

 **KATANA™ Zirconia ONE**
For IMPLANT

TECHNICAL GUIDE

KATANA™ Zirconia ONE

For IMPLANT

The solution for strength,
natural beauty, and workflow efficiency
all in ONE block.

“KATANA™ Zirconia ONE For IMPLANT”
is newly added to
the “KATANA™ Zirconia ONE” series



Hybrid Abutment Crown
or Hybrid Abutment
with **ONE block**

Flexural Strength
932 MPa¹

Multi-Layer technology
results in
natural tooth-colored
restorations

10 shades
available
based on
VITA classical A1-D4® shade guide

¹ According to ISO 6872:2015, Three-point flexural strength test, Sample size 1.2x4x14 mm, Span length 12 mm, Source: Kuraray Noritake Dental Inc.

EFFICIENT WORKFLOW

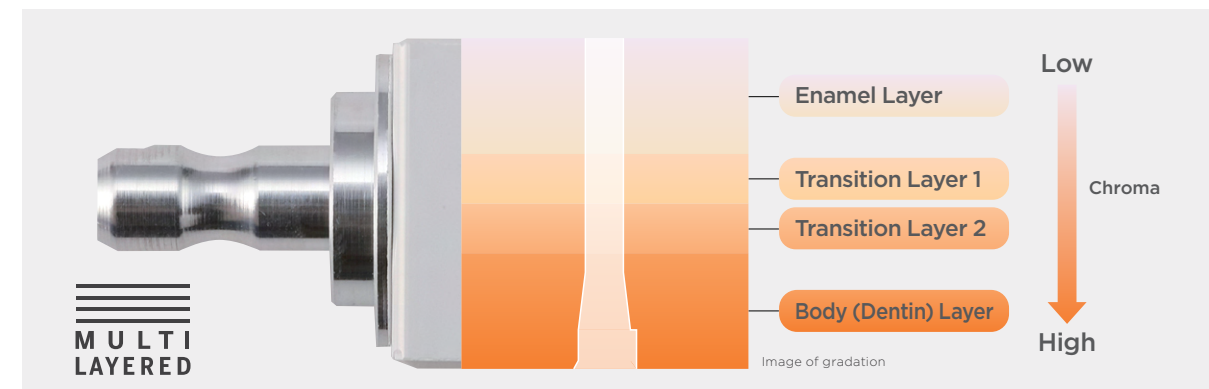
The collaboration of Kuraray Noritake Dental’s superior materials technology and Dentsply Sirona’s CEREC Primemill with SpeedFire now makes it possible to mill and sinter KATANA™ Zirconia ONE For IMPLANT with a brand-new schedule.



¹ When using this product, use the following guidelines: CEREC Software 5.2.11 / CEREC Software 5.3.1 / inLab CAM Software 22.6 / inLab CAM Software 24.0 / inLab CAD Software 22.4.1 or later is required.
² It is recommended to work under dry conditions. In cases where the process is performed under wet conditions and using a sintering furnace other than CEREC SpeedFire, dry the block at 200°C (392°F) for 10 minutes in the sintering furnace, prior to the sintering.

NATURAL BEAUTY: GRADATION OF COLOR/TRANSLUCENCY

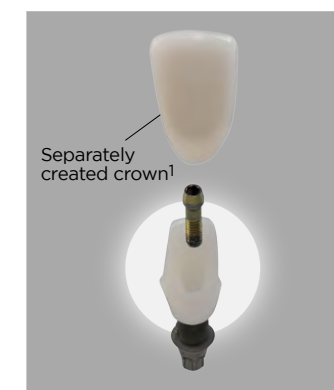
This multi-layered block consists of four layers of zirconia in gradated shades.
This product allows the chair side fabrication of natural-tooth-colored restorations -
eliminating additional sintering time.



TWO TYPES OF RESTORATION OPTIONS IN ONE BLOCK



Hybrid abutment crown
(Screw-retained crown)



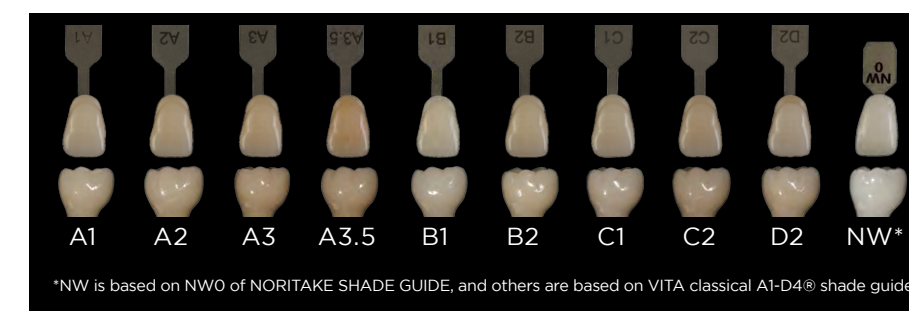
Hybrid abutment + crown²
(Cement-retained crown)

¹ When the restoration is to be used as a hybrid abutment, after the tightening with abutment screw and sealing the screw channel intraorally, cement a crown with a cement that claims to be usable for zirconia.
It is recommended to use resin cement to bond the restoration.
² The photo of “Hybrid abutment + crown” shows the palatal view.

KATANA™ Zirconia ONE For IMPLANT can be used as a hybrid abutment crown or a hybrid abutment.
With this block, you can create either type depending on the case.
For general cases, a hybrid abutment crown can be used.
A hybrid abutment, which needs a separately created crown, is used when an implant is placed in an orientation that is not parallel to that of the adjacent teeth, etc.

10 SHADES AVAILABLE Based on VITA classical A1-D4® shade guide

Designed to match the shade guide when used as a posterior restoration when finishing by hand polishing^{1,2}.



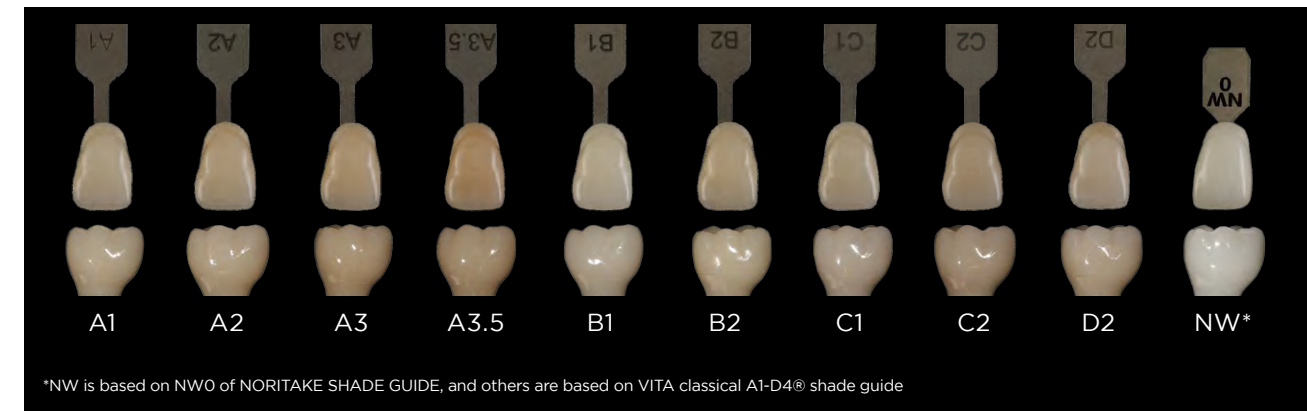
*NW is based on NWO of NORITAKE SHADE GUIDE, and others are based on VITA classical A1-D4® shade guide

¹ When it is used for making anterior restorations, we recommend finishing the restoration by glazing and staining with dental porcelain such as CERABIEN™ ZR FC Paste Stain for achieving even more aesthetic outcomes.
² All restorations shown on the picture were finished by hand polishing.



1 SHADE SELECTION

Select an appropriate shade, paying close attention to the surrounding teeth.
 Please note that the shades of KATANA™ Zirconia ONE For IMPLANT are designed to match the shade guide when used as a posterior restoration, finished by hand polishing^{1,2}.
 For anterior restorations, finishing by glazing and staining is recommended. For details, please see step 5.



¹ When it is used for making anterior restorations, we recommend finishing the restoration by glazing and staining with dental porcelain such as CERABIEN™ ZR FC Paste Stain for achieving even more aesthetic outcomes.
² All restorations shown on the picture were finished by hand polishing.

2 INTRAORAL SCANNING / DESIGNING / BLOCK SIZE SELECTION

Take a digital impression of the ScanPost or Scanbody. Select an appropriate size of the block based on the implant system. KATANA™ Zirconia ONE For IMPLANT comes with two types, S and L. The difference between S and L is the diameter of the access hole. The block size is the same.



Block size (unit: mm)		a	b	c
KATANA™ Zirconia ONE For IMPLANT S / L	Before Sintering	22.1	23.6	24.6

Implant system (Manufacturer)	Platform	Sirona TiBase Name	Size
Replace, Replace Select (Nobel Biocare)	NP	TiBase NB RS 3.5 L	L
	RP	TiBase NB RS 4.3 L	
	WP	TiBase NB RS 5.0 L	
	6.0	TiBase NB RS 6.0 L	
Nobel Active NobelReplace Conical Connection (Nobel Biocare)	NP	TiBase NB A 4.5 L	L
	RP	TiBase NB A 5.0 L	
Bone Level (Straumann)	NC (3.3 mm)	Ti Base S BL 3.3 L	L
	RC (4.1 mm / 4.8 mm)	Ti Base S BL 4.1 L	
Certain (Biomet 3i)	3.4	TiBase BC 3.4 S	S
	4.1	TiBase BC 4.1 L	L
	5.0	TiBase B C 5.0 L	
Tapered Screw-Vent (Zimmer)	3.5	TiBase Z TSV 3.5 L	L
	4.5	TiBase Z TSV 4.5 L	
	5.7	TiBase Z TSV 5.7 L	

*The indication of Ti Base S BL 3.3 L is restricted to the replacement of single lateral incisors in the maxilla and lateral and central incisors in the mandible.

*Block sizing may have individual slight differences but will be adjusted automatically by the software.

3

MILLING

Place the block into the milling machine, then begin the milling process following the milling system's technical instructions^{1,2}.

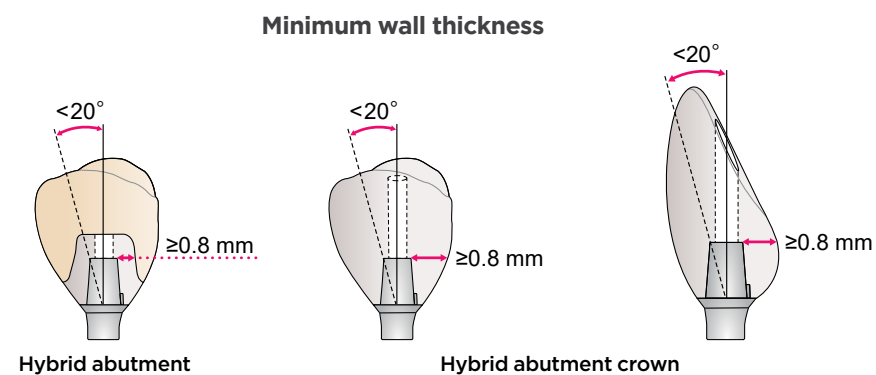
After milling, remove the restoration from the block and carefully smooth the surface where the restoration was connected to the mandrel with a diamond bur, etc³.



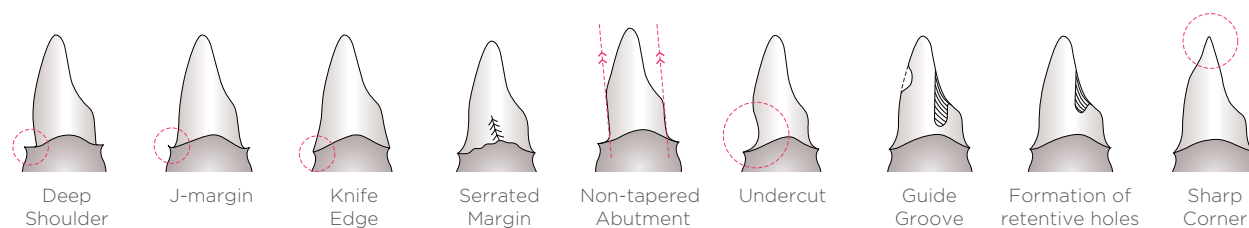
- 1 When using this product, use the following guidelines: CEREC Software 5.2.11 / CEREC Software 5.3.1 / inLab CAM Software 22.6 / inLab CAM Software 24.0 / inLab CAD Software 22.4.1 or later is required.
- 2 It is recommended to work under dry conditions. In cases where the process is performed under wet conditions and using a sintering furnace other than CEREC SpeedFire, dry the block at 200°C (392°F) for 10 minutes in the sintering furnace, prior to the sintering.
- 3 Before sintering, make sure there are no cutting waste or dust in the access holes. If there is cutting waste or dust inside the access hole, remove it with a gentle air stream or a soft brush.

Attention:

- The margins should be prepared with a deep chamfer and rounded shoulders, with cutting edges and corners rounded to eliminate sharp preparation corners. The angle of the axial surface should be within the range of 0 to 20 degrees.
- When milling the block, keep the minimum wall thickness of this product, referring to the illustration below.



- When preparing a hybrid abutment, avoid the following: deep shoulders, J-margins, knife edges, serrated margins, non-tapered abutments, undercuts, guide grooves, the formation of retentive holes, and sharp corners.

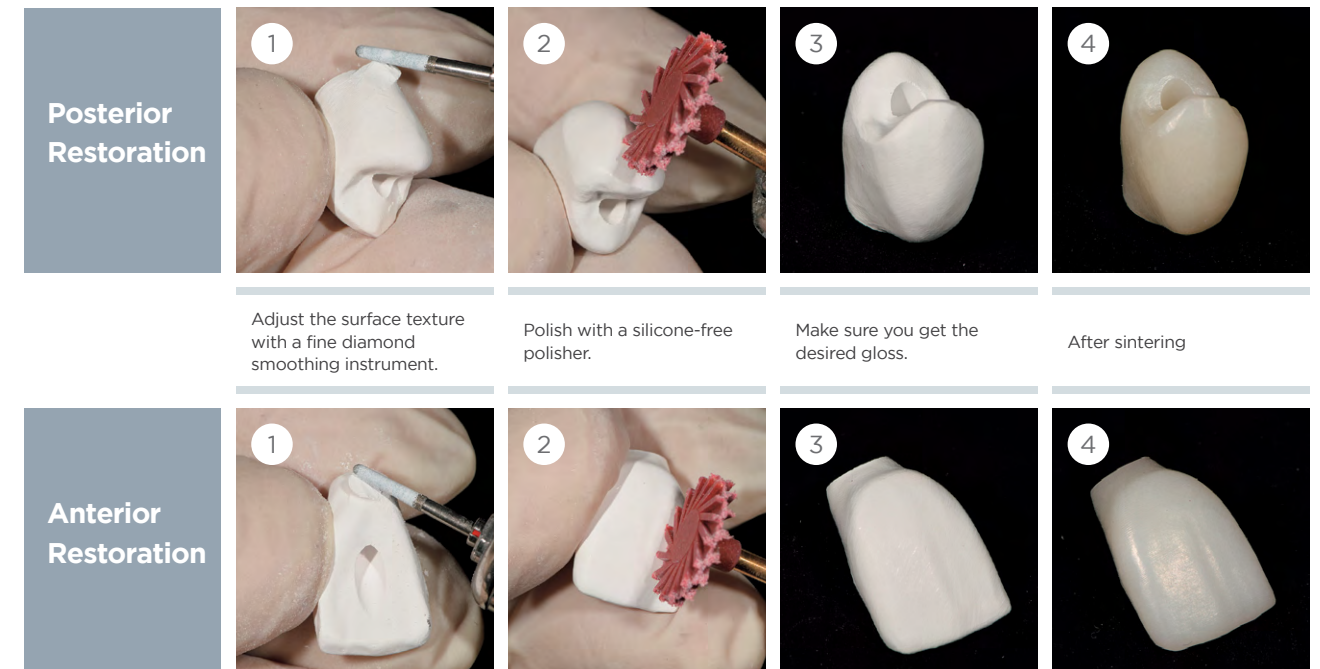


4

SINTERING / MORPHOLOGICAL CORRECTION

Pre-polishing

As desired, the pre-sintered restoration can be polished following the steps below.



Sintering and morphological corrections

Sinter the prosthetic in CEREC SpeedFire.

After sintering, make morphological corrections observing the conditions given below.

- 1) The prosthetic is very hot immediately after sintering. Do not touch the prosthetic with your bare hands when removing it from the furnace.
- 2) Make morphological corrections carefully using a diamond bur or silicone points containing diamond particles. Use a copious spray of water or work on the prosthetic while it is fully wet.
- 3) Be careful not to apply undue force, because this might cause a fracture, break or micro-cracks from a local spot heating.
- 4) Confirm that the restoration has no cracks.

This product is compatible with following two finishing methods:

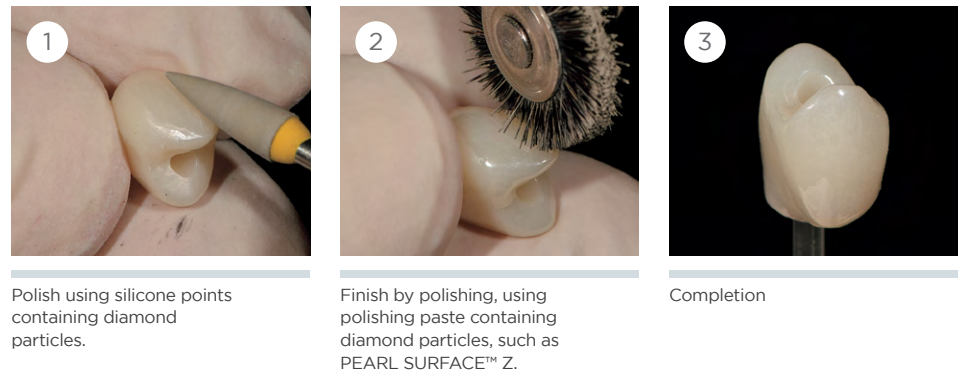
- Hand polishing
- Glaze baking

For the optimal results, the following method is recommended for each case:

- For posterior restorations: Hand polishing

Hand polishing is recommended to achieve a color that approximates the shade guide.

This product is designed to match the shade guide when used as a posterior restoration, finished by hand polishing.

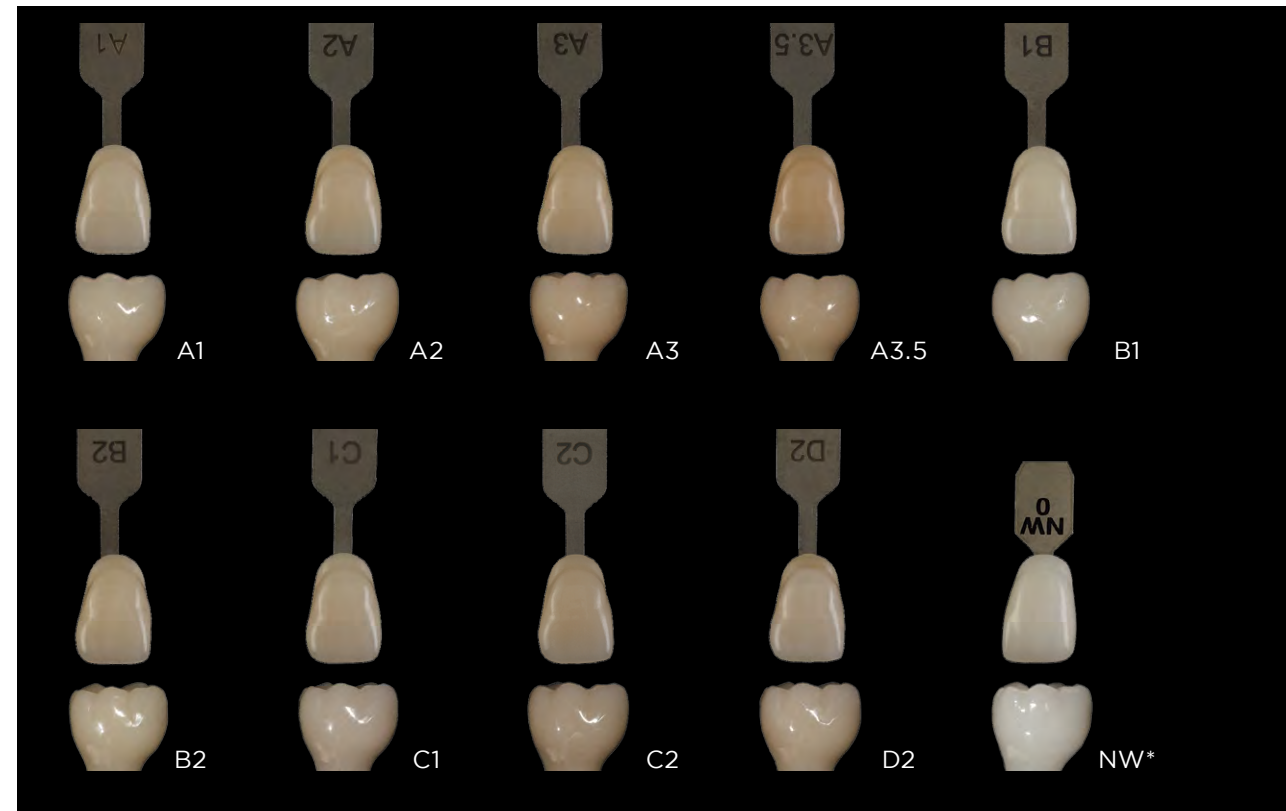


Polish using silicone points containing diamond particles.

Finish by polishing, using polishing paste containing diamond particles, such as PEARL SURFACE™ Z.

Completion

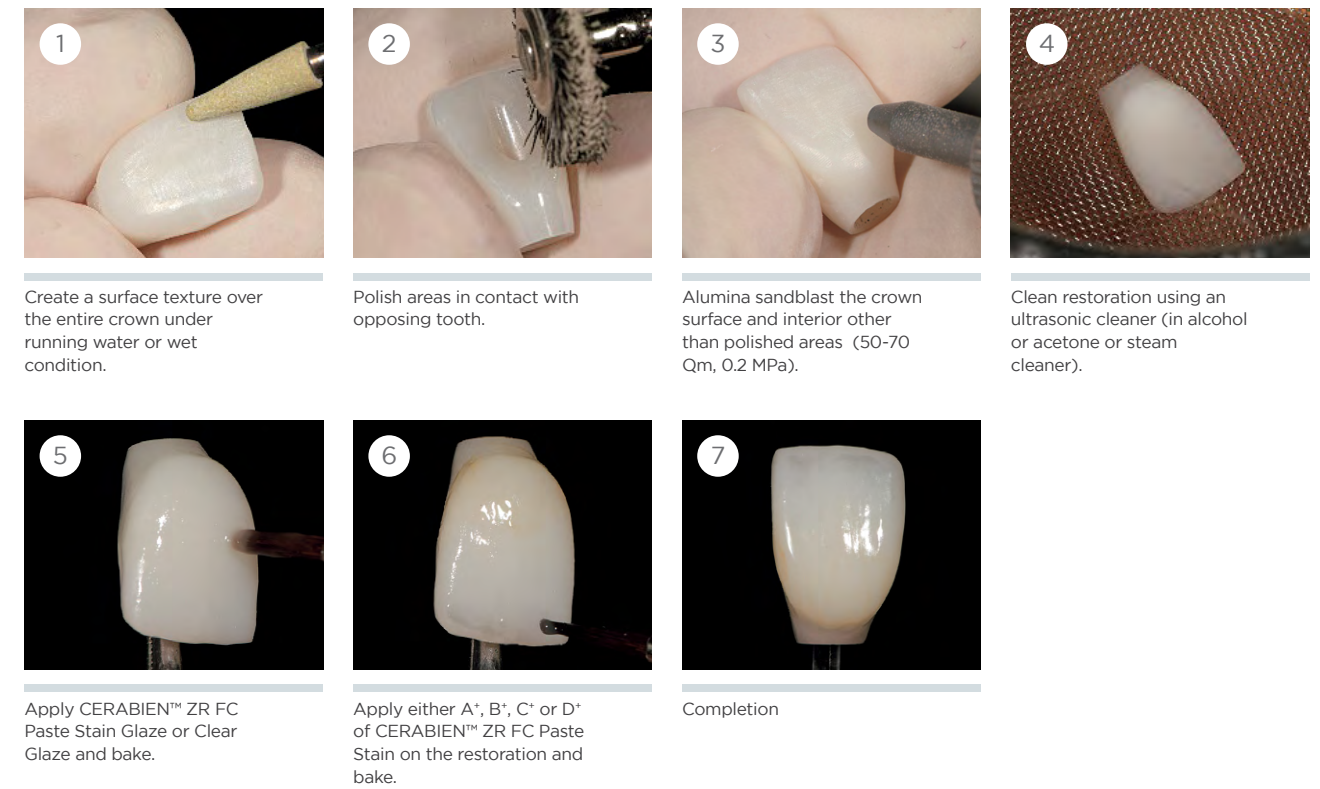
Restorations finished by hand polishing



*NW is based on NWO of NORITAKE SHADE GUIDE, and others are based on VITA classical A1-D4® shade guide

• For anterior restorations: Glaze baking

We recommend glaze baking then staining with dental porcelain such as CERABIEN™ ZR FC Paste Stain for achieving even more aesthetic outcomes, for anterior restorations.



Create a surface texture over the entire crown under running water or wet condition.

Polish areas in contact with opposing tooth.

Alumina sandblast the crown surface and interior other than polished areas (50-70 Qm, 0.2 MPa).

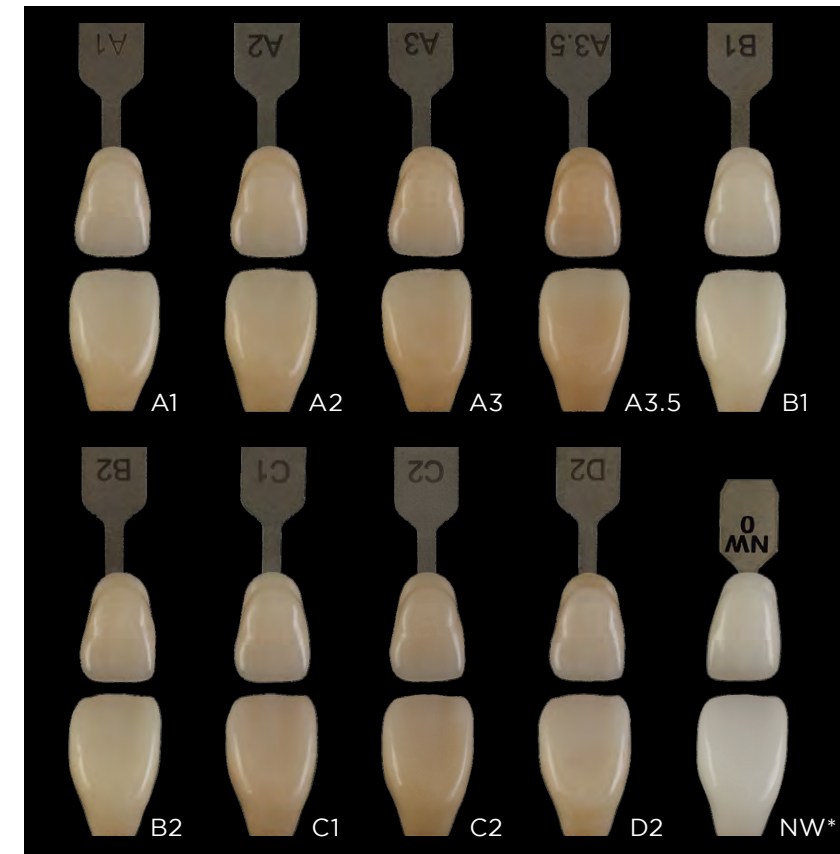
Clean restoration using an ultrasonic cleaner (in alcohol or acetone or steam cleaner).

Apply CERABIEN™ ZR FC Paste Stain Glaze or Clear Glaze and bake.

Apply either A*, B*, C* or D* of CERABIEN™ ZR FC Paste Stain on the restoration and bake.

Completion

Restorations finished by Glaze baking



* NW is based on NWO of NORITAKE SHADE GUIDE, and others are based on VITA classical A1-D4® shade guide
 * All restorations are glazed with CERABIEN™ ZR FC Paste Stain Clear Glaze, then, stained with following shades of CERABIEN™ ZR FC Paste Stain:
 A* is used for A1, A2, A3, A3.5
 B* is used for B1 and B2
 C* is used for C1 and C2
 D* is used for D2
 NW is finished by glazing only
 * The appearance may vary depending on the amount of stain applied to the restoration

7

PLACING THE RESTORATION INTRAORALLY

Fix the implant screw following the instructions provided by the manufacturer of the implant system.

Posterior Restoration
(Hybrid Abutment Crown)



Anterior Restoration
(Hybrid Abutment Crown)

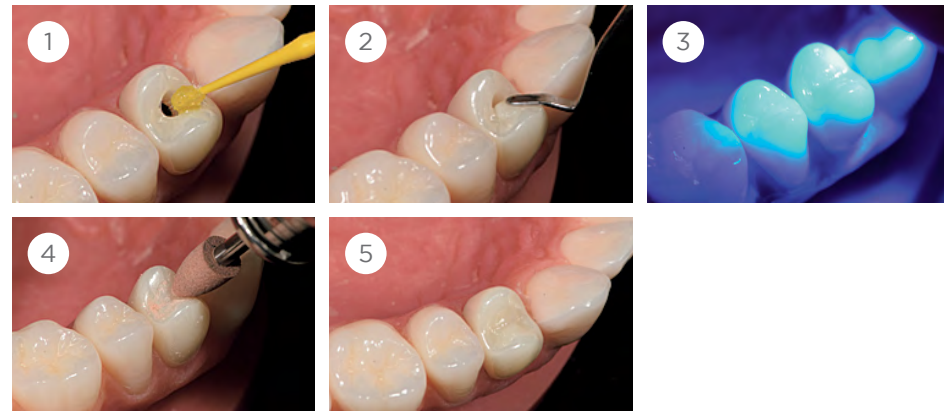


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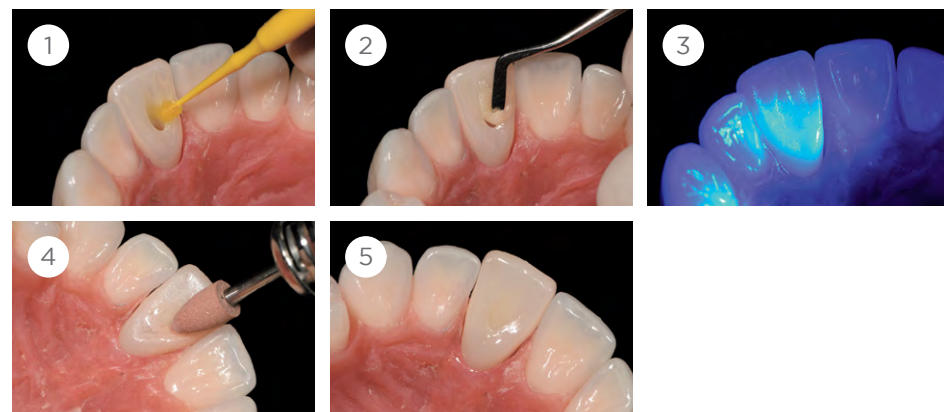
SEALING THE SCREW CHANNEL

Seal the screw channel with a filling composite using a dental adhesive compatible with zirconia, as used to produce a standard occlusal dental filling. Follow the relevant processing instructions from the manufacturer. Once the composite has hardened, polish the surface following the composite manufacturer's instructions.

Posterior Restoration
(Hybrid Abutment Crown)



Anterior Restoration
(Hybrid Abutment Crown)



YOUR CONTACT

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- Before using this product, be sure to read the Instructions for Use supplied with the product.
- The specifications and appearance of the product are subject to change without notice.
- Printed color can be slightly different from actual color.

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