FRC Postec® Plus
Glass fibre-reinforced composite posts
Translucent in all directions

The combined use of innovative glass fibres and a purpose-designed composite matrix impart a natural translucency to FRC Postec Plus. This lays the groundwork for the excellent aesthetic properties of the entire prosthetic reconstruction.

Light intensity in mW after light transmission through fibre posts
Light source: HIP program of bluephase (approx. 1100 mW/cm²)
Source: R&D, Ivoclar Vivadent AG, Schaan, 2006

FRC Postec Plus impresses users with its translucency that allows light to travel through the post in all directions. The glass fibres, which are unidirectionally aligned with the axis of the post, optimally transmit the light deep into the root canal. Consequently, users can choose between a self-curing or dual-curing composite, allowing the posts to be cemented using an adhesive technique.
Restorations that are gentle to the root structure

FRC Postec Plus consists of glass fibres embedded in a composite matrix. This design produces a post with an elastic behaviour (modulus of elasticity) similar to that of dentin, unlike metal or ceramic posts.

The elastic behaviour of FRC Postec Plus is very similar to that of dentin.

![Modulus of elasticity chart]

Modulus of elasticity when force is applied at an angle of 30º to the axis of the post. Source: R&D, Ivoclar Vivadent, Schaan, 2004; Materials Science and Engineering. An introduction. 6th ed. Wiley

Unlike metal or ceramic posts, fibre-reinforced posts offer ideal biomechanical conditions, as they prevent abrupt transitions between different levels of elasticity within the root structure. As a result, less stress is exerted on the root structure and the risk of root fracture is reduced.

The use of a glass fibre post with a composite core results in an even level of elasticity throughout the root, while the use of a metal post involves a risk of fracture at the transition from the stiff post to the less rigid dentin (adapted from Heidemann et al, Endodontic Journal 2/2004).
An exceptionally aesthetic root post solution

FRC Postec

FRC Postec Plus is a post system that has been especially designed for patients with extensive coronal damage. Outstanding translucency and reliable sealing of the post prepare the tooth for new root canal treatment.

High retention

As FRC Postec Plus posts are adhesively cemented with composites, their retention in the root canal is three to four times higher than that of metal posts, which are conventionally cemented with a zinc phosphate or glass ionomer cement. As a result, the risk of retention loss is considerably reduced.

Tooth-conserving revision

Another advantage of fibre-reinforced composite posts is that the post material can be drilled out if revision of the endodontic treatment should necessitate the removal of the post.

Fibre-reinforced posts entail a considerably smaller loss of tooth structure than metal and ceramic posts, which are difficult or impossible to drill out.

Adhesive cementation

The FRC Postec Plus system offers far more than just a quick build-up.
FRC Postec Plus is applied in combination with the proven and reliable MultiCore. This results in effective reproducible results.

Cementation with Multilink Automix and core build-up with MultiCore

1. Initial situation
2. Prepare the post space
3. Apply Multilink Primer
4. Cement the post with MultiLink Automix
5. Build up the core with MultiCore Flow
6. Completed core build-up
FRC Postec Plus has been further developed from FRC Postec, which has been in successful clinical use for five years.

A clinically proven method

Cementation and core build-up with MultiCore

1. Initial situation
2. Prepare the post space
3. Apply AdheSE DC adhesive
4. Cement the post with MultiCore Flow
5. Build up the core with MultiCore Flow
6. Completed core build-up

SEM image of FRC Postec Plus: Even distribution of the fibres over the cross-section of the post.

Source: R&D, Ivoclar Vivadent AG, Schaan, 2004

Reproducible quality

Cutting-edge manufacturing processes and continuous quality checks ensure that FRC Postec Plus posts are of a consistently high quality.

This is for instance evident in the even distribution of the glass fibres over the entire cross-section of the posts.
System components

- light-transmitting glass fibre-reinforced composite posts in three sizes
- matching stainless steel reamers for the preparation of the recipient site of the post

<table>
<thead>
<tr>
<th>Size 0</th>
<th>Size 1</th>
<th>Size 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3 mm</td>
<td>1.5 mm</td>
<td>2.0 mm</td>
</tr>
<tr>
<td>0.6 mm</td>
<td>0.8 mm</td>
<td>1.0 mm</td>
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</table>
Superior radiopacity

FRC Postec Plus is the first glass fibre-reinforced post that offers a high radiopacity similar to that of metal posts. Having a radiopacity of up to 510% Al, FRC Postec Plus can always be clearly identified on radiographs. Hence, the difficulty in distinguishing between glass fibre-reinforced posts and dentin on radiographs is a thing of the past.

Radiopacity; Source: R&D, Ivoclar Vivadent AG, Schaan, 2006

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FRC Postec® Plus

Glass fibre-reinforced composite posts

Delivery forms

Intro Pack 603543 AN
3 FRC Postec Plus, Size 0
5 FRC Postec Plus, Size 1
2 FRC Postec Plus, Size 3
1 FRC Postec Plus Reamer, Size 0
1 FRC Postec Plus Reamer, Size 1
1 FRC Postec Plus Reamer, Size 3

Multilink Automix System Pack
1 Multilink Automix Syringe, 9 g
available in the shades:
- transparent 627471 AN
- yellow 627473 AN
- opaque 627472 AN
1 Multilink Primer A/B, 2 x 3 g
1 Monobond Plus, 5 g
Various accessories (mixing slab, mixing pad, applicators, flow charts)

MultiCore Flow Refill
1 MultiCore Flow Syringe, 10 g
available in the shades:
- light 604166 AN
- medium 604167 AN
- white 604168 AN
10 Mixing Tips
10 Intra Oral Tips

Refills

Posts:
5 FRC Postec Plus, available in Sizes 0, 1 and 3

20 FRC Postec Plus, available in Sizes 0, 1 and 3

Instruments:
1 FRC Postec Plus Reamer, available in Sizes
0 603542 AN
1 572801 AN
3 572800 AN

This is a product from our “Composites” competence field. Products from this field are optimally coordinated with each other.