Welcome to Meta Biomed. Thirty years of business success speak for themselves: thanks to our dedication and innovative spirit, today we are a well-established name in the health and medical sector. We are committed to production excellence and guaranteeing customer satisfaction. We export our products to more than 80 countries and have been a driving force for innovation since our foundation. As a result of our research endeavours, we have not only consistently enhanced the quality of our own products, but have also made a long-term contribution to the further development of this entire industrial segment.

In the bio-engineering sector in particular, we have assumed a pioneering role with the development of alternative bone substitutes for Orthopaedic treatments. New and innovative products are on the verge of market maturity and will soon enable our customers to perform advanced treatments. As such, Meta Biomed is growing continuously and, looking toward the future, will continue to set great store by change and progress.

As a company in the health sector, we also have a particular responsibility vis-à-vis society. We remain continually focused on this responsibility and always do our utmost to ensure that every single product meets these standards. The entire Meta Biomed team embraces this responsibility with its shared values and rises to the daily challenges with creativity and dedication.

Greetings from our Founder

Seok Song Oh
Founder
Meta Biomed
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Endodontic treatment
Innovative solutions from A to Z

Aurum Blue™
Controlled Memory file
Blue – the colour of extraordinary elasticity and fracture resistance

Benefits
- Unique Manufacturing Process
  Due to the unique heat and surface treatment during manufacturing, Aurum Blue files offer maximum flexibility without compromising strength
- Super flexible alloy
  Significantly reduces the risk of ledging, transportation or perforation of a canal
- Bendability
  Easier access to a canal orifice
- Electro-polishing surface treatment
  Removes imperfections and adds strength
- Shape recovery
  Heat treatment during manufacturing allows for shape recovery during autoclaving

Comparison

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<th>Extremely resistant to fracture</th>
<th>Number of cycles to failure</th>
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<tr>
<td>Protaper Universal F2</td>
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</table>

Source: Yonsei University, Dental Material Research Center

Square shape: 20/.10, 20/.04
Excellent centering, fracture-resistant

Convex triangular shape: 25/.06, 35/.04
Resistant to torsional stress while maintaining flexibility
Aurum G™
Glide Path File

Benefits

○ Unique Manufacturing Process
Due to the unique heat and surface treatment during manufacturing, Aurum G files offer maximum flexibility without compromising strength

○ Increased flexibility
With increased flexibility and more resistance to cyclic fatigue due to special heat-treatment, Aurum G offers many advantages over manual stainless steel files

○ Electro-polished
Removes surface imperfections

Aurum Blue, Aurum G – protocol

### Standard

- **Coronal**
  - CF 20/.10
  - T1 20/.04
  - T2 25/.06
  - T3 35/.04

- **Middle**
  - T2.5 (35/.04)

- **Apical**
  - T3.5 (45/.04)
  - T4 (45/.04)
  - T4.5 (45/.04)

### Complex

- **Coronal**
  - 17/.025
  - 13/.025

- **Middle**
  - 17/0.25

- **Apical**
  - 17/0.25

---

**Aurum Blue, pack of 4**

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<th>ID</th>
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**Aurum G, pack of 6**

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<th>31 mm</th>
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Aurum Pro™

Familiar Sequence, Different Flexibility

Benefits

- Unmatched flexibility
  Heat-treated NiTi gives amazing flexibility, inhibiting transportation of root canal
- The system you trust
  The most commonly used rotary file system
- Incredible strength
  100% more resistant to cyclic fatigue than

Comparison

<table>
<thead>
<tr>
<th>Extremely resistant to fracture</th>
<th>Number of cycles to failure</th>
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<tr>
<td>Aurum Pro F2</td>
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<tr>
<td>Protaper Universal* F2</td>
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Source: Yonsei University, Dental Material Research Center
*Not a Meta Biomed trademark

Matching GP and PP

Aurum Pro Gutta Percha Points ➔ Page 14
Aurum Pro Absorbent Paper Points ➔ Page 15

Aurum Pro – protocol

Access & glide path

- Use MD-Chelcream and small hand files during the manual processing and securing of canals.
- Use NaOCl during the mechanical processing or shaping of canals.
- Use Aurum Pro SX files over one or more rounds, or use Aurum Pro SX to move the coronal aspect of a canal from an external root concavity; remove the triangles from the dentine or create more shape.
- Rinse, repeat with a size-10 file, and rinse again after each time a rotating file is removed.
- Clean and inspect the grooves on the rotating file on a regular basis.

Coronal 2/3

Create WL

Apical 1/3

Design & finishing sequence

Shapers

Finishers

Track, brush and finish to the correct length

Checking the apical grooves for the dentine in order to ensure the shape

Continue to disinfection and 3D obturation

300 RPM/torque 1.5 Ncm

Endodontic treatment
GL153
Controlled Memory file with shape memory

Benefits
- The series 10 instruments are available in Stainless Steel or Nickel Titanium
- Offered with the Standard handles or the unique D&S dual-purpose handle
- GL153 is most effective when using constant downward pressure and a reciprocating motion with engine or by hand

Areas of application
- The size 15 taper .02 is ideally suitable for preparing the glide path.
- The taper .02 also allows for largely interference-free preliminary work up to the apex, which is a real benefit with regards to tactility.
- Method: slow backward movement.
- With the careful selection of the GL153 Safe10 instruments, the number of instruments per channel can be reduced.

Packaging types

**Made in the USA**

The optimised material structure and rounded cross-section of the GL153 make it easier to perform smooth and efficient canal preparation without damaging the tooth structure or risking a file fracture in the canal.

The production method occasionally has a significant impact on the fatigue strength and the torsional strength. An independent scientific study showed that the Controlled Memory wire used to produce the GL153 Safe10 series significantly increases the number of cycles: the instruments fail far later than comparable files on the market.

Step by step
Use a low-speed handpiece (500 UpM).
A torque of up to 2.5 N cm (25 mN m) is recommended.

Areas of application

○ The size 15 taper .02 is ideally suitable for preparing the glide path.
○ The taper .02 also allows for largely interference-free preliminary work up to the apex, which is a real benefit with regards to tactility.
○ Method: slow backward movement.
○ With the careful selection of the GL153 Safe10 instruments, the number of instruments per channel can be reduced.

**Significant fracture-resistance and unlimited flexibility with a 10 mm working part**

**Areas of application**

○ The size 15 taper .02 is ideally suitable for preparing the glide path.
○ The taper .02 also allows for largely interference-free preliminary work up to the apex, which is a real benefit with regards to tactility.
○ Method: slow backward movement.
○ With the careful selection of the GL153 Safe10 instruments, the number of instruments per channel can be reduced.

**Packaging types**

**Made in the USA**

The optimised material structure and rounded cross-section of the GL153 make it easier to perform smooth and efficient canal preparation without damaging the tooth structure or risking a file fracture in the canal.

The production method occasionally has a significant impact on the fatigue strength and the torsional strength. An independent scientific study showed that the Controlled Memory wire used to produce the GL153 Safe10 series significantly increases the number of cycles: the instruments fail far later than comparable files on the market.
## Endodontic treatment

### Gutta Percha Points

.02/.04/.06/.08/ Aurum Pro (F1~F3)

- **Gutta Percha Points**
- **Specifications**
  - Size: 02, 04, 06, 08 (120, 60, 60, 60)
  - Taper: 02, 04, 06, 08 taper (10 to 140)
  - Packaging: Individual packages
  - Length markings: 15 to 24 nm

### Absorbent Paper Points

.02/.04/.06/.08/ Aurum Pro (F1~F3)

- **Absorbent Paper Points**
- **Specifications**
  - Size: 02, 04, 06, 08 taper (120, 60, 60, 60)
  - Taper: 02, 04, 06 cone (15 to 80)
  - Packaging: Individual packages
  - Length markings: 15 to 24 mm

### Benefits

- Long shelf life of 4 years
- Rigid and flexible
- Outstanding radiopacity
- Different sizes, tapers and packs

### Specifications

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### Length markings

- 15 to 24 mm

## Root canal filling

- Gutta Percha Points
- Absorbent Paper Points

### Size & specifications

- 02 cone: 10 to 140
- 04, 06 cone: 15 to 80
- 08 cone: 15 to 40
- Non-standardised: XF, FF, F, M, ML, L, XL
- De Trey style: XX-F, X-F, Fine, Medium
- Protaper size (F1~F5)

### Benefits

- Highly absorbent
- Sterilized individual packages
- Various sizes and packages available
- Syrs Shelf life

### Specifications

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### Length markings

- 15 to 24 mm

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### Protaper size (F1~F5)

- 02 taper: 15 to 140
- 04, 06, 08 taper: 15 to 80
- 08 taper: 15 to 40
- Non-standardised: XX-Fine, X-Fine, Fine, Medium, Coarse, X-Coarse
- F1 to F3
Endodontic treatment

**Packaging types**

Private labels are available in all packaging types

---

Pack of 6 vials (square)
- Code: P.31
- Regular point packs: GP: 60/120 points – PP: 60/200 points
- Dimensions: 84 × 51 × 16 mm

Pack of 6 vials (round)
- Code: P.31
- Regular point packs: GP: 60/120 points – PP: 60/200 points
- Dimensions: 84 × 51 × 16 mm

Slide dispenser
- Code: P.71
- Regular point packs: GP: 60/120 points – PP: 60/200 points
- Dimensions: 70 × 45 × 12 mm

Dispenser with 4 compartments
- Code: P.51
- Regular point packs: GP: 60/120 points – PP: 60/200 points
- Dimensions: 70 × 45 × 13 mm

Endo organizer
- Code: P.11
- Leak-proof, 12 compartments
- Size: ISO 15–80
- Colour-coding available
- Regular point packs: – GP: 240 points, PP: 400 points

Absorbent Paper Points
- Code: P.61
- Regular point packs: 180/200 points
- Dimensions: 163 × 54 × 11 mm
- Only available for PP

---

**Benefits**
- Outstanding antibacterial effect and radiopacity
- Pre-mixed paste
- Syringe-type for easy delivery of the paste into the canal
- Disposable tips for prevention of cross-contamination

**Areas of application**
- Weeping canal
- Formation of a hard tissue barrier (apexification)
- Root canal filling for deciduous teeth
- Internal and external root resorption

**Components**
- 2.2 g paste in a syringe (pack of 2 syringes available)
- Disposable tips
- Rotational joint for direction control of the tip
- Dimensions: 228 × 61 × 22 mm
- Weight: 46 g

**Composition**
- Calcium hydroxide, iodoform, silicone oil

**Shelf life**
- 2 years from the date of manufacture

---

**Clinical cases**

**Apexification**
- Pulp necrosis on #21 of an 8-year-old boy as a result of trauma.
- Around one year after treatment with Metapex
- Internal resorption on the distolingual root
- Root perforation due to inflammatory resorption

**Not available in Europe**
### Metapaste

**Temporary fixing cement with calcium hydroxide base**

**Benefits**
- Gentle cleaning and removal with good water solubility
- Outstanding antibacterial effect and radiopacity
- Pre-mixed paste
- Syringe-type for easy delivery of the paste into the canal
- Disposable tips for prevention of cross-contamination

**Areas of application**
- Weeping canal
- Formation of a hard tissue barrier (apexification)
- Root canal filling for deciduous teeth
- Internal and external root resorption

**Composition**
Calcium hydroxide, barium sulphate, polypropylene glycol

**Shelf life**
2 years from the date of manufacture

**Clinical cases**
- **Apexification**
  - Before treatment: Large apical foramen with incomplete apex
  - Metapaste filling
  - Three months later: The apical barrier is formed. The paste is removed
  - Six months later: Outstanding healing with no further root resorption
  - Approximately 1-2 months later, an X-ray image shows the location of the genuine apical foramen.

- **To locate a genuine apical foramen**

### ADSEAL™

**Resin Based Sealer**

**Benefits**
- Excellent biocompatibility
- Easy-to-mix paste
- Hermetic sealing capacity
- Nonstaining to the teeth
- Insoluble in tissue fluid
- Good radiopacity

**Areas of application**
- Permanent sealing of the root canal
- Thermal obturation

**Composition**
Base of epoxy resin oligomer, hydroxyethyl salicylate, bismuth III carbonate, catalyst of polybutane diol amino benzoate, calcium phosphate, bismuth III carbonate

**Shelf life**
2 years from the date of manufacture

**Properties**
- Working time: 35 minutes at 23°C (73°F)
- Setting: 45 minutes at 37°C (99°F)
- Film thickness: 3.3 µm

**Flow**

**Solubility**

**Radiopacity**

**Material properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lateral condensation</td>
<td>4.5</td>
</tr>
<tr>
<td>Vertical condensation</td>
<td>3.5</td>
</tr>
</tbody>
</table>

---

**Components**
- 13.5 g dual syringe
  - 9 g base (epoxy resin, calcium phosphate)
  - 4.5 g catalyst (amines, bismuth III carbonate)
- Spatula
- Mixing plate
  - Dimensions: 55 x 180 x 40 mm
  - Weight: 98 g
ZOB Seal
Root canal sealer with zinc oxide base

Benefits
- Good adhesion onto tooth material
- Good mixture consistency
- Extraordinary radiopacity
- Excellent antibacterial effect

Areas of application
- Permanent sealing of the root canal

Properties

<table>
<thead>
<tr>
<th>Flow</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>ZOB Seal</th>
</tr>
</thead>
<tbody>
<tr>
<td>µl/s</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>30</td>
<td>40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cure Time</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>ZOB Seal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Processing Time</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>ZOB Seal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</table>

<table>
<thead>
<tr>
<th>Film Thickness</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>ZOB Seal</th>
</tr>
</thead>
<tbody>
<tr>
<td>µm</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Radiopacity</th>
<th>5.18 mm/mmAl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solubility</td>
<td>0%</td>
</tr>
</tbody>
</table>

Components
- Powder 15 g (zinc oxide)
- Liquid 7 ml (eugenol)
- Spoon
- Mixing plate
- Dimensions: 63 x 81 x 70 mm
- Weight: 84 g

Composition
Zinc oxide powder, resin, bismuth III carbonate
Liquid eugenol, olive oil

Shelf life
2 years from the date of manufacture

MD-ChelCream
EDTA Cream for Root Canal Cleaning and Preparation

Benefits
- Removal of inorganic substances through chelation (EDTA-Ca²⁺)
- Easier filling thanks to lubrication effect
- Produces the cleanest canal wall after smear layer removal

Areas of application
- Root canal preparation with files and reamers
- Presence of calcifications in the canal
- Narrow canals in the premolars and molars
- Smear layer removal

Properties

<table>
<thead>
<tr>
<th>Flow</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>ZOB Seal</th>
</tr>
</thead>
<tbody>
<tr>
<td>µl/s</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>30</td>
<td>40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cure Time</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>ZOB Seal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Processing Time</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>ZOB Seal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Film Thickness</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>ZOB Seal</th>
</tr>
</thead>
<tbody>
<tr>
<td>µm</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Radiopacity</th>
<th>5.18 mm/mmAl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solubility</td>
<td>0%</td>
</tr>
</tbody>
</table>

Components
- MD-ChelCream 7 g (5.4 ml) × 2
- Disposable tips
- Dimensions: 186 x 45 x 30 mm
- Weight: 59 g

Composition
EDTA, PEG

Shelf life
2 years from the date of manufacture

Why not find out about our endodontic equipment too?

I-ROOT
Fully automatic electronic apex locator

EQ-V Set
Wireless device for root canal obturation

ES-100
Endodontic micromotor
**Benefits**

- Removal of inorganic substances by chelation (EDTA-Ca³⁺)
- Easier instrumentation by softening dentin canal wall
- Produces the cleanest dentinal walls after smear layer removal

**Areas of application**

- Presence of calcification in the canal
- Narrow canals on posterior teeth
- Smear layer removal
- Root canal cleaning

**Clinical cases**

- Following preparation of the root canal
- Following application of the MD Cleanser (×1000)
- Following application of the MD Cleanser (×7000)

**Physical and chemical properties**

- Radiopaque
- Translucent
- Optimal flexural strength (close to dentine)
- Excellent light translucency for efficient light-curing deep in the root canal

**Strength test**

<table>
<thead>
<tr>
<th>Material</th>
<th>Flexural strength (MPa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NexPost</td>
<td>800</td>
</tr>
<tr>
<td>B</td>
<td>700</td>
</tr>
<tr>
<td>C</td>
<td>600</td>
</tr>
<tr>
<td>B C</td>
<td>500</td>
</tr>
<tr>
<td>A</td>
<td>400</td>
</tr>
</tbody>
</table>

**Sizes**

- Sizes: 0.8, 1.0, 1.2, 1.5, 2.0

**Composition**

- MD Cleanser: 100 ml
- 1cc syringe
- Disposable tips
- Dimensions: 106 × 50 × 53 mm
- Weight: 138 g
- EDTA, PEG

**Shelf life**

- 2 years from the date of manufacture

**Components**

- NexPost kit (pin ×20, drill ×5)
- NexPost re-fill (pin ×5)
- NexPost re-fill drill (drill ×1)
- Glass Fiber, resin with Bis-GMA base

**Shelf life**

- 3 years from the date of manufacture
## Benefits

- Suitable viscosity and flow for post cementation and core build-up
- Dual curing: light-curing and self-curing are possible, so no need to worry about incorrect resin polymerization
- Biocompatibility (ISO10993)
- Easy-to-mix by auto-mixing type, Direct injection: Intraoral-tip, Endo-tip
- Excellent radiopacity
- 3 shades (tooth, white and ceramic restoration blue: metal restoration)
- Suitability for cutting (flexural modulus: NexCore 14.2GPa)

## Areas of application

- Post-adhesions and core structures in restorations

## Composition

**Components**

- NexCore cartridge ×1 with 50 g paste, 30× Automix tip, 30× intraoral tip
- NexCore cartridge refill ×1 with 50 g paste (shade: tooth, white, blue)
- NexCore dual syringe ×2 with 9 g paste, 20× Automix tip, 10× Intraoral tip, 10× Endo-tip
- NexCore dual syringe refill ×1 with 9 g paste (shade: tooth, white, blue)

**Composition**

- Barium glass, ytterbium(III) fluoride, pyrogenic silicic acid
- Bis-GMA, TEGDMA

**Physical properties**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working time</td>
<td>1:50 - 2:20 min</td>
</tr>
<tr>
<td>Setting time (self-curing)</td>
<td>4:00 - 5:00 min</td>
</tr>
<tr>
<td>Setting time (light-curing)</td>
<td>20 - 40 s</td>
</tr>
<tr>
<td>Flexural strength (light-curing)</td>
<td>20 - 40 s</td>
</tr>
<tr>
<td>Water resorption, solubility</td>
<td>16.5/ 2.3 μg/mm²</td>
</tr>
<tr>
<td>Radiopacity</td>
<td>Optical density corresponds to the optical density on a 4.2 mm aluminium step wedge</td>
</tr>
<tr>
<td>Shade and colour stability</td>
<td>No change in colour and identical to the shade guide</td>
</tr>
</tbody>
</table>

**Flexural strength modulus – polymerisation shrinkage rate**

- **NexCore**
- **Competitor A**
- **Competitor B**
- Dentine: approx. 17.5±3.8 GPa

## Areas of application

- Post-adhesions and core structures in restorations

## Components

- NexCore cartridge ×1 with 50 g paste, 30× Automix tip, 30× intraoral tip
- NexCore cartridge refill ×1 with 50 g paste (shade: tooth, white, blue)
- NexCore dual syringe ×2 with 9 g paste, 20× Automix tip, 10× Intraoral tip, 10× Endo-tip
- NexCore dual syringe refill ×1 with 9 g paste (shade: tooth, white, blue)
Endodontic equipment

Successful treatments with revolutionary equipment

i-ROOT
Electronic apex locator
i-ROOT is the 5th generation dual-frequency apex locator model. i-ROOT precisely measures the apical constriction without any measurement errors.

Specifications

- **Dimensions**: W110 × H100 × D117 mm
- **Screen**: W79 × H70 mm
- **Battery**: Lithium-ion, DC 8.2 V, 2200 mAh
- **Continuous operation**: 60 hours
- **AC adapter**: AC 100~240 V, (50~60 Hz)
- **Weight**: 390 g

Benefits

- Optimal precision in all root canal conditions (dry, bleeding, wet, saline, EDTA, NaOCl or chlorhexidine etc...)
- Simultaneous visual and sound measurement
- Colour display
- Stylish and ergonomic design
- Simple operation
- Self-test to check the system
- Automatic power-off function
- Stable and durable in a wide range of conditions
- Computer monitoring and patient management via USB interface

Components

- 1 i-ROOT main unit
- 1 probe cable
- 1 file holder A
- 2 file holder B
- 5 lip clips

Device | Battery | Connection to the monitor
--- | --- | ---
i-ROOT S | Rechargeable battery | ☑
i-ROOT A | Rechargeable battery | ×
i-ROOT 100 | AA battery (x3 each) | ×
EQ-S

Effective 3D irrigation for a successful root canal treatment.

Active Flow™
Technology

Benefits
- Less pressure to the apical foramen
- Easier access to curved canals
- Perfect interaction with irrigant
- Color coded

Rotational & Vertical Movement
Indentation along the tip, combined with counter clockwise motion, ensures 3D Active Flow™. The unique shape and design of the EQ-S tip create stronger force, which enhances flow in small canals.

Powerful Cleaning

Specifications

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>026-210</td>
<td>EQ-S Gray Kit</td>
<td>Tips and Protective Sleeves included</td>
</tr>
<tr>
<td>026-220</td>
<td>EQ-S Pink Kit</td>
<td>Tips and Protective Sleeves included</td>
</tr>
<tr>
<td>126-230</td>
<td>EQ-S Tip 15/02</td>
<td>30μm/7/ea (Color: White)</td>
</tr>
<tr>
<td>126-240</td>
<td>EQ-S Tip 25/02</td>
<td>30μm/7/ea (Color: Red)</td>
</tr>
<tr>
<td>126-250</td>
<td>EQ-S Tip 35/02</td>
<td>30μm/7/ea (Color: Green)</td>
</tr>
<tr>
<td>126-260</td>
<td>Protective sleeve</td>
<td>100ea/1set</td>
</tr>
</tbody>
</table>

Dimensions (W × H × L): 24 mm × 25 mm × 183 mm (Including tip)
Weight: 43 g
Battery: 1.5 V Alkaline (AA) – Not included in the Kit
Operation Time: 9 hours (continuous operation)

Contents

Testimonial

Dr Jenner Argueta, DDS, M.Sc.

My clinical feeling of EQ-S, as a multidirectional sonic device and the novel design of the activating tips, when working inside of the root canal is quite good. It is also useful in my clinical practice for removing medicaments, spreading bioceramic sealers inside of the root canal previous to the placement of the master cone and cements previous to the placement of fiber posts.

Dr Johnny Onori, DDS, M.Sc.

EQ-S is an innovative device, versatile, of easy clinical use, offering something that so far had not been seen in a sonic device. My clinical experience is the multidirectional movement of the tip causing more fluid dynamics, creating continuous waves and having better cleaning, disinfection and removal of the smear layer. High power can be used for irrigation or removing Calcium hydroxide and low can be used for spreading bioceramic sealer before placing the master cone.
EQ-V
Cordless root canal obturator
The new EQ-V system from META BIOMED, for the reliable, practical and precise obturation of root canals.

Benefits
- Chemically resistant and ergonomically designed body (remains intact after one week of immersion in cavicide)
- Durable flexible GP Cartridge (both disposable and refillable cartridge are available)
- Easy maintenance due to unique structure
- Outstanding heating performance

Specifications

<table>
<thead>
<tr>
<th>Contents</th>
<th>Item no.</th>
<th>Description</th>
<th>FILL (R)</th>
<th>FILL (D)</th>
<th>PACK Battery</th>
<th>Single charger</th>
<th>Dual charger</th>
<th>Point pack</th>
<th>Cartridge R (pack of 6)</th>
<th>Cartridge D (pack of 10)</th>
<th>GP Bar (x100)</th>
<th>Multi-instrument</th>
<th>Brush</th>
<th>AC adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQV026</td>
<td>EQ-V Full kit (R)</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2 (F, FM)</td>
<td>1 pack (25 G)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EQV028</td>
<td>EQ-V Full kit (D)</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2 (F, FM)</td>
<td>1 pack (25 G)</td>
<td>1</td>
<td>1</td>
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<td>EQV027</td>
<td>EQ-V Fill kit (R)</td>
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<td>1</td>
<td>2 (F, FM)</td>
<td>1 pack (25 G)</td>
<td>1</td>
<td>1</td>
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<tr>
<td>EQV029</td>
<td>EQ-V Fill kit (D)</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2 (F, FM)</td>
<td>1 pack (25 G)</td>
<td>1</td>
<td>1</td>
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<td></td>
<td></td>
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<tr>
<td>EQV032</td>
<td>EQ-V Pack kit</td>
<td>1</td>
<td>2</td>
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<td>2 (F, FM)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Obturation process – Fast, reliable and dense filling

1. Fit a master cone that matches the size and taper of the canal being obturated and trim the tip to 0.5mm short of the working length.

2. Select an EQ-V Pack Tip to reach a depth 4–6mm short of the working length.

3. Coat the bottom 3 mm of the master cone with sealer and insert it into the root canal. Remove excess gutta-percha using the EQ-V Pack Tip to 4–6mm short of the working length.

4. Condense the gutta-percha with a hand plugger to completely obturate the apical area and accessory canals.

5. Insert the EQ-V Fill’s cartridge into the root canal and wait 5 seconds for it to heat.

6. Slowly pull on the trigger to back-fill the root canal with gutta-percha to the canal orifice.

7. Condense the hot gutta-percha with a hand plugger to achieve complete obturation of the root canal.

Clinical cases

Before

After

With the kind permission of Dr. Walter Verges Díaz

Before

After

With the kind permission of Dr. Álvaro Barrios Angulo

Before

After

With the kind permission of Dr. Jenner O. Argueta
ROOTOR

Electronic apex locator
Accuracy guaranteed by the latest multiple frequency technology meets compact and minimalistic dimensions for the most efficient endodontic treatment.

Benefits

- Precision in all root canal conditions (dry, bleeding, moist, saline, EDTA, NaOCl or chlorhexidine etc. ...)
- Colour display
- Stylish and ergonomic design
- Automatic power-off to save battery life
- Stability and measuring reliability

Components

1 ROOTOR
1 probe cable
5 lip clips
2 file holder B
1 holder

Specifications

- Rated voltage: DC 4.5 V (alkaline battery, size AAA DC 1.5 V x 3 each)
- Input current: under DC 60 mA
- Power consumption: under 0.27VA
- Patient leakage current: under AC 10 μA
- Oscillation frequency: 500 Hz ± 0.2 Hz, 5 kHz ± 0.002 kHz
- Protection class and degree against electric shock: Inner current type equipment, type B equipment

ES-100

Endomotor

Benefits

- Powerful Performance with Long-lasting Battery
  - Stable Rotation: 250~800RPM (16:1)
  - Torque: 0.6~6.4 NCM
  - 10hrs of working time (2200mAh)
  - Swiss Micro Motor
- Ergonomically Designed Body with Small Headed, Durable, Chemically Resistant Contra-Angle
  - Remains intact after 1 week of immersion in Cavicide
- Torque Auto-Reverse, Auto Forward, Reciprocation
- Memory Functions
  - Memo 1 ~ 9
  - Memorizing RPM, Torque, Reverse Function, Rotation Direction

Components

1 control unit
1 handpiece
1 contra-angle
1 AC adapter

Specifications – control unit

- Rated input current: 7.2 V, 1.2 A
- Dimensions: ø 16.7 x L 63
- Weight: 443 g

When the current torque is reached (1), the handpiece will run in an anti-clockwise direction (2), causing the file to run free and then stop (3).

Auto Reverse

When the current torque is reached in Auto Forward mode (1), the file will automatically rotate in the opposite direction (2), causing it to run free, and will then continue to rotate in a clockwise direction (3).

Auto Forward

Not available in Europe
EQ Condenser

Maximum flexibility for individual obturation techniques

Hand pluggers can be used with all standard obturation techniques including warm and cold condensation.

Benefits

- Flexible NiTi tip
- Smooth edge, flat end
- Practical Length marking (5mm from the tip)
- Anti-crack and rotation prevention
- Color anodizing
- Excellent chemical resistance
- Lightweight

Specifications

<table>
<thead>
<tr>
<th>NiTi tip</th>
<th>Marking</th>
<th>N40</th>
<th>N60</th>
<th>N80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working length</td>
<td>0.40 mm</td>
<td>0.60 mm</td>
<td>0.80 mm</td>
<td></td>
</tr>
<tr>
<td>Taper</td>
<td>0.02</td>
<td>0.01</td>
<td>0.01</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SUS tip</th>
<th>Marking</th>
<th>S80</th>
<th>S100</th>
<th>S120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working length</td>
<td>0.80 mm</td>
<td>1.00 mm</td>
<td>1.20 mm</td>
<td></td>
</tr>
<tr>
<td>Taper</td>
<td>0.04</td>
<td>0.02</td>
<td>0.01</td>
<td></td>
</tr>
</tbody>
</table>

Crown remover

Revolutionary technology for crown removal

Benefits

- No more sectioning
- Gentle on root and crown
- Saves time and money

Useful tips

1. The distance between the purchase points must be at least 4 mm
2. As shown in the image, it may be necessary to grip the tooth horizontally depending on the shape of the crown

Application – buccal

Application – lingual
Before assembly, choose one of three ring sizes (small, medium or large) that best fits your index finger. Slide the selected ring into the cup channel located beneath the scale.

Place the EndoRing e-Foam insert into the EndoRing cup. Pull the e-Foam insert out the bottom of the cup to seat the foam.

Prior to first use, autoclave the EndoRing cup with the metal ruler attached to the ruler platform. After the first autoclaving, the metal ruler will easily slide on and off the EndoRing cup. For subsequent autoclaving, always remove the metal ruler from the ruler platform.

WARNING: If the metal ruler gets loose, remove it and autoclave the EndoRing cup for 2 cycles to restore the retention feature.

Arrange hand files, rotary files or other instruments into the e-Foam insert. Remove all file bioburden prior to autoclaving files in the e-Foam insert. When using rubber stops, utilize the stop locks on either the built-in ruler or the detachable metal ruler to increase or decrease the instrument’s working length. The rulers perform well with paper points, gutta percha and many other endodontic instruments. To efficiently clean instruments, simply pass them in and out of the e-Foam insert. You can also clean instruments by sliding them through the corrugated area on top of the e-Foam insert. Rubber stops can be safely added to instruments using the ports located on the back of the EndoRing cup.

Made in the USA

Package Contents
1 EndoRing II Assembly
6 e-Foam Inserts
1 Metal Ruler
4 Single Use Cups

Each Assembly Includes
1 EndoRing Cup
3 Finger Rings (S, M, L)
1 Reusable Cup
1 Adaptor Ring

Processing Instructions:
EndoRing Cup with Finger Ring GelWell Adaptor Ring GelWell Cup Metal Ruler (if equipped)

PreCleaning Instructions: Disassemble the metal ruler (if equipped) and any reusable or single use GelWell cup or ring. Rinse all items under tap water to remove gross and visible soils. Use a scrub brush if necessary to remove visible soils. Place items in an ultrasonic bath with only an enzymatic detergent prepared to the manufactures directions. Fully immerse the items and soak for 1 minute. Then sonicate the parts for 5 minutes and remove and rinse for 15 seconds with tap water. Inspect for any soils and repeat if any soils are visible.

Autoclave Processing Instructions: Place items in an FDA approved autoclave pouch/bag. Using a gravity autoclave, process the items at 250°F (121°C) for 30 minutes. Allow the bagged articles to dry for 30 minutes. During autoclaving, place all components near center of the chamber.

Single Use e-Foam Inserts
DO NOT REUSE

Steam autoclave a new e-Foam insert prior to use. Unused or ultrasonically cleaned files may be placed in the e-Foam insert prior to processing. Autoclaving will not remove bioburden left behind from prior usage. The e-Foam insert, along with files, may be placed in an FDA approved autoclave pouch/bag prior to processing. Do not exceed temperature of 275°F (135°C). To avoid deforming the e-Foam insert, do not load or stack items on top of the e-Foam insert during autoclave processing. Dispose of after each use.

Single Use GelWell Cups
DO NOT REUSE

Always use a new single use GelWell cup for each procedure. Do not autoclave the cups because they will deform and or melt. Dispose of after each use. To disinfect, always use an FDA approved High Level Disinfectant and follow the manufacturer’s instructions.

Attachments can be placed onto the EndoRing cup to hold lubricant or other lubricating gels and liquid. Use either the reusable 2.0ml cup (1) or the single-use clear .65ml cup (2) inserted into the attachment ring. These can be reversibly attached to either side of the EndoRing cup.

The back of the EndoRing cup features the Endo Docking Station™. When held by an assistant, a doctor operating under a surgical microscope, can safely pass files into the expanded area of e-Foam. The area is also ideal for storing used files.

Do not place any components into Surgical Milk, “cold sterilizing solutions” or instrument dips prior to autoclaving. Only use enzymatic ultrasonic detergents when precleaning the EndoRing cup and the metal ruler in ultrasonic cleaners.
Restorative treatment

Maximum efficiency with excellent materials

Biner LC
Light-curing Type Cavity Liner

Benefits

- Outstanding biocompatibility with dentine and pulp
- Light-curing type cavity liner, extremely hard-curing
- Chemical bonding to adhesives and composites
- Insoluble in water and oral fluids
- Radiopacity
- Flow-on-demand operation and easy dispensing
- Heat barrier

Areas of application

- Protection of the dental pulp
- Lining under all filling materials
- Protection when applying the total etch technique

Physical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexural strength</td>
<td>Over 100 MPa</td>
</tr>
<tr>
<td>Sensitivity to ambient light</td>
<td>60 seconds, homogeneous</td>
</tr>
<tr>
<td>Linear expansion</td>
<td>2 - 3%</td>
</tr>
<tr>
<td>Radiopacity</td>
<td>Yes</td>
</tr>
<tr>
<td>Curing depth (40 s)</td>
<td>2 mm</td>
</tr>
</tbody>
</table>

Components

- Biner LC 2g x 2 syringes
- 10 disposable tips

Composition

- Calcium hydroxyphosphate, UDMA, photoinitiator
- Barium aluminium silicate

Shelf life

3 years from the date of manufacture
Meta Etchant

Etching gel with 37% phosphoric acid, developed for the etching of dentine and enamel.

Benefits
○ Polymer-thickened gel
○ Easy dispensing and application
○ No residue, full rinsing
○ Thixotropic properties (non-flowing)

Areas of application
○ Conditioning of the surface for dentine and tooth enamel with composites and inlay/onlay

Clinical cases

Before application of Meta Etchant (×2000)

After application of Meta Etchant (×2000)

Components
3 g × 3 syringes, 20 tips

Composition
Phosphoric acid, H2O, xanthan gum

Shelf life
2 years from the date of manufacture

Meta P&Bond

5th Generation Bonding System

Benefits
○ Superior bonding strength
○ 5th Generation adhesive
○ One-step priming and bonding
○ Ethanol based adhesive
○ Wet bonding type

Areas of application
○ Bonding for direct composite
○ Bonding for porcelain, composite, metal repair, setting amalgam, post
○ Bonding for porcelain veneer
○ Bonding for amalgam and indirect bonding methods with Metacem adhesive resin cement

Physical properties
Dentine shear bonding strength: 10.75 MPa
Tooth enamel shear bonding strength: 30.76 MPa

Components
Meta P&Bond 5 g
10x micro-brushes

Composition
Bis-GMA, PMGDM, 2-hydroxyethyl methacrylate, ethyl alcohol

Shelf life
2 years from the date of manufacture
Benefits
- Low 1.6% shrinkage for superior marginal integrity, various shades
- Filled with 40 nano-sized filler for excellent polishability
- Optimal handling – excellent sculptability for restoring natural shape and function
- Non-slumping, non-sticky

Areas of application
- Class I, II, III, IV, V restorations
- Diastema closures
- Direct veneering
- Composite and porcelain repairs

Components
- Nexcomp kit:
  - 4 g × 7 syringes (A1, A2, A3, A3.5, B2, A2E, B2E)
  - Meta P&Bond 5 g
  - Meta Etchant 3 g

Composition
- Bis-GMA, UDMA, Bis-EMA
- Borosilicate glass

Shelf life
- 3 years from the date of manufacture

Physical and chemical properties
- Compressive strength (MPa)
  - Nexcomp Flow set:
    - 2 g × 5 syringes (A2, A3, A3.5, B2, B3), each with 20 disposable tips
  - Nexcomp Flow Refill:
    - 2 g × 2 syringes (A1, A2, A3, A3.5, A4, B1, B2, B3, OA2, OA3, C2, D2, WT, TL), each with 10 disposable tips

Composition
- Bis-GMA, UDMA, Bis-EMA TMPTMA
- Borosilicate glass

Shelf life
- 3 years from the date of manufacture
Restorative treatment

Metacem
Dual-cured Resin Cement

Benefits
- Easy to use for indirect cosmetic restorations
- High resistance to compressive force
- Provides dual-curing for heavily shaded, thick or opaque closures
- 5 shades correspond with shade guide
  - A1, A3, B2, TL (translucent white), OP (opaque)

Areas of application
- Crowns and bridges (ceramic, composites, porcelain)
- Inlay/onlay sealing
- Bonding for porcelain veneers

Components
Metacem set:
- 2 dual syringes (A3, transparent white, 9 g each)
- P&Bond 5 g
- 20 mixing tips
- 20 etchant disposable tips
- Spatula
- Mixing pad paper
- 10 adhesive brushes

Metacem Refill:
- 1 dual syringe (A1, A3, B2, transparent white, opaque, 9 g each)

Composition
Base - Bis-GMA, DHEPT, borosilicate glass
Catalyst - Bis-GMA, TEGDMA, borosilicate glass

Shelf life
2 years from the date of manufacture

MD-Temp Plus
Hydraulic temporary restoration

Benefits
- Simple application and removal
- Hermetic cavity sealing
- Excellent stability with suitable compressive strength

Areas of application
- Temporary cavity filling

Components
4x white or pink paste in a glass container (40 g, 30 g, 20 g)
Dimensions: 40 x 35 x 39 mm
Weight: 52.5 g, 42.5 g, 32.5 g

Composition
Copolymer
Zinc oxide
Calcium sulphate

Shelf life
3 years from the date of manufacture
**NexTemp HV/NexTemp LC**

**Light-curing temporary filling**

- **Benefits**:
  - High elasticity
  - Tightness for margin sealing
  - Easy application and removal
  - Excellent stability when set
  - Proper crush strength

- **Areas of application**:
  - Temporary treatment of the prepared cavity (1–6 days)
  - Temporary cavity filling

- **Application**:
  1. Preparation
  2. Cleaning and drying
  3. Application
  4. Light-curing
  5. Polishing
  6. Removal of surplus material

- **Components**:
  - NexTemp HV: 3 g × 3 syringes (TL, blue)
  - NexTemp LC: 2 g × 3 syringes, 10× disposable tips (TL, blue, yellow)

- **Shelf life**:
  - NexTemp HV: 2 years from the date of manufacture
  - NexTemp LC: 3 years from the date of manufacture

**NETC**

**Non-Eugenol Temporary Cement**

- **Benefits**:
  - Paste in a tube
  - Working time: 1.5 minutes
  - Setting time: 6 minutes
  - Particularly suitable for patients with sensitive reactions to eugenol

- **Areas of application**:
  - Temporary sealing of crowns and bridges

- **Components**:
  - Type of tube: Base 40 g, catalyst 14 g, mixing pad
  - Dual syringe design: 2 × 11 g each, 2 mixing tips each
  - 2 caps each, mixing pad

- **Shelf life**:
  - 2 years from the date of manufacture

**Physical and chemical properties**

- **Adhesive strength (MPa)**:
  - NETC: 2, A: 1.5, B: 1.0, C: 0.5

- **Compressive strength (MPa)**:
  - NETC: 10, A: 8, B: 6, C: 4

- **Film thickness (μm)**:
  - NETC: 25, A: 20, B: 15, C: 10
Impression material | MD-Flex

**Benefits**
- Impressions of crowns, bridges or partial dentures
- Accurate impression without bubbles because of hydrophilic property
- Gypsum model will be effectively reproduced without transformation due to an excellent reproducibility and volume stability
- Biocompatibility (ISO10993)
- Compatible with other polyvinyl siloxane impression materials
- Easy to mix by auto-mixing type

**Areas of application**
- Cavity impressions of veneers, inlay, onlay, crowns, bridges or partial dentures

**Specifications**

<table>
<thead>
<tr>
<th>Type</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Putty</td>
<td>Base 450 g, catalyst 450 g, 2 measuring spoons each</td>
</tr>
<tr>
<td>Heavy</td>
<td>2 x 50 ml cartridges, each with 6 Automix tips</td>
</tr>
<tr>
<td></td>
<td>Large pack 4 and 10 cartridges (without mixing tips)</td>
</tr>
<tr>
<td>Monophase</td>
<td>2 x 50 ml cartridges, 6 Automix tips, 6 intraoral tips, large pack 4 and 10 cartridges (without mixing tips, oral tips)</td>
</tr>
<tr>
<td>Light</td>
<td>2 x 50 ml cartridges, 6 Automix tips, 6 intraoral tips</td>
</tr>
<tr>
<td></td>
<td>Large pack 4 and 10 cartridges (without mixing tips, oral tips)</td>
</tr>
<tr>
<td>Shelf life</td>
<td>2 years from the date of manufacture</td>
</tr>
</tbody>
</table>

**Shelf life**
- 2 years from the date of manufacture

**Physical and chemical properties**

- Hardness (Shore A)
  - MD-Flex Putty
  - Express™ (3M ESPE)
  - Exafine™ (GC)
  - Aqua® (Denplo)
  - Virtual® (Ivoclar Vivadent)
  - Flexitime® (Heraeus)
  - Charmflex® (Denkist)

**Tensile strength**
- MD-Flex Light Body
  - Imprint 2™ (3M ESPE)
  - Flexitime® (Heraeus)
  - Virtual® (Ivoclar Vivadent)

**Distortion rate**
- MD-Flex Light Body
  - Imprint 2™ (3M ESPE)
  - Flexitime® (Heraeus)
  - Virtual® (Ivoclar Vivadent)

**Contact angle (hydrophilic property)**
- MD-Flex Light Body
  - Imprint 2™ (3M ESPE)
  - Flexitime® (Heraeus)
  - Virtual® (Ivoclar Vivadent)
Restorative treatment

Impression material | NexSil Bite

NexSil Bite
Bite registration

Benefits
- The fast-setting material offers rock-hard adjustment for excellent occlusal recordings
- Due to the high final hardness of 90 Shore A and the high fracture toughness, the material is easy to cut and grind
- Provides excellent results when recording images with intraoral scanners
- Biocompatibility (ISO 10993)
- Simple mixing thanks to automatic mixing mode

Areas of application
- Used to produce an occlusion in the mouth

Physical properties

<table>
<thead>
<tr>
<th>Physical properties</th>
<th>Working time (23°C)</th>
<th>Setting time (23°C)</th>
<th>Shore A</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 seconds</td>
<td>90 seconds</td>
<td>90</td>
<td></td>
</tr>
</tbody>
</table>

Components

- Cartridges 50ml x2

Shelf life

- 3 years from the date of manufacture

GL sponsoring

The Meta Biomed philosophy is not exclusively about delivering the highest possible product quality; we also aim to improve the quality of life for many people. We strive for success and wish to share this with others. And this is only possible thanks to your help. We would be delighted to provide you with details of how, together with us, you can support aid organisations or find ways for Meta Biomed to support your organisation. We are always open to new suggestions and ideas. We look forward to hearing from you!

Sponsorship

Meta Biomed has set up a sponsorship programme for children in need. As part of this programme, every member of the Meta Biomed family sponsors a child in need. Regular contact is maintained through letters, e-mails and pictures. Our responsibility towards these children goes hand in hand with our sense of duty vis-à-vis our company.

Non-profit organisations

Meta Biomed is proud to be able to promote and support its partners’ aid programmes. Together with Dr. Jenner and ADIZ-ONG from Guatemala we donated 10% of our profits from the Greater New York Dental Meeting for charitable work. And this is just the start. We are already looking forward to getting involved in more exciting projects in the future!

Donations

We are always on the look-out for projects and organisations worthy of support. And we are not just focused on monetary donations. For example, we provide our products free of charge to our friends and partners at the Medical Faculty of the University of California in San Diego. We also support the Memorial Health Foundation and the Anderson Cancer Institute. Do you also wish to be supported by Meta Biomed? – Please do not hesitate to get in touch!

www.meta-europe.com

Providing quality. Taking responsibility.
Bone graft

Safe and high-quality regeneration

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**DM Bone**

Silicon ion containing porous hydroxyapatite
(Si content: 0.6% by weight)

- Optimal balance HA and B–TCP with a ratio (%) of 60:40
- The silicon-ion technology accelerates bone regeneration and activates healing
- Excellent biocompatibility (no biological rejection, no disease transmission)
- Excellent osteoblast activity with a large surface: 72% porosity

**Benefits**

- Periodontal defects
- Intrabony defects
- Ridge augmentation
- Implant preparation/placement at extraction sites
- Sinus lift
- Cystic cavities

**Areas of application**

**Pack details (1 vial/box)**

<table>
<thead>
<tr>
<th>Size</th>
<th>0.3–0.5 mm</th>
<th>0.5–1.0 mm</th>
<th>1.0–2.0 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>0.25 g</td>
<td>0.25 g</td>
<td>0.25 g</td>
</tr>
</tbody>
</table>

---

**Patient case with implant**

- Case A: before
- Case B: before
- Case A: after
- Case B: after

---

Not available in Europe
Benefits
- Outstanding osteoconductivity
- Accelerates bone regeneration and activates healing
- Excellent biocompatibility (no biological rejection, no disease transmission)
- Precise and problem-free implantation
- Easy to use
- Porosity: 55–60%

Areas of application
- Periodontal defects
- Intrabony defects
- Ridge augmentation
- Implant preparation/placement at extraction sites
- Sinus lift
- Cystic cavities

Pack details – vials
<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.3–0.5 mm</td>
<td>0.25 g</td>
</tr>
<tr>
<td>0.5–1.0 mm</td>
<td>0.25 g</td>
</tr>
<tr>
<td>1.0–2.0 mm</td>
<td>0.25 g</td>
</tr>
<tr>
<td>2.0–4.0 mm</td>
<td>0.25 g</td>
</tr>
</tbody>
</table>

Pack details – syringes
<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.3–0.5 mm</td>
<td>1.0 cc</td>
</tr>
<tr>
<td>0.5–1.0 mm</td>
<td>1.0 cc</td>
</tr>
<tr>
<td>1.0–2.0 mm</td>
<td>1.0 cc</td>
</tr>
</tbody>
</table>

Sorbone chipform
Sorbone internal structure
Sorbone surface: Connected nanopores and micropores

GBR (flap opening)

X-ray image before the implant (left) and after the implant (right)

SorGuide
Absorbable periodontal regeneration induction membrane
In CE certification process

Benefits
Safety materials:
- Highly purified type-I collagen membrane derived from porcine tissue

Excellent Adhesion:
- Excellent adhesion to bone loss section with good flexibility

High porosity:
- Outstanding biocompatibility (no biological rejection, no disease transmission)

SorGuide™ = 70%
B product = 50%

Comparison – duration of biological degradation
<table>
<thead>
<tr>
<th>Brand</th>
<th>Duration of biological degradation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SorGuide™</td>
<td>3–5 months</td>
</tr>
<tr>
<td>B product</td>
<td>2–4 months</td>
</tr>
</tbody>
</table>

Clinical cases

Comparison – tensile strength

Comparison – duration of biological degradation

Bio-Gide

*Bio Guide is not a Meta Biomed brand*