#### **Product Information**

Product Name	Perfit FS <sup>™</sup>			
Type / Class (ISO 6872)	2/4			
Color	White, Shade and Multi-shades according to VITA Classical 16 Shades			
Size (L X W X H mm)	I12 (15.0 X 12.0 X 10.4) C14 (18.0 X 14.0 X 12.7) C16 (18.0 X 15.9 X 17.8) B32 (32.0 X 15.1 X 15.1)			
Flexural strength	500 MPa			
Translucency	46%			
Fracture toughness	6.9 MPa · m <sup>1/2</sup>			
Vickers hardness	8.5 GPa			

## General Instruction

- Perfit FS are patented\* fully-sintered, 100% tetragonal zirconia blocks for direct machining into inlays, onlays, crowns, and bridges. The exceptional machinability is achieved through higher fracture toughness, lower scratch hardness, and coarser microstructure
- Perfit FS blocks are available in VITA Classical 16 Shades including multi-shades in the sizes of I12, C14, C16, and B32.
- \*Korean Pat, 10-1639708; Japanese Pat, 5973546; U.S. Pat, 9,545,363 B2; Eu Pat. pending 14199959.9

# 01

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# **Tooth Preparation**

- Complete the angle with a curved surface and do not leave sharp point on the abutment.
- Do not form undercut on the surface of preparation tooth.
- Design margins with shoulder or chamfer.
- Shoulder Margin, which has an internal line angle of 90°, gives
- sufficient space for restorations production.
- Chamfer Margin, which has a curve slope and brings unique distribution of stress is suitable.





Chamfer Margin Shoulder Margin

# Milling Process

- 1) Attach the block to the machine.
- 2) Enter the size information of the block into the machine.
- 3) Input the information required for machining.
- 4) Check the inflow of grinding parameters.
- 5) Be sure to machine the block while irrigating the coolant.
- 6) Remove the finished block.

## Finishing

- Sintering is not required.
- Before glazing, sandblasting is required for optimum performance.

# - Staining is optional. Cementation

- For natural teeth restoration, dual cure resin cements are recommended.
- In case of implants, resin modified glass ionomer cements are recommended.

## Indications for Use

- Anterior and posterior dental restorations such as crowns and bridges
- Prosthetic treatments due to tooth loss and caries

Perfit FS™ 112	Inlay/Onlay		
Perfit FS <sup>™</sup> C14 Perfit FS <sup>™</sup> C16	Single Crown (Anterior)	Single Crown (Posterior)	Coping
Perfit FS™ B32	3-unit Bridge		

# Minimum Wall Thickness

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	Ant	erior	Posterior				
Indication	Minimum Thickness	Connector Dimensions	Minimum Thickness	Connector Dimensions			
Inlay/Onlay	-	-	1.0 mm	-			
Crown	0.8 mm	-	1.0 mm	-			
Three-unit bridge	0.8 mm	12 mm²	1.0 mm	16 mm²			

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# **Caution - Indications and Preparation**

- Perfit FS is recommended for single teeth to short span bridges (≤3-unit).
- The operator should understand the characteristics of the Perfit FS prior to using the product to avoid machining problems.
- After the occlusal adjustment, the minimum thickness should be ensured to prevent the prosthesis from facing a probable fracture.
- -Multi-shades blocks should be positioned properly as it has 3 layers from the enamel layer to the body layer.
- Translucency(46%) is the reference value based on 1mm thickness of A2 shade; other shades may have slightly different translucency.

# Caution - Milling and Finishing

- Diamond plated tools are required throughout the fabrication processes of restorations including milling and finishing.
- -In general, Perfit FS is compatible with 4 or 5 axes, wet-milling machines. Before using Perfit FS, please consult the manufacturer of your milling machine to check the milling strategy including the tool and CAM system.

## **Caution - Handling**

- The block after machining should not be reused.
- It is recommended that an expert inspects the manufactured prosthesis.
- This product is required to be disposed of as general waste.
- Do not use the product for any purpose other than making dental restorations.

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# Storage

- Visually check the product for damage, presence of impurities, and abnormalities.
- Keep the unused block completely dry.
- Store the product in its original packaging to prevent any damage.
- Avoid direct sunlight and store in a dry place at room temperature.
- Do not place where infection is possible.
- Our products are not subject to the shelf-life date as change in physical properties does not occur during storage.

### Contraindications

- Doctor's close examination is required for patients with bruxism or hypersensitivity reactions.
- Do not perform the procedure on patients with inflammation or with an oral disease.
- Adverse reactions may include hypersensitivity to cold, gingival bleeding, pain, chipping of the veneering porcelain, loss of cementation, localized gingival irritation, loss of retention, infection, allergic reactions, and irritation.
- Side effects may include postoperative tooth sensitivity, framework fracture, temporary pain.

#### 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.

# 05

### Warning

- The block should be used only by a dentist or an expert.
- The block may cause damage if it is detached from the holder during grinding.
- If the detachment of block occurs, the machine should be stopped as soon as possible.
- Remove the grooves or sharp edges of the machined surface by fine polishing.
- Do not apply excessive force or impact.
- Face masks and ventilation facilities should be used when polishing machined products.
- Dusts, produced during the preparation of frameworks, may be hazardous to your health. Do not breath in dust. Processing is ideally performed with a properly functioning ventilation system.
- Do not load excessively when milling or positioning.
- When processing, please use suitable goggles and protective gloves.
- The presence of notches and sharp edges on the bottom side of the interdental connectors may reduce the stability of the sintered framework.
- Please do not touch the core surface with your hand after sintering.
- Re-using blocks may cause inflammation, diseases (such as infections), breakage and cracking of the prosthesis.
- Do not use unsterilized instruments.
- Manufacturing restorations to patients without dentists' approval is prohibited.

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# Perfit FS<sup>™</sup> Instruction for use



### Label Symbols

•••	Manufacturer	₽	Use By Date	
8	Do Not Reuse	REF	Catalogue Number	
~~ <u> </u>	Date of Manufacture	NON STERILE	Non-Sterile	
LOT	Batch Code	誉	Keep Away from Sunlight	
[]i	Consult Instructions for Use	<del>**</del>	Keep Dry	
EC REP	Authorized Representative in the European Community			



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