

Perfit ZR[™] Instruction for use



Indication for Use

| Perfit ZR [™] UT | 8 | | |
|-----------------------------|---|---------|--|
| Perfit ZR [™] ST | | VII) (| |
| Perfit ZR [™] HT | | XX) all | |
| Perfit ZR [™] STML | | | |
| Perfit ZR [™] TSML | | | |













Crown



Posterior Bridge

(up to 3 units)



(up to 3 units)







Product Information

- Product name: Perfit ZR (HT, ST, UT, TSML, STML)
- Color: White and Shade according to VITA shade guide (Classic)

| | Perfit ZR [™] | | | | |
|----------------------------|------------------------|----------|--------|----------|-----------|
| | UT | ST | HT | STML | TSML |
| Type / Class (ISO6872) | 2 / 4(b) | 2 / 4(b) | 2/5 | 2 / 4(b) | 2 / 4(b) |
| Flexural Strength [MPa] | 800 | 1,100 | 1,300 | 1,100 | 800-1,100 |
| Translucency (%) | 50 | 46 | 42 | 46 | 46-50 |
| Material | 5Y-TZP | 4Y-TZP | 3Y-TZP | 4Y-TZP | 4Y/5Y-TZP |

General Instruction

- Perfit ZR Dental Zirconia blanks are used for dental restorations using CAD / CAM or manual milling machines.
- All blanks should be processed by Dental Professionals
- Inspect the product for any damages.
- Confirm thickness and shade of disc for the intended use.
- Avoid exposure to foreign particles or liquids.
- Ensure that the disc is placed in the original packaging box under dry conditions.

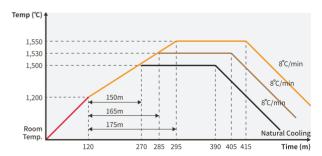
01

Prior to Sintering

- Confirm the shrinkage rate or expansion factor provided on the disc.
- Mill the disc into the required framework shape.
- Depending on the size of the restoration, if coloring liquid is infiltrated into milled frameworks, dry them for 10-25 minutes at a temperature of less than 140°C.

Sintering

- Use the following heating schedule to sinter zirconia for optimal translucency and strength.



| Step | Starting temp.(°C) | Target temp. (°C) | Heating rate (°C/min) | Holding time(h) |
|------|--------------------|-------------------|-----------------------|-----------------|
| 1 | Room Temp. | 1,200 | 10 | = |
| 2 | 1,200 | Target temp. | 2 | = |
| 3 | Target temp. | Target temp. | - | 2 |
| 4 | Target temp. | Room Temp. | -8 | - |

⁻ Recommended Target temp.(°C) Perfit ZR HT (1,550) / ST, STML, TSML (1,530) / UT (1,500)

Post Sintering (Precautions for Crown Fractures)

- Fully sintered restorations may be adjusted by a wet grinding process using immaculate diamond-coated burs under light pressure to avoid overheating and microcracking of the sintered body.
- It is essential to polish occlusal surfaces with diamond impregnated rubber polishers while maintaining minimum wall thickness and connector cross sections.
- After sintering, the crown's wall thickness should not be less than 0.5mm. For bridges, the cross section of the connectors should not be less than 9 må.
- To properly cement zirconia restorations, refer to the manufacturer's instructions.

Conditions for Porcelain Powder Build-Up and Firing

- Zirconia discs have a coefficient of thermal expansion of ~10ppm/°C, and only porcelain powders that are compatible should be used.
- The porcelain powder thickness should be kept under $2\sim3 mm$ to reduce the risk of fracture.
- Please follow the instructions in each manufacturer's manual for the specific firing temperature of porcelain powders.

Intended Use

- Designed by professional dental technicians to create custom all ceramic restorations

Use in CAD / CAM milling systems to make dental restorations such as crowns and bridges. It can be used to create anterior and posterior dental restorations.

04

Caution

- An understanding of the different application methods, clinical indications, and cautions should precede the use of Perfit ZR Zirconia Blanks.
- Specialized and complex procedures are required for milling processes.
- Creating cases of single to bridges (≤3-unit) is recommended.
- When milling or positioning, avoid excessive loading.
- The quality of the product can be improved by heat treatment at a temperature of up to 1000° C prior to build-up after sintering.
- Additional heating of the zirconia restorations sintered in the furnace might cause cracks due to deterioration of mechanical properties.
- Sintered zirconia restorations may be compromised by notches and sharp edges present on the damaged bottom section of the connectors.
- Use the recommended build-up powder for zirconia by the manufacturer.
- Bridge frameworks should not be supported exclusively by the abutment teeth on either side.
- The Pontic should be supported.

Contraindications

- Do not use on patients who have an allergic reaction to the material.
- The procedure should not be performed on patients with oral inflammation or

Warning

- The dust produced during the preparation of restorations may be hazardous to your health.
- It is recommended that processing take place in an area with a properly functioning ventilation system.
- This medical device is intended to be used as a disposable. Re-use may cause the prosthesis to break or crack. It may also lead to inflammation or infections.
- Wear protective goggles, gloves, and masks when processing.
- If ceramic powder or liquid comes into direct contact with skin or eyes, thoroughly wash with water and consult a physician.
- Please do not touch the surface with your hands after sintering.
- Do not use unsterilized instruments.
- Do not place the restorations on its marginal edge (crown margin).
- Only for use by Dental Professionals.
- The products are "Rx Only" and are not available over-the-counter or to the general public.

05

07

Label Symbols

| ••• | Manufacturer | ₽ | Use By Date |
|--------|---|----------------|-------------------------|
| (3) | Do Not reuse | REF | Catalogue Number |
| ~~· | Date of Manufacture | NON STERILE | Non-Sterile |
| LOT | Batch Code | 誉 | Keep Away from Sunlight |
| []i | Consult Instructions for Use | ** | Keep Dry |
| EC REP | Authorized Representative in the European Community | | |



Vatech mcis Co., Ltd.

C-dong, 2544, Nambuk-daero, Idong-eup, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea



Vatech Global France SARL

49 Quai de Dion Bouton, Aviso A 4ème étage, 92800 Puteaux, France



ACSI - 20P 2023.08.24 (REV. 18)

06