visio.lign

The Aesthetic and Functional System

Manual

Composite processing techniques

veneering composite	veneers	denture teeth	composite blanks	stains	bonding system
crea.lign	**novo.lign**	**neo.lign**	**visio.CAM**	**visio.paint**	**bond.lign**

perform with
visio.lign

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

SKY elegance press abutment, individually pressed tooth stump made from BioHPP

Tooth No. **11**

Coloured zirconium dioxide cap with palatinal collar

Tooth No. **11/12**

Zirconium dioxide bridge with palatinal scalloping (22 pontic)

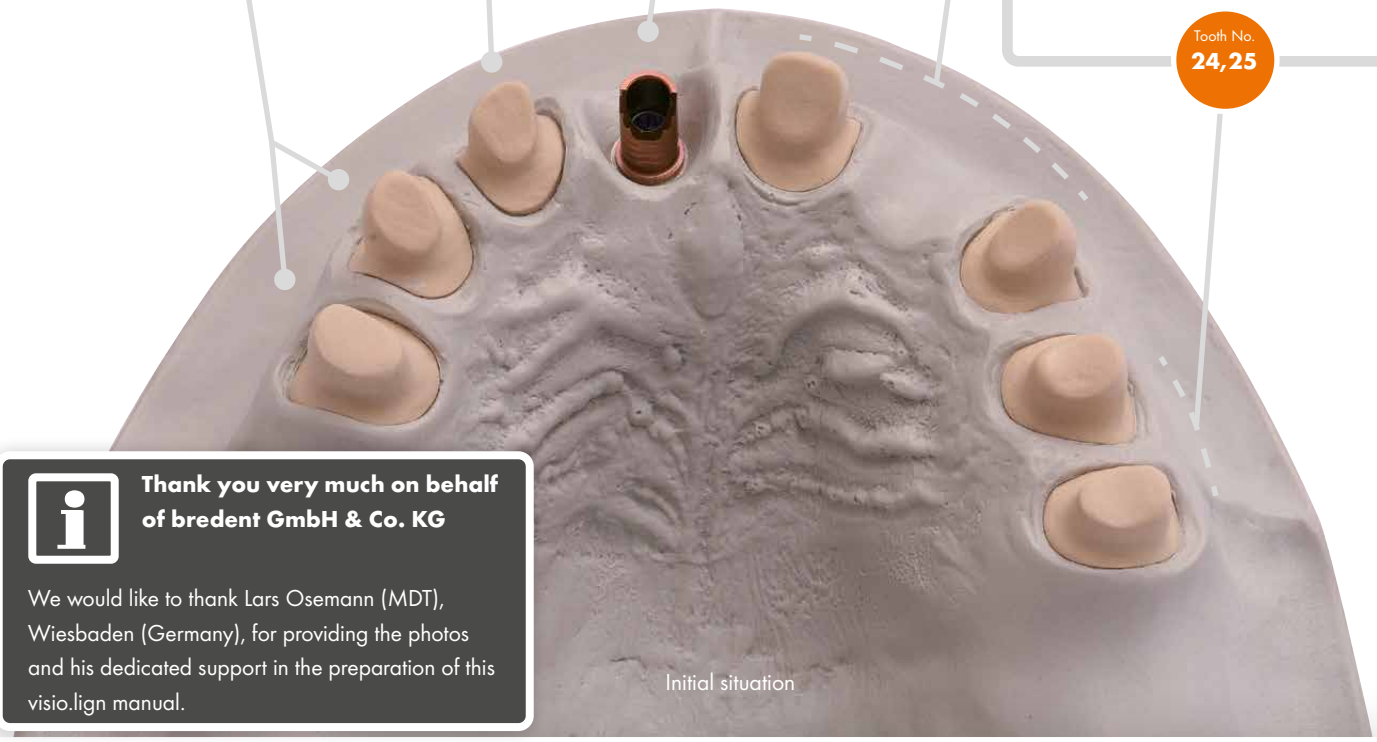
Tooth No. **21-23**

NPM individual crowns splinted with distal Vario-Soft 3 attachments to 14 and shear distributor

Tooth No. **13, 14**

NPM individual crowns with distal Vario-Soft 3 attachments to 25 and shear distributor, NPM cast model with neo.lign dentures and red-white aesthetics of the saddles.

Tooth No. **24, 25**



Initial situation

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

45° **Sandblasting** | 30 sec **Waiting time** | 180 sec **Light-curing time** | **Do not clean with steam!** | **Attention!**

Contents

page

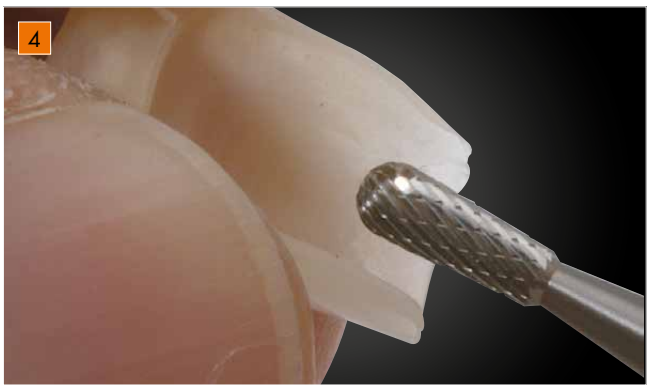
1. Aesthetic preparation

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.

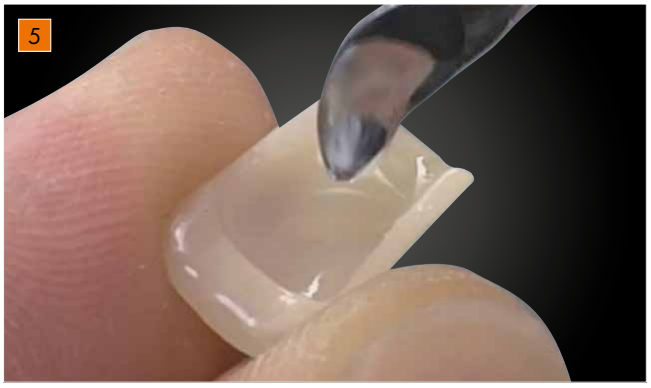
Find the right novo.lign A (anterior) tooth shape.

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.

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.

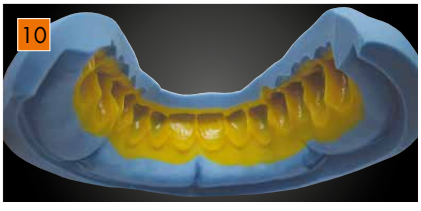
This gives the matrix more rigidity and allows for better repositioning.

2.2 Opaque matrix/kneading silicone

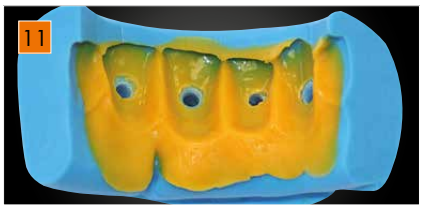
The visio.sil fix is applied in order to create a finely detailed mould.

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.

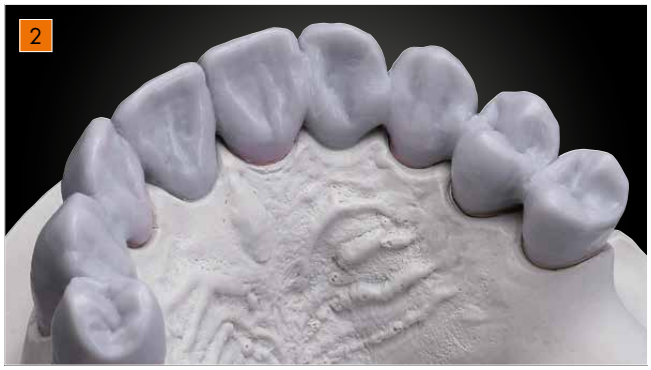
3. Framework design

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

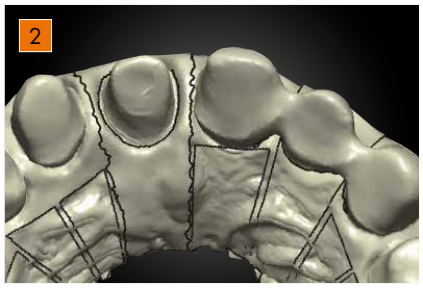
Titanium press base.

Wax model.

Pressed BioHPP abutment.

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

Wax model.



CAD construction/double scan.

Completed crown and bridge frameworks.

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

Wax model with retention crystals.

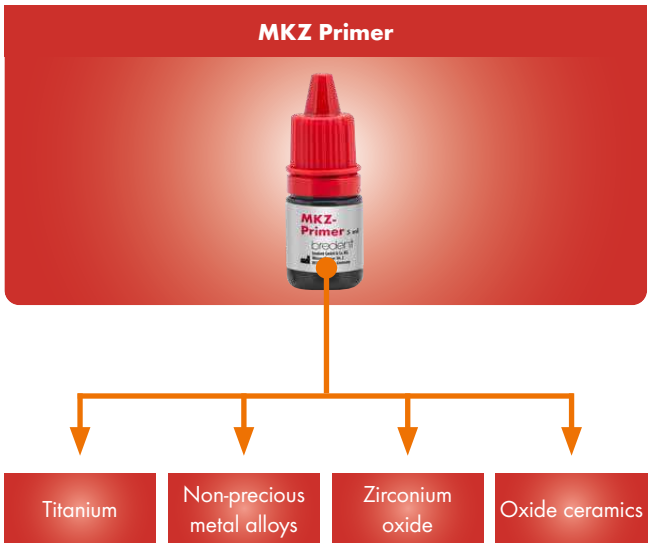
Completed crown framework.

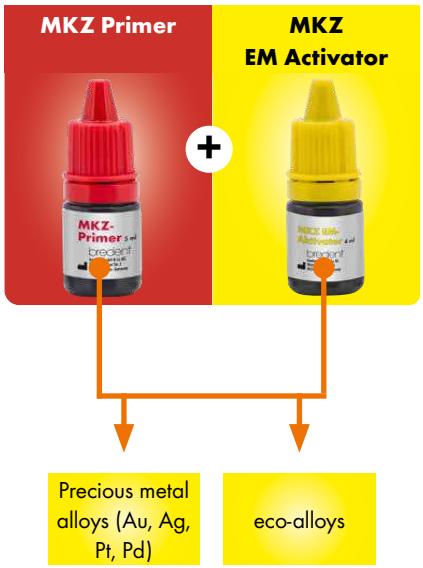
Manufacture of NPM cast model

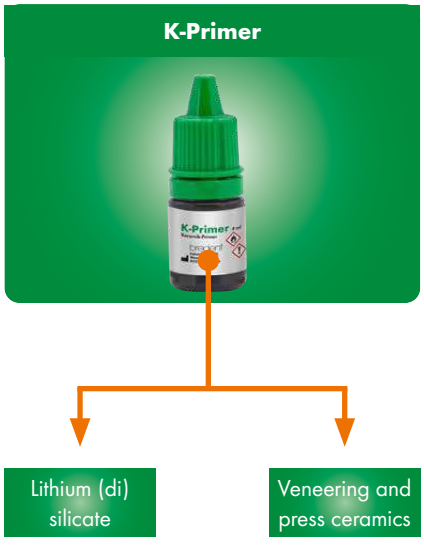
Wax model.

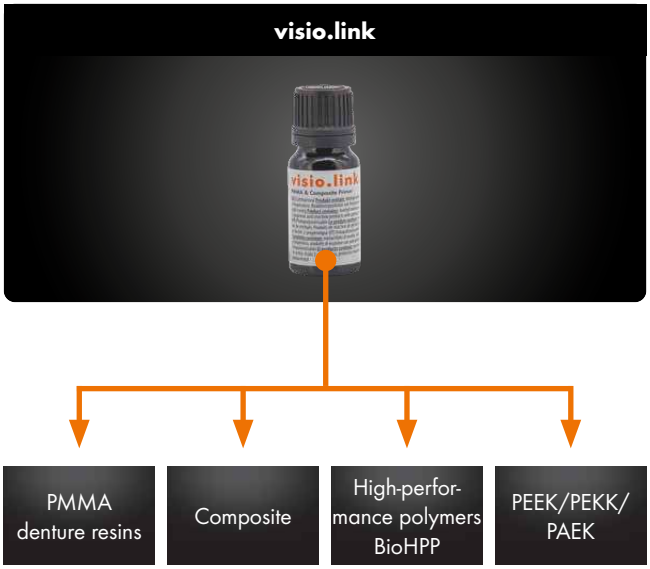
Moulded cast model.

4. Veneering technique/indication of visio.lign primer









5. Framework conditioning

Preparation of the adhesive bond of composites:
- Titanium
- Non-precious metal alloys
- Zirconium oxide
- Oxide ceramics

Conditioning of metal and zirconium frameworks (CoCr/NPM/titanium/zirconium)
Sandblast metal frameworks at 3 to 4 bar and zirconium frameworks at max. 2 bar with 110 µm grain aluminium oxide.
The framework must not be cleaned with a steam jet after sandblasting. Any impurities should be removed using alcohol and a clean brush.
Then apply the MKZ Primer and wait until it evaporates.

(Mix 1: 1)

Preparation of the adhesive bond of composites:
- Precious metal alloys (Au, Ag, Pt, Pd)
- eco-alloys (low precious metal alloys)

Conditioning of precious metal frameworks (palladium-based/silver-based alloy)
Sandblast metal frameworks with 110 µm grain aluminium oxide at a pressure of 2 to 3 bar. The framework must not be cleaned with a steam jet after sandblasting. Any impurities should be removed using alcohol and a clean brush. Then mix the MKZ Primer and the MKZ EM-Activator at a ratio of 1:1, apply and wait until the mixture evaporates.

Preparation of the adhesive bond of composites:
- Lithium (di)silicate
- Veneering and press ceramics

Also suitable for silanization of surfaces.

Conditioning of oxide ceramic frameworks (zirconium oxide/aluminium oxide/spinel ceramic):
Sandblast the ceramic frameworks with 110 µm aluminium oxide at a maximum pressure of 2 bar or roughen with a diamond grinder. The framework must not be cleaned with a steam jet after sandblasting/grinding! Remove any impurities using alcohol and a clean brush. Then apply the appropriate primer and wait until it evaporates.

Preparation of the adhesive bond of composites:
- PMMA denture resins
- Composite (veneer composites/ composite teeth)
- High-performance polymers BioHPP
- PEEK/PEKK/PAEK

Conditioning of plastics (composite/PMMA materials/high-performance polymers such as BioHPP):
Sandblast the plastic/plastic framework with 110 µm grain aluminium oxide at a pressure of 2 to 3 bar. The framework must not be cleaned with a steam jet after sandblasting. Any impurities should be removed using alcohol and a clean brush. Then apply a thin coating of visio.link and cure for 90 seconds in a light polymerisation device (wavelength range 370 nm - 500 nm). The conditioned area should have a silk-matte finish after light curing. This shows that the layer thickness is perfect.

Sandblasting

Light-curing time

Waiting time

Maximum layer thickness

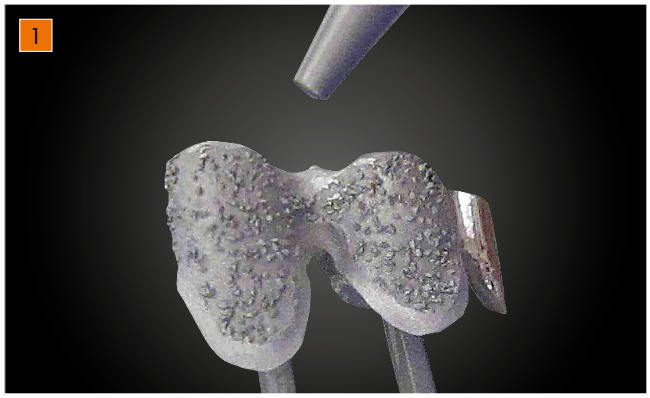
5. Framework conditioning

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 novo.lign veneers conditioning

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

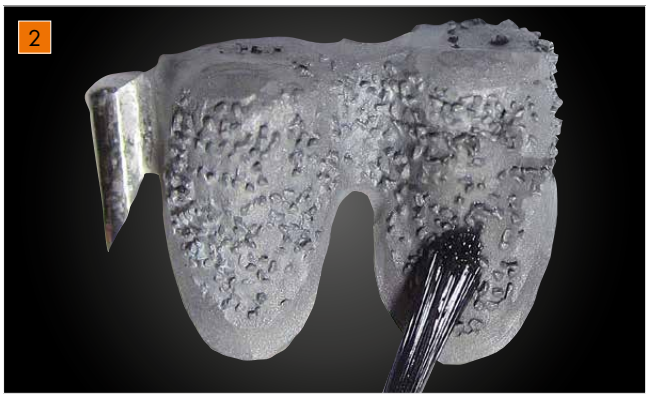
- Angle approx. 45°
- Distance approx. 3 cm

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 PowerUnit 2.

Semi-matt finish.

⚠ *Too much applied.*

7. Applying opaker/zirconium liner

7.1 Applying opaker to zirconium oxide

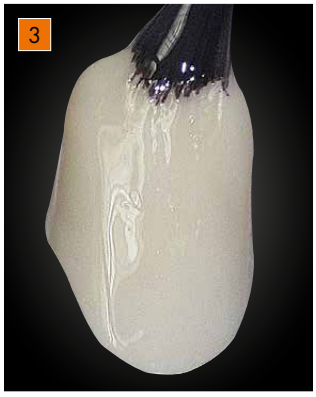
Opaker must be applied in order to create a chemical bond to the zirconium oxide. Once the last coat has been applied, a final polymerisation for 360 seconds is required.

180 sec

Apply a thin layer of crea.lign opaker and polymerise for 180 seconds in the bre.Lux PowerUnit 2 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.



180 sec

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

⚠ *Final polymerisation of crea.lign opaker: 360 seconds*

1

Opaquer combo.lign colour paste.

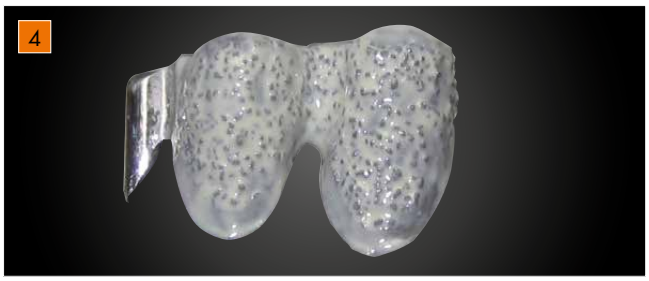
2

Opaquer combo.lign catalyst paste.

3

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

4



180 sec

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

5

6

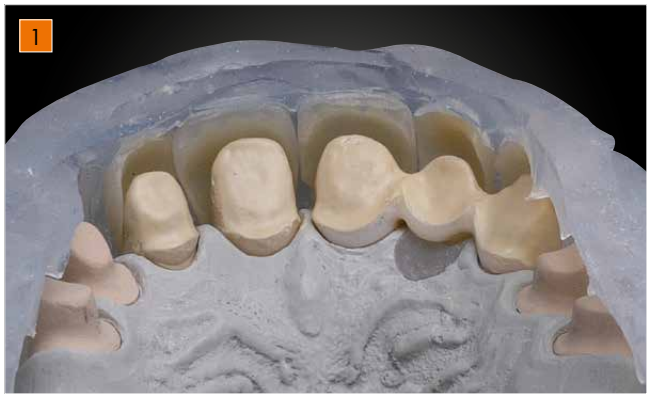
180 sec

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

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.

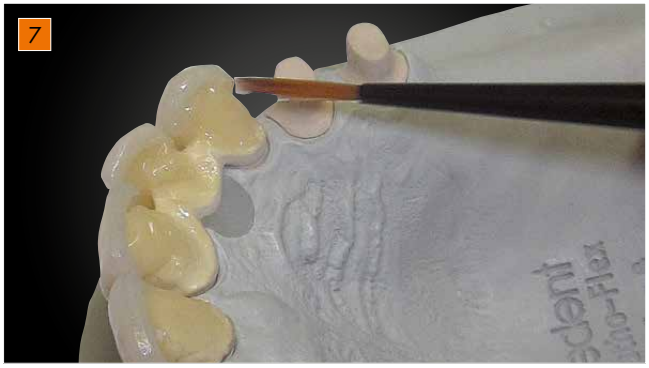
The matrix is placed onto the model and any excess combo.lign squeezed out.

180 sec

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 PowerUnit 2 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 PowerUnit 2 light curing device. We recommend that it sits for 10 minutes to enable complete chemical curing.

combo.lign can be added later if required.



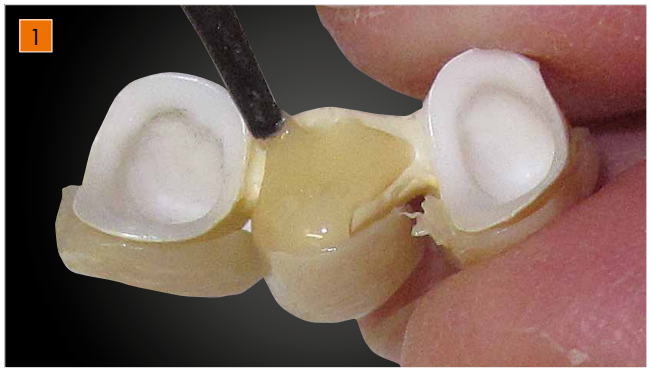
Carefully apply the combo.lign and polymerise for 180 seconds in the bre.Lux PowerUnit 2 curing device.

The bonded veneers on the framework.

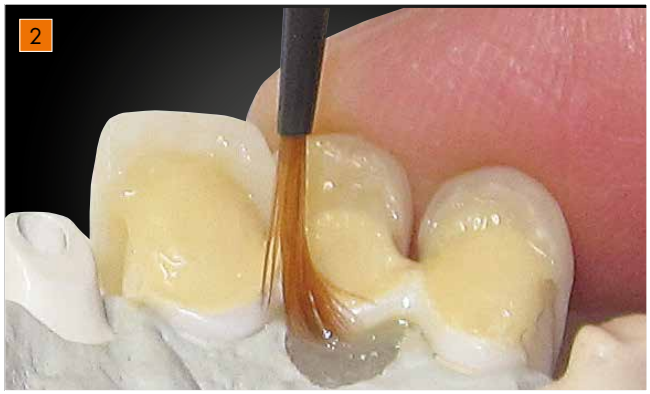
8. Veneering using novo.lign veneers

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-second 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 PowerUnit 2 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 PowerUnit 2 curing device.

The completed veneers undergo final polymerisation for 360 seconds.

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

The completed veneers.

→ *For preparation and polishing see page 32.*

8. Veneering using novo.lign veneers

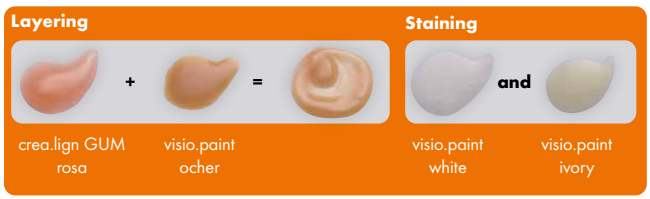
8.3 Realistic staining of veneers (21–23) - harmonious

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.

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



90 sec

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

visio.paint blue | crea.lign GUM lila | crea.lign Transpa clear

90 sec

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

Layering

crea.lign Transpa clear

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

→ *For preparation and polishing see page 32.*

9. Free-form layering

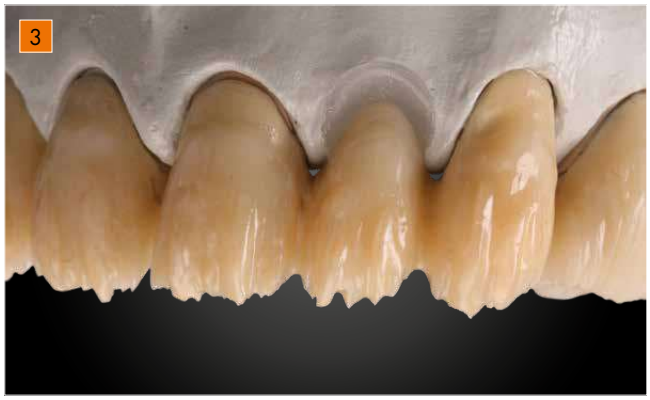
9.1 Free-form layering 21-23 - aesthetic

180 sec

Dentin layering with
crea.lign paste A3.

180 sec

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



180 sec

Application of BL3 in the body.

180 sec

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

180 sec

Application of crea.lign umbra in the cervical area.

360 sec

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 32.*

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.

360 sec

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

180 sec

crea.lign paste Dentine A3 is applied and polymerised.

360 sec

The E2 incisal materials are applied and final polymerisation is carried out for 360 seconds in the bre.Lux PowerUnit 2 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 32.*

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.

180 sec

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

360 sec

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 32.*

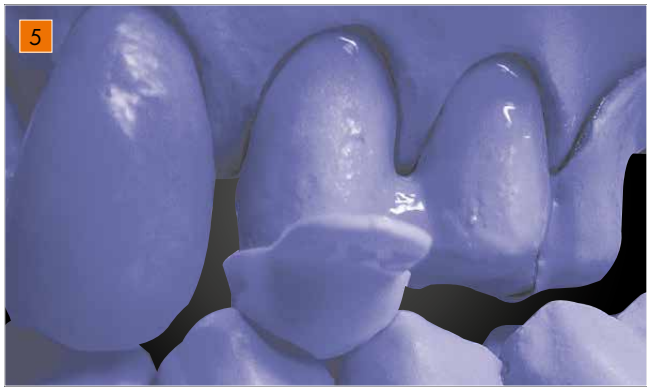
9. Free-form layering

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 dentin 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 LightPen angled hand light.

The Gnathoflex silicone occlusal surfaces were removed and the veneer polymerised for 180 seconds in the bre.Lux PowerUnit 2 curing device.

180 sec

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*

360 sec

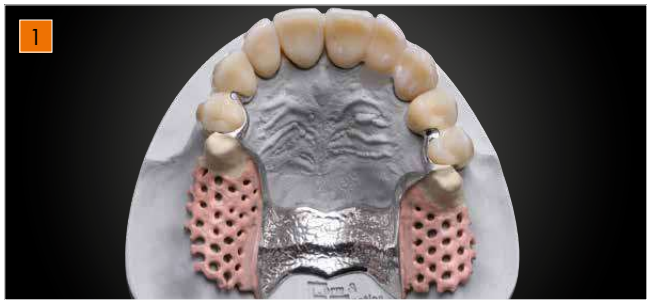
The shape of the veneer was completed with crea.lign Incisal E2 and end polymerisation was carried out in the bre.Lux PowerUnit 2 polymerisation device for 360 sec.

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

→ *For preparation and polishing see page 32.*

10. Model casting

The neo.lign full teeth that have been sandblasted with 110 µm aluminium oxide at 2-3 bar in the matrix 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.

11. 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 layering 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.

180 sec

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

180 sec

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

180 sec

The remaining recesses are sealed with crea.lign Transpa.

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

12. 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 Abraso-Star-glanz high-gloss polishing paste.

Prepared and polished veneers.

Surface roughness of 0.02 µm can be achieved with the visio.lign Toolkit!

13. Polymerisation times and equipment

13.1 bre.Lux PowerUnit 2

Manufacturer	Product name	bre.Lux PowerUnit 2 curing times in seconds [s] / Luminous power in percent [%]				
		bre.Lux LightPen (Angled hand light)		bre.Lux PowerUnit2 (basic unit)		
		Partial polymerisation (fixation/ partial curing)	**Intermediate polymerisation** (intermediate curing of individual layers)	**Partial polymerisation** (fixation/ partial curing)	**Intermediate polymerisation** (intermediate curing of individual layers)	**Final polymerisation** (final end hardness of material)
bredent	visio.link	N/A	30 s	N/A	90 s	90 s
	combo.lign bonding composite	30 s	N/A	20 s / 50 % (iProg)	180 s	180 s
	crea.lign gel	15 s	15 s	20 s / 50 % (iProg)	180 s	360 s
	crea.lign paste	15 s	15 s	20 s / 50 % (iProg)	180 s	360 s
	combo.lign Opaker	N/A	N/A	N/A	180 s	360 s
	crea.lign Opaker	N/A	N/A	N/A	180 s	360 s
	visio.lign color/visio.lign shield	10 s	N/A	N/A	90 s	180 s
	crea.lign Stains	N/A	N/A	N/A	180 s	360 s
	Ropak UV	N/A	N/A	N/A	180 s **	360 s
	Ropak Compact opaquer UV	N/A	N/A	N/A	180 s **	360 s
	Ropak Compact opaquer tooth-coloured UV	N/A	N/A	N/A	180 s	360 s
	compoForm UV	15 s	N/A	20 s / 50 % (iProg)	90 s	180 s
	Tray material UV	N/A	N/A	40 s / 50 % (iProg)	90 s	180 s (1)
	Die varnish, light-curing	N/A	30 s *	20 s / 50 % (iProg)	90 s	180 s
	SERACOLL UV	N/A	15 s	N/A	20 s / 50 % (iProg)	40 s / 50 % (iProg)
	Qu-connector	N/A	30 s	N/A	90 s	90 s
Heraeus	Signum	N/A	N/A	20 s / 50 % (iProg)	180 s	360 s
	Palatray XL	N/A	N/A	40 s / 50 % (iProg)	90 s	360 s
Shofu	Solidex	N/A	N/A	20 s / 50 % (iProg)	180 s	360 s
GC	Gradia	15 s	N/A	20 s / 50 % (iProg)	180 s	360 s
Wegold	S-Lay	N/A	N/A	20 s / 50 % (iProg)	180 s	360 s
VITA	VITA **VM LC** PRE OPAQUE / VITA **VM LC** OPAQUE PASTE	N/A	N/A	N/A	N/A	180 s
	VITA V**M LC** OPAQUE Pulver	N/A	N/A	N/A	360 s	360 s
	VITA **VM LC** Composite	30 s	N/A	40 s / 50 % (iProg)	180 s	360 s (2)
Degudent	Degudent in:joy	N/A	N/A	20 s / 50 % (iProg)	180 s	360 s

Notes:

*	In case of one order only.
**	Only apply opaquer in two coats.
(1)	For UV tray material, upper and lower side each 1 x 180 s.
(2)	For pontics, layer thickness up to max. 2 mm.
(iProg)	Individual programming necessary: See new parameters, including the bonding of prefabricated wax parts. Please create an individual programme with 50% luminous power without step function (heat reduction!)
N/A	Not applicable.

The polymerisation times are guide values for intact devices.
Individual programmes: Metal frameworks store the thermal energy of light more than pure polymers. Heat can have a positive effect on materials in the form of post-treatment or, in the case of too much heat, can lead to embrittlement or stresses. The development of heat can be conveniently controlled by the user by automatically adapting the stored (default) programs to the desired material conditions. For metal-free restorations or constructions with material thicknesses of more than 2mm, the option up to 100% power "Red. Power off" is recommended. For restorations that include metal components or involve high material shrinkage, it is recommended to reduce the light power: "Red. Power on". However, raising the power to 100% is always possible in the individual programs without having to re-adjust the unit.
In some cases, the curing times may change proportionally.

The hand lamp can be used as an alternative to the bre.Lux PowerUnit 2 for partial or intermediate polymerisation. The final curing is always done using the bre.Lux PowerUnit 2!

14.2 Shade combination tables

crea.lign gel/paste*	Traditional A - D shades															
Enamel	A1	A2	A3	A3.5	A4	B1	B2	B3	B4	C1	C2	C3	C4	D2	D3	D4	BL3
E1	■					■				■				■			■
E2		■	■				■										
E3				■				■	■		■	■			■	■	
E4					■								■				

* All crea.lign Gel compounds can be seamlessly combined with all crea.lign Paste compounds.

13.2 Other suitable light polymerisation devices

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

Manufacturer	Product name	Wavelength [nm] *	Polymerisation times in seconds [s]		
			visio.link	combo.lign	crea.lign / crea.lign - Opaker / combo.lign - Opaker
bredent	bre.Lux PowerUnit 2	370 - 500 nm	90 s	180 s	360 s
Dentsply	Triad 2000	400 - 500 nm	180 s	360 s	600 s
Degudent	Eclipse	k.A.	60 s	180 s	360 s
Heraeus Kulzer	Dentacolor XS, Uni XS, Heraflash	320 - 520 nm	90 s	180 s	360 s
GC	Labolight LV-III	380 - 490 nm	120 s	300 s	600 s
Ivoclar Vivadent	Targes Power Ofen, Luminat 100	400 - 580 nm	240 s	180 s	480 s
Schütz Dental	Spektra 200	310 - 500 nm	120 s	180 s	360 s
Shofu Dental	Solidilite	400 - 500 nm	90 s	180 s	360 s
Kuraray Dental	CS 110	k.A.	120 s	300 s	480 s
Hager & Werken	Speed Labolight	320 - 550 nm	90 s	180 s	480 s
3M ESPE	Visio Beta neu: P1 - P4 alt: U0 - U3	400 - 500 nm	> 240 s (P2) 420 s (U1, U3)	420 s (P2) 900 s (U0)	900 s (P1) 900 s (U0)

Notes: * Manufacturer's data
n/a No information

14. Layer thickness and shade combination tables

14.1 Polymerisation times for specific layer thicknesses

Material	max. layer thickness [mm]	bre.Lux PowerUnit 2 polymerisation times in seconds [s]	
		Intermediate polymerisation (intermediate curing of individual layers)	Final polymerisation (final end hardness of material)
crea.lign Enamel	1 mm	180 s	360 s
crea.lign Incisal	1 mm	180 s	360 s
crea.lign Transpa clear	1 mm	180 s	360 s
crea.lign Dentin	1 mm	180 s	360 s
crea.lign Opaque Dentin	1 mm	180 s	360 s
crea.lign High Translucent	1 mm	180 s	360 s
crea.lign Modifier	1 mm	180 s	360 s
crea.lign GUM	1 mm	180 s	360 s
crea.lign Stains	0,3 mm	180 s	360 s
crea.lign paste	2 mm	180 s	360 s
combo.lign	2 mm	180 s	180 s
crea.lign Opaker	0,1 mm	180 s	360 s
combo.lign Opaker	0,1 mm	180 s	180 s

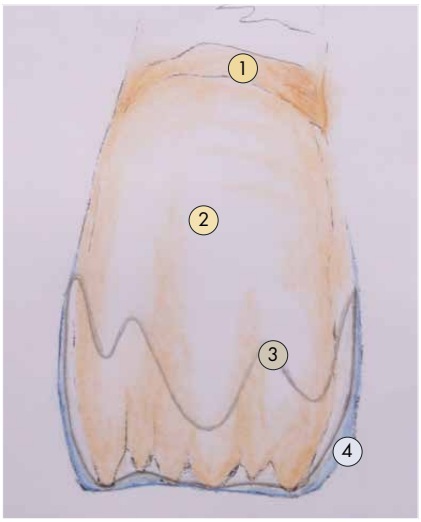
crea.lign Opaker system shades	1	2	3	4	5	6	7	8	9	GUM
shades	A1 / B2	A2	A3	B1 / C1 / BL3	C2 / C3 / D2 / D4	B3 / B4	A3.5	A4 / C4	D3	Gingiva shades

The transparent crea.lign opaquer is suitable for pre-coloured frameworks, e.g. zirconia.

combo.lign Opaker system shades	light	medium	intensiv	GUM
shades	A1 - A3 / B1 - B2 / C1 - C2	A3.5 / B3 - B4 / D2 - D3	A4 / C3 - C4 / D4	Gingiva shades

15. Standard and free-form layering instructions

Standard layering



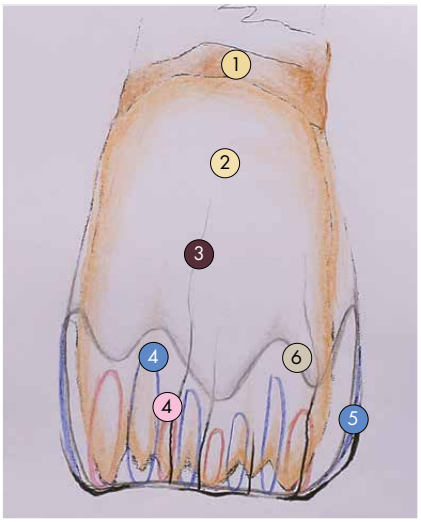
1 The neck of the tooth is coated with the dentine mass A3.5 or beige modifier – one degree darker than the subsequent tooth colour.

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.

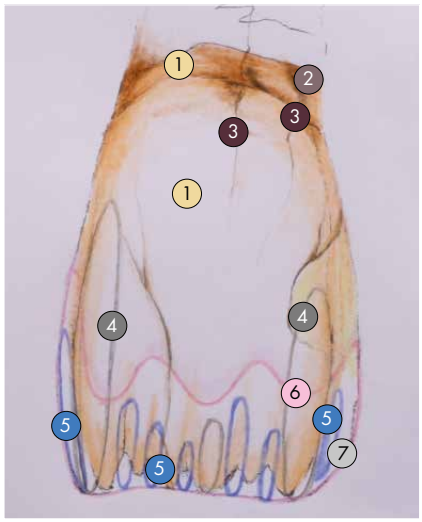
3 Add thin enamel cracks using visio.paint ebony.

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

16. Red-white-customisation layering instructions

16.1 Layering instructions crea.lign Gel GUM

The bone is represented with beige.

The effect of depth is achieved with lila. Lila is spread from the mucolabial fold towards the teeth.

The layers that were previously applied are coated with pink.

The alveolar sockets are accentuated with rose.

Well perfused areas are accentuated with red.

Light is applied to the gingival margin.

The entire surface is sealed with transpa.

16. Red-white-customisation layering instructions

16.2 Layering instructions crea.lign Paste GUM

Use Paste PO to contour the marginal area.

The alveolar sockets are built up with Paste PL.

Use light to apply the gingival margin.

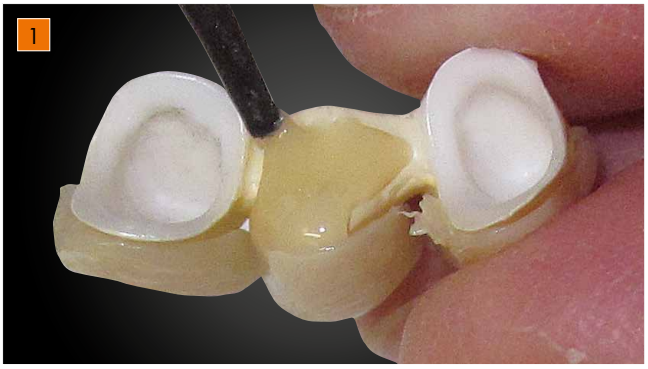
The effect of depth is achieved with lila.

Well perfused areas are accentuated with red.

The entire surface is sealed with transpa.

17. Tips and tricks

17.1 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.

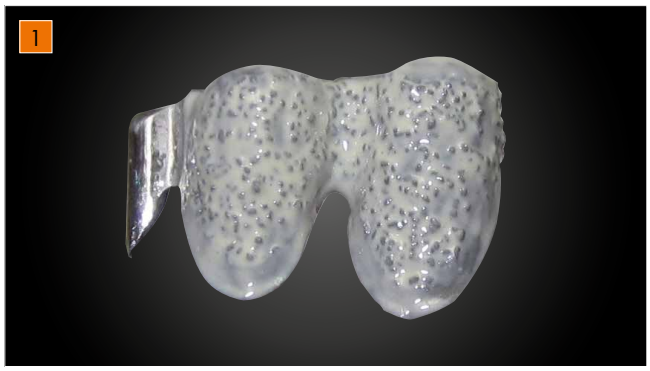
Any excess crea.lign is removed.

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 PowerUnit 2 curing device.

The cured basal area just needs to be polished again.

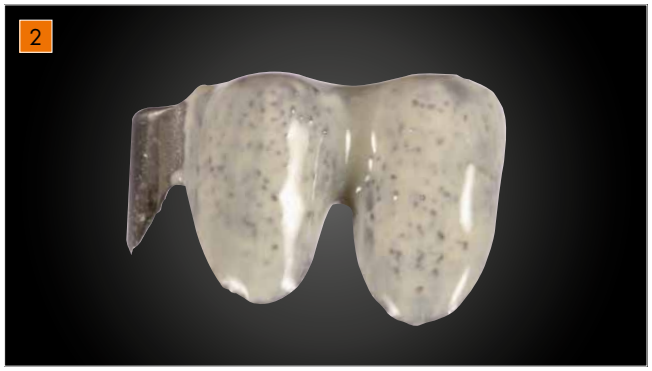
17. Tips and tricks

17.2 Zirconium liner to improve retention



180 sec

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



180 sec

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

360 sec

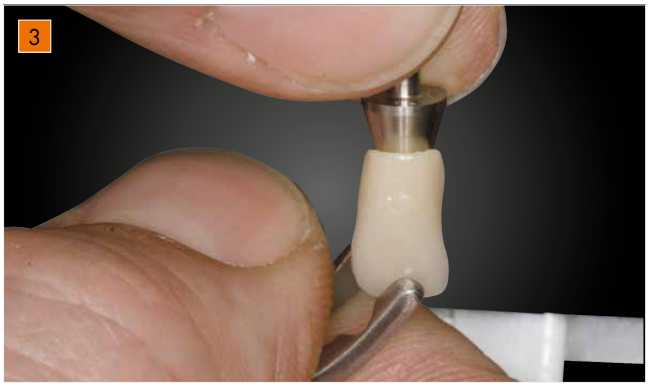
After another application of crea.lign opaker and final polymerisation, the surface looks smooth and even. This ensures that both veneers have an equal layer thickness.

17. Tips and tricks

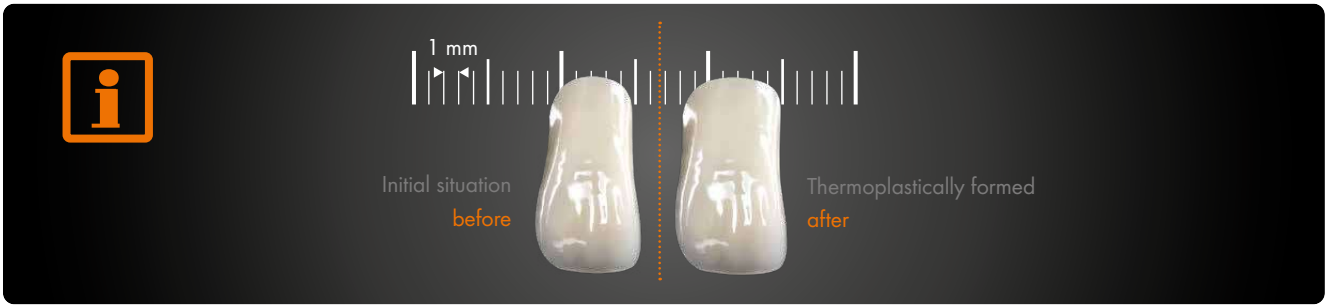
17.3 Heating and bending novo.lign veneers

Thermo-Pen.
Hot-air blower with Piezo technology without an open flame.

...creates the required temperature of 250°C on the inside of the veneer.



In a thermoplastic state, veneers are stretched using a conical instrument.



18. 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 wrapa-round 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.
- BioHPP should not be covered with ice. If areas that are difficult to polish or clean are to be covered, use crea.lign Transpa Clear (T1). After conditioning according to section 5, page 11, apply visio.link and after polymerisation apply a thin layer of crea.lign Transpa Clear and process according to the instructions. Opaquer/zirconium liner is not required.

More interesting offers for you:

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Presentation of the system
A compact summary of the visio.lign system product range.

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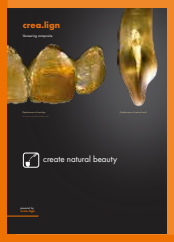

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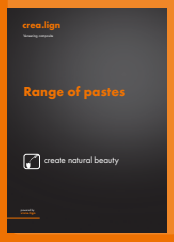

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Design chart
Overview of all neo.lign anterior and posterior denture teeth.

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PowerUnit 2
A brief summary of the most important information regarding the LED light polymerisation unit.

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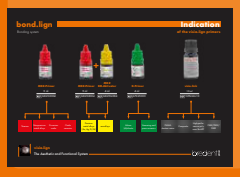
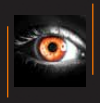


bond.lign
An overview of the primer/bonder - the specialist for the secure bonding of all materials.

REF 009539GB



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