



META BIOMED

Endodontics / Restorative / Bone Graft

<http://ShivEtalk.com>







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Endodontics

A-Z Endo Solution from Meta





Aurum Blue Triangle™

Controlled Memory File



Blue; the color of extreme elasticity & fracture resistance

Advantage



• Martensitic Alloy

Aurum Blue files are manufactured utilizing a unique process in which the crystallographic phase transition from austenite to martensite at room temperature in contrast to conventional NiTi files, making the files extremely flexible and fracture resistant



• Super Flexible Alloy

Significantly reduce the risk of ledging, transportation or perforation of a canal



• Pre-bendable

more easier access to a canal orifice

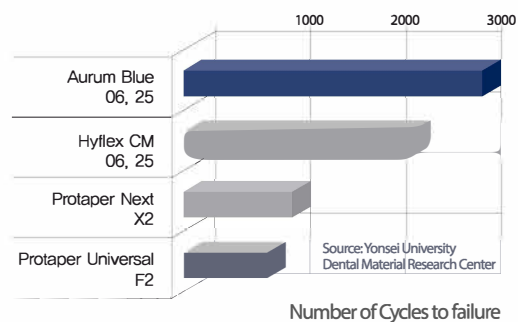


- Surface Treatment

Removing imperfection

Comparison

• Extremely resistant to fracture



• Aurum Blue



• Protaper Universal



Aurum G™

Glide Path File



13/.025 17/.025

Blue; the color of extreme elasticity & fracture resistance

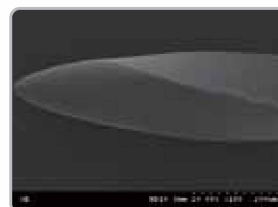
Advantage

- **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;

- **Surface Treatment**

Removing Imperfection



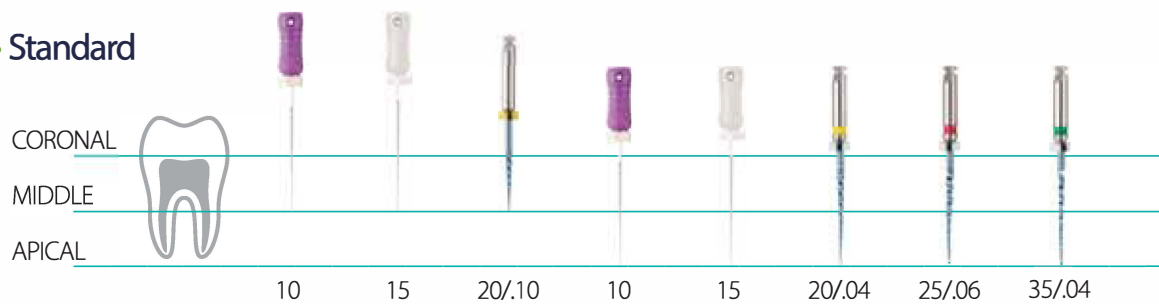
Item list

Aurum Blue Triangle 4pcs/pack						
Contents	17mm		21mm		25mm	31mm
Sequence Pack (20/.10, 20/.04, 25/.06, 35/.04)			O		O	O
20/.10	O					
20/.04			O		O	O
25/.06			O		O	O
35/.04			O		O	O
Aurum G, 6pcs Refills, 6pcs/pack						
Contents			21mm		25mm	31mm
Assort Pack (13/.025 3pcs, 17/.025 3pcs)			O		O	O
13/.025			O		O	O
17/.025			O		O	O



Aurum Blue Triangle, Aurum G Protocol

• Standard



• Complex



All Aurum Blue files can be used at 500RPM and at a torque of 2.0 Ncm (20 mNm)
Aurum G (RPM: 300, Torque: 1.5Ncm)

• Post Op



• Regeneration after heating-up





Aurum Pro™

Familiar Sequence, Different Flexibility



UNMATCHED FLEXIBILITY

Heat-treated NiTi gives amazing flexibility, inhibiting transportation of root canal

SX, S1,
S2, F1,
F2, F3

THE SYSTEM YOU TRUST
The most commonly used rotary file system



INCREDIBLE STRENGTH

20% Resistant to Cyclic Fatigue than Protaper Gold 240% Resistant than Protaper Universal

Amazing Strength of Aurum Pro

Number of cycle for fracture, Internal testing data

Aurum Pro – Meta Biomed



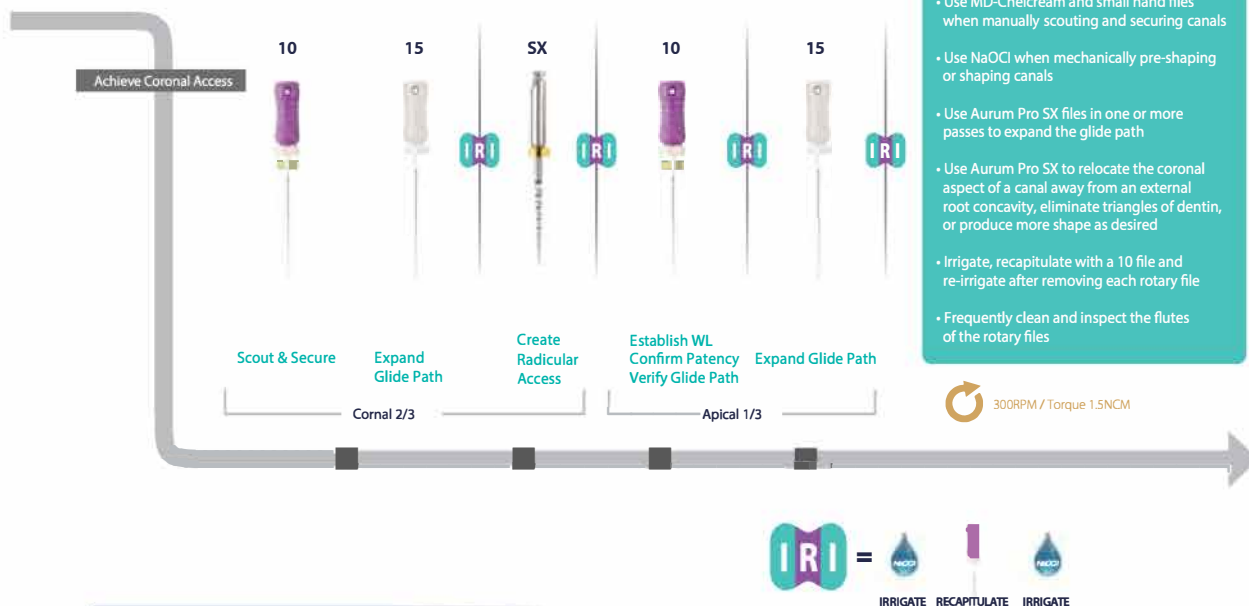
Protaper Universal – Dentsply



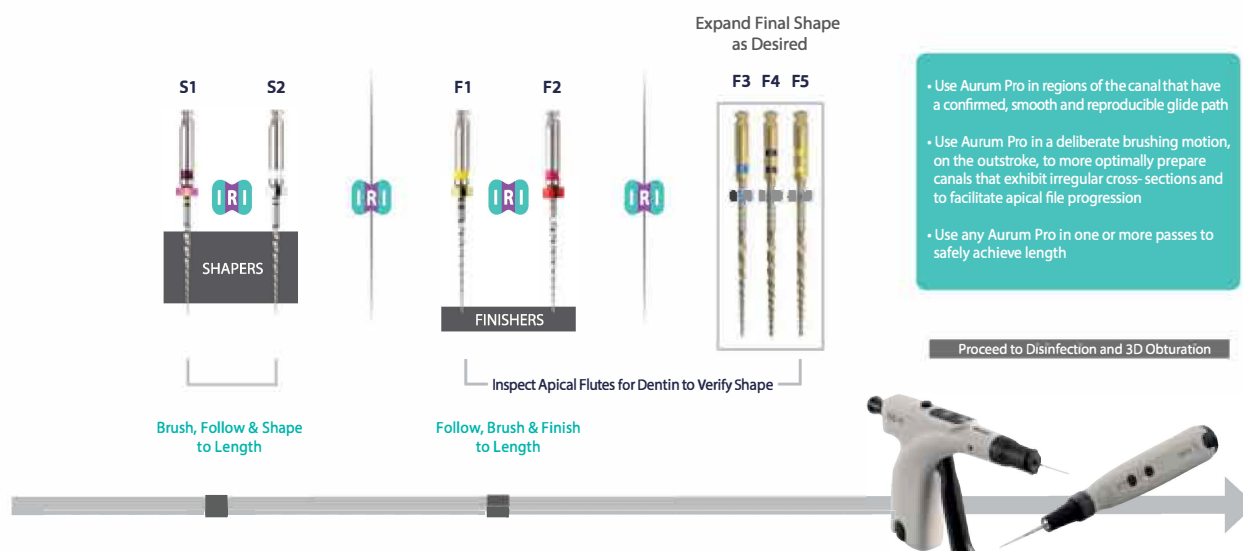


Aurum Pro Protocol

- Access & Glide path



- SHAPING & FINISHING SEQUENCE



300RPM / Torque 1.5NCM

EQ-V

The Best Choice for Continuous Wave Obturation



Gutta Percha Points

.02/.04/.06/.08/Pro Taper Gutta Percha Points



Advantage

- Long Shelf Life 4yrs
- Stiff and Flexible
- Excellent Radiopacity
- Various Size, Taper, Package

Length Marked



Size & Specification

- 02 Taper: 10~140
- 04, 06 Taper: 15~80
- 08 Taper: 15~40
- Non Standard
 - Non-Standard: XF, FF, MF, F, FM, M, ML, L, XL
 - Japanese Type: JF-S, JF-M, JF-L, JS, JM, JL, JL-S, JL-M, JL-L
 - De Trey Type: XX-F, X-F, Fine, Medium
 - Protaper Size(F1~F5)

Specification

Size	Taper(points)				Packing Type
	02(120)	04(60)	06(60)	08(60)	
10					
15					
20					
25					
30					
35					
40					
45					
50					
55					
60					
70					
80					
90					
100					
110					
120					
130					
140					

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Absorbent Paper Points

.02/.04/.06/.08/Pro Taper Paper Points



Advantage

- Highly Absorbent
- Sterilized Individual Packages
- Variety Sizes and Package Available
- 5yrs Shelf life

Length Marked

Accurate insertion of the working length



Size & Specification

- 02 Taper: 15~140
- 04, 06, 08 Taper: 15~80
- 08 Taper: 15~40
- Non Standard
 - Non-Standard: XX-Fine, X-Fine, Fine, Medium, Coarse, X-Coarse
 - Protaper Size(F1~F5)

Specification

Size	Taper(points)				Packing Type
	02(120)	04(60)	06(60)	08(60)	
10					
15					
20					
25					
30					
35					
40					
45					
50					
55					
60					
70					
80					
90					
100					
110					
120					
130					
140					

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Packing Type (Private Labels are available in all packages)

6 Vial Packing (Square)



- Code : P31
- Regular Packing Points :
 - GP: 60/120 Points - PP: 60/200 Points
- Dimension : 84×51×16(mm)

6 Vial Packing (Round)



- Code : P31
- Regular Packing Points :
 - GP: 60/120 Points - PP: 60/200 Points
- Dimension : 84×51×16(mm)

Sliding Type Dispenser



- Code : P71
- Regular Packing Points :
 - GP: 60/120 Points - PP: 60/200 Points
- Dimension : 70×45×12(mm)

4 Compartment Dispenser



- Code : P51
- Regular Packing Points :
 - GP: 60/120 Points - PP: 60/200 Points
- Dimension : 77×45×13(mm)

Endo Organizer



- Code : P11
- Spill Proof 12 Compartments
- Size : ISO 15 - 80
- Color Coded Available
- Regular Packing Points :
 - GP: 240 Points - PP: 400 Points

Blister Cell



- Code : P61
- Regular Packing Points : 180 / 200 Points
- Dimension : 163×54×11(mm)
- Available for PP only



Metapex

Calcium Hydroxide with Iodoform



Applications

- Weeping canal
- Formation of a hard tissue barrier (Apexification)
- Root canal filling for deciduous teeth
- Internal & external root resorption

Composition

- Calcium Hydroxide, Iodoform, Silicon oil

Advantages

- Excellent antibacterial effect and radiopacity
- Premixed paste
- Syringe type for easy delivery of the paste into the canal
- Disposable tips for prevention of cross-contamination

Components

- 2.2g paste in a syringe (2 syringe packing available)
- Disposable tips
- One ring rotator for direction control of the tip
- Dimension : 228x61x22(mm)
- Weight : 46g

Shelf life

- Two years from the production date.

Clinical Cases

Apexification



Pulp necrosis on #21 of 8 year-old boy took place by trauma.



About 1 year after Metapex treatment

Root Resorption



Internal resorption on disto-lingual root



Root perforation by inflammatory resorption



Metapaste

Calcium Hydroxide with Barium Sulfate



Applications

- Weeping canal
- Formation of a hard tissue barrier (Apexification)
- Temporary root canal filling
- Internal & external root resorption

Composition

- Calcium Hydroxide, Barium Sulfate, Poly Propylene Glycol

Advantages

- Easy cleaning and removing with good water solubility
- Excellent antibacterial effect and radiopacity
- Premixed paste
- Syringe type for easy delivery of the paste into the canal
- Disposable tips for prevention of cross-contamination

Components

- 2.2g paste in a syringe (2 syringe packing available)
- Disposable tips
- One ring rotator for direction control of the tip
- Dimension : 228×61×22(mm)
- Weight : 46g

Shelf life

- Two years from the production date.

Clinical Cases

Apexification



Before treatment

- Large apical foramen with an incomplete apex
- Note the root resorption on the lateral surface



Metapaste filling



Three months later

- after removal of the paste, it shows a formation of the apical barrier



Six months later

- Excellent healing without further root resorption



To locate real apical foramen

- About 1-2 months after, X-ray shows exactly where the real apical foramen is.



Root Canal Sealer / ADSEAL

ADSEAL™

Resin Based Sealer



Applications

- Permanent root canal sealing
- Thermal insulation

Composition

- Base-Epoxy oligomer resin, Ethylene glycol salicylate, Bismuth subcarbonate
- Catalyst-poly butanediol aminobenzoate, Calcium Phosphate, Bismuth subcarbonate

Advantages

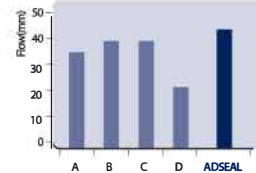
- Excellent biocompatibility
- Easy to mix paste-paste
- Hermetic sealing ability
- Nonstaining to the teeth
- Insoluble in tissue fluids
- Good radiopacity

Components

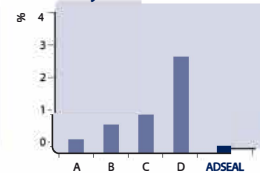
- 13.5g dual syringe
Base 9g (Epoxy resin, Calcium phosphate)
Catalyst 4.5g (Amines, Bismuth subcarbonate)
- Spatula
- Mixing Plate
- Dimension : 55x180x40(mm)
- Weight : 98g

Physical and Chemical Properties

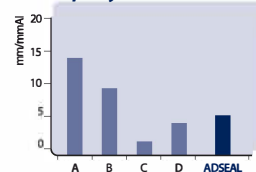
Flow



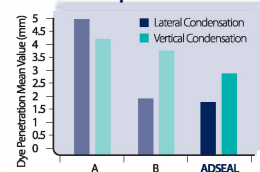
Solubility



Radiopacity



Material Properties



- Working Time : 35 Minutes at 23°C (73°F)
- Setting Time: 45 Minutes at 37°C (99°F)
- Film Thickness: 3.3 μ m

Shelf life

- Two years from the production date.



Z·O·B Seal

Zinc Oxide Based Root Canal Sealer



Applications

- Permanent root canal sealing

Composition

- Powder-Zinc Oxide, Rosin, Bismuth subcarbonate
- Liquid-Eugenol, Olive oil

Advantages

- Good adhesion to tooth material
- Good mixing consistency
- Excellent radiopacity
- Excellent anti-bacterial effect

Components

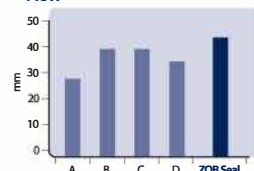
- Powder 15g (Zinc Oxide)
- Liquid 7ml (Eugenol)
- Spoon
- Mixing Pad
- Dimension : 63×81×70(mm)
- Weight: 84g

Shelf life

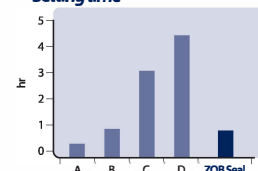
- Two years from the production date.

Physical and Chemical Properties

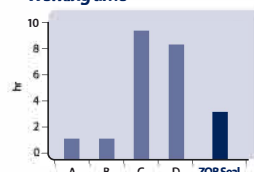
Flow



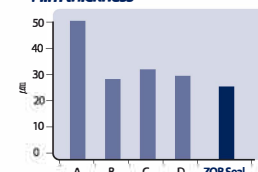
Setting time



Working time



Film thickness



Radiopacity	5.18mm/mmAl
Solubility	0 %

Test Method : ISO 6876 - Dental root canal sealing materials



MD-ChelCream

Viscous Chelator / EDTA Gel



Applications

- Root canal preparation with files and reamers
- Presence of calcifications in the canal
- Narrow canals in posterior teeth
- Smear layer removal

Composition

- EDTA, PEG

Advantages

- Removal of inorganic substances by chelation (EDTA- Ca^{2+})
- Easier filing with lubricating action
- Produces the cleanest canal wall after smear layer removal

Components

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

Shelf life

- Two years from the production date.



MD-Cleanser™

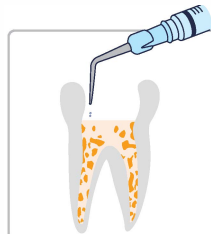
Smear Layer Remover / EDTA Solution



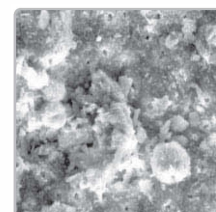
Components

- MD-Cleanser : 100 ml
- 1cc syringe
- Disposable tips
- Dimension : 50 x 115 x 55 mm
- Weight : 138g

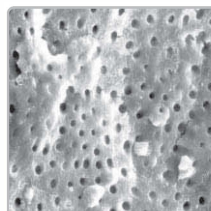
Clinical Case



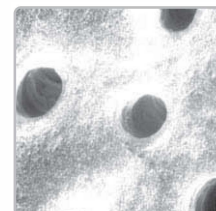
Application Method



After root canal preparation



After MD-Cleanser application (x1000)



After MD-Cleanser application (x7000)

Applications

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

Composition

- EDTA, Water, Ammonia water

Advantages

- Removal of inorganic substances by chelation (EDTA-Ca²⁺)
- Easier instrumentation by softening dentin canal wall
- Produces the cleanest dentinal walls after smear layer removal

Shelf life

- Two years from the production date.



Memo





Endodontics

Meta Biomed Endodontic Equipment





i-Root

Electronic Apex Locator



- i-ROOT is the 5th generation Apex Locator by dual frequency type. i-Root can measure the apical constriction exactly without mismeasurement.

	Battery	Monitor connection
i-Root S	Rechagable Battery	O
i-Root A	Rechagable Battery	X
i-Root 100	A2 Battery(3ea)	X

Advantages

- Best accuracy in any root canal condition (Dry, Bleeding, Wet, Saline, EDTA, NaOCl or Chlorhexidine etc...)
- Simultaneous visual and sound measurement
- Color display
- Stylish and ergonomic design
- Simple and easy to use
- Self test for the system checking
- Auto power off function
- Stable and durable in wide range of condition
- Computer monitoring & Patient Management

Specifications

Dimensions	W110 × D100 × H117mm
Screen	W79 × D70mm
Battery	Lithium-Ion, DC8.2V 2200mAh
Continuous use	60 hours
AC-Adapter	AC 100 ~ 240V, (50 ~ 60Hz)
Weight	390g

Components

- 1 i-ROOT main unit
- 1 Probe cord
- 1 File holder A
- 2 File holder B
- 5 Lip clips



ROOTOR

Electronic Apex Locator



- 2.5D Patient Management Software, Fast, Reliable, Precise measurement results reduces need for X-Ray maximum portability for easy and quick working length gauging.
- Accuracy guaranteed by the latest multiple frequency technology meets hand-held size for the best efficiency of your endodontic treatment.

Advantages

- Accuracy in any root canal conditions (Dry, bleeding, wet, saline, EDTA, NaOCl, Chlorhexidine and etc)
- Color display
- Stylish and ergonomic design
- Auto power-off for saving battery life
- Stability and measurement reliability

Specifications

Rated voltage	DC 4.5 V (Alkaline battery size AAA DC1.5V x 3ea)
Input current	less than DC 60mA
Power consumption	less than 0.27 VA
Patient auxiliary current	less than AC 10uA
Oscillation frequency	500Hz±0.2Hz, 5kHz±0.002kHz
Protection type and level against electric shock	inner Power Type Equipment, Type B Equipment

Components

- 1 Rotor
- 1 Probe cord
- 5 Lip clip
- 2 File holder B
- 1 Holder



ES-100

Endo Motor



Advantages

- Auto reverse on / off functions
- Torque setting : 0.6~6.4Ncm
(Changeable by Gear Ratio)
- Slim & compact handpiece

Specifications

Contra Angle

Dimension	ø16.7 x L63mm
Weight	34.8g
Rated Input	16 : 1

Motor

Dimension	ø20 x L108mm
Weight	34.8g
Rated Input	13,000 RPM



EQ-V

Cordless Root Canal Obturator



Unique Structure of EQ-V Fill



- The Best Choice for Continuous Wave Obturation

EQ-V Fill Kit (Disposable)

EQ-V Pack Kit

Advantages

- Chemically Resistant & Ergonomically Designed Body (remain intact after 1 week of immersion in cavicide)
- Durable & Flexible GP Cartridge (Both Disposable & Refill Cartridge is available)
- Easy maintenance due to unique structure
- Outstanding Heating Performance (Fill: 35Sec to reach 200C, Pack: Instantly reaches set temperature)

Specifications

Fill

Weight	177g(Including Battery)
Operating Voltage	3.7V
Setting Temperature	160 or 200°C
Auto Shutoff	5 minutes

Pack

Weight	90g(Including Battery)
Operating Voltage	3.7V
Setting Temperature	180 or 230°C
Auto Shutoff	5 minutes

Type

Type	Contents													
	Fill Unit (Refill Type)	Fill Unit (Disposable Type)	Pack Unit	Battery	Single Charger	Dual Charger	Pack Tip (F/FM) (1pack)	Refill Cartridge (25G) (6pcs/1pack)	Disposable Cartridge (25G) (10pcs/1pack)	Bending Tool	Cleaning Tool	AC Adapter	Power Cord	GP bar (100pcs/Bottle)
EQ-V Full Kit (Refill)	○		○	○		○	○	○		○	○	○	○	○
EQ-V Full Kit (Disposable)		○	○	○		○	○		○	○	○	○	○	
EQ-V Fill Kit (Refill)	○			○	○			○		○	○	○	○	○
EQ-V Fill Kit (Disposable)		○		○	○				○	○	○	○	○	
EQ-V Pack Kit			○	○	○		○					○	○	



GENESYS

Motorized cordless Obturator



Advantages

- Convenient cordless device using battery
- Cordless & electric motorized filling system
- New cartridge needle to refill GP pellet
- 360° rotation at both cartridge needle & pack tip
- High capacity lithium-ion battery
- Simple, easy & quick to use

Specifications

Pack

Dimension	153mm x 27mm x 25mm (W x L x H)
Weight	90g (Including battery)
Operating Voltage	3.7V
Range of setting temperature	140 ~ 400°C
Auto off	5min

Battery

- Samsung SDI Co., Ltd. 1CLR18650-26C++ 3.7V 2600mAh,
- Lithium-ion battery

Charger

- Input : 9.0V
- Single charger size : 165mm x 80mm x 47mm (W x L x H)
- Twin charger size : 230mm x 80mm x 47mm (W x L x H)

Fill

Dimension	223mm x 27mm x 26mm (W x L x H)
Weight	177g (Including battery)
Operating Voltage	3.7V
Range of setting temperature	140 ~ 200°C
Auto off	5min

Adapter

- Model : Bridge Power JMW118KA0900F02
- Input : 100-240V, 50/60 Hz
- Output : 9.0V, 2.0 A
- Size : 84mm x 46mm x 32mm



Downpack with Pack



1. Fit a master apical cone that matches the taper of the canal being obturated and check it makes a tug back.



2. Marked length select a Pack Tip and plugger 4-6mm short of working length.



3. Cement master cone to 3mm, insert it to root canal and cut the excess over the orifice using the Pack Tip with gutta percha to 4-6mm short of the working length.



4. Harden the melted gutta percha with pre-selected plugger. Now apical area & accessory canal are perfectly obturated.

Backfill with Fill



5. After inserting the Fill Cartridge into the Root Canal, wait for 5 seconds after inserting Gun Needle to root canal.



6. Pull the trigger slowly and fill the gutta percha up to root canal. Fill Cartridge would be pushed by filled gutta percha naturally.

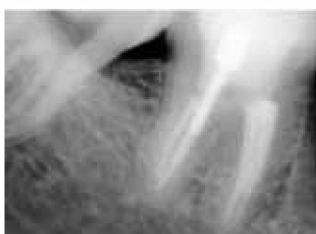


7. Harden the heated gutta percha with bigger plugger.



8. Now, the entire root canal is fully obturated.

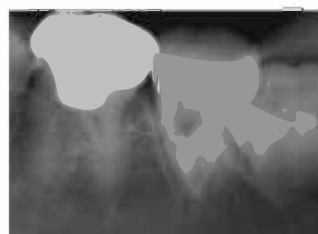
Clinical Cases



Mandibular right 1st molar, mesial 4 orifices



Mandibular left 1st molar, S-curved distolingual canal



Mandibular left 2nd molar, C-shape canal

Courtesy of PS Kim, DDS, MSD, Ph D.



EMS-200

All-in-one Endo System



Endo Motor Features

- Auto-reverse mode
- Torque control from 0.6 to 6.4Ncm
- Long shelf life with swiss motor
- 10 Memory saving function

Backfill Feature

- Easy install for fill needle
- 360° rotating cartridge needle
- Fully motorized obturation for smooth filling
- Long shelf-life with swiss motor
- Comfortable grip with ergonomic design
- Auto reverse function when cartridge is empty
- Automatic off after 5 minutes

Apex Locator Features

- Best accuracy in any root canal
- Self test for system failure
- Simple, easy to use
- Color display

Down Pack Feature

- 360° rotating for pack tip
- Outstanding heating performance (Max. 400 °C)
- Comfortable grip
- Hold switch for safety
- Temperature range (140~400 °C) displayed in LED window
- Automatic off after 5 minutes

Type per customer's request





Restorative

Meta Biomed Restorative solution





Biner LC

Light curing type cavity liner



Applications

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

Composition

- Hydroxy calcium phosphate, UDMA, Photoinitiator
- Barium aluminium silicate

Advantages

- Excellent biocompatibility with dentin and pulp
- Light curing type cavity liner, cure extremely hard
- Chemically bonds to adhesives and composites
- Insoluble in water and oral fluids
- Radiopacity
- Flow-on-demand handling and easy dispensing
- Heating Barrier

Physical properties

Flexural strength	More than 100 MPa
Sensitivity to ambient light	Homogeneous for 60s
Linear Expansion	2~3 %
Radiopacity	Yes
Depth of Cure (40 sec.)	2mm

Components

- Biner LC 2g X 2 Syringes
- 10ea disposable tips

Shelf life

- Three years from the production date.



Meta Etchant

37% Phosphoric Acid



Applications

- Conditioning of surface for dentine and enamel with composite and inlay / onlay

Composition

- Phosphoric acid, H₂O, Xanthan gum

Advantages

- Polymer thickened gel
- Easy dispensing and application
- No residue, rinse out completely
- Thixotropic characteristics(not runny)

Components

- 3g X 3Syringes, 20 tips

Shelf life

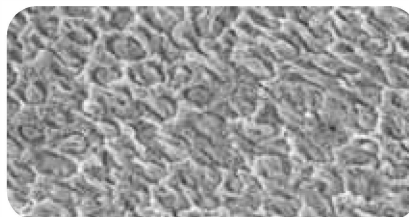
- Two years from the production date.

Clinical Case

Enamel SEM



Before Meta Etchant application(x2000)



After Meta Etchant application(x2000)



Meta P&Bond

5th Generation Bonding System



Applications

- Bonding for direct composite
- Bonding for porcelain, composite, metal repair, set amalgam, post
- Bonding for porcelain veneer
- Bonding for amalgam and indirect bonding procedures with Metacem adhesive resin cement

Composition

- Bis-Gma, PMGDM, 2-Hydroxyethylmethacrylate, Ethyl alcohol

Advantages

- Superior bonding strength
- 5th Generations Adhesive
- One step priming and bonding
- Ethanol base adhesive
- Wet bonding type

Physical Properties

- Dentin shear bonding strength 10.75MPa
- Enamel shear bonding strength 30.76MPa

Components

- Meta P&Bond 5g
- Micro brush 10EA

Shelf life

- Two years from the production date.



Nexcomp

Nano Hybrid Composite Resin



Unidose Type is Available

	Nexcomp
- Principle organic component of polymer base	Bis-GMA, Bis-EMA, Urethane dimethacrylate, Triethylene glycol dimethacrylate
- Range of dimensions of inorganic filler particles	0.04 to 0.7 μm
percentage by volume of total inorganic fillers	54 vol.%
Recommended external energy source	Specification required of Light curing device: usual dental halogen/LED lamps with light intensity of more than 400mW/cm ² and wavelength range of 430~480nm

Applications

- Class I , II ,III,IV , V restorations
- Diastema closures
- Direct veneers
- Composite and porcelain repairs

Composition

- Bis-Gma, UDMA, Bis-Ema
- Barium aluminium boro silicate

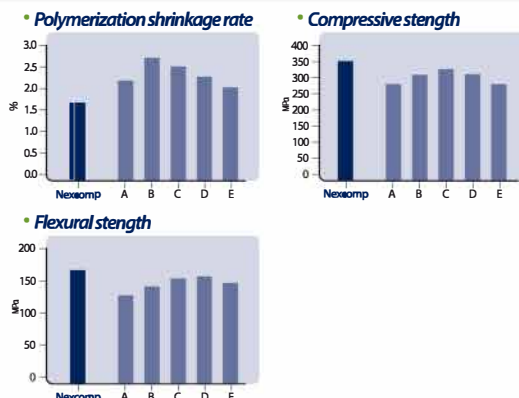
Advantages

- Low 1.6% shrinkage for superior marginal integrity Various shade
- Filled with 40 nano sized filler for excellent polishability
- Optimum handling - Excellent Sculptability for restoring natural shape and function.
- Non-Slumping. Non-Sticky

Components

- Nexcomp Kit
 - 4g x 7 Syringe (A1, A2, A3, A3.5, B2, A2E, B2E)
 - Meta P&Bond 5g
 - Meta Etchant 3g
- Nexcomp Refill
 - 4g x 1 Syringe (A2E, B2E, A1, A2, A3, A3.5, A4, B1, B2, B3, C2, C3, D2, D3, TL, WT, OP, OA2, OA3)g

Physical and Chemical Properties



Clinical Cases

Before



After



Shelf life

- Three years from the production date.



Nexcomp Flow

Nano Hybrid Flowable Composite Resin



Nexcomp Flow	
- Principle organic component of polymer base	Bis-GMA, Bis-EMA, Urethane dimethacrylate, Triethylene glycol dimethacrylate
- Range of dimensions of inorganic filler particles	0.04 to 0.7 μm
percentage by volume of total inorganic fillers	37 vol%
Recommended external energy source	Specification required of Light curing device: usual dental halogen/LED lamps with light intensity of more than 400mW/cm ² and wavelength range of 430~480nm

Applications

- Restoration of invasive cavity
- Pits and fissure sealing
- Base and Liner for direct restoration
- Repair acrylic temporary materials
- Repair of esthetic indirect restorations

Composition

- Bis-Gma, UDMA, Bis-Ema TMPTMA
- Barium aluminium boro silicate

Advantages

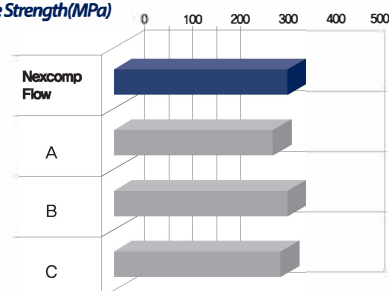
- Low viscosity, light-cured, radiopaque flowable composite resin for minimally invasive cavity preparation.
 - Filled with 40nano sized filler for excellent polishability
 - Flow on demand handling
 - Excellent Radiopacity
 - Available in 14 shades including opaque and translucent
 - No slumping and running

Components

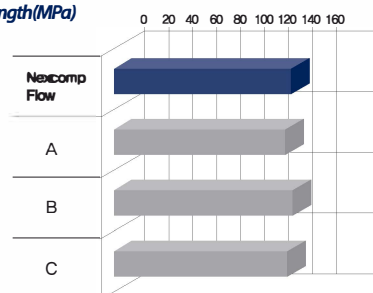
- Nexcomp Flow set
 - 2g X 5 syringes(A2, A3, A3.5, B2, B3), 20ea disposable tip
- Nexcomp Flow set
 - 2g X 2 syringes(A1, A2, A3, A3.5, A4,B1, B2, B3, OA2, OA3, C2, D2, WT, TL), 10ea disposable tip

Physical and Chemical Properties

• Compressive Strength(MPa)



• Flexural Strength(MPa)



Shelf life

- Three years from the production date.



NexPost

Fiber post



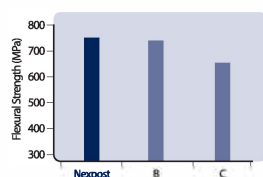
Advantages

- Radiopaque
- Translucent
- Optimal flexural strength(close to dentin)
- Excellent light translucency for efficient light cure deep into the root canal

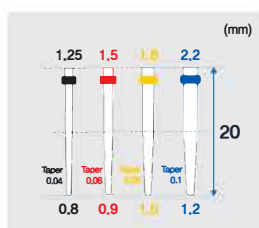
Composition

- Glass Fiber
- Bis-GMA based composite resin

Strength test



Sizes



Components

- NexPost Kit (Post x 20, Drill x 5)
- NexPost Refill (Post x 5)
- NexPost Drill Refill (Drill x 1)

Physical and Chemical Properties



Light Transmission



Radiopacity

Scanning Electron Microscope



- Glass fiber
- Composite resin matrix

Shelf life

- Three years from the production date.



NexCore™

Dual-cured core build-up Material



Applications

- Post adhesions and core build-up in restorations

Advantages

- Suitable viscosity and flow for post cementation and core build-up
- Dual curing: Light-curing and self-curing are possible so there is no need to worry about the polymerization failure of resin
- Biocompatibility (ISO10993)
- Easy to mix by auto-mixing type, Direct injection: Intraoral-Tip, Endo-Tip
- Radiopaque
- 3 Shade
(Tooth, White: Ceramic restoration Blue: Metal restoration)
- Cuttability likes dentin
(Flexural modulus: NexCore 14.2GPa)
- Three years from the production date

Components

- NexCore Cartridge 50g paste 1ea, Automix-tip 30ea, Intraoral-tip 30ea
- NexCore Cartridge Refill 50g paste 1ea (Shade: Tooth, White, Blue)
- NexCore Dual Syringe 9g paste 2ea, Automix-tip 20ea, Intraoral-tip 10ea, Endo-tip 10ea
- NexCore Dual Syringe Refill 9g paste 1ea (Shade: Tooth, White, Blue)

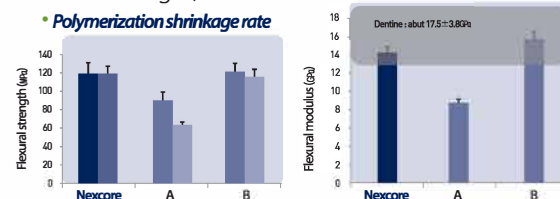
Physical Properties

- Composition
Barium glass, Ytterbium trifluoride, fumed silica in a Bis-GMA based matrix of dental resins
- Physical Properties

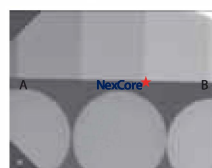
Working time	1:50 ~ 2:20 min
Setting time	4:00 ~ 5:00 min (Self-cure) 20 ~ 40 sec (Light-cure)
Flexural strength (light curing)	115.52 MPa
Water Sorption, Solubility	16.5/ 2.3 µg/mm ³
Radio-opacity	Optical density was equivalent with optical density at 4.2mm aluminum step wedge
Shade and color stability	No change in color and identical to the shade guide.

* Tested in accordance with ISO 4049

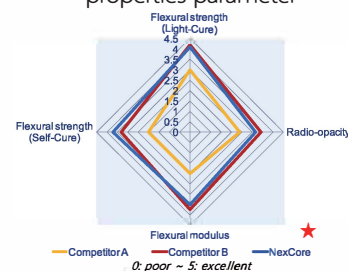
- Flexural strength, modulus



- Radio-opacity



- Compilation of physical properties parameter





Metacem

Dual-Cured Resin Cement



Applications

- Crowns & Bridges (ceramic, composite, porcelain)
- Inlay/Onlay cementation
- Bonding for porcelain veneers

Composition

- Base-Bis-Gma, TEGDMA, Barium aluminium boro silicate
- Catalyst-Bis-Gma, TEGDMA, Barium aluminium boro silicate

Advantages

- Easy to use for cosmetic indirect restorations.
- Provides high resistance to compressive force.
- Provides a dual-cure for highly shaded, thick or opaque cementation.
- 5 shades correspond with shade guide.
[A1, A3, B2, TL(Translucent white), OP(Opaque)]

Components

1. Metacem set

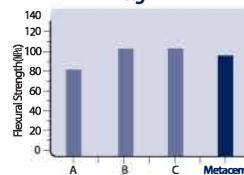
- 2 Dual syringe(A3, Translucent white shade, 9g/ea)
- P&Bond 5g
- 20 Mixing tips
- Spatula
- 10 Adhesive brush
- Etchant 3g
- 20 Etchant disposable tips
- Mixing pad paper

2. Metacem Refill

- 1 Dual syringe(A1, A3, B2, Translucent white, Opaque, 9g/ea)

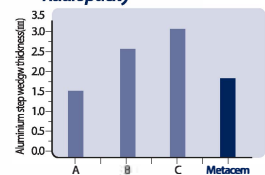
Physical and Chemical Properties

• Flexural Strength



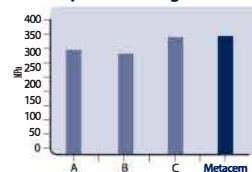
Working time 2 min
Setting time 5 min
Flexural strength 99 MPa
Radiopacity 2.33mm Al/mm

• Radiopacity



Film thickness <21 µm
Water absorption 29.3 µg/mm²
Water solubility 2.3 µg/mm²

• Compressive Strength



Shelf life

- Two years from the production date



MD-Temp Plus

Hydraulic Temporary Restorative



Applications

- Temporary cavity filling

Composition

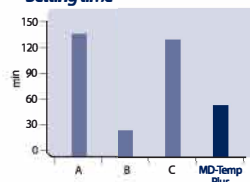
- Vinyl Chloride Vinyl Acetate Copolymer
- Bis(2-ethylhexyl) Adipate
- Zinc oxide
- Calcium sulfate
- Menthol oil
- D&C Red6

Advantages

- Easy application and removal
- Hermetic seals the cavity
- Excellent stability when set
- Proper crush strength

Physical and Chemical Properties

Setting time



Components

- 4 White or Pink paste in a jar (40g, 30g, 20g)
- Dimension : 40 x 35 x 39 (mm)
- Weight : 52.5g, 42.5g, 32.5g

Shelf life

- Three years from the production date



NexTemp HV / NexTemp LC

A light-cured temporary filling materials



Applications

- Temporary restoration of prepared cavity(1~6days)
- Temporary filling sealing of cavities

Component

- NexTemp HV : 3.0g Syringe x 3ea
- NexTemp LC : Syringe 2.0g paste 3ea, Disposable Tip 10ea

Advantages

- High elasticity
- Easy application
- Tightness for margin sealing
- Easy removal

Shade

- NexTemp HV : TL, Blue
- NexTemp LC : TL, Blue, Yellow

How to use



Shelf life

- Nextemp HV : Two years from the production date
- Nextemp LC : Three years from the production date



NETC

Non-Eugenol Temporary Cement



Applications

- Temporary cementation of crown&bridges

Composition

- Base-Zinc Oxide
- Catalyst-Rosin, Nonanoic acid

Advantages

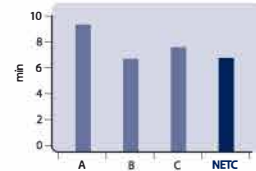
- Paste-paste tube type
- Working time : 1.5 min
- Setting time : 6min
- Especially suitable for patients who are sensitive to eugenol.

Components

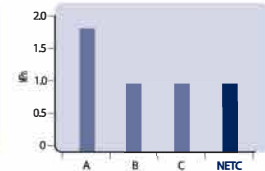
- Tube Type : Base 40g, Catalyst 14g, Mixing Pad
- Dual Syringe Type : 11g x 2ea, Mixing tip x 2ea, Cap x 2ea, Mixing Pad

Physical and Chemical Properties

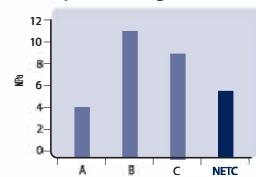
• Setting time



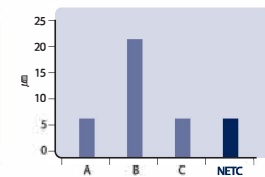
• Adhesive strength



• Compressive strength



• Film thickness



- NETC complies with the requirements of ISO 3107 (Type I , Class 2B)

Shelf life

- Two years from the production date.



MD-flex™

Polyvinylsiloxane Impression Material



Applications

- Cavity impression of veneer, inlay, onlay
- Impression of crown or bridge, partial denture

Shelf Life

- Two years from the production date

Advantages

- Impression of crown or bridge, partial denture.
- 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)
- This product is compatible with other Polyvinylsiloxane Impression Materials.
- Easy to mix by auto-mixing type.

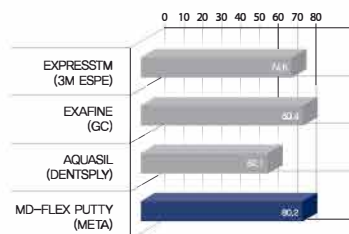
Components

Type	Contents
Putty	Base 450g, Catalyst 450g Measuring spoon 2ea
Heavy	50ml Cartridge x 2ea, Automix tip 6ea
	Bulk Package 4 and 10 Cartridge(without mixing tips)
Regular	50ml Cartridge x 2ea, Automix tip 6ea, Intra oral tip 6ea
	Bulk Package 4 and 10 Cartridge(without mixing tips, oral tips)
Light	50ml Cartridge x 2ea, Automix tip 6ea, Intra oral tip 6ea
	Bulk Package 4 and 10 Cartridge(without mixing tips, oral tips)

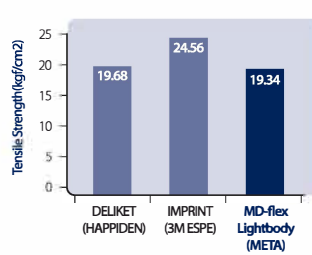


Physical Property

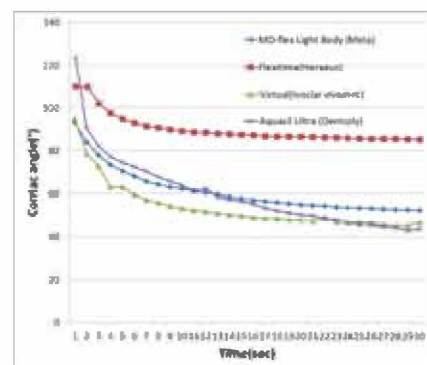
• Shore A Hardness (Putty)



• Tensile Strength(Light body)



• Contact Angle(Light Body) Hydrophilic Characteristic



Working/Setting Time

	Working time(23°C)	Setting Time(37°C)
Putty	60 Sec	4 Min
Heavy	90 Sec	4 Min
Regular	90 Sec	4 Min
Light	90 Sec	4 Min



Nexsil^{Bite}

Bite Registration



Advantages

- Fast setting material offers a rock hard set creating excellent occlusal records
- Easy to trim and grind due to the material's high final hardness of 90 Shore-A and high fracture toughness
- Delivers excellent results when capturing images with intra-oral scanning devices
- Biocompatibility (ISO 10993)
- Easy to mix by auto-mixing type

Shelf life

- Three years from the production date

Applications

- Used to create occlusal in the mouth

Physical Properties

Work time(23°C)	Set time(23°C)	Shore A
40 seconds	90 seconds	90

Components

- Cartridges 50 ml x 2



Nexsil^{Soft}

Transparent Silicone



Advantages

- Light cured after transparent silicone material
- Excellent elastic recovery and tear strength after hardening Easy to remove
- Accurate modeling without bubbles on the surface

Applications

- Confirmation of occlusal status
- Transfer key for adhesion of calibration bracket
- Matrix for light curing

Physical Properties

Work time(23°C)	Set time(23°C)	Shore A
Within 45seconds	5 min	54

Components

- Cartridges 50 ml x 2

Shelf life

- Three years from the production date



Bone

Meta Biomed Bone Graft





BoneMedik- DM Bone

Silicon Ion Containing 60% HA, 40% β -TCP



Applications

- Periodontal defects
- Intrabony defects
- Ridge augmentation
- Extraction sites(Implant preparation/placement)
- Sinus lift
- Cystic cavities

Advantages

- Silicon ion containing porous Hydroxyapatite (Si-Content:Avg.0.6 wt%)
- Optimum balance between HA and β -TCP in the ratio(%), 60:40
- Silicon ion technology speeds up the Bone Regeneration & Heal Activation
- Outstanding Biocompatibility(No Biological Rejection, No Disease Transmission)
- Excellent Osteoblastic Activity with wide surface area:72% Porosity

Package Specifications (1 vial / box)

SIZE	Weight					
0.3 ~ 0.5mm	0.25g	0.5g	1.0g	2.0g	5g	10g
0.5 ~ 1.0mm	0.25g	0.5g	1.0g	2.0g	5g	10g
1.0 ~ 2.0mm	0.25g	0.5g	1.0g	2.0g	5g	10g

Implant Case

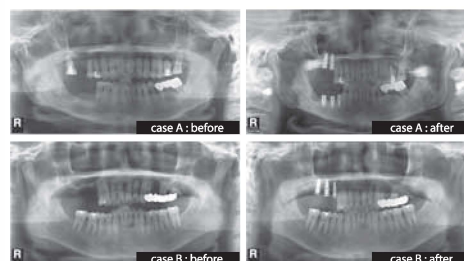


Figure 1. Clinical and radiographic view during surgery. Intrabony defect(Left), BoneMedik-DM placed into intrabony defect.

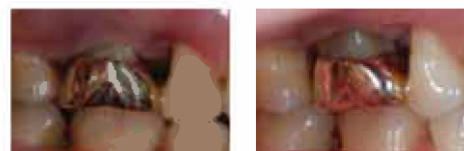


Figure 2. Clinical view. Pre-operative(Left) and Six months post operative(Right) clinical



Figure 3. Radiographic view of test group. Pre-operative(Left) and Six months post operative radiographic(Right)



Figure 4. Radiographic view of control group. Pre-operative(Left) and six months post operative radiographic(Right)



Sorbone

100% β -TCP



Applications

- Periodontal defects
- Intrabony defects
- Ridge augmentation
- Extraction sites(Implant preparation / placement)
- Sinus lift
- Cystic cavities

Advantages

- Excellent osteoconductivity
- Speed up the bone regeneration & heal activation
- Outstanding biocompatibility
(No biological rejection, No disease transmission)
- Accurate and problem-free implantation
- Easy handling
- Porosity: 55~60%

Implant Case



Fig. 1. Radiographic view of before implantation(Left), and after implantation(Right)

SEM Observation of Sorbone



GBR(Window Opening)



Package Specifications

• Vial type

SIZE	Weight			
0.3 ~ 0.5mm	0.25g	0.5g	1.0g	2.0g
0.5 ~ 1.0mm	0.25g	0.5g	1.0g	2.0g
1.0 ~ 2.0mm	0.25g	0.5g	1.0g	2.0g

• Syringe type

SIZE	Weight			
0.3 ~ 0.5mm	0.25cc	0.5cc	1.0cc	
1.0 ~ 2.0mm	0.25cc	0.5cc	1.0cc	



SorGuide

Absorbable Periodontal Regeneration Induction Membrane

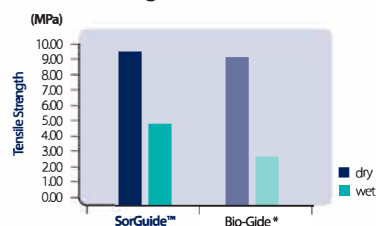


Comparative

- Biodegradable time

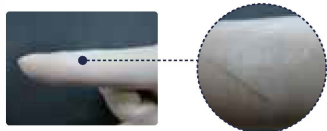
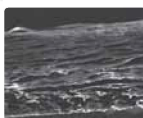
Brand	Biodegradable time
SorGuide™	3~5 months
B product	2~4 months

- Tensile strength



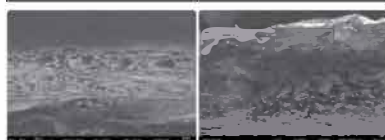
Advantages

- Safety materials :
High purified type I collagen membrane derived from porcine tissue
- Excellent adhesion :
Excellent adhesion to bone loss section by good flexibility



- Highly Porosity :

SorGuide™	B product
≈ 70%	≈ 50%



SorGuide

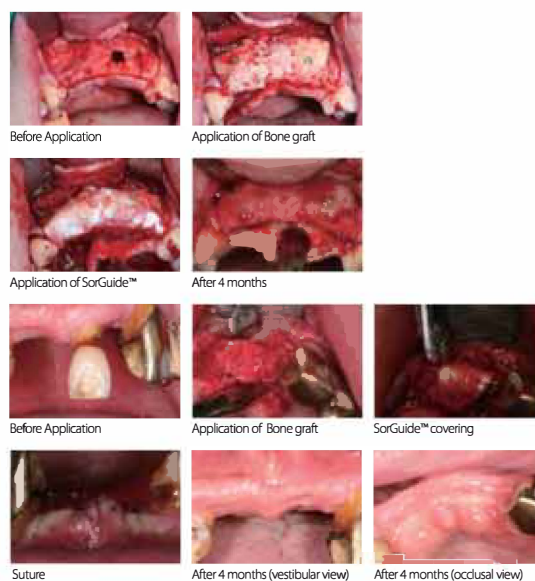
B product

Size

- TG-1 (15mm x 20mm)
- TG-2 (20mm x 30mm)
- TG-3 (30mm x 40mm)

Clinical Case

- Used to create occlusal in the mouth



* Bio Guide Not a Meta Biomed trademark



Meta Biomed, Dental Business Group, www.meta-biomed.com

META BIOMED CO.LTD.

270, Osongsaengmyeong 1-ro, Osong-eup, Heungdeok-gu, Cheongju-si,
Chungcheongbuk-do, Korea

Tel: 82-43-216-0433~4 Fax: 82-43-217-1988

Website: <http://www.meta-biomed.com>

E-mail: info@meta-biomed.com

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