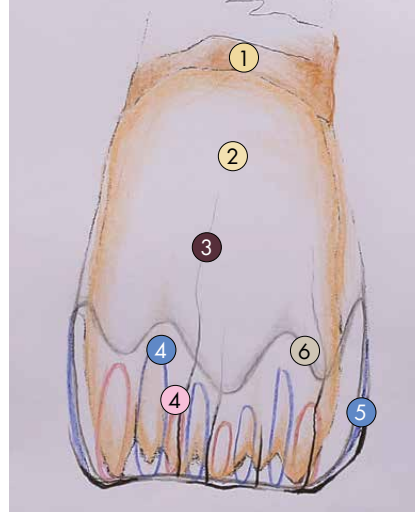
16. Standard and free-form layering instructions

Standard layering



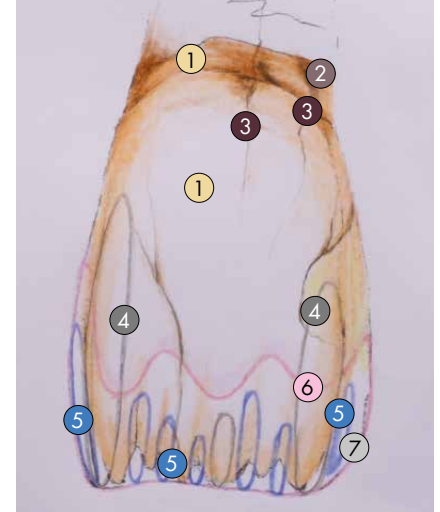
- ① The neck of the tooth is coated with the dentine mass A3.5 or beige modifier – one degree darker than the subsequent tooth colour.
- ② The body of the tooth and mamelons are coated with the dentine mass A3.
- ③ Almost the entire edge is built up with Enamel E2.
- ④ The form of the cutting edge is completed with Incisal opal.

Customised layering



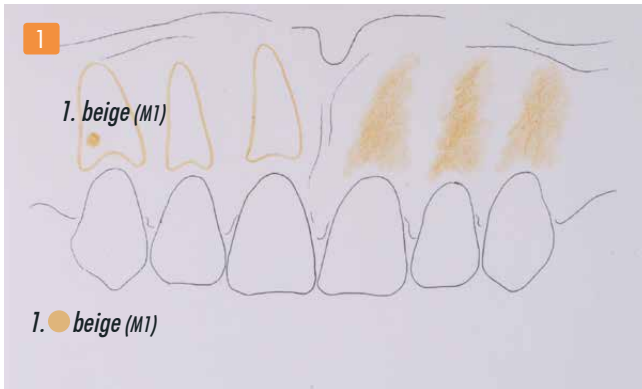
- ① The neck of the tooth is coated with the dentine mass A3.5 or beige modifier – one degree darker than the subsequent tooth colour.
- ② The body of the tooth and mamelons are coated with the dentine mass A3.
- ③ Add thin enamel cracks using visio.paint ebony.
- ④ ④ Place alternating layers of Incisal blue and Incisal rose over the mamelons.
- ⑤ Apply Incisal blue in a mesial and distal direction from the cutting edge.
- ⑥ The entire edge is built up with Enamel E2.

Pronounced customised layering

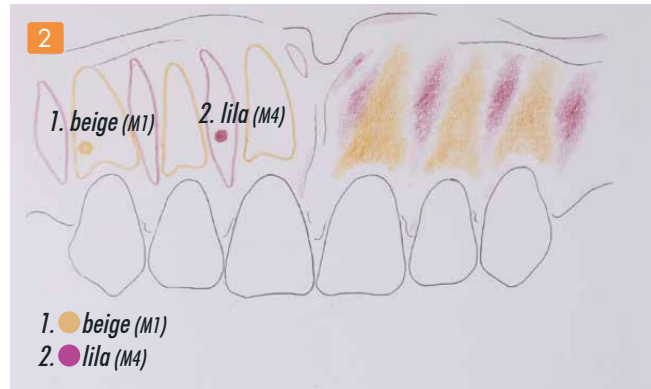


- ① The neck of the tooth and the body of the tooth with mamelons are coated with the dentine mass A3.
- ② Dark contrasts are ground into the neck area with orange Stains and brown Stains, which is also mixed with visio.paint ebony.
- ③ Add thin cracks using visio.paint ebony.
- ④ Marginal ridges are built up with Incisal universal.
- ⑤ Place Incisal blue over the mamelons and on the marginal ridges.
- ⑥ Complete the cutting edge area with Incisal rose.
- ⑦ Complete the marginal ridge with crea.lign Transpa Clear in a distal direction and laminate the veneer

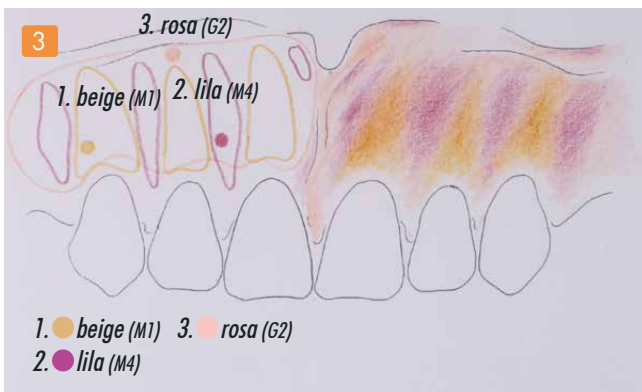
17. Red-white-customisation layering instructions



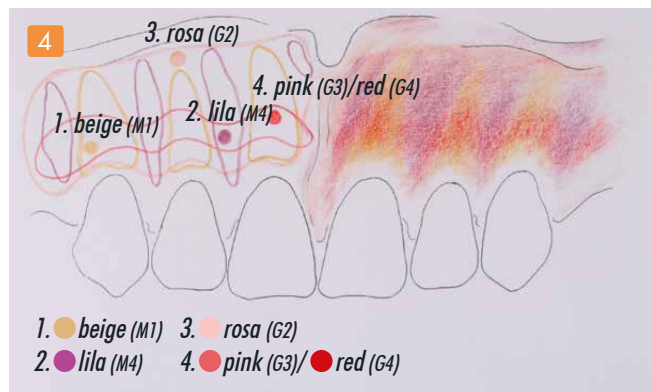
Beige (M1) is applied in the area of the alveoli, in order to enhance the bony areas. After each product application, the area must be polymerised for at least 15 seconds using the hand-held lamp.



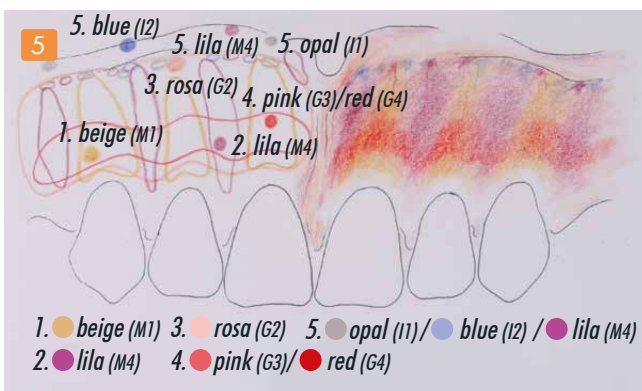
Lila (M4) is applied between the beige (M1) to achieve a depth effect.



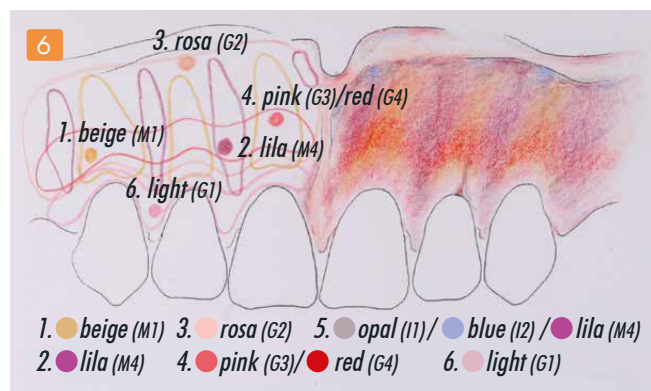
Rosa (G2) is applied in order to reduce the strong effect of the materials.



Pink (G3)/red (G4) is used for the well-perfused areas of the gum.



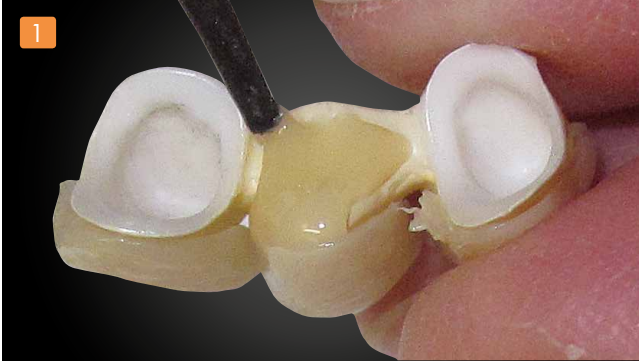
Opal (I1), blue (I2) and lila (M4) are applied in the area of the gingivobuccal fold in a punctiform manner and spread using a brush to suggest blood vessels.



The interdental papillae are simulated with the colour light (G1). Unevenness and the interdental gaps are closed using the colour opal (I1). Correct application minimises expensive reworking. The prosthesis must be placed in the bre.Lux Power Unit for 360 seconds for final polymerisation.

18. Tips and tricks

18.1 Gingival mask made from visio.sil (transparent silicone)



crea.lign is applied to the basal area of the pontic and the bridge is placed on the model.



Any excess crea.lign is removed.



The transparent gingival mask means that the base of the model can be cured for 15 seconds using the hand-held lamp. Final polymerisation for 180 seconds in the bre.Lux Power Unit curing device.



The cured basal area just needs to be polished again.

18.2 Zirconium liner to improve retention



Dual-curing combo.lign opaquer was applied as a wash opaquer.



A thin layer of zirconium liner was applied to the crowns to level out the retentions.



After another application of crea.lign opaquer and final polymerisation, the surface looks smooth and even. This ensures that both veneers have an equal layer thickness.

Illustrations not true to scale. Subject to errors and changes.

18. Tips and tricks

18.3 Application of crea.lign Modelling Liquid in red-white customisation

When individualizing the gingiva using crea.lign GUM materials on denture resin, crea.lign GUM should be applied thinly and spread in the transition zone towards the denture resin

using crea.lign Modelling Liquid. As a result, the flexibility of crea.lign is increased and cracks and chipping are avoided.



crea.lign Modelling Liquid.

⚠ Attention!

- only dilute crea.lign by a maximum of 30% with crea.lign Modelling Liquid
- crea.lign Modelling Liquid is not a sealing lacquer and must not be used as such, otherwise discolourations will occur within a very short time!

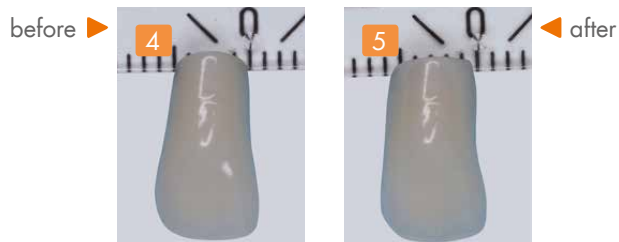
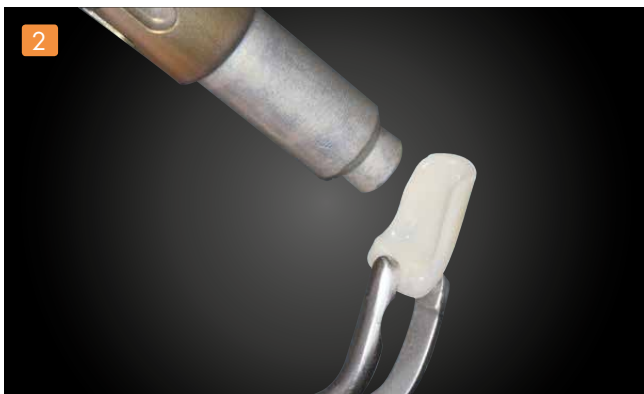


The material, slightly thinned using crea.lign Modelling Liquid, is applied to the marginal area.



There is no transition to be seen in the marginal area between the denture acrylic and the crea.lign. This is partly due to the seamless link created by the uni.lign denture acrylic.

18.4 Heating and bending novo.lign veneers



Illustrations not true to scale. Subject to errors and changes.

19. Important information

- Do not use K-Primer on ceramic/glass surfaces as it will react with the ceramic/glass surfaces and be ineffective.
- Opaquer combo.lign must only be used for veneering with novo.lign veneers in order to avoid colour deviations when used for free-form layering techniques.
- crea.lign opaker can be used for free-form layering techniques as well as for veneering using novo.lign veneers.
- The visio.paint stains must not remain on the surface to avoid any discoloration. Please coat the stains with crea.lign Transpa, for example. If the visio.paint stains are mixed with crea.lign, the mixture must not remain on the surface!
- The layer thickness of crea.lign must not exceed 1.5 mm without framework support, combo.lign support or crea.lign Paste support.

Important information for veneering BioHPP frameworks

- Attach circular scalloping using a wraparound technique
- Mechanical retentions must be attached (retention beads/retention crystals)
- The dual-curing combo.lign opaquer must be used as the first layer of opaquer. For further layers, crea.lign opaker can be used.
- Do not exceed layer thicknesses of max. 1 mm in order to ensure complete polymerisation.
- Separate adjoining veneers and only seal them together at the end, prior to the final polymerisation.

Request the System Presentation:

visio.lign® Veneering system

REF 009504GB



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