For three decades Bredent has been offering innovative products for dental laboratories. With a current workforce of more than 200 qualified employees at the company headquarters in Senden/Iller, Germany, Bredent develops and produces over 8000 high quality products which help dentists and dental laboratories to optimize work processes and to reduce costs. 96% of all Bredent products are based on ideas from working dental technicians and are produced in-house for the strictest quality control.

Bredent holds ISO 9001 / DIN EN 46001 certification, keeping in step with the most modern high-tech manufacturing.

“Thank you very much for your confidence in Bredent employees and technologies”
“We are constantly striving to improve!”
Peter Brehm ~ CEO
Bredent

Located in sunny Miami, Florida, XPdent is the sole importer of Bredent, Wiedent, and ZEO CE LIGHT Porcelain products into the United States.

XPdent’s goal is to share with the US technicians some of the best European products available. XPdent was founded by Peter Kuch, a certified dental technician with vast knowledge in dental implants and attachments, who now heads the technical support staff.

XPdent’s standards of quality products and quality service also include quality education with the addition of our state of the art training laboratory for hands on training in attachments, waxing, milling and implants.

For more information about the courses, call 1.877.328.3965 and ask your account representative about course schedules and pricing. All courses are good for continuing education credits.

“It is important to us to provide quality products and technical service”
Peter Kuch, CDT, ZTM ~ CEO
Ellen Kuch ~ President
XPdent Corporation
Contents

ATTACHMENTS
18..... VKS-SG Attachments
25..... VKS-SG/OC Bond-In Exchangeable Stud
21..... VKS-SG Exchangeable Stud
31..... Drill-N-Tap Retrievable Ball Screw Kit
34..... VKS-OC Attachments
36..... VKS-OC Exchangeable Stud
40..... VKS-OC RS Abutments
53..... Occlusal Screw System
40..... VKS Stud Reworking Set
14..... NEW! VS-3 Mini & SV Attachments
54..... NEW! VS-3 Mini Tapered
44..... VSP Bar Attachments
43..... VSS Vario Soft Bar
55..... Diatit Multidrill System
48..... Security Lock
51..... Locking Pin Snap
46..... NEW! Friction Splint FS1
54..... Interlock
60..... FGP Friction Fit System

BRUSHES
6..... NEW! Kolinsky Brushes
7..... NEW! Magic Contrast Brushes

LIQUIDS
110... Chrome Cobalt Bonding
117... Colloidal Graphite
115... Diephos UV Die Spacer
59..... Exakto-Form
51..... FGP Insulating Agent
65..... Gloss & Hardening Agent for Plasters
65..... Isobre Wax Insulating Liquid
91..... Isoflex Ceramic Insulating Liquid
115... Light-Curing Die Spacer
64..... Master-Sep Insulating Liquid
111... Microceramic
51..... Milling/Drilling Oil
117... Oxide-Stop
112... Pi-Ku-Plast
64..... Plaster Separating Liquid
116... Plaster Solvent
116... Porcelain Mixing Liquid
114... Repak Liquid
93..... Seracoll UV Light-Curing
64..... Silicone & Wax Surface Tension Reducing Agent
116... Stain Liquid
114... Tooth-colored UV Opaque
102... Wax-Lite Surface Tension Reducing Agent

EQUIPMENT
72..... NEW! Milling Machine BF-2
118..... Silano Pen
127..... NEW! Bre.Lux Power Unit
12..... NEW! Bredent Casting Technique
89..... NEW! Waxpool Duo

MATERIALS
120... Heat Absorbent Paste
111... Microceramic
120... Retention Beads & Crystals
65..... Transblock

MODELS & DUPLICATING
59..... Exako-Form Resin
62..... Exaksol C Kneading Silicone
62..... Exaksol N 21 Duplicating Silicone
63-64 Master-Pin System
63..... Multisol-Mask Soft

RESINS
59..... Exako-Form Resin
112... Pi-Ku-Plast HP 36
93..... NEW! Seracoll UV
93..... NEW! CompoForm UV
51..... NEW! DTK Adhesive Kit

TOOLS
91..... Aesthetic Gnathoflex
85..... Articulation Paper Holder
12..... NEW! Bredent Casting Technique
86..... NEW! Ceramix
85..... Cervical Disc
66..... Diatit Cutting Tools
87..... NEW! Ergonomic Wax Knife
90..... Gnathoflex Premium
84..... Mamelon Cutter
88..... NEW! Quick Change
86..... NEW! Quick Tool
87..... NEW! Repositioning Tweezers
78..... Set-up Grinding Tool
84..... Spot Clip
88..... NEW! Thermo-pen
89..... NEW! Transfuser

WAXES
91..... Aesthetic Gnathoflex
101... Biotec Milling Wax
93..... Biotec Wax System
12..... Bredent Casting Technique
95..... Cervical Wax
96..... Dipping Waxes
97..... Elaflex
90..... Gnathoflex Premium
94..... K2 Exact Carving Wax
95..... KBI Wax
95..... Outer Copings Wax
108... Posilix
94..... Specialty Waxes
95..... Splendidio Wax
94..... Standard Modelling Wax
95..... Sticky Wax
95..... Undercut Wax
97..... Visio Dip

PONTICS
103... Biotec Pontic Blocks
104... Between Blocks BW-BL
105... In Between Pontics BWG
106... Hollow Pontic Blocks HP-BL
107... Shallow Collar Pontics FGMK-BL
108... AK-BL Pontics
108... Posilix
109... Aesthetic and Ergonomic AEMK-BL

BURS & DISCS
71..... Diabolo Sintered Diamonds
78..... Diacryl Diamond for Acrylic
80..... Diagen
66..... Diatit Cutting Tools
55..... Diatit Multidrill System
70..... Diatit and TungstenCarbide Burs
82..... Giflex-TR Diamond Discs
74..... Milling Bur System
78..... Set-up Grinding Tool
83..... Silicone Burs
79..... Special Grinding Tool
83..... Transflex Diamond Discs

POLISHINGS
122... Abraso Buff
125... Abraso Fix
122... Abraso Soft
124... Polishing Pastes
121... Polishing Assortment Kits
81..... Silicone + Rubber Polishing
(Abrasogum)
NEW! **KoliBrush** - golden brown natural hair

Natural hair brushes made of superior quality Kolinsky hair.

The Koli Big Brush has an improved tip design thanks to the integrated spheres for easier porcelain build-ups. Fine and stable tip made of carefully selected hair.

The pointed shape of a dry brush hair is immediately restored by wetting, tapping off or vibrating the brush lightly. Thanks to the strong contrast, any contamination such as dust or dry ceramic particles can be clearly recognized.

Go from a spatula shaped tip to a pointed tip by wetting the brush, tapping or vibrating it slightly with a suitable instrument.

High elasticity to pick up specific quantities of ceramic material more easily. The optimized resiliency restores the shape of the brush tip immediately after picking up the porcelain. The contrast between the ceramic material and black brush hairs promotes clear visibility of the amount to be applied.

Large quantities of ceramic material are picked up and time-saving layering is achieved thanks to the elasticity and the springiness of the brush hair. The spatula shape can be easily achieved after pressing the tip with two fingers. This way, the brush can be shaped individually.

The spatula shape does not reduce the stability of the brush hair; hence, less time is required for applying the ceramic material to the framework.

NEW! **MagicContrast** - black hair

Fatigue-free working thanks to the contrast of the ceramic material and the brush hair. The synthetic hairs provide lasting resiliency of the brush tip.

The pointed shape of a dry brush hair is immediately restored by wetting, tapping off or vibrating the brush lightly. The desired elasticity is obtained by the unique design and combination. This way the applied ceramic layers will not be damaged.
### KoliBrush - product line

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Size</th>
<th>Qty.</th>
<th>Item #</th>
<th>Price</th>
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<td>4, 6, 8 B</td>
<td>1 piece each</td>
<td>390 KSET 1</td>
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**Koli Brush Set**

#5390 KSET 1  
Kit includes:  
1, 2, 4, 5, 6, 8 & 1/0 sizes  
$99.00

Carefully Selected Hair!
# Magic Contrast Set

## #5390 CSET 1

- Kit includes: 1, 2, 4, 5, 6, 8 & 1/0 sizes
- **$148.00**
4 Implant Overdenture: Notice the angulation of the implants from each other. The VKS-OC RS Implant Abutment system allows each implant to have a 15° deviation from the path of insertion (up to 30° from each other).

The OC-RS implant Abutments are screwed directly into the implants and are available in 3 diameters, each with 3 tissue heights. This picture shows the females engaged into the overcasting.

Although an overcasting is recommended, the females can be placed in individual metal housings and embedded into the acrylic. Having the females in a housing or overcasting allows the clips to be replaced easily without curing.

The bar design above illustrates the low profile of the VSP bar attachment. The VSP bar is a parallel bar that can be used in any standard bar mandrel. The VSP clips do not fold over and last for a long period of time. Replacing the clips are a snap with the insertion pin.

This case shows the 1.7 SG attachment on the side of an implant coping. Although telescopic copings were milled, the attachments give added retention and versatility. Either a denture or a porcelain-metal bridge can be fabricated over the copings.

In combination cases (Implant - Natural Dentition), the attachments can be placed anywhere sufficient space is available.

A combination of SG and OC-RS implant abutments in this case is used to restore a lower arch. When casting yellow gold copings such as the one above, a Type IV alloy is highly recommended.

Due to tight inter-occlusal space, the attachments were placed mesially and distally instead of on top of the gold copings. The copings were splinted for added strength and support.

The Low Profile Application of the Bredent Attachments aids in the stability of your implant case
Production sequence for an implant bar case

1. 6 unit implant case requiring an implant bar.

2. Waxing sleeves are used and customized with resin.

3. The implant frame is waxed up using the SG bar patrix.

4. The bar is cast in a type 4 alloy, at least 230 vicker hardness.

5. To create the partial, the yellow females are snapped onto the attachments parallel to each other.

6. All undercuts in the case are blocked out, including under the attachments.

7. A silicone mold is formed for duplication.

8. The refractory model is poured in investment material.

9. The overcasting is waxed onto the refractory model.

10. The overcasting is cast and deplated.

11. The attachment housings are automatically created as part of the overframe.

12. Ropak light curing opaquer is applied to the casting.

13. The case is finished using standard techniques.

14. The finished case in the mouth.

15. For more detailed instructions, please call our technical support department.
**Bredent Attachments Requirements for Success:**

The following are a list of things needed in order to produce a successful, long-lasting prosthesis using Bredent attachments:

1. All attachments are to be installed parallel.

2. Attachments are to be cast using an alloy with a vickers hardness of at least 230.

3. A metal housing is required for all Bredent attachments.

4. All Bredent attachments used for combination fixed/removable cases are to have a milled lingual shelf with an interlocking groove in the mesio-interproximal that will accommodate a lingual arm*. This prevents distal displacement of the prosthesis, centers occlusal forces down the long axis of the tooth and keeps the attachment stress-free. **Optional:** For cases where a lingual shelf and arm are not desired, then, any SV** styled attachment (stress distributor) may be used. The unique design of these attachments eliminates the need for lingual shelves and arms.

5. Educate the patient to insert the prosthesis with finger pressure and not to bite the prosthesis into place.

6. It is recommended that the patients clean their prosthesis at least twice daily to prevent impaction of plaque into the plastic matrix which can cause premature wear of the attachments.

7. Regularly scheduled visits to the dentist (at least every six months) by the patient are recommended to check the prosthesis to maintain and assure accuracy of fit. Improper fitting dentures and partials will compromise the longevity of the attachment. When needed, relining of the acrylic base is strongly recommended.

8. Avoid over-polishing, grinding or adjusting to preserve longer lasting retention of the Bredent attachment.

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**Yellow-Extrafine Round Brushes Highly Recommended!**

Fine abrasive particles integrated into the bristles enable all dental materials to be pre-polished without using polishing paste. **Abraso-Fix Polishers are suitable to pre-polish attachment components without the risk of over reducing material!**

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(For more information about Abraso-Fix please go to page 125)

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If you have any questions on any Bredent attachment case, please contact our **technical support team** for assistance at: **1.877.329.3965**
Use any of the Bredent attachments to digitally construct a case.

The case Designer is a simple program that allows the user to design cases by placing natural teeth, crowns, root caps and implants onto a blank upper and/or lower arch. It further enables the user to combine these restorative components with a variety of Bredent attachments and other frequently used techniques such as lingual arms or interlocks. Using the Universal Tooth Numbering Code, the upper and lower arches are numbered 1-32. The user can select or erase each individual tooth or entire arches. A combination of natural teeth and implant supported restorations can be easily drawn and displayed simply by clicking on an attachment component icon and adding it to the corresponding oral structure.
NEW! Bredent Casting Technique Book
“A dental technician’s manual for producing precise fitting, homogenous and biocompatible dental castings”

The Bredent Casting Technique (According to Sabath) is an instructional user manual with simplified, reliable scientific data and experience in the dental casting process. The main purpose of the book is to provide practical knowledge for the dental technician rather than scientific or metallurgical formulas and processes. It is a 230 page book assembled in a loose-leaf, hard-backed, ring binder style with 6 chapters categorized in the following manner:

Chapter 1: Investment Compounds - composition of investments and application ranges, processing information, wax movement and thermal wax tension, pressure investing, comparison of ring flasks systems and investing.

Chapter 2: Preheating (Burn-Out) - Linear preheating, Kiln types and their effects on investment ring molds, rapid fire-preheating techniques and practice-related case studies about preheating and castings fit results.

Chapter 3: Casting - Materials, alloy melting (flame, induction, resistance, electric arc), comparison of casting methods and their results.

Chapter 4: Cast - Port supply (Sprueing) - Direct and indirect sprueing techniques and inflow of metal.

Chapter 5: Bredent Casting Technique According to Sabath.

Chapter 6: Refractory model casting techniques - Choosing proper sprues and attaching pressure equalization channels.

Sprues for Centrifugal Casting & Rinsing Heads

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Rinsing Heads

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Double Rinsing Heads

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Assortment
390 pieces
Centrifugal casting, containing 30 sprues and 30 rinsing heads each
#430 014 80 $335.00
## Attachment Selector by Indication

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<th>Limited Vertical Space</th>
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<th>On Side of Implant Bars</th>
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<th>For Implant Abutments</th>
<th>Direct Ball Implant Abutments</th>
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<td>VS-3 Conical Bridges</td>
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</tbody>
</table>

*(See Attachment Dimensions on pages 56-58)*
VS-3 Mini Attachment System

- The most widely used attachment in Europe!
- VS-3 Mini offers a gentle slide-in friction with great stability.
- The height can be adjusted up to 40% to fit cases with limited vertical room.
- “Self cleaning” design prevents the accumulation of plaque and debris on the attachment which reduces wear and increases longevity.
- Less maintenance and wear than traditional ball attachments.

Indications:
- C & B Mesial / Distal
- Limited Vertical Space
- Mesial / Distal of Implant Bars
- On Side of Implant Bars
- For Implant Abutments

VS-3 Mini SV Attachment System

- Offers all the benefits of the VS-3 Mini attachments with the addition of extra support grooves for added stability.
- Eliminates the need for a lingual arm for situations where metal arms are not desired and aesthetics are a must.

Indications:
- C & B Mesial / Distal
- C & B Unilateral
- Limited Vertical Space
### VS-3 Mini Attachment System

**VS-3 Mini Patrices**  
Lingual arm required for C & B applications  
8 piece set #430 073 25 $73.50  
4 piece set #547325 $46.50  
A friction style attachment that can be adjusted in height to accommodate cases with limited occlusal space. Ideal for mesial/distal applications as well as on implant bars. Fits anywhere a 1.7mm ball patrix can be used. Can be adjusted to adapt to the gingiva to prevent food impaction underneath. A lingual arm and vertical groove is required for crown and bridge applications.

**VS-3 Mini Duplicating Matrices**  
8 piece set #430 073 23 $52.50  
4 piece set #547332 $33.25

**VS-3 Mini Wax Matrix Housings**  
8 piece set #430 073 20 $52.50  
4 piece set #547320 $33.25

**VS-3 Mini 13 Part Kit**  
2 matrices VS-3 mini red 2 VS-3 mini patrices  
2 matrices VS-3 mini yellow 2 wax matrix housings  
2 matrices VS-3 mini green 1 VS-3 mini insertion pin  
2 VS-3 mini duplicating matrices  
**VS-3 Mini 13 Part Kit #430 073 12** $73.50  
*Requires SV Mandrel #360 011 51

**VS-3 Mini SV Attachment System**

**VS-3 Mini SV Patrices**  
No lingual arm required  
8 piece set #430 073 43 $73.50  
4 piece set #547343 $46.50  
A friction style attachment that can be adjusted in height to accommodate cases with limited occlusal space. Ideal for mesial/distal applications. Fits anywhere a 1.7mm ball patrix can be used. Can be adjusted to adapt to the gingiva to prevent food impaction underneath. Does not require a lingual arm or groove due to the stress distributor grooves.

**VS-3 Mini SV Duplicating Matrices**  
8 piece set #430 073 41 $52.50  
4 piece set #547341 $33.25

**VS-3 Mini SV Wax Matrix Housings**  
8 piece set #430 073 38 $52.50  
4 piece set #547338 $33.25

**VS-3 Mini SV 13 Part Kit**  
2 VS-3 mini SV red matrices 2 VS-3 mini SV patrices  
2 VS-3 mini SV yellow matrices 2 wax matrix housings  
2 VS-3 mini SV green matrices 1 VS-3 mini SV insertion pin  
2 VS-3 mini SV duplicating matrices  
**VS-3 Mini SV 13 Part Kit #430 073 30** $73.50  
*Requires SV Mandrel #360 011 51

**SV Paralleling Mandrel**  
For the VS-3 Mini and the VS-3 Mini SV Patrix. This universal mandrel can be used for many items including bars.  
#360 011 51 $86.00
VS-3 Mini Instructions

Minimize the wear factor with the VS-3 Mini Attachment.
The larger retentive surface design of the VS-3 Mini Attachment will minimize wear of the male component.

VS-3 Mini

Adjust VS-3 Mini patrix from the bottom first (angled area).
**TIP:** Use the SV Mandrel to hold the patrix while adjusting.

The patrix can be reduced up to 40% in height.
**TIP:** Use the SV Mandrel to gauge the amount of reduction for the patrix.

The VS-3 Mini patrix is waxed onto the copings using the SV Paralleling Mandrel.

A lingual arm rest seat with a groove is strongly recommended. It is established in wax using a milling machine or surveyor and the corresponding burs or tools.

The lingual arm rest seat with a groove is redefined after casting.

Porcelain crowns are finished and the VS-3 Mini patrices are polished lightly using Abraso Fix polishers (Item# 350 007 51).

The undercuts are blocked out and the case is duplicated with the yellow matrix in place.

After the refractory model is poured, wax is applied over the refractory matrix and contoured with the major connector.

Finished partial frame coated with Tooth Colored Opaquer UV and Ropak Pink Opaquer UV. (Item# 540 001 05) (Item#520 001 65)

Close up of lingual arm fitting flush into the shoulder rest with groove.

-Final Case Views-
Minimize the wear factor with the VS-3 Mini SV Attachment.
The larger retentive surface design of the VS-3 Mini SV Attachment will minimize wear of the male component.

**VS-3 Mini SV**

Adjust VS-3 Mini SV patrix from the bottom first (angled area). The patrix can be reduced up to 40% in height.

The VS-3 Mini SV patrix is waxed onto the copings using the SV Paralleling Mandrel. A lingual arm is not required.

Porcelain crowns are finished and the VS-3 Mini SV patrices are polished lightly using Abraso Fix polishers (Item# 350 007 51)

The model is duplicated with the yellow matrix. The undercuts are blocked out and the case is duplicated.

After the refractory model is poured, wax is applied over the refractory matrix and contoured with the major connector.

**Dimensions**

<table>
<thead>
<tr>
<th>Products</th>
<th>Depth</th>
<th>Width</th>
<th>Height</th>
<th>Maximum Reduction*</th>
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<tr>
<td>VS-3 Mini Patrix</td>
<td>2.3 mm</td>
<td>3.1 mm</td>
<td>6.0 mm</td>
<td>3.0 mm</td>
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<tr>
<td>VS-3 Mini Matrix</td>
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<td>3.0 mm</td>
<td>6.0 mm</td>
<td>3.0 mm</td>
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<tr>
<td>VS-3 Mini SV Patrix</td>
<td>4.1 mm</td>
<td>3.5 mm</td>
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<tr>
<td>VS-3 Mini SV Matrix</td>
<td>2.0 mm</td>
<td>2.6 mm</td>
<td>6.0 mm</td>
<td>2.8 mm</td>
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</tbody>
</table>

* Reduction of attachment more than recommended will result in loss of retention.
Indications:
• C & B Mesial / Distal
• C & B Bars
• C & B Unilateral
• Limited Vertical Space
• Mesial / Distal of Implant Bars
• On Side of Implant Bars
• For Implant Abutments
• Laser Welding

> The most versatile Bredent attachment system
> Cost effective and easy to use and maintain
> Available in two ball diameters, each with over 6 retention levels
> Can be used in cases with very limited room
> Retention clips are made of special Duroplast material which resists deterioration in the oral environment
> Laser welding components also available
VKS-SG Attachment System

SG Patrix
- 8 piece set 2.2 mm  #430 053 70  4 piece set 2.2 mm  #45370
- 8 piece set 1.7 mm  #430 067 00  4 piece set 1.7 mm  #46700

$73.50  $46.50

Available in 2.2mm or 1.7mm ball diameters. Ideal for mesial/distal applications and cases with very limited room. The ball can be placed low to the tissue for excellent stability. A lingual arm and vertical groove is required for crown and bridge applications.

VKS-SG/SV Stress Distributor Patrix
- 8 piece set *1.7 mm only  #430 073 53  $73.50
- 4 piece set *1.7 mm only  #547353  $46.50

Offered in 1.7mm ball diameter only. Has two vertical grooves which eliminates the need for a lingual arm and makes it great for cases where metal showing is undesirable. Ideal for unilateral cases. Takes a bit more room than the regular SG Patrix. Requires the SV Mandrel.

VKS Universal Patrix
- 8 piece set 2.2 mm  #430 053 80  4 piece set 2.2 mm  #45380
- 8 piece set 1.7 mm  #430 067 60  4 piece set 1.7 mm  #46760

$73.50  $46.50

The small base makes it easy to attach to abutments and onto the side of bars.

SG Bar Patrix
- Comes with 4 SG Patrices already paralleled on the bar in strategic positions.
- 2 piece set 2.2 mm (8 attachments)  #585370  $73.50
- 2 piece set 1.7 mm (8 attachments)  #586700  $73.50

Saves time and adds precision when fabricating implant bars. Creates more aesthetic bars as each patrix does not have to be waxed to the bar individually. Requires the VKS Bar Mandrel or any parallel bar mandrel.

VKS-SG 4 Piece Set
- SG Matrix: Red, Yellow & Green
- 1 Metal SG Housing
- 1.7mm  #5A6630  $46.50
- 2.2mm  #5A5360  $46.50

VKS Model Analogs
- Metal analogs for replicating the VKS ball.
- 8 piece set 2.2 mm  #430 054 82  4 piece set 2.2 mm  #505482
- 8 piece set 1.7 mm  #430 066 20  4 piece set 1.7 mm  #506625

$63.50  $38.25

Metal SG Matrix Housings
- 2 piece set 2.2mm  #5A5410  $24.00
- 2 piece set 1.7mm  #5A6680  $24.00

Castable SG Matrix Housings
- 8 piece set 2.2 mm  #505420  4 piece set 2.2 mm  #5A5420
- 8 piece set 1.7 mm  #506660  4 piece set 1.7 mm  #5A6660

$52.50  $33.25

Assortment Kit:
- 4 pieces 1.7mm + 4 pieces 2.2 mm  #506620  $52.50

SG Green Matrix - Retention Level 1
- 8 piece set 2.2 mm  #430 054 10  4 piece set 2.2 mm  #45410
- 8 piece set 1.7 mm  #430 066 80  4 piece set 1.7 mm  #46680

$52.50  $33.25

SG Yellow Matrix - Retention Level 2
- 8 piece set 2.2 mm  #430 054 20  4 piece set 2.2 mm  #45420
- 8 piece set 1.7 mm  #430 066 60  4 piece set 1.7 mm  #46660

$52.50  $33.25

SG Red Matrix - Retention Level 3
- 8 piece set 2.2 mm  #430 054 30  4 piece set 2.2 mm  #45430
- 8 piece set 1.7 mm  #430 066 40  4 piece set 1.7 mm  #46640

$52.50  $33.25

SG Super Snap Light Green Matrix - Retention Level 4
- 4 piece set 2.2 mm  #430 SG 204  4 piece set 1.7 mm  #430 SG 104

$38.50  $38.50

SG Super Snap Light Yellow Matrix - Retention Level 5
- 4 piece set 2.2 mm  #430 SG 205  4 piece set 1.7 mm  #430 SG 105

$38.50  $38.50

SG Super Snap Light Red Matrix - Retention Level 6
- 4 piece set 2.2 mm  #430 SG 206  4 piece set 1.7 mm  #430 SG 106

$38.50  $38.50

SG Super Snap Light Green Matrix - Retention Level 7
- 4 piece set 1.7 mm  #430 SG 107

$38.50

SG Super Snap Light Red Matrix - Retention Level 8
- 4 piece set 2.2 mm  #430 SG 208  4 piece set 1.7 mm  #430 SG 108

$38.50  $38.50

SG Super Snap Light Green Matrix - Retention Level 9
- 4 piece set 2.2 mm  #430 SG 209  4 piece set 1.7 mm  #430 SG 109

$38.50  $38.50

SG Super Snap Light Red Matrix - Retention Level 10
- 4 piece set 2.2 mm  #430 SG 210  4 piece set 1.7 mm  #430 SG 110

$38.50  $38.50

These products are made in the USA for XPdent. They are not Bredent, Germany products.
**VKS-SG Attachment System**

**VKS Paralleling Mandrel**
Ensures that the attachments are parallel and secured in place precisely.
- 2.2mm #360 011 30 $52.50
- 1.7mm #430 067 30 $52.50

**VKS Insertion Pin**
Is used by technicians and dentists to place the matrices into the housings.
- 2.2mm #430 054 80 $21.95
- 1.7mm #430 062 10 $21.95

**VKS Paralleling Mandrel**
For the VKS-SG/SV Stress Distributor Patrix. This universal mandrel can be used for many items including bars.
- #360 011 51 $86.00

<table>
<thead>
<tr>
<th>VKS-SG 10 Part Kit</th>
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<tbody>
<tr>
<td>2 matrices SG red</td>
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<td>2 matrices SG yellow</td>
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<td>2 matrices SG green</td>
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<tr>
<td><strong>10 Part Kit 2.2 mm</strong> #430 053 30 $126.00</td>
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<td><strong>10 Part Kit 1.7 mm</strong> #430 067 30 $126.00</td>
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<td>2 matrices SG yellow</td>
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<tr>
<td><strong>8 Part Kit 2.2 mm</strong> #430 053 60 $63.50</td>
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<tr>
<td><strong>8 Part Kit 1.7 mm</strong> #430 066 30 $63.50</td>
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<tr>
<td>2 matrices SG yellow</td>
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<tr>
<td><strong>6 Part Kit 2.2 mm</strong> #525360 $46.00</td>
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<td><strong>6 Part Kit 1.7 mm</strong> #526630 $46.00</td>
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<td>1 matrix SG red</td>
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<td>1 matrix SG yellow</td>
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<tr>
<td><strong>3 Part Kit 2.2 mm</strong> #515360 $29.00</td>
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<tr>
<td><strong>3 Part Kit 1.7 mm</strong> #516630 $29.00</td>
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**Bar Mandrel**
For the SG Bar Patrix and any other parallel bars.
- #430 062 30 $52.50

**SV Paralleling Mandrel**
For the VKS-SG/SV Stress Distributor Patrix.
- #360 011 51 $86.00

**VKS-SG/OC 2.2mm Introductory Kit**
- 4 matrices OC red 2.2 2 patrices OC 2.2 $52.50
- 4 matrices OC yellow 2.2 2 patrices SG 2.2 $52.50
- 4 matrices OC green 2.2 2 patrices UNI 2.2 $52.50
- 2 matrices OC metal 2.2 4 blocking out discs 2.2 $21.95
- 2 matrices SG red 2.2 1 each wax bars 1.6/1.9/2.2 $21.95
- 2 matrices SG yellow 2.2 1 paralleling mandrel VKS 2.2 $21.95
- 2 matrices SG green 2.2 1 insertion pin VKS 2.2 $21.95
- **2.2mm Introductory Kit #430 053 00 $267.00**

**VKS-OC/SG 1.7mm Introductory Kit**
- 2 matrices OC red 1.7 2 patrices SG 1.7 $52.50
- 2 matrices OC yellow 1.7 2 patrices UNI 1.7 $52.50
- 2 matrices OC green 1.7 2 blocking out discs 1.7 $52.50
- 2 matrices OC metal 1.7 1 each wax bars 1.6/1.9/2.2 $52.50
- 2 matrices SG red 1.7 1 paralleling mandrel VKS 1.7 $52.50
- 2 matrices SG yellow 1.7 1 insertion pin VKS 1.7 $52.50
- 2 matrices SG green 1.7 $52.50
- **1.7 mm Introductory Kit #430 065 10 $242.00**

**VKS-SG/SV Stress Distributor 9 Part Kit**
- 2 matrices SG red 1.7 2 stress distributor patrices SG/SV $52.50
- 2 matrices SG yellow 1.7 1 insertion pin VKS 1.7 $52.50
- 2 matrices SG green 1.7 $52.50
- **1.7 mm only Order #430 073 52 $82.00**
- *Requires SG/SV Mandrel #360 011 51 $86.00

**Dimensions**

- 2.2 mm Matrix
- 1.7 mm Matrix
- 1.7 mm SG-SV side view
- 1.7 mm SG-SV front view
- Example of a proper lingual arm (Rest with vertical groove)
VKS-SG Exchangeable Stud

Safety, precision and biocompatibility due to easily exchangeable titanium stud.

The stud-head screw is only slightly screwed into the threaded sleeve and held to the wax model using the paralleling mandrel.

The attachment patrix is waxed to the wax model in the path of insertion of the shear distributor with parallel interlock.

The stud-head screw is turned out (counter clockwise) of the threaded sleeve using the screwdriver.

Prior to investing the model, the stud-head screw must be replaced by the casting screw.

Colloidal graphite (#540 007 06) is applied onto the thread of the casting screw; then the screw is turned into the threaded sleeve exerting minimum force.

The casting is sandblasted and the casting screw is turned out. The crowns are finished and the stud-head screw is turned in.

Finished and polished with Abraso-Star Glaze (#520 001 63).

The yellow matrix is placed on the stud and the model is prepared for duplicating.
**VKS-SG Exchangeable Stud Assortment Kit**

**1.7 mm**
- 1 thread sleeve VKS-SG platinum, 1.7
- 1 matrix VKS-SG 1.7 red
- 1 matrix VKS-SG 1.7 yellow
- 1 matrix VKS-SG 1.7 green
- 1 casting screw M1.6
- 1 stud-head screw VKS-SG titanium, 1.7
- 1 screwdriver short, 1.7
- 1 paralleling mandrel, 1.7
- 1.7 kit #450 000 61 $199.00

**2.2 mm**
- 1 thread sleeve VKS-SG platinum, 2.2
- 1 matrix VKS-SG 2.2 red
- 1 matrix VKS-SG 2.2 yellow
- 1 matrix VKS-SG 2.2 green
- 1 casting screw M2
- 1 stud-head screw VKS-SG titanium, 2.2
- 1 screwdriver short, 2.2
- 1 paralleling mandrel, 2.2
- 2.2 mm kit #450 000 49 $199.00

**VKS-SG Threaded sleeve**

Available in two alloys:
- HSL (Au, Pt, Pd), melting range: 1320 - 1460°C
- Casting temperature cannot exceed 1270°C.
- Platinum-Iridium (Pt, Ir), melting range: 1820 - 1850°C
All commercial dental alloys except titanium may be used.

A threaded sleeve is cast into the crown and the machined ball patrix is screwed on after the case is done. This eliminates casting errors and provides a perfect ball patrix. This also allows the ball to be exchanged in the future in case it ever gets damaged or worn.

**Titanium Bar Patrix**

- 1.7 mm #450 05A 17 $93.00
- 2.2 mm #450 05A 22 $93.00

**VKS-SG Stud Screw**

- 1.7 mm #450 000 56 $32.00
- 2.2 mm #450 000 47 $32.00

**Casting Screw**

- 1 mm #450 000 48 $28.50
- 1.7 mm #450 000 57 $28.50

**Screwdriver**

- 2.2 mm #330 006 90 $33.95
- 1.7 mm #330 011 64 $33.95

**Tap for Exchangeable Stud**

- 1.7 mm #460 001 17 $139.00
- 2.2 mm #460 001 22 $139.00

**Tap Holder**

- #507340 $26.50
Custom Metal Housing with Lingual Arm
For repairs and fabrication of new cases

Two splinted crowns with a 1.7mm SG and milled shoulder rest with an interproximal locking groove.

A 1.7mm yellow matrix is placed inside a 1.7mm castable housing (#SA6660) and snapped over the ball.

The retention tail of the castable housing is cut off and saved. Now, using a surveyor and an SV Mandrel (# 36001151) the castable housing with yellow matrix inside, are secured in a parallel path of insertion. Pikuplast modeling resin (Yellow #54000217) is applied onto the shoulder rest and groove, on the crown, to create the lingual arm as a uniform part of the castable housing.

The retention tail can be further modified if necessary and then tacked on the castable housing following the shape of the ridge, using Pikuplast. Note: use a surveyor and SV Mandrel (#36001151) for easier placement.

Lift off the custom, castable housing with lingual arm pattern and cast as usual.

Grind in some mechanical retentions, sandblast and opaque using Ropak (Powder #52000165 and Liquid #52000164) light curing opaquer to mask out the metallic color. Polish lingual arm to a high shine, block-out all undercuts with wax and paint acrylic separator on the model.

“Hollow out” the acrylic and/or metal in the areas of the RPD where the new metal housing will be installed.

Apply self-curing pink acrylic to secure the new metal housing with lingual arm. Once acrylic has set, finish and polish as normal.
Instructions
SG Impression Analog Instructions.

After the crowns/bridge have been created, it is recommended to pickup the crowns in an impression rather than cementing them and then pulling an impression. However, in the event that the restoration has been permanently cemented, the removable laboratory will need an accurate model to work on. This can be made by following these easy steps.

It is important not to slide any of the matrices onto the ball patrices before taking the impression. An accurate reproduction of the male patrix will suffice to produce a precise model.

A rigid impression material such as Impregum or hard Polyvinyl should be used to accurately capture the crowns and the SG patrices. The impression may tear to release from the ball, this is normal and will not affect the accuracy of the model.

The VKS analog can be bent to a 90 degree angle which will allow the retention post to be embedded into the die stone properly.

The analog is inserted into the impression of the ball patrix with the retention tail pointing upwards. If needed, a little wax can be used to hold it in place securely.

The impression is poured using standard techniques. This gives an accurate model with a metal representation of the SG patrix in the correct position.

Instructions

For hygienic reasons, clean the case before removing the old matrix.

Make a slice down the middle of the matrix. This makes it easier for the clip to fold over on itself when being removed.

Insert the scalpel behind the matrix ...

... and pry it out forcefully.

After the matrix is removed, clean the housing properly to ensure that no debris gets trapped under the new clip.

Put the new matrix onto the tip of the insertion tool and hold it in place with your finger.

Push the matrix into the housing forcefully. An audible snap should be heard.

The case is now ready to be seated.
VKS-SG/OC Bond-In Exchangeable Stud
Create Retrievability and Serviceability of Attachment Cases.

The VKS-SG/OC Bond-in Exchangeable Stud System provides a variety of benefits tailored to increase the lifespan of attachment retained removable prosthetics. Featuring a titanium ball screw which is less susceptible to wear compared to those cast out of alloys commonly used in the dental laboratory. However, in the rare cases where a titanium ball screw should wear out and cause loss of retention; then the dentist can easily unscrew the worn ball and replace it with a new one. In the worst case scenario... if damage to the threaded sleeve should occur, the dentist can carefully grind it out and bond in a new threaded sleeve to restore the attachment assembly.

The VKS-SG/OC Bond-in Exchangeable Stud creates a completely retrievable and serviceable, precision removable prosthesis. Technicians will avoid unnecessary aggravations using a high quality, simple and cost-effective attachment system. Dentists can confidently deliver to their patients an attachment case with superior, long term maintenance capabilities that will save them both time and money.

A 1.7mm auxiliary modeling element (#450 000 73) is placed into a VKS paralleling mandrel and is waxed to the coping using a surveyor. The modeling element creates a 0.5mm larger receptacle to accommodate the cement used to bond in the threaded sleeve.

After wax has been applied around the auxiliary modeling element, it is carefully removed. Note: a vertical guide plane is created by applying wax directly onto the paralleling mandrel while waxing-in the modeling element.

Completed wax-up and ready to sprue for casting.

Lingual arm shoulder rest and groove are re-defined and castings are finished as usual.

Porcelain work is finished and metal areas are polished. Note: sandblast the hole lightly to remove any excess porcelain material.

1.7mm titanium threaded sleeve, stud-head screw and screwdriver.

Stud-head screw is carefully screwed into the threaded sleeve; use minimal pressure.

NOTE: Because of the intricate design of the 1.7mm stud-head screw, the screwdriver is designed to break before the ball platform should excess force be used.
VKS Paralleling Mandrel
Ensures that the attachments are parallel and secured in place precisely.

Use high quality anaerobic cement and apply it evenly into the hole created by the auxiliary modeling element.

NOTE: Make sure to insulate with separating medium any areas where bonding cement is not desired such as, the model, paralleling mandrel, etc.

Use the surveyor to insert the ball screw/threaded sleeve assembly into the receptacle coated with cement and allow it to set. Using the surveyor will ensure that the attachment is set absolutely parallel.

After the cement has set, release the mandrel from the attachment and inspect. At this time any excess cement can be picked off using a scalpel and fabrication of the RPD can begin.

**Kits:**

<table>
<thead>
<tr>
<th>VKS-SG/OC 2.2 Exchangeable Stud w/ Titanium Bond-In Thread Sleeve Assortment Kit</th>
<th>VKS-SG/OC 1.7 Exchangeable Stud w/ Titanium Bond-In Thread Sleeve Assortment Kit</th>
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<tbody>
<tr>
<td>2 VKS Stud-head screw 2.2mm</td>
<td>2 VKS Stud-head screw 1.7mm</td>
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<tr>
<td>2 Auxiliary modeling element</td>
<td>2 Auxiliary modeling element</td>
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<tr>
<td>2 Bond-in titanium thread sleeve</td>
<td>2 Bond-in titanium thread sleeve</td>
</tr>
<tr>
<td>2.2mm 6 Part Kit $163.00</td>
<td>1.7mm 6 Part Kit $163.00</td>
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<tr>
<th>VKS-SG/OC 2.2 Exchangeable Stud w/ Titanium Bond-In Thread Sleeve Assortment Kit</th>
<th>VKS-SG/OC 1.7 Exchangeable Stud w/ Titanium Bond-In Thread Sleeve Assortment Kit</th>
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<tbody>
<tr>
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<td>2 VKS Stud-head screw 1.7mm</td>
</tr>
<tr>
<td>2 Auxiliary modeling element</td>
<td>2 Auxiliary modeling element</td>
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<tr>
<td>2 Bond-in titanium thread sleeve</td>
<td>2 Bond-in titanium thread sleeve</td>
</tr>
<tr>
<td>1 VKS paralleling mandrel 2.2mm</td>
<td>1 VKS paralleling mandrel 1.7mm</td>
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<tr>
<td>1 Screwdriver for 2.2mm stud screw</td>
<td>1 Screwdriver for 1.7mm stud screw</td>
</tr>
<tr>
<td>2.2mm 8 Part Kit $242.00</td>
<td>1.7mm 8 Part Kit $242.00</td>
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</table>

**NEW! DTK Adhesive Kit**
A dual hardening composite adhesive for the fixation of dental attachments.

<table>
<thead>
<tr>
<th>DTK Adhesive Kit</th>
<th>(See page 51)</th>
</tr>
</thead>
<tbody>
<tr>
<td>#540 001 06</td>
<td>$125.00</td>
</tr>
</tbody>
</table>

**Accessories**

<table>
<thead>
<tr>
<th>VKS-SG/OC Stud-Head Screw</th>
<th>1 piece. Titanium</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2 mm #450 000 47</td>
<td>$32.00</td>
</tr>
<tr>
<td>1.7 mm #450 000 56</td>
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</tbody>
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<table>
<thead>
<tr>
<th>VKS Paralleling Mandrel</th>
<th>Tap for Exchangeable Stud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensures that the attachments are parallel and secured in place precisely.</td>
<td>#460 001 17</td>
</tr>
<tr>
<td>2.2 mm #360 011 30</td>
<td>$52.50</td>
</tr>
<tr>
<td>1.7 mm #430 067 70</td>
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<table>
<thead>
<tr>
<th>Screwdriver 2.2 mm</th>
<th>Tap for Exchangeable Stud</th>
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</thead>
<tbody>
<tr>
<td>for 2.2 mm stud head screw #330 006 90</td>
<td>#460 001 22</td>
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<tr>
<td>$33.95</td>
<td>2.2 mm $139.00</td>
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<table>
<thead>
<tr>
<th>Screwdriver 1.7 mm</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>for 1.7 mm stud head screw #330 011 64</td>
<td></td>
</tr>
<tr>
<td>$33.95</td>
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</tr>
</tbody>
</table>
Case Designs

VKS-SG Bar Upper

VKS-SG Patrix - Lingual arm & vertical groove required

VKS-SG SV Patrix - No lingual arm required

Tray Material UV

**Highly stable light-curing resin for trays and base plates.**
The flexibility of the material allows easy placement onto the model without tearing. The required shape can be cut with an instrument. The pink color provides the perfect basis for the set-up.

**Tray Material UV band**
2.5 mm x 90 mm, 1350 g
#540 001 66
$105.00

The high flexibility of the material simplifies the placement onto the model. The material will not be damaged. The tray material can be precisely cut with any instrument. Accordingly, the amount of work is reduced. Perfect adaptation to any situation guarantees uniform wall thicknesses. Due to the high stability the position of the handle which has been determined will not be changed during the polymerization process.

The high stability of the tray material avoids deformation during impression-taking. Precise models will be obtained. The pink color offers the perfect basis for any type of set-up. As a basic material for bite patterns or functional trays with bite rims, the resin ensures that the work will not be deformed.
The SG Patrix is waxed onto the copings with the VKS Paralleling Mandrel. The use of a surveyor to parallel the patrices is necessary. It is recommended to use a lingual support arm with a positive rest. The square backing of the patrix serves as a path of insertion but can be reduced in height and width. Take care not to lose the positive seat on the flat side of the attachments.

The short part of the patrix needs to be placed towards the tissue (see diagram on right). The patrix should be placed as close to the tissue as possible without interfering with the interproximal. Placing the attachment low on the tooth or bar improves stability and places less stress on the teeth and implants.

To create the overcasting, the model needs to be duplicated with the yellow matrix in place. The yellow matrix, therefore, basically acts as a duplicating jig but is removed and can be reused at a later date. It is extremely important that all the matrices are placed parallel to each other to create a singular insertion/removal path. All undercuts of the frame and matrix need to be blocked out and absolutely no wax should be on the matrix when it is duplicated.

This shows the refractory model of the case. The refractory model is basically a duplicate model made in investment material. Notice the refractory “dummy” of the yellow matrix. It is imperative not to scratch or damage the matrix or any of the areas that will be waxed over.

After the refractory model is created, the chrome cobalt overframe is simply waxed as required. Waxing over the refractory matrix will create the housing for the attachment matrices. A lingual arm should be incorporated into the framework for partials. Bredent retention crystals or beads could be placed on the wax framework to create a more retentive surface for the acrylic. Once spread, the entire model & wax-up is invested.

To place the matrix into the framework, simply use the insertion pin and push the matrix into place. Because the attachments are completely mechanical, no acrylic is required to hold the matrix in place. To change the friction of the attachment, a small bur is used to tear the old matrix out of the housing and the new matrix is placed as usual. When replacing a matrix, it is suggested to replace the old matrix with a matrix of the same color/friction. If an adequate retention is still not achieved, then the next higher friction matrix should be used. As with all attachments, the patients need to know that the appliance should not be inserted by biting into place - it needs to be inserted via hand pressure. Biting any attachment into place causes extreme forces that wear down the attachment prematurely.
VKS-SG SV Instructions

The SG SV patrix has two vertical grooves that serve the same purpose as a lingual arm, thus eliminating the need to wax a lingual rest. When placing the patrix, the SV paralleling mandrel must be used.

After casting and fitting, polish the attachment lightly. This is an extremely aesthetic solution as there is no metal showing from lingual arms or rests and the crowns can be built up fully with porcelain.

To create the overcasting, the yellow matrix must be placed on the ball. It is extremely important that all the matrices are placed parallel to each other and to the grooves of the patrix.

All undercuts of the frame and matrix need to be blocked out and absolutely no wax should be on the matrix when it is duplicated. After duplication, the yellow matrix is removed and salvaged.

The refractory model is basically a duplicate model made in investment material. Notice the refractory “dummy” of the yellow matrix. It is imperative not to scratch or damage the matrix, grooves or any of the areas that will be waxed over.

The framework is then cast and fitted. A light deplat-ing of the chrome cobalt framework casting is usually required to clean and polish the interior of the attachment metal housing. If a higher electro-polish of the framework is required, it is necessary to block out the housing interior with a drop of wax to prevent overpolishing.

To place the matrix into the framework, simply use the insertion pin and push the matrix into place. No acrylic is required to hold the matrix in place. Notice how the partial framework wraps around into the grooves. This provides precision and stability that makes the SG-SV attachment extremely suitable for uni-lateral cases.

VKS-SG Bar Patrix Instructions

The SG Bar Patrix significantly reduces the time required to wax up bars with the SG attachment as they are already pre-paralleled on the bar. The SG Bar Patrix is first cut to the desired length using a disc.

Any remaining sections of the bar can be saved to be used at a later date. The bar is paralleled onto the implant abutments or crowns using any bar mandrel and waxed into place. The bredent bar mandrel (430 062 30) is ideal.

Since the patrices are already parallel on the bar, there is no need to use the VKS paralleling mandrel. The case is cast, duplicated and finished according to figures 6-12 of “instructions for the side of a bar” above.
Symptoms of wear at the stud of the VKS attachment lead to the loss of the function of the denture. Normally, the patient requires a new prosthetic supply which includes the risk that the root of the abutment tooth may be damaged considerably and can no longer be used to hold the denture. To avoid these risks and additional cost, the VKS stud reworking set has been developed. For hygienic purposes, used instruments should not be reused; they must be disposed off. Use the VKS stud reworking set only for gold alloys. This kit allows the worn VKS patrix (stud) to be milled in the patient’s mouth to a cylindrical post over which a new titanium ball can be placed.

Clamp the VKS repair bur into the angle handpiece. Put the repair bur to the centre of the worn stud and hold it towards the direction of insertion of the denture; only then milling is started. Mill the residual stud parts at a maximum speed of 5000 rpm until a cylindrical post is obtained.

The post that was produced with the repair bur is shortened to a defined length using the height stop. Clamp the height stop into the angle and piece and place onto the cylindrical post together with the guide sleeve. Shorten the cylindrical post at a maximum speed of 5000 rpm until the guide sleeve of the height stop rests on the platform below the post. Adequate cooling must be ensured by the operator.

Cut a thread on the cylindrical post. Add a small drop of cooking oil onto the cylindrical post and into the tap. Put the tap onto the cylindrical post in the direction of insertion and turn clockwise exerting slight pressure. After the first turn the thread can be completed without exerting any pressure to the tap. During this process the tap is turned back by a half turn after each full turn. This process is repeated until the tap rests on the platform below the cylindrical post. By turning anticlockwise, the tap can be removed. Clean and dry the thread.

Prior to gluing on the stud sleeve it must be ensured that the thread post in the patient’s mouth is grease-free and dry. Hold the stud sleeve on the holding element, spread a small quantity of adhesive in the internal thread of the stud sleeve using a pointed object and screw it on the threaded post. After the adhesive hardens, the supporting post can be cut off with a separating disc, the surface can be smoothed with a rubber polisher and excess adhesive can be removed with a pointed object. The surface of the stud must not exhibit any scratches.
Drill-N-Tap Retrievable Ball Screw

Salvage worn implant cases...  
...or fabricate new cases with the benefits of retrievability.

The Drill-N-Tap Retrievable Ball Screw  
(Made of Titanium) from XPdent  
is designed to be used for replacing worn out attachments  
on implant bars and abutments. Also recommended for  
fabricating new implant cases.

Tools & equipment

Available in two kits 2.2 mm only:
• Titanium/non-precious #ST7000
• Precious #SP7000

Dimensions of Ball Screws:
Thread sleeves: 4.0 mm  
Thread diameter: M2 x .4  
Ball diameter: 2.2 mm  
Pilot hole size: 1.8 mm  
Tap size: M2 x .4

Drill-N-Tap Retrievable Ball Screw Kit for Precious Metal
2 Titanium Ball Screws  
1 Short screwdriver  
1 Tap  
1 Tungsten Carbide Center Drill  
1 Diatit Multidrill 1.8 x 6.0 mm  
#SP7000 $169.00

Drill-N-Tap Retrievable Ball Screw Kit for Non-Precious & Titanium
2 Titanium Ball Screws  
1 Short screwdriver  
1 Tap  
1 Tungsten Carbide Center Drill  
1 Diatit Multidrill 1.3 x 5.0 mm  
1 Diatit Multidrill 1.8 x 6.0 mm  
#ST7000 $210.00

NEW! DTK Adhesive Kit
A dual hardening composite adhesive  
for the fixation of dental attachments.

DTK Adhesive Kit  
#540 001 06  
$125.00

Milling & Drilling Oil  
#550 000 08  
$25.50

Tap Holder  
#507340 $26.50

Titanium Ball Screws  
Two pieces, 2.2 mm  
#527000 $29.95

Short Screwdriver  
#330 006 90 $33.95

Tungsten Carbide Center Drill  
#330 006 60 $39.50

Diatit Multidrill 1.3 mm x 5.0 mm  
#330 0006 1 $44.50

Diatit Multidrill 1.8 mm x 6.0 mm  
#330 0008 00 $44.50
Step by Step Construction of an Implant Bar Using the Drill and Tap Ball Screw SG

**Step 1**
Drill a 1.5mm hole into your preferred plastic/wax bar pattern using a Diatit Multidrill 1.5mm # 33000730.

**Step 2**
Install the pre-drilled bar patterns using a surveyor and the Bar Mandrel item # 43006230.

**Step 3**
If the holes are drilled too large then use the Waxing Pin # 44000656 analog from the Locking Pin system to re-size the holes to 1.5mm. Finish the bar wax-up, sprue and invest in the usual manner.

**Step 4**
After casting, the implant bar is milled and finished.

**Step 5**
Pilot holes are re-sized to 1.8mm using the Diatit Multidrill 1.8mm #33000800. The use of Milling Oil #55000008 during this process is important. Note: Multidrill bur speed should not exceed 5000rpm.

**Step 6**
After cleaning any debris left from drilling, the 1.8mm hole is ready to be tapped to receive the 2.0mm ball screw.

**Step 7**
The tap from the Security Lock system # 507293-T will be used to cut the threads.

**Step 8**
Coat the hole and the cutting area of the tap with Milling Oil #55000008. Insert the tap into a holder. Align the tap tool with the hole and begin turning slowly in a clockwise direction and then when binding occurs back out the tap tool (counterclockwise) and then proceed again slowly (clockwise). Tip: It is recommended to use Milling Oil to reduce binding and ensure a clean, easy and precise threaded hole.

**Step 9**
Insert the ball screws to check for accuracy.
Cut off the excess screw shaft.

Snap a 2.2mm SG yellow matrix onto the ball to ensure proper positioning of ball screw.

With the SG yellow matrix still in place, grind the remainder of the screw body flush to the implant bar using a milling machine or laboratory handpiece.

Select a high quality bonding cement such as Parapost or Panavia to bond the ball screws into the implant bar.

Note: Follow the manufacturer’s instructions for cementation to achieve optimal bond results.

Coat the hole with cement as well.

Coat the threaded portion of the ball screw with cement.

Screw the ball in place carefully.

Allow the cement to set for the timeframe indicated by the manufacturer.

Clean off any excess cement

Implant bar is now ready to have an overcasting fabricated.
Indications:
- C & B Mesial / Distal
- C & B Bars
- Limited Vertical Space
- Root Cap / Abutment
- Mesial / Distal of Implant Bars
- On Side of Implant Bars
- On Top of Implant Bars
- For Implant Abutments
- Direct Ball Implant Abutments
- Laser Welding

- Cost effective and easy to use and maintain
- Available in two ball diameters, each with over 6 retention levels
- Can be used in cases with very limited room
- Retention clips are made of special Duroplast material which resists deterioration in the oral environment
- Laser welding components also available
VKS-OC Attachment System

Remember to always:
1) Use a lingual arm (Except for SV)
2) Use a metal with at least 230 Vickers Hardness
3) Use a metal housing

VKS Universal Patrix
Can be used with both the SG (horizontally) and
the OC (vertically) attachments.
8 piece set 2.2 mm  #430 053 80     4 piece set 2.2 mm  #430 054 80
8 piece set 1.7 mm  #430 065 50     4 piece set 1.7 mm  #430 065 50
$73.50                      $33.25
$46.50                      $21.95

VKS Super Snap Green Matrix - Retention Level 4
For slightly higher snap-in friction.
4 piece set 2.2 mm  #430 OC 204     4 piece set 1.7 mm  #430 OC 204
$38.50                      $38.50

VKS Super Snap Yellow Matrix - Retention Level 5
For very high snap-in friction.
4 piece set 2.2 mm  #430 OC 205     4 piece set 1.7 mm  #430 OC 205
$38.50                      $38.50

VKS Super Snap Red Matrix - Retention Level 6
For maximum snap-in friction.
4 piece set 2.2 mm  #430 OC 206     4 piece set 1.7 mm  #430 OC 206
$38.50                      $38.50

VKS Super Snap Green Matrix - Retention Level 7
For slightly higher snap-in friction.
4 piece set 1.7 mm  #430 OC 107
$38.50

OC Metal Matrix
Is resistant to oral conditions, extends matrix longevity and enables
easier replacement of the attachments.
8 piece set 2.2 mm  #430 054 70     4 piece set 2.2 mm  #430 054 70
8 piece set 1.7 mm  #430 066 10     4 piece set 1.7 mm  #430 066 10
$152.00                      $88.95

VKS Paralleling Mandrel
Ensures that the attachments are parallel and secured in place precisely.
2.2mm #430 054 80     1.7mm #430 066 20
2.2mm #430 066 10     1.7mm #430 066 10
$52.50                      $21.95
$52.50                      $21.95

VKS Insertion Pin
Is used by technicians and dentists to place the matrices into the
housings.
2.2mm #430 OC 204     1.7mm #430 OC 107
$63.50                      $38.50

OC Blocking Out Disc
To aid the blocking out process for duplicating and to ensure that the Matrix sits parallel on the Patrix. If the case is processed without using this disc, the Matrix may sit at an angle and wear out prematurely.
8 piece set 2.2 mm  #430 054 70     4 piece set 2.2 mm  #430 054 70
8 piece set 1.7 mm  #430 066 10     4 piece set 1.7 mm  #430 066 10
$42.00                      $24.25
VKS-OC Exchangeable Stud
Safety, precision and biocompatibility due to easily exchangeable titanium stud.

The stud-head screw is only slightly screwed into the threaded sleeve and held to the root cap wax-up using the paralleling mandrel.

The attachment patrinx is waxed to the wax model in the path of insertion.

The stud-head screw is turned out (counter clockwise) of the threaded sleeve using the screwdriver.

Prior to investing the model, the stud-head screw must be replaced by the fixation screw.

Colloidal graphite (#540 007 06) is applied onto the thread of the casting screw; then the screw is turned into the threaded sleeve exerting minimum force.

The casting is sandblasted and the casting screw is turned out. The crowns are finished and the stud-head screw is turned in. The stud-head screw is polished to high luster using titanium polishing paste.

VKS-OC 2.2 exchangeable stud
VKS-OC 1.7 exchangeable stud

Working is continued with the vks-oc 2.2 mm matrices.

...or with the vks-oc rs 2.2 mm.
Advisory:

It is highly recommended to advise patients not to bite, but to hand insert their restoration into place. Biting any attachment case into place can cause premature wearing of the components. It is also recommended to use metal housings for the matrices. Without them, the cases will have substandard retention and will wear faster than normal. The metal used must have a hardness of at least 230 vickers.

These products are made in the USA for XPdent. They are not Bredent, Germany products.
VKS-OC Attachment System

**VKS-OC 12 Part Kit 2.2 mm**
- 2 matrices OC red 2.2
- 2 matrices OC yellow 2.2
- 2 matrices OC green 2.2
- 2 matrices OC 2.2

12 Part Kit 2.2 mm #430 053 10 $130.00

**VKS-OC 10 Part Kit 2.2 mm**
- 2 matrices OC red 2.2
- 2 matrices OC yellow 2.2
- 2 matrices OC green 2.2

10 Part Kit 2.2 mm #430 053 40 $69.50

**VKS-OC Universal 14 Part Kit**
- 2 matrices OC red
- 2 matrices OC yellow
- 2 matrices OC green
- 2 metal matrices

14 Part Kit 2.2 mm #430 053 20 $159.00
14 Part Kit 1.7 mm #430 067 40 $159.00

**VKS-OC Universal 10 Part Kit**
- 2 matrices OC red
- 2 matrices OC yellow
- 2 matrices OC green

10 Part Kit 2.2 mm #430 053 50 $69.50
10 Part Kit 1.7 mm #430 067 20 $69.50

**VKS-OC Root Caps Uni Kit**
- 2 matrices OC red
- 2 matrices OC yellow
- 2 matrices OC green

Root Cap Kit 2.2 mm #430 055 20 $105.00
Root Cap Kit 1.7 mm #430 067 80 $105.00

**VKS-OC 3 Part Matrix Kit**
- 1 matrix OC red
- 1 matrix OC green
- 1 matrix OC yellow

3 Part Kit 2.2 mm #S15350 $29.00
3 Part Kit 1.7 mm #S16720 $29.00

**VKS-OC 30°+60° 22 Part Kit 1.7mm**
- 4 matrices OC red 1.7
- 4 matrices OC yellow 1.7
- 4 matrices OC green 1.7
- 4 blocking out discs 1.7
- 2 OC 30° matrices
- 2 OC 60° matrices

22 Part 30°+60° Kit 1.7 mm #430 073 49 $183.00

**VKS-OC 30° 12 Part Kit 1.7mm**
- 2 matrices OC red
- 2 matrices OC yellow
- 2 matrices OC green

VKS-OC 30° 12 Part Kit 1.7 mm #SA7345 $106.00

**VKS-OC 60° 12 Part Kit 1.7mm**
- 2 matrices OC red
- 2 matrices OC yellow
- 2 matrices OC green

VKS-OC 60° 12 Part Kit 1.7 mm #SA7347 $106.00

**VKS-OC 6 Part Matrix Kit**
- 2 matrices OC red
- 2 matrices OC yellow
- 2 matrices OC green

6 Part Kit 2.2 mm #S25350 $46.00
6 Part Kit 1.7 mm #S26720 $46.00

**VKS-OC 2.2mm Introductory Kit**
- 4 matrices OC red 2.2
- 4 matrices OC yellow 2.2
- 4 matrices OC green 2.2
- 2 matrices OC metal 2.2
- 2 matrices SG red 2.2
- 2 matrices SG yellow 2.2
- 2 matrices SG green 2.2

2.2mm Introductory Kit #430 053 00 $267.00

**VKS-OC/SG 1.7mm Introductory Kit**
- 2 matrices OC red 1.7
- 2 matrices OC yellow 1.7
- 2 matrices OC green 1.7
- 2 matrices OC metal 1.7
- 2 matrices SG red 1.7
- 2 matrices SG yellow 1.7
- 2 matrices SG green 1.7

2.2mm Introductory Kit #430 065 10 $242.00

**VKS-OC Instructions for Root Caps**

The OC attachment is an excellent choice for custom root cap cases. The over denture case above requires two custom root caps with attachments on top.

The root cap posts are waxed up and the universal patrix is placed using the VKS Paralleling Mandrel. When placed correctly, the patrix is attached by waxing around the cap.

This shows the final waxup of the root cap and the attachment. The entire waxup is cast in one piece. This gives the restoration greater strength while saving time and money.

After casting, finish the patrix by polishing lightly. Overpolishing will cause the attachment to lose retention. The blocking out disc is then placed under the ball. The blocking out disc aids in blocking out and ensures the matrix sits parallel and stable on the patrix.

The yellow matrix is snapped into the metal housing using the insertion pin. It is recommended to use the yellow matrix with medium friction. For reduced and increased friction, use the green or red matrix respectively.

Prior to finishing, apply liquid silicone to the root cap or patrix. This will block out the undercut and prevent acrylic from spreading underneath the attachment in the final restoration.

The metal housing with integrated plastic matrix is snapped onto the patrix, on top of the blocking out disc. This should be done while the silicone is still soft.

This is the finished denture viewed from the fitting surface. To change the matrix, the matrix must be destroyed with a round-head bur and pried out. A new matrix is snapped in using the insertion pin.
The copings for the crowns are waxed up using standard techniques. It is recommended to double abut to give added strength for the OC matrix. It is also highly recommended to wax a lingual rest shelf for a lingual arm.

The OC matrix is waxed onto the copings with the VKS Paralleling Mandrel. The use of a surveyor to parallel the matrices is necessary. The matrix should be placed as close to the tissue as possible to increase stability and minimize torque.

As seen above, the backing of the matrix can be reduced in height and length to allow optimum placement.

After casting and fitting on the model, polish the attachment lightly. If the attachment is not polished, residue and oxide may wear the matrices prematurely. The ball should not be ground upon or highly polished as it would lose retention and damage the attachment.

The framework is cast and fitted. A light deplatting of the chrome cobalt framework casting is usually required to clean and polish the interior of the attachment metal housing. If a higher electro-polish of the framework is required, it is necessary to block out the housing interior with a drop of wax to prevent over polishing. Over polishing could result in loss of friction.

To place the matrix into the framework, simply use the insertion pin and push the matrix into place. No acrylic is required to hold the matrix in place. To change the friction of the attachment, a small bur is used to tear the old matrix out of the housing and the new matrix is placed as usual.

To create the overcasting, the model needs to be duplicated with the yellow matrix in place. Block out frame and the area between disc and the ridge. No wax should be on the matrix when it is duplicated.

The case is duplicated using silicone duplicating material. Above shows the refractory model of the case. The refractory model is a duplicate model made in investment. Notice the refractory “dummy” of the yellow matrix. It is important not to scratch or damage the refractory matrix or any of the areas that will be waxed over.

The chrome cobalt over frame is waxed as required. Waving over the refractory matrix will create the housing for the attachment matrices. A lingual arm should be incorporated into the framework for partials. Breatent retention beads or crystals could be placed on the wax framework to create a more retentive surface for the acrylic. The entire model & wax-up is then invested.

The above picture shows the finished frame snapped onto the attachment. As with all attachments, the patients need to know that the appliance should not be inserted by biting into place – it needs to be inserted via hand pressure. Biting any attachment into place causes extreme forces that wear down the attachments prematurely.

**Dimensions**

**Example of a proper lingual arm**

- 1.7 mm 30° Patrix with OC Metal Housing
- 1.7 mm 60° Patrix with OC Metal Housing
- 2.2 OC Patrix with OC Metal Housing
- 2.2 mm OC Patrix
- 2.2 mm Universal Patrix with Metal Housing
- 1.7 mm Universal Patrix with Metal Housing
VKS-OC RS Implant Abutments
VKS attachment abutments for Branemark, 3i, Steri-Oss Hex-Lock and Replace implants.

The VKS-OC RS Implant Abutments can be used on implants that are up to 15° divergent from the path of insertion. The abutments are available in 3 diameters, each with 3 different tissue heights. These abutments can be used with either the rigid or resilient matrices.

Dentist implant abutments and impression matrices

<table>
<thead>
<tr>
<th>Abutment Type</th>
<th>Diameter</th>
<th>Collar Height</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>VKS-OC RS 4x2 Abutment 2.2mm</td>
<td>4 mm Ø, 2 mm tissue height</td>
<td>1 abutment + 1 impression matrix</td>
<td>#460 000 42</td>
</tr>
<tr>
<td>VKS-OC RS 5x2 Abutment 2.2mm</td>
<td>5 mm Ø, 2 mm tissue height</td>
<td>1 abutment + 1 impression matrix</td>
<td>#460 000 52</td>
</tr>
<tr>
<td>VKS-OC RS 6x2 Abutment 2.2mm</td>
<td>6 mm Ø, 2 mm tissue height</td>
<td>1 abutment + 1 impression matrix</td>
<td>#460 000 62</td>
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<tr>
<td>VKS-OC RS 4x4 Abutment 2.2mm</td>
<td>4 mm Ø, 4 mm tissue height</td>
<td>1 abutment + 1 impression matrix</td>
<td>#460 000 44</td>
</tr>
<tr>
<td>VKS-OC RS 5x4 Abutment 2.2mm</td>
<td>5 mm Ø, 4 mm tissue height</td>
<td>1 abutment + 1 impression matrix</td>
<td>#460 000 54</td>
</tr>
<tr>
<td>VKS-OC RS 6x4 Abutment 2.2mm</td>
<td>6 mm Ø, 4 mm tissue height</td>
<td>1 abutment + 1 impression matrix</td>
<td>#460 000 64</td>
</tr>
<tr>
<td>VKS-OC RS 4x6 Abutment 2.2mm</td>
<td>4 mm Ø, 6 mm tissue height</td>
<td>1 abutment + 1 impression matrix</td>
<td>#460 000 46</td>
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<tr>
<td>VKS-OC RS 5x6 Abutment 2.2mm</td>
<td>5 mm Ø, 6 mm tissue height</td>
<td>1 abutment + 1 impression matrix</td>
<td>#460 000 56</td>
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<tr>
<td>VKS-OC RS 6x6 Abutment 2.2mm</td>
<td>6 mm Ø, 6 mm tissue height</td>
<td>1 abutment + 1 impression matrix</td>
<td>#460 000 66</td>
</tr>
</tbody>
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Laboratory implant analogs

<table>
<thead>
<tr>
<th>Analog Type</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>VKS-OC RS 4mm Ø</td>
<td>Laboratory Analog 2.2mm</td>
</tr>
<tr>
<td></td>
<td>2 pieces</td>
</tr>
<tr>
<td></td>
<td>#460 000 04</td>
</tr>
<tr>
<td>VKS-OC RS 5mm Ø</td>
<td>Laboratory Analog 2.2mm</td>
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<tr>
<td></td>
<td>2 pieces</td>
</tr>
<tr>
<td></td>
<td>#460 000 05</td>
</tr>
<tr>
<td>VKS-OC RS 6mm Ø</td>
<td>Laboratory Analog 2.2mm</td>
</tr>
<tr>
<td></td>
<td>2 pieces</td>
</tr>
<tr>
<td></td>
<td>#460 000 06</td>
</tr>
</tbody>
</table>

Tools & equipment

<table>
<thead>
<tr>
<th>Tool Type</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>VKS-OC RS Latch Screwdriver</td>
<td>#460 000 10</td>
</tr>
<tr>
<td>VKS-OC RS Hand Screwdriver</td>
<td>#460 001 00</td>
</tr>
<tr>
<td>VKS-OC RS Angle Guide</td>
<td>#460 001 00</td>
</tr>
<tr>
<td>VKS-OC RS Vertical Alignment Post</td>
<td>2 pieces</td>
</tr>
<tr>
<td>VKS-OC RS Vertical Alignment Post</td>
<td>8 pieces</td>
</tr>
</tbody>
</table>

After uncovering the implant, a OC-RS abutment with the correct collar-height is screwed onto the implant with an OC-RS screwdriver with 30Ncm torque.

The abutments are available in 2, 4 or 6 mm collar-height. The impression matrices are placed on the abutments and are picked up into the impression.

After the impression is made with the impression matrices in place, the laboratory analogs with the correct diameters are inserted into the impression matrices.

Once the model has been poured with the laboratory analogs, the next step is to determine whether the implants are within acceptable angle tolerances for this attachment.

In the VKS-OC RS system, a tolerance of 15° per implant is acceptable. To determine the degree of the implant, the Vertical Alignment Post is first placed on the analog.

The 15° Angle Guide is used to determine if the implant is within the acceptable angle tolerances. In a multiple implant situation, no implant can deviate more than 15°.
VKS-OC RS Matrix System

The VKS-OC RS 2.2 mm Matrices are available in rigid form. The matrices are easy to replace and can be done chairside.

VKS-OC RS
Rigid Matrix Green 2.2 mm for low snap-in friction.
8 pieces #440 007 08 $52.50
4 pieces #540708 $33.25

VKS-OC RS
Rigid Matrix Yellow 2.2 mm for normal snap-in friction.
8 pieces #440 008 08 $52.50
4 pieces #540808 $33.25

VKS-OC RS
Rigid Matrix Red 2.2 mm for high snap-in friction.
8 pieces #440 009 08 $52.50
4 pieces #540908 $33.25

VKS-OC RS
Titanium Housing
2 pieces #440 002 02 $69.50
8 pieces #440 002 08 $215.00

Tools & equipment

VKS-OC RS Paralleling Mandrel
For precise placement of the duplicating matrix & the housings.
#360 011 60 $86.00

VKS-OC RS Insertion Pin
Is used by technicians and dentists to place the matrices into the housings.
#360 011 61 $22.50

VKS-OC RS Matrix Pliers
Is used by technicians and dentists to remove the matrices from the housings.
#310 000 06 $130.00

Case Designs

VKS-OC RS Implant Abutment • 1

VKS-OC RS Implant Abutment • 2
# Bredent VKS-OC RS Implant Abutment Compatibility Chart

The VKS-OC RS Implant Abutments are compatible with most Branemark Standard Interface 4.1mm Regular Platform Implants. Verify the supported diameters (3rd column) of each implant to ensure compatibility.

<table>
<thead>
<tr>
<th>Implant Manufacturer</th>
<th>Supported Implant Line(s)</th>
<th>Supported Diameters (mm)</th>
<th>VKS OC-RS Abutments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branemark</td>
<td>Mk III Standard - Regular Platform Implants</td>
<td>3.75mm, 4.0mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Branemark</td>
<td>Mk IV Standard - Regular Platform Implants</td>
<td>4.0mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Branemark</td>
<td>Not compatible w/ Branemark Wide &amp; Narrow Platform Implants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steri-Oss</td>
<td>Hex-Lock Implants</td>
<td>3.8mm, 4.5mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Steri-Oss</td>
<td>Hex-Lock Implants</td>
<td>5.0mm</td>
<td>5x2, 5x4, 5x6</td>
</tr>
<tr>
<td>Steri-Oss</td>
<td>Hex-Lock Implants</td>
<td>6.0mm</td>
<td>6x2, 6x4, 6x6</td>
</tr>
<tr>
<td>Steri-Oss</td>
<td>Replace Implants</td>
<td>4.3mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Steri-Oss</td>
<td>Replace Implants</td>
<td>5.0mm</td>
<td>5x2, 5x4, 5x6</td>
</tr>
<tr>
<td>Steri-Oss</td>
<td>Replace Implants</td>
<td>6.0mm</td>
<td>6x2, 6x4, 6x6</td>
</tr>
<tr>
<td>Steri-Oss</td>
<td>Not compatible with the Steri-Oss Replace SELECT implants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3i</td>
<td>Cylinder Implant</td>
<td>4.0mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>3i</td>
<td>Cylinder Implant</td>
<td>5.0mm</td>
<td>5x2, 5x4, 5x6</td>
</tr>
<tr>
<td>3i</td>
<td>Cylinder Implant</td>
<td>6.0mm</td>
<td>6x2, 6x4, 6x6</td>
</tr>
<tr>
<td>3i</td>
<td>ICE® Super Self-Taping Implants</td>
<td>3.75mm, 4.0mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>3i</td>
<td>ICE® Super Self-Taping Implant</td>
<td>5.0mm</td>
<td>5x2, 5x4, 5x6</td>
</tr>
<tr>
<td>3i</td>
<td>ICE® Super Self-Taping Implant</td>
<td>6.0mm</td>
<td>6x2, 6x4, 6x6</td>
</tr>
<tr>
<td>3i</td>
<td>Miniplant ICE® Super Self-Taping Implant</td>
<td>3.25mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>3i</td>
<td>Miniplant Cylinder Implant</td>
<td>3.0mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>3i</td>
<td>Osseotite® Implant</td>
<td>4.0mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>3i</td>
<td>Osseotite® Implant</td>
<td>5.0mm</td>
<td>5x2, 5x4, 5x6</td>
</tr>
<tr>
<td>3i</td>
<td>Osseotite® Implant</td>
<td>6.0mm</td>
<td>6x2, 6x4, 6x6</td>
</tr>
<tr>
<td>3i</td>
<td>Osseotite® XP 3/4 Implant</td>
<td>3.25mm, 3.75mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>3i</td>
<td>Osseotite® XP 4/5 Implant</td>
<td>4.0mm</td>
<td>5x2, 5x4, 5x6</td>
</tr>
<tr>
<td>3i</td>
<td>Osseotite® XP 5/6 Implant</td>
<td>5.0mm</td>
<td>6x2, 6x4, 6x6</td>
</tr>
<tr>
<td>3i</td>
<td>ST Self-Taping Threaded Implants</td>
<td>3.75mm, 4.0mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>3i</td>
<td>Not compatible with 3i Microminiplant or TG implants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impla-Med</td>
<td>Works with all Impla-Med Regular Platform Implants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impla-Med</td>
<td>HA Screw Implants</td>
<td>3.75mm, 4.0mm, 5mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Impla-Med</td>
<td>HA Cylinder Implants with TPS Undercoating</td>
<td>3.3mm, 4.0mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Impla-Med</td>
<td>Regular Platform Standard Screw Implants</td>
<td>3.75mm, 4.0mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Impla-Med</td>
<td>Regular Platform Self-Tapping Screw Implants</td>
<td>3.75mm, 5.0mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Impla-Med</td>
<td>Regular Platform Stern Self-Tapping Screw Implants</td>
<td>3.75mm, 4.0mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Impla-Med</td>
<td>Regular Platform TPS Cylinder Implants</td>
<td>3.3mm, 4.0mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Impla-Med</td>
<td>Regular Platform TPS Screw Implants</td>
<td>3.75mm, 4.0mm, 5mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Impla-Med</td>
<td>Regular Platform Partially Coated TPS Screw</td>
<td>3.75mm, 4.0mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Impla-Med</td>
<td>Not compatible w/ Impla-Med Wide &amp; Narrow Platform Implants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crossmark</td>
<td>Crossmark</td>
<td>3.75mm, 4.0mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Interpore (IMZ)</td>
<td>IMZ Hex-Head Implants (Interpore Hex)</td>
<td>3.3mm, 4.0mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Lifecore</td>
<td>Regular Diameter (RD) Implants</td>
<td>3.75mm, 4mm, 4.2mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Zimmer Dental</td>
<td>Paragon Swede-Vent Implants</td>
<td>3.75mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Zimmer Dental</td>
<td>Taper-Lock Implants</td>
<td>3.3mm, 4.1mm, 4.7mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Zimmer Dental</td>
<td>Thread-Lock Implants</td>
<td>3.75mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
<tr>
<td>Osteo-Implant</td>
<td>Small, Standard &amp; Deep Thread Implants</td>
<td>3.25mm, 2.75mm, 4mm</td>
<td>4x2, 4x4, 4x6</td>
</tr>
</tbody>
</table>
VSS Soft Bar VSS 2°

Indications:
- Implant Bars
- C & B Bars

- 2° bar system of implants and crowns & bridges.
- Three friction levels.
- Extremely secure and comfortable for the patient.
- Large contact area makes for improve stability.

VSS Patrix
Has smooth, parallel sides with a 2 degree taper.
8 pieces  #430 052 40
$73.50

The 2° taper simplifies fitting down, particularly if the removable section consists of chrome cobalt or other non-precious alloy.

VSS insertion pin
Is used to insert the matrix into the framework.
2 piece package  #430 073 63
$21.95

VSS Metal Housing
2 pieces  #SA5270
$24.00

Remember to always:
1) Use a metal with at least 230 Vickers Hardness
2) Use a metal housing

A friction style attachment that can be adjusted in height to accommodate cases with limited occlusal space. Ideal for implant bar applications. Can be adjusted to adapt to the gingiva to prevent food impaction underneath. Can be combined with the VKS-SG if necessary to achieve optimal retention.

VSS Green Matrix
Retention Level 1
For low friction.
8 pieces  #430 052 70
$52.50

The four rounded corners of the matrix produce guidance grooves to retain it securely in the removable section of the denture.

The snap retainers guarantee retention in the matrix housing.

VSS Yellow Matrix
Retention Level 2
For normal friction.
8 pieces  #430 052 60
$52.50

The external dimensions of the matrices are exactly the same which allows them to be interchanged with one another, depending on the desired level of friction.

VSS Red Matrix
Retention Level 3
8 pieces  #430 052 50
$52.50

The 2° taper can be shortened along its base and mesial or distal surfaces as required.

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$21.95

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$24.00

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$52.50

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2 piece package  #430 073 63
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Retention Level 3
8 pieces  #430 052 50
$52.50

The 2° taper can be shortened along its base and mesial or distal surfaces as required.

VSS Insertion Pin
Is used to insert the matrix into the framework.
2 piece package  #430 073 63
$21.95

VSS Metal Housing
2 pieces  #SA5270
$24.00

Remember to always:
1) Use a metal with at least 230 Vickers Hardness
2) Use a metal housing

A friction style attachment that can be adjusted in height to accommodate cases with limited occlusal space. Ideal for implant bar applications. Can be adjusted to adapt to the gingiva to prevent food impaction underneath. Can be combined with the VKS-SG if necessary to achieve optimal retention.
VSP-FS / VSP-GS

VSP-FS Friction Snap / VSP-GS Snap

This bar system not only offers you a choice of two types of matrices: Snap and Friction-Snap, but it also provides each in three different grip levels. Although the bar is the same for either, they are not interchangeable with each other. However, they can be used in combination with each other to achieve the perfect friction level required.

VSP-FS Yellow Matrix
Retention Level 2
For normal friction.
8 pieces  #430 063 50

VSP-FS Red Matrix
Retention Level 3
For high friction.
8 pieces  #430 063 70

VSP-FS Green Matrix
Retention Level 1
For low friction.
8 pieces  #430 063 20

VSP-GS Green Matrix
Retention Level 1
For low friction.
8 pieces  #430 062 70

VSP-GS Yellow Matrix
Retention Level 2
For normal friction.
8 pieces  #430 062 90

VSP-GS Red Matrix
Retention Level 3
For high friction.
8 pieces  #430 063 10

VSP-GS Metal Housing
2 pieces  #SA6270 $24.00

VSP-GS Assortment Kit
4 matrices VSP-GS red 2 VSP-GS bars
4 matrices VSP-GS yellow 1 press-in pin VSP
4 matrices VSP-GS green 1 paralleling mandrel VSP
4 VSP-GS duplicating jigs
VSP-GS Assortment Kit  #430 064 80 $167.50

VSP Insertion Pin
For VSP-FS, VSP-GS
2 pieces  #430 062 20 $21.95

Bar Mandrel
1 piece  #430 062 30 $52.50

VSP-GS duplicating jig
Guarantees that the joint matrix grips optimally.
8 pieces  #430 062 50 $52.50

VSP-FS Metal Housing
2 pieces  #SA6320 $24.00

VSP-FS Assortment Kit
4 matrices VSP-FS red 2 VSP-FS bars
4 matrices VSP-FS yellow 1 insertion pin VSP
4 matrices VSP-FS green 1 paralleling mandrel VSP
VSP-FS Assortment Kit  #430 064 90 $148.95

VSP-FS/GS Bar
For snap-in bar restorations.
4 pieces  #430 069 40

VSP-FS/GS Titanium Bar
For snap-in bar restorations.
1 piece  #560 000 20 $120.00

VSP-FS/GS Assortment Kit
4 matrices VSP-FS red 2 VSP-FS bars
4 matrices VSP-FS yellow 1 insertion pin VSP
4 matrices VSP-FS green 1 paralleling mandrel VSP
4 VSP-FS duplicating jigs
VSP-FS Assortment Kit  #430 064 90 $148.95

Instructions

Remember to always:
1) Use a metal with at least 230 Vickers Hardness
2) Use a metal housing

Indications:
• C & B Bars
• Mesial / Distal of Implant Bars
• On top of Implant Bars

The bar should be fitted between the implant abutments with a paralleling mandrel. The bar is made of rigid acrylic which can be trimmed easily and quickly.

The matrix is also duplicated and acts as a spacer for the matrix housing in the chrome cobalt framework.

Before inserting the matrix into its housing in the chrome cobalt framework, check the housing for bubbles and high spots.

The matrix with the desired degree of friction is selected and pressed in using the insertion tool.

After casting and trimming, the bar is secured on the abutments with the paralleling mandrel. They should be soldered together to create a stress free unit.

The bar and the matrix are simply coated with wax. The remaining sections of the patterns are waxed up as required.

Duplicating is carried out with the yellow matrix for the VSP-FS and with the Duplicating Jig for the VSP-GS. This provides the optimum conditions for changing the degree of friction later.

The underside of the finished restoration with parallel bar and red matrix. The friction can be increased or decreased as required by replacing the matrix.
Security Lock Set Screw for Hybrid Overdentures

Initial tooth set-up.

A silicone matrix taken of the set-up relates the working spaces on the master model to wax the abutments.

Six abutments are waxed and pre-milled with a 2º taper.

Using a Diatit Multidrill (#33000790), a 1.4 mm pilot hole for the Security Lock is pre-drilled in plastic/wax.

The abutments are cast, finished and milled in preparation for the overcasting fabrication.

Pikuplast pattern resin (Yellow # 54000217) is used to create the overcasting. The Auxiliary Modeling Element (# 36001169) was used to create a receptacle that allows bonding-in of the security lock assembly...

...and perforations were made into the connector areas of the overcasting for retention.

The silicone matrix is applied over the Pikuplast resin overcasting pattern to check space availability.

Mesh pattern is added for extra retention. The overcasting pattern is sprued according to The Bredent Casting Technique Manual (# 992961GB).

A dense...

...and accurate casting.

After sandblasting the framework, the light curing, Tooth-Colored Opaquer UV (# 54000105) is used to mask out the grey metallic color.

The teeth set-up is transferred onto the overcasting.

The case is finished using composite, however conventional denture acrylics may also be used.

A gingival-side view of the case. Pink colored composite was used to add some interdental papilla for maximum aesthetics.

The Security Lock is bonded into the pre-established receptacle using DTK Adhesive (#54000106).

The Security Lock locking screw is check for easy insert and removal.

A hands-on course for this technique is highly recommended; call us at 877-328-3965 for pricing and availability.
NEW! Friction Splint FS1
Connecting elements for superstructures

- Uncomplicated integration in the mouth
- Defective screw connectors can be repaired with FS1
- FS1 is replaceable
- Time-saving, no tapping necessary
- Variable application for all indications
- Can be individually shortened
- No loosening caused by expansion

The FS1 sleeve is placed through the splint hole (identical size and position in both the primary and secondary units) with the splint screw being preassembled.

After pressing in the sleeve...

...the splint screw is turned in.

No tapping is necessary.
Wax-up silicone matrix. Remove the wax-up. The pin hole is drilled into the abutment with the Diatit-Multidrill Ø 2.0mm. The wax-up is placed back onto the model. The modelling aid is integrated in the wax-up. Holes with a diameter of 2.0mm are drilled into the full wax-up at the positions for the attachments. The attachments are milled. The previously prepared matrix serves for orientation. The ceramic spacer can be used to ensure perfect casting of the splint holes.

Using the modelling aids... the secondary units are waxed up and prepared for casting. Sleeve... and splint screw are shortened to the same length if required.

In the case of zirconium crowns, it must be insured that... the diameter of the drillhole is 2.0mm after the sintering process and... the ceramic firings. Stress/tension within the ceramic can only be avoided this way. The splint screw which is screwed halfway into the sleeve is positioned using tweezers.

...and pressed in. The remaining section of the splint screw is turned in. The screwed-in fixing screw is removed from the sleeve. In case of usage of less than 1 year and in undamaged condition, the removed sleeve can be reinserted.

Friction Splint FS1 Sleeve 1 piece #450 000 80 $28.50
Friction Splint FS1 Pin 1 piece #450 000 81 $28.50
Friction Splint Spacer 2.0mm 2 pieces #450 000 82 $17.95
Modeling Aid Ø 2.0 mm 2 pieces #450 000 83 $21.50
Loosening of the screw is avoided in this system due to the engagement of the smooth section of the bolt into the substructure and the threaded section into the over-structure. This patented design allows micro-movements between the sub- and over-structure, thus avoiding the shear stresses that can cause the screws on other systems to loosen. Extremely easy to use and perfect for implants.

Security Lock 9 Piece Kit
2 Casting Screws  2 Sleeves
2 Locking Screws  1 Short Screwdriver
1 Center Drill  1 Diatit Multidrill
1.0 mm Kit #430 072 90  $345.00
1.4 mm Kit #430 072 91  $345.00
1.8 mm Kit #430 072 92  $345.00

During three years of clinical experience with 268 patients, no screws loosened.

The different sizes can be used for a wide range of applications with implants and bridges.

Once the abutment has been cast, it should be milled and polished. A centering drill is used to create a dimple in the correct position. The correct size of Multidrill is used to drill a hole at the correct angle for the threaded rod. It is essential that Bredent’s milling and drilling oil (#550 000 08) is used.

Screw a retention screw coated with colloidal graphite into the threaded sleeve to retain it in the investment material (#540 007 06). The rear of the short screwdriver can be used to remove the retention screw.

Coat the threaded rod and sleeve with Pi-Ku-Plast resin (#540 002 20). Pi-Ku-Plast guarantees optimum strength for continued processing.

The correct size of Multidrill is used to drill a hole at the correct angle for the threaded rod. It is essential that Bredent’s milling and drilling oil (#550 000 08) is used.

Screw a retention screw coated with colloidal graphite into the threaded sleeve to retain it in the investment material (#540 007 06). The rear of the short screwdriver can be used to remove the retention screw.

Indications:
- C & B Mesial / Distal
- C & B Bars
- C & B Unilateral
- On side of Implant Bars
- For Implant Abutments
- Screws & Pins

Replacement Screw 1.4
#S07294-G  $42.00

Tap for 1.4 mm Screw (Cast-in)
(Specifically for gold sleeve)
#S07293-G  $32.95

Coated the threaded rod and sleeve with Pi-Ku-Plast resin (#540 002 20).

Pi-Ku-Plast guarantees optimum strength for continued processing.

Once the abutment has been cast, it should be milled and polished.

A centering drill is used to create a dimple in the correct position.

The correct size of Multidrill is used to drill a hole at the correct angle for the threaded rod. It is essential that Bredent’s milling and drilling oil (#550 000 08) is used.

Screw a retention screw coated with colloidal graphite into the threaded sleeve to retain it in the investment material (#540 007 06).

The rear of the short screwdriver can be used to remove the retention screw.

Coat the threaded rod and sleeve with Pi-Ku-Plast resin (#540 002 20).

Pi-Ku-Plast guarantees optimum strength for continued processing.

Once the abutment has been cast, it should be milled and polished.

A centering drill is used to create a dimple in the correct position.

The correct size of Multidrill is used to drill a hole at the correct angle for the threaded rod. It is essential that Bredent’s milling and drilling oil (#550 000 08) is used.

Screw a retention screw coated with colloidal graphite into the threaded sleeve to retain it in the investment material (#540 007 06).

The rear of the short screwdriver can be used to remove the retention screw.

Coat the threaded rod and sleeve with Pi-Ku-Plast resin (#540 002 20).

Pi-Ku-Plast guarantees optimum strength for continued processing.

Once the abutment has been cast, it should be milled and polished.

A centering drill is used to create a dimple in the correct position.

The correct size of Multidrill is used to drill a hole at the correct angle for the threaded rod. It is essential that Bredent’s milling and drilling oil (#550 000 08) is used.

Screw a retention screw coated with colloidal graphite into the threaded sleeve to retain it in the investment material (#540 007 06).

The rear of the short screwdriver can be used to remove the retention screw.

Coat the threaded rod and sleeve with Pi-Ku-Plast resin (#540 002 20).

Pi-Ku-Plast guarantees optimum strength for continued processing.

Once the abutment has been cast, it should be milled and polished.

A centering drill is used to create a dimple in the correct position.

The correct size of Multidrill is used to drill a hole at the correct angle for the threaded rod. It is essential that Bredent’s milling and drilling oil (#550 000 08) is used.

Screw a retention screw coated with colloidal graphite into the threaded sleeve to retain it in the investment material (#540 007 06).

The rear of the short screwdriver can be used to remove the retention screw.

Coat the threaded rod and sleeve with Pi-Ku-Plast resin (#540 002 20).

Pi-Ku-Plast guarantees optimum strength for continued processing.

Once the abutment has been cast, it should be milled and polished.

A centering drill is used to create a dimple in the correct position.

The correct size of Multidrill is used to drill a hole at the correct angle for the threaded rod. It is essential that Bredent’s milling and drilling oil (#550 000 08) is used.

Screw a retention screw coated with colloidal graphite into the threaded sleeve to retain it in the investment material (#540 007 06).

The rear of the short screwdriver can be used to remove the retention screw.

Coat the threaded rod and sleeve with Pi-Ku-Plast resin (#540 002 20).

Pi-Ku-Plast guarantees optimum strength for continued processing.

Once the abutment has been cast, it should be milled and polished.

A centering drill is used to create a dimple in the correct position.

The correct size of Multidrill is used to drill a hole at the correct angle for the threaded rod. It is essential that Bredent’s milling and drilling oil (#550 000 08) is used.

Screw a retention screw coated with colloidal graphite into the threaded sleeve to retain it in the investment material (#540 007 06).

The rear of the short screwdriver can be used to remove the retention screw.
Security Lock 1.4

The adhesive type of security lock system is perfectly suitable for situations difficult to access such as small jaws or large span bridges. The titanium threaded sleeve that can be cemented in allows processing independent of the alloys.

 Auxiliary Modeling Element 1.4
#360 011 69
$20.50

 Locking Screw 1.4
#507294-T
$42.00

 Titanium Sleeve
#507397
$19.95

 Short Screwdriver
Can be used with the security lock and the occlusal screw system.
#330 006 90
$33.95

 Tap for 1.4 mm Screw (Bond-in only)
(Specifically for titanium sleeve)
#507293-T
$32.95

Locking Screw 1.4 mm & Titanium Sleeve
(1 of each)
#527294
$59.95

2 Locking Screws 1.4 mm
2 Titanium Sleeves
2 Analogs (Auxiliary Modeling Element)
#567294
$150.00

Made in

Accessories

NEW! DTK Adhesive Kit
A dual hardening composite adhesive for the fixation of dental attachments.

 DTK Adhesive Kit
#540 001 06
$125.00

 Center Drill
#330 006 60
$39.50

 Diatit Multidrill
#330 007 90
$44.50

 Milling and Drilling Oil
#550 000 08
$25.50

Tap Holder
#507340
$26.50

Pi-Ku-Plast HP36 Asst. Kit
$189.00
100 ml Monomer
100 ml Cleaner
85 g Polymer
1 Brush size A
1 Brush size B
1 Brush holder
3 Vessels

Blue Kit #540 002 19
Yellow Kit #540 002 17
Orange Kit #540 002 18
Red Kit #540 002 20
Transparent Kit #540 002 16

NEW! DTK Adhesive Kit
A dual hardening composite adhesive for the fixation of dental attachments.
Auxiliary modelling pins are placed and checked for ideal positioning.

The angle in which the modelling element is placed will determine the angle in which the dentist will access the screw head.

Relief was is added to block out all gross undercuts in a parallel manner. A light coat of Vaseline on the bar is recommended.

Pi-Ku-Plast is used to create the overcasting pattern. Any color Pi-Ku-Plast can be used.

Access hole is drilled using the 1.4 mm center drill and multidrill. Milling oil is recommended.

Implant bars or custom abutments are milled and polished.

The bridge is waxed in the usual manner over the Pi-Ku-Plast patterns.

Upon removal of the auxiliary waxing pin, a uniform housing in Pi-Ku-Plast is achieved for bonding in of the screw and thread-sleeve.

Metal is finished and prepared for porcelain. You must finish the porcelain work prior to bonding in the locking screw.

Careful investing ensures that the cylindrical housing is accurately replicated.

A light coat of Vaseline is applied to prevent permanent bonding in of the locking screw.

Bonding cement is applied into the cylindrical metal housing.

Thread-sleeve and locking screw are inserted into the housing. Be sure to insert the screw all the way into the hole.

The locking screw is adjusted. Care must be taken not to over adjust the screw head as the hex can be lost and render the screw-driver useless.

Close up view of a properly adjusted locking screw.

You must finish the porcelain work prior to bonding in the locking screw.
Locking Pin Snap System

> Excellent for implant cases.
> Easy for patients to insert and remove their prosthesis.
> Stable and reliable retention.
> Can be easily repaired by just inserting a new plunger.

The soft, resin-supported guidance results in a soft snap of the locking pin during locking in the open or closed position. The snap informs the patient that the lock is completely open and the denture can be removed.

Locking Pin Snap E : for bonding in metal and resin

<table>
<thead>
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<th>Tool Name</th>
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<td>Plunger</td>
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<td>FGP Insulating Liquid</td>
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<td>#540 010 27</td>
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Tools & accessories

<table>
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<tr>
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<tr>
<td>Diatit Center Drill</td>
<td>#330 006 60</td>
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<tr>
<td>Diatit Multidrill 1.5mm</td>
<td>#330 007 30</td>
<td>$44.50</td>
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<tr>
<td>Pi-ku-plast Resin HP</td>
<td>#540 002 18</td>
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</tr>
<tr>
<td>Milling and Drilling Oil</td>
<td>#550 000 08</td>
<td>$25.50</td>
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</tbody>
</table>

NEW! DTK Adhesive Kit
A dual hardening composite adhesive for the fixation of dental attachments.

Assortment Includes:
- 1 Base paste B, 5 g
- 1 Catalyst paste K, 5 g
- 1 Mixing block
- 1 Spatula
- 10 Application cannulas (black)
A small dimple is prepared with the Diatit Center Drill (#330 006 60) to determine the position of the drill hole. The dimple will center the drill and keep it in position.

The hole is drilled with the 1.5mm Diatit Multidrill (#330 007 30). The dimple is used to guide the drill into position.

The waxing pins are inserted into the holes to check for proper positioning.

Gross undercuts are relieved using wax and is carved in a parallel manner.

After setting, the Pi-Ku-Plast pattern is gently lifted off and slightly adjusted with the use of burs or rubber wheels.

After adjusting, and removal of attachment components, the pattern is placed over the bar to check the fit. It is recommended at this time to add some mechanical retentions such as wax mesh, flat side up.

Additionally, some retentive “tails” can also be added. The pattern is lifted off, sprued, and invested.

The casting is devested and carefully fit over the bar. It should have a frictive fit without the attachments in place.

Once the overcasting is seated, the hole in the bar should be clearly visible through the housing created by the Pi-Ku-Plast around the Waxing Pin Ropak UV opaquer (#520 001 64 & 520 001 65) is used to mask out the metals color.

Denture teeth are arranged in a typical manner. The denture is waxed.

Bonding cement is mixed and applied into the cylindrical metal housings.

The locking pin is then inserted into the chrome cobalt framework.

After the bonding cement has set, the locking pin attachments are checked for accurate fit and function.

A light coat of petroleum jelly is added to the non-bonding elements of the attachment.

Acrylic processing is carried out in the usual manner and bonding in of the locking pin is done after finishing and polishing of the prosthesis.

Tissue side view of the locking pin cylinder in the closed position.
The paralleling mandrel positions the sectioning attachment correctly.

The design and small size of the threaded sleeve in the sectioning attachment allows it to be adapted to the papillae as required.

The threaded sleeve is made of a cast-on alloy and can be used with any gold or semiprecious alloy.

With a diameter of 1 mm., the section that connects the attachment to the coping can be trimmed with a 1 mm. rotary cutter if required.

The exterior design of the locking ring, which consists of a cast-on gold alloy, ensures that it is retained securely in the resin.

The bridge pattern is waxed up onto the outer resin section.

To ensure that the locking ring is fixed in place, the outer section must be molded with Pi-ku-Plast brush on resin.

The titanium screw can be ground to blend it into the occlusal surface.

The circumferential ledge on the locking ring marks the level to which the locking ring can be reduced.

Colloidal Graphite
It is recommended to coat the threads with Colloidal Graphite before investing and casting the fixation screws.

Paralleling Mandrel
#360 011 57
$53.00

Casting Screw
2 pieces #360 010 30
$28.50

Long Screwdriver
Can be used with the security lock and the occlusal screw system.
#330 008 12  $42.50

Short Screwdriver
Can be used with the security lock and the occlusal screw system.
#330 006 90  $33.95

Latch Driver
Can be used with the security lock and the occlusal screw system.
#330 008 13  $31.50

Indications:

• C & B Mesial / Distal
• C & B Bars
• Screws & Pins

> Suitable for splinting non-parallel abutment teeth.
> Pre-made, cast-on thread sleeve can be used with any gold alloy.
Interlock

Parallel and 2° Interlock - made of special wax with a high melting point.

Biotec Milling Wax is recommended as it is designed to mill cleanly without melting. See the wax section for more information.

- Fast and secure attaching of the Interlocks
- No damage of the die with the drilling of the Interlocks
- Defined wall strength of only 0.4 mm

NEW! VS-3 Mini Tapered

Bridge sectioning attachment for fixed prosthesis in case of divergent abutment teeth

- Precisely fitting, full burn-out synthetic mold parts.
- Conic shape for easy processing
- Integrated parallel holder on male parts and matrix save time and expand the application range
- Designed for intra- and extra-oral use
- No individual milling work necessary
- Primary and secondary parts are fabricated simultaneously to save time and money

The existing retention and the height of the attachment are individually adjusted to the situation with a metal bur.

The secondary part is completed by the modellation of the bridge link. By individualizing the attachment, it adapts to any situation perfectly.

Simply use a finger or an instrument to remove the parallel holder at the “predetermined breaking point.”

Primary and secondary parts are modelled in one step; time-saving, material-saving, efficient.

The existing retention and the height of the attachment are individually adjusted to the situation with a metal bur.

The attachment distinguishes itself through a special shape and precise fit. The long-lasting connection is proof of success.

The integrated parallel holder allows intracoronal use of the female within the primary part.

Female and male parts are simply exchanged for intra- or extra-coronal use. Any application is possible!

The modellation is mounted and the invested according to the Bredent Casting Technique in one step.

Following casting, the attachment is blast-polished with 50 μm pearls. The attachment is now assembled without having to work it over elaborately.

The attachment distinguishes itself through a special shape and precise fit. The long-lasting connection is proof of success.

The integrated parallel holder allows intracoronal use of the female within the primary part.

Vs-3 Mini Tapered

conical bridge attachments
4 females, 4 males
#430 073 40
$63.50
Diatit Multidrill - 1.4 & 1.6 mm
Drills exact holes, even in hard chrome cobalt alloys.

As a result of the Diatit wear protection, this three-edged Multidrill has a device hardness of 3700 HV.

A diatit “twist” drill bit that can be used for drilling holes in hard alloys such as Chrome-Cobalt.
To ensure a smooth drilling process (no stopping and thus no tilting) and a long service life of the drills, a rich quantity of oil must be used during each working process.
We recommend that you use the Milling & Drilling Oil (item # 550 000 08).

Diatit Multidrill

<table>
<thead>
<tr>
<th>Drill Type</th>
<th>Code</th>
<th>Price</th>
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<tbody>
<tr>
<td>Diatit-Multidrill, 0.8 Ø x 8 mm</td>
<td>330 007 40</td>
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<td>Diatit-Multidrill, 1.0 Ø x 5 mm</td>
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<td>Diatit-Multidrill, 1.2 Ø x 2.3 mm</td>
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<td>Diatit-Multidrill, 1.2 Ø x 5 mm</td>
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<td>Diatit Tap Holder</td>
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<td>Tungsten Carbide Center Drill</td>
<td>330 006 60</td>
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<td>Tungsten Carbide Facing Cutter 1.2 mm</td>
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<td>Tungsten Carbide Facing Cutter 1.3 mm</td>
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<tr>
<td>Short Screwdriver</td>
<td>330 006 90</td>
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<tr>
<td>Titanium Screw 1.4 x 2.0 mm</td>
<td>330 007 00</td>
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<tr>
<td>Titanium Screw 1.6 x 2.5 mm</td>
<td>330 011 60</td>
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</tr>
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Tool set for fabricating custom screwed connectors

1. Diatit-Multidrill, 2.3 mm long
2. Diatit-Multidrill, 5 mm long
1. MV first tap
1. MF last tap
1. Tap holder
1. Tungsten carbide center drill 1.4 mm Ø
1. Tungsten carbide facing cutter 1.2 mm Ø
1. Screwdriver
2. Titanium screws, M

1.4 mm 10 piece set #330 006 00 $368.00
1.6 mm 10 piece set #330 000 16 $415.00

This tool set can be used to position the screwed connector wherever required and according to the available space.
The center drill is used to drill a dimple where the screw is to be placed.
The hole can be drilled through the matrix into the patrix freehand, using a handpiece, or with a milling machine.
Finish-drill the core hole in the primary part with the multidrill with depth gauge to the limit stop.
A thread is cut into the primary part with the first tap and the last tap.
The conical recess for the screw head is created with the facing cutter when the primary and secondary parts are assembled.
The titanium screw held by the screwdriver can also be screwed in without difficulty in inaccessible places in the mouth.
The head of the screw can be adapted to the anatomy.
### Abutments

<table>
<thead>
<tr>
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<th>Item#</th>
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<th>Tissue height</th>
<th>Width</th>
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### Vario-Kugel-Snap VKS-OC

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<td>-</td>
<td>-</td>
<td>3.0 mm</td>
<td>41</td>
</tr>
<tr>
<td>Matrices VKS-OC 1.7</td>
<td>430 065 50</td>
<td>2.7 mm</td>
<td>-</td>
<td>-</td>
<td>2.0 mm</td>
<td>35</td>
</tr>
<tr>
<td>Matrices VKS-OC 2.2</td>
<td>430 065 90</td>
<td>2.7 mm</td>
<td>-</td>
<td>-</td>
<td>2.0 mm</td>
<td>35</td>
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<tr>
<td>Matrices VKS-OC 2.2</td>
<td>430 065 60</td>
<td>2.7 mm</td>
<td>-</td>
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<td>430 065 40</td>
<td>3.3 mm</td>
<td>-</td>
<td>-</td>
<td>2.7 mm</td>
<td>35</td>
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<tr>
<td>Matrices VKS-OC 2.2</td>
<td>430 054 50</td>
<td>3.3 mm</td>
<td>-</td>
<td>-</td>
<td>2.7 mm</td>
<td>35</td>
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<tr>
<td>Matrices VKS-OC 2.2</td>
<td>430 054 60</td>
<td>3.3 mm</td>
<td>-</td>
<td>-</td>
<td>2.7 mm</td>
<td>35</td>
</tr>
<tr>
<td>Blocking out disc VKS-OC 1.7</td>
<td>430 065 20</td>
<td>2.8 mm</td>
<td>-</td>
<td>-</td>
<td>0.4 mm</td>
<td>35</td>
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<tr>
<td>Blocking out disc VKS-OC 2.2</td>
<td>505400</td>
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<td>-</td>
<td>-</td>
<td>0.4 mm</td>
<td>35</td>
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<tr>
<td>Blocking out disc VKS-OC RS 2.2</td>
<td>440 001 08</td>
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<td>-</td>
<td>-</td>
<td>0.75 mm</td>
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### Vario-Stud-Snap VKS-SG / OC exchangeable stud

<table>
<thead>
<tr>
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<th>Item#</th>
<th>Ø</th>
<th>Depth</th>
<th>Thread</th>
<th>Width</th>
<th>Height</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stud-head screw VKS-SG/OC 1.7</td>
<td>450 0005 6</td>
<td>Stud 1.7 mm</td>
<td>-</td>
<td>M 1.6 x 0.2</td>
<td>-</td>
<td>2.9 mm</td>
<td>26, 37</td>
</tr>
<tr>
<td>Stud-head screw VKS-SG/OC 2.2</td>
<td>450 0004 7</td>
<td>Stud 2.2 mm</td>
<td>-</td>
<td>M 2 x 0.25</td>
<td>-</td>
<td>3.5 mm</td>
<td>26, 37</td>
</tr>
<tr>
<td>Thread sleeve VKS-OC 1.7</td>
<td>450 0005 4</td>
<td>3.4 mm</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.7 mm</td>
</tr>
<tr>
<td>Thread sleeve VKS-OC 2.2</td>
<td>450 0006 4</td>
<td>3.4 mm</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.7 mm</td>
</tr>
<tr>
<td>Thread sleeve VKS-SG 1.7</td>
<td>450 0005 9</td>
<td>-</td>
<td>1.7 mm</td>
<td>-</td>
<td>3.0 mm</td>
<td>4.0 mm</td>
<td>26</td>
</tr>
<tr>
<td>Thread sleeve VKS-SG 2.2</td>
<td>450 0005 2</td>
<td>-</td>
<td>1.7 mm</td>
<td>-</td>
<td>3.9 mm</td>
<td>5.1 mm</td>
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### Drill-N-Tap Retrievable Ball Screw

<table>
<thead>
<tr>
<th>Product</th>
<th>Item#</th>
<th>Thread Sleeves</th>
<th>Thread Diameter</th>
<th>Ball Diameter</th>
<th>Pilot Diameter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drill-N-Tap retrievable ball screw</td>
<td>S27000</td>
<td>Stud 1.7 mm</td>
<td>M2 x 0.4</td>
<td>2.2 mm</td>
<td>1.8 mm</td>
<td>31</td>
</tr>
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</table>
# Attachment Dimensions

## Vario-Stud-Snap VKS-SG

<table>
<thead>
<tr>
<th>Product</th>
<th>Item#</th>
<th>Ø</th>
<th>Depth</th>
<th>Width</th>
<th>Height</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patrix VKS-SG 1.7</td>
<td>430 067 00</td>
<td>2.7 mm</td>
<td>3.0 mm</td>
<td>4.1 mm</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Patrix VKS-SG 2.2</td>
<td>430 053 70</td>
<td>3.5 mm</td>
<td>3.8 mm</td>
<td>5.4 mm</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Patrix VKS-SG 1.7 sv</td>
<td>430 073 53</td>
<td>4.3 mm</td>
<td>3.5 mm</td>
<td>4.5 x 5.5 mm</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Matrix VKS-SG 1.7 Green</td>
<td>430 066 80</td>
<td>2.4 mm</td>
<td>3.3 mm</td>
<td>3.0 mm</td>
<td>19</td>
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<tr>
<td>Matrix VKS-SG 2.2 Green</td>
<td>430 054 10</td>
<td>2.8 mm</td>
<td>4.4 mm</td>
<td>4.2 mm</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Metal VKS-SG Housings 1.7</td>
<td>S06 660</td>
<td>2.9 mm (with tail: 11 mm)</td>
<td>4.5 mm</td>
<td>3.8 mm</td>
<td>19</td>
<td></td>
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<tr>
<td>Metal VKS-SG Housings 2.2</td>
<td>S05 420</td>
<td>3.3 mm (with tail: 11.4 mm)</td>
<td>5.4 mm</td>
<td>4.7 mm</td>
<td>19</td>
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</table>

## Interlock

<table>
<thead>
<tr>
<th>Product</th>
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<th>Depth</th>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interlock 2°</td>
<td>430 073 68</td>
<td>1.4 mm</td>
<td>-</td>
<td>-</td>
<td>1.0/1.4 mm</td>
<td>6.0 mm</td>
<td>54</td>
</tr>
<tr>
<td>Interlock 0°</td>
<td>430 073 69</td>
<td>0.9 mm</td>
<td>-</td>
<td>-</td>
<td>2.2 mm</td>
<td>6.0 mm</td>
<td>54</td>
</tr>
</tbody>
</table>

## VS-3 Mini

<table>
<thead>
<tr>
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<th>Depth</th>
<th>Width</th>
<th>Height</th>
<th>Max. reduction</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS-3 Mini matrix</td>
<td>430 073 25</td>
<td>-</td>
<td>2.3 mm</td>
<td>3.1 mm</td>
<td>6.0 mm</td>
<td>3.0 mm</td>
<td>15</td>
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<tr>
<td>VS-3 Mini sv matrix</td>
<td>430 073 35</td>
<td>-</td>
<td>2.0 mm</td>
<td>2.6 mm</td>
<td>6.0 mm</td>
<td>2.8 mm</td>
<td>15</td>
</tr>
<tr>
<td>VS-3 Mini Metal Housing</td>
<td>SA7 317</td>
<td>-</td>
<td>2.9 mm</td>
<td>4.3 mm</td>
<td>6.7 mm</td>
<td>7.5 mm</td>
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## Vario-Soft-Bar-Pattern VSP

<table>
<thead>
<tr>
<th>Product</th>
<th>Item#</th>
<th>Ø</th>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bar, friction-snap / joint snap-in</td>
<td>430 069 40</td>
<td>-</td>
<td>50 mm</td>
<td>1.5 mm</td>
<td>3.5 mm</td>
<td>44</td>
</tr>
<tr>
<td>Matrix, friction-snap</td>
<td>430 063 20</td>
<td>-</td>
<td>5.6 mm</td>
<td>3.1 mm</td>
<td>4.2 mm</td>
<td>44</td>
</tr>
<tr>
<td>Matrix, joint snap-in</td>
<td>430 062 70</td>
<td>-</td>
<td>5.4 mm</td>
<td>3.1 mm</td>
<td>2.3 mm</td>
<td>44</td>
</tr>
<tr>
<td>VSP-FS Metal Housing</td>
<td>SA6 320</td>
<td>-</td>
<td>5.6 mm</td>
<td>4.5 mm</td>
<td>4.4 mm</td>
<td>44</td>
</tr>
<tr>
<td>VSP-GS Metal Housing</td>
<td>SA6 270</td>
<td>-</td>
<td>5.4 mm</td>
<td>4.1 mm</td>
<td>4.4 mm</td>
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## Vario-Soft-Bar VSS

<table>
<thead>
<tr>
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<th>Item#</th>
<th>Ø</th>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bar, Patrix vss</td>
<td>430 052 40</td>
<td>-</td>
<td>48 mm</td>
<td>2.2 / 2°</td>
<td>7.1 mm</td>
<td>43</td>
</tr>
<tr>
<td>Matrix vss</td>
<td>430 052 70</td>
<td>-</td>
<td>6.7 mm</td>
<td>3.4 mm</td>
<td>8.0 mm</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>430 052 60</td>
<td>-</td>
<td>6.7 mm</td>
<td>3.4 mm</td>
<td>8.0 mm</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>430 052 50</td>
<td>-</td>
<td>6.7 mm</td>
<td>3.4 mm</td>
<td>8.0 mm</td>
<td>43</td>
</tr>
<tr>
<td>VSS Metal Housing</td>
<td>SA5 270</td>
<td>-</td>
<td>8.0 mm</td>
<td>5.0 mm</td>
<td>6.2 mm</td>
<td>43</td>
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</table>
**Attachment Dimensions**

### Friction Splint FS1

<table>
<thead>
<tr>
<th>Product</th>
<th>Item#</th>
<th>Ø</th>
<th>Length</th>
<th>Thread</th>
<th>Length/Rod</th>
<th>Max.reduction</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friction Splint FS1 Sleeve</td>
<td>450 000 80</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>47</td>
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<tr>
<td>Friction Splint FS1 Pin</td>
<td>450 000 81</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>47</td>
</tr>
<tr>
<td>Friction Splint FS1 Spacer</td>
<td>430 000 82</td>
<td>2.0 mm</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>47</td>
</tr>
<tr>
<td>Modeling Aid</td>
<td>450 000 83</td>
<td>2.0 mm</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>47</td>
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</table>

### Locking Pin Snap System

<table>
<thead>
<tr>
<th>Product</th>
<th>Item#</th>
<th>Ø Axle</th>
<th>Ø Ring</th>
<th>Length</th>
<th>Ø</th>
<th>Max.reduction</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locking pin Snap</td>
<td>440 006 58</td>
<td>1.5 mm</td>
<td>3.5 mm</td>
<td>6.25 mm</td>
<td>-</td>
<td>-</td>
<td>51</td>
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<tr>
<td>Locking pin Snap sleeve</td>
<td>440 006 60</td>
<td>2.8 mm</td>
<td>-</td>
<td>3.6 mm</td>
<td>2.8 mm</td>
<td>-</td>
<td>51</td>
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</tbody>
</table>

### Security-Lock-System

<table>
<thead>
<tr>
<th>Product</th>
<th>Item#</th>
<th>Ø</th>
<th>Length</th>
<th>Thread</th>
<th>Length/Rod</th>
<th>Max.reduction</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threaded rod, Titanium 1.0</td>
<td>430 072 93</td>
<td>rod 1.0 mm</td>
<td>8.5 mm</td>
<td>M 2 / 0.4</td>
<td>3.5 mm</td>
<td>2.3 mm</td>
<td>48</td>
</tr>
<tr>
<td>Threaded rod, Titanium 1.4</td>
<td>430 072 94</td>
<td>rod 1.4 mm</td>
<td>8.5 mm</td>
<td>M 2 / 0.4</td>
<td>3.5 mm</td>
<td>2.3 mm</td>
<td>48</td>
</tr>
<tr>
<td>Threaded rod, Titanium 1.8</td>
<td>430 072 95</td>
<td>rod 1.8 mm</td>
<td>8.5 mm</td>
<td>M 2.5/0.45</td>
<td>3.5 mm</td>
<td>2.3 mm</td>
<td>48</td>
</tr>
<tr>
<td>Matrix sleeve, Titanium</td>
<td>430 073 97</td>
<td>2.8 mm</td>
<td>5.3 mm</td>
<td>-</td>
<td>-</td>
<td>2.3 mm</td>
<td>48</td>
</tr>
<tr>
<td>Matrix sleeve HL 1.0</td>
<td>430 072 96</td>
<td>2.8 mm</td>
<td>5.3 mm</td>
<td>-</td>
<td>-</td>
<td>2.3 mm</td>
<td>48</td>
</tr>
<tr>
<td>Matrix sleeve HL 1.4</td>
<td>430 072 97</td>
<td>2.8 mm</td>
<td>5.3 mm</td>
<td>-</td>
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<td>2.3 mm</td>
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### Occlusal Screw System OC

<table>
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<tr>
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<th>Length</th>
<th>Thread</th>
<th>Length/Head</th>
<th>Max.reduction</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium screw 1.4</td>
<td>330 007 00</td>
<td>2.1 mm</td>
<td>4.5 mm</td>
<td>M 1.4/0.3</td>
<td>2.5 mm</td>
<td>1.4 mm</td>
<td>53</td>
</tr>
<tr>
<td>OC spacer ring</td>
<td>430 073 04</td>
<td>2.5 mm</td>
<td>2.1 mm</td>
<td>-</td>
<td>-</td>
<td>1.4 mm</td>
<td>53</td>
</tr>
<tr>
<td>OC occlusal system patrix</td>
<td>430 073 03</td>
<td>3.0 mm</td>
<td>6.9 mm</td>
<td>M 1.4/0.3</td>
<td>-</td>
<td>3.3 mm</td>
<td>53</td>
</tr>
</tbody>
</table>

### Diatit Tool Set M 1.4 / 1.6

<table>
<thead>
<tr>
<th>Product</th>
<th>Item#</th>
<th>Ø</th>
<th>Length</th>
<th>Thread</th>
<th>Length/Head</th>
<th>Max.reduction</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium screw M 1.4</td>
<td>330 007 00</td>
<td>2.1 mm</td>
<td>4.5 mm</td>
<td>M 1.4/0.3</td>
<td>2.5 mm</td>
<td>1.2 mm</td>
<td>55</td>
</tr>
<tr>
<td>Titanium screw M 1.6</td>
<td>330 011 60</td>
<td>2.3 mm</td>
<td>5.2 mm</td>
<td>M 1.6/0.35</td>
<td>2.5 mm</td>
<td>1.2 mm</td>
<td>55</td>
</tr>
</tbody>
</table>

---

**XPDent Corporation**

**CONTINUING EDUCATION COURSES**

- **VKS-SG, VKS-OC and VS-3 Mini Attachment System Introductory Course**
- **How to Fabricate an Overcasting Over Existing Implant Bars Course**
- **Implant Bar Design and Advanced Attachment Course**

**CALL FOR MORE INFORMATION & TO RESERVE YOUR SEAT! 1.877.328.3965**
Exakto-Form
Model resin for accurate reproduction and maximum edge stability.

Practical tip:
If a silicone impression is used with a polyurethane base, the impressions must be previously sprayed out with Exakto-Form Insulating Liquid (Order #520 002 10) to avoid bonding of the impression and model.

Exakto-Form Kit
(Includes components A+B)
Component A: 6x50g
Component B: 6x50g
Green #520 002 80 $85.50
Ivory #520 002 82 $85.50
Yellow #520 002 84 $85.50

Exakto-Form Refill Packages
1x50g Component B #520 001 73 $9.95
Green 1x50g Component A #520 001 74 $9.95
Ivory 1x50g Component A #520 001 76 $9.95
Yellow 1x50g Component A #520 001 78 $9.95

Exakto-Form Insulating Liquid
125 ml #520 002 10 $23.50

Prior to mixing, each component must be stirred so that a homogeneous mixture is obtained. Mix the sediment completely.

Add component A to component B; empty tin completely.

Mix Exakto-Form approximately 30 seconds until a uniform color is obtained.

The material can be removed after 30 minutes. Final hardness is achieved after 90 minutes. Then the model can be trimmed.

If a base for the model is to be produced with Exakto-Form, the model must first be insulated with Exakto-Form Insulating Liquid.

Due to its high edge stability, Exakto-form is perfectly suitable for precision-fit bridge and crown work.

Any technique can be used for sawing Exakto-Form models. Adopting a new technique is not required.

The hardened resin can be drilled and trimmed. The stability avoids dimensional changes and guarantees precise models.

If smaller quantities are used, fill component A and B into separate syringes.

Pour equal quantities of Exakto-Form into a silicone beaker (approximately 2 ml for one die) and mix to obtain a homogeneous material. Please note, material in syringes must be used within 5 days.

Pour Exakto-Form into the impression. The excellent flow properties prevent the formation of bubbles even in impressions with thin edges.
FGP Friction

FGP Friction Fit System
An absolutely tension free fit.

This friction fit system offers the dentist and the dental technician entirely new options for the preparation and restoration of telescopic and metal-metal situations. The long service life and the simple, time saving processing render this friction fit system a comfortable solution for the patient.

These advantages have contributed to more than 25,000 cases allowing soft integration and removal of the denture. The function of the FGP resin is that the metal on metal telescopic cases will now be replaced by a metal on resin fit. The metal on resin fit offers the benefit of a considerably more coefficient of friction than the one of a pure metal fit. Consequently, increased resistance to wear and an extended service life are obtained.

- Time saving due to fast and simple preparation
- Renovation of individual friction at reasonable costs
- No fitting of secondary elements
- Long service life
- Maximum comfort of wear for the patients
- Allows low cost, single piece castings
- Can be processed in the mouth

For this comparison between a classical metal fit and an FGP fit, 21,000 integration and removal processes were simulated. This corresponds to a wear period of approximately 20 years.

Conventional metal on metal fit

Metal fit after completion adjusted to a frictional force of eight Newtons.

FGP resin on metal fit

Resin fit after completion adjusted to a frictional force of eight Newtons.

Result: Residual friction of two Newtons, that is only 25%

Result: Residual friction of six Newtons, that is still 75%
FGP Friction Fit System
Metal to resin friction fit.

**FGP Friction Fit System Assortment**
- Friction Resin Component A 2.5 g.
- Friction Resin Component B 2.5 g.
- FGP Bonding Agent 1.25 ml.
- FGP Insulating Agent 3.0 ml.
- 1 Spatula
- 5 Brushes
- 1 Brush holder
- 1 Mixing block

#540 010 28  $329.00

**Refill Packs**
- Friction Resin Component A  #540 010 8A  $85.50
- Friction Resin Component B  #540 010 8B  $85.50
- FGP Bonding Agent  #540 010 26  $121.00
- FGP Insulating Agent  #540 010 27  $49.50

**Accessories**
- Mixing Blocks
  - 35 x 50 x 10 mm., 10 pieces  #330 011 44  $49.00
  - Disposable brush, 100 pieces  #330 011 42  $25.50
  - Brush holder, 12 pieces  #330 011 41  $25.00

**Safety and outstanding quality**

The FGP system by bredent offers optimum and individual friction when preparing new conical and telescopic crowns.

**A direct solution rather than extended waiting times**

The simple use during the restoration of the friction of telescopic work is the solution for the dentist and the patient.

**The excellent sliding properties of FGP resin ensure gentle, implant protection integration and removal of the supra constructions.**

**Even very small tensions in the low cost and biocompatible, single piece casting process are perfectly compensated.**

**The high resistance to abrasion and non-tilting integrating and removing of the supra construction provide the patient with a high comfort of wear and simple handling of the denture.**

**The friction with FGP resin that will remain stable over many years guarantees the patients' happiness and satisfaction.**
NEW! Exaktosil N 21 Pouring Silicone
Pouring silicone for the duplication of models.

Components A and B are mixed in a 1:1 ratio. The components are stirred until they are evenly mixed. Then power mix under vacuum for 30 seconds.

The advantages of Exaktosil Duplicating Silicone:
- Excellent reproduction of detail
- High tear resistance
- Low shrinkage

Model can be de-molded after 30 - 40 minutes.

Exaktosil consistent quality ensures precision accuracy when duplicating.

NEW! Exaktosil C Kneading Silicone
Kneading Silicone for the production of matrices.

A measuring spoon of Exaktosil C kneading silicone is mixed with 3 cm of hardener paste.

The components are kneaded until a uniform color is achieved.

Exaktosil C kneading silicone has a soft consistency that allows accurate adaptation of even the most difficult to access areas.

The fine reproduction of details and high stability of Exaktosil C kneading silicone provides precise matrices that allow efficient processing.
NEW! Multisil-Mask Soft
Accurate reproduction of gingival tissue.

Quick and economical processing with the cartridge and the specially adjusted silicone allow trouble-free direct application into the impression or the matrix. The natural color of the gingival mask supports perfect shade determination of the veneer. Overdimensioning of margins is recognized immediately.

Multisil-Mask Soft Kit
2 Cartridges 50 ml
24 Mixing Cannulas
1 Insulating Liquid 10ml
#540 010 41
$98.00

Multisil Separating Agent
10 ml insulating liquid
#520 010 03
$11.50

Mixing Canulas
12 pieces
#320 004 50
$21.95

The gingival situation on the unsawed sawcut model...
...is reproduced using Exaktoсил C kneading silicone and then the arch is sawed.
The sawcut are coated with wax.

The correct height of the arch is essential.
This is the correct alignment of drillholes in the arch.
The arch as well as the Master-Pins are separated with Master-Sep (520 002 90).
Even in the case when two pins are very close, the Master-Pin sleeve can still be used due to the lateral flattening.

(Continued on next page...)

Master-Pin System
Brass pin and plastic sleeve which has the smallest drilling depth of all pins of 4.5 mm.

Due to the special surface design of the inner wall of the sleeve, soft friction between the pin and sleeve is achieved while ensuring maximum precision and safety.

- Drill hole diameter of 1.5mm
- Drilling depth of only 4.5mm in the arch
- Boundary line for drilling at the Master-Pin for perfect drilling results
- Lateral flattening of the Master-Pin sleeve for pins with small distances to each other
- Defined soft friction between Master-Pin and Master-Pin sleeve
- Uniform height of model base, since the sleeves are longer than the Master-Pins
- Master-Pin Diatit tungsten carbide drill for constant, precise drilling over long periods

Efficient
Informative
Aesthetic
Master-Pin System

The drillholes are positioned with the Master-Pin Diatit tungsten carbide drill (#360 011 92).

**Master Pin Assortment**
- 200 Master-Pins
- 200 Master-Pin sleeves
- 1 Master-Pin Diatit tungsten Ø 1.5/2.0mm, shaft Ø 3 mm carbide bur
- 1 working box #360 012 26
$132.00

**Master-Sep Insulating liquid - plaster against plaster**
- 200 ml #520 002 90
- $37.50
- Perfect results are obtained in conjunction with the Master-Pins.

**Silicone & Wax surface tension reducing agent**
- Improves the flow characteristics of plaster on silicone impressions.

- Silicone and wax surface tension reducing agent 750ml #540 007 05
  - $46.50

- Empty Spray Bottle 125ml #540 007 50
  - $6.50

- Empty Brush Pen Bottle 125ml #390 003 30
  - $18.50

- Empty Spray Bottle 125ml #540 007 50
  - $6.50

- The spraying head of the spray bottle simplifies uniform wetting surface with silicone and wax tension reducing agent.
- After the application of the agent onto the surface (above), the flow characteristics of the plaster have been clearly improved.
- Silicone and wax surface tension reducing agent produces a homogeneous plaster surface. This will ensure precise dental work.

**Plaster Separating Liquid**
- For reliable insulation of plaster against plaster.

- Plaster Separating Liquid 750ml #540 001 35
  - $52.50

- Empty Spray Bottle 125ml #540 007 50
  - $6.50

- Empty Brush Pen Bottle 125ml #390 003 30
  - $18.50

- The plaster separating liquid soaks into the plaster and seals the surface without layering. The pen brush allows quick application.
- The spray bottle insulates large areas within a short time. The fine spray mist ensures uniform wetting of the surface.
- The plaster separating liquid allows separating of the base and the arch without any damage.

Perfect fit of the working dies on the model base.

The die segments are separated using a Giflex diamond disc.

The arch is removed from the model base towards the pins.

The spraying head of the spray bottle simplifies uniform wetting surface with silicone and wax tension reducing agent.

The flow characteristics of the plaster have been clearly improved.

The gap-free fit ensures maximum precision.
Isobre wax insulating liquid
Micro-fine insulating liquid on organic basis for reliable, exact separation of the wax pattern against all materials.

Isobre wax insulating liquid on organic basis is absolutely reliable, solvent-free and can be washed off easily. Neutral against plastic, ceramic, metal, plaster and painted surfaces. Even when the insulated surface has dried, Isobre wax insulating liquid will produce a highly efficient, micro-fine insulating layer which ensures simple and safe removal of the wax pattern. Highly absorbing surfaces must be insulated 2 to 3 times.

Gloss and hardening agent for plaster
100ml #550 000 02 $37.50

Without the hardening agent, models can be damaged when the restoration is placed on the model.

The special consistency leads to the diffusion into the plaster surface. The high edge stability and scratch resistance prevents most surface damage.

Gloss & Hardening agent for plasters

Transblock
Transparent block-out material for fast and purposeful working in all techniques.

Any desired size or shape of transblock can be produced with the help of an instrument or scissors.

The high flexibility simplifies placing Transblock onto the model.

Due to its stability, a uniform thickness is retained during the adaptation. If required, the thickness can be adapted individually by scraping.

The transparency of Transblock allows to check the thickness of the area that has been blocked out. This way precisely prepared models for individual trays are obtained.

Transblock
250 g #540 011 49 $55.95

Isobre wax insulating liquid
750 ml #540 010 40 $33.50

Plaster burnisher and hardener
20ml #540 000 01 $13.50

Empty Brush pen
20 ml #540 007 20 $11.50
Diatit Cutting Tools

Bredent’s tungsten carbide tools consist of a metal sintering material with a very fine grain size. Additionally, Diatit tools are subject to a hardening process after the cut has been completed. This hardening process reaches into the gaps between the crystals up to a depth of 100 µm.

Dulling of the cutting edges of the Diatit tools is reduced due to the wear protection. Compared to uncoated carbide burs the hardness of the Diatit rises up to 3700 HV (compared to 1850 HV) and results in an increased service life of the tool.

The surface of the tool is smoothened so that the friction is reduced. The scraps come off the tools more easily. This results in smoother running of the tool.

Diatit tools feature the advanced Diatit wear protection coating. This is a special material which is added into the surface of the bur after it has been produced. It hardens the tool surface and reduces the surface friction. This comprehensive hardening process results in a tool which features very smooth rotation and precise cutting performance from the very beginning - and this is provided over a considerably long period. Accurate removal of material is ensured. Additionally, the service life of the tool (compared to uncoated carbide burs) is increased considerably by the hardening process.
KH: Cross cut with relief

- For processing of precious metals, non-precious metals, resin and plaster
- Fine removal of material, very smooth surface of object, low vibration running protects the wrist of the technician
- Cross Cut Relief: wider, stable cutting edge for extended service life, enhanced cutting performance

D001 KH 23  $29.95
Smooth surface and fine cutting performance on hard materials.

KF: Cross cut fine

- Mainly for more delicate types of work on precious and non-precious metals, resins and ceramics
- Moderate and accurate removal of material, smooth surface of object

D137 KF 23  $29.65
Due to the fine cut a smooth surface of the object is obtained. This slender tool is particularly suitable for finishing veneers.

D184 KF 16  $25.50
The fine micrograph of the KF cut simplifies polishing of the metal surface.

D187 KF 23  $31.00
The slender design and smooth micrograph of this bur ensure fine suitability for finishing of partial frameworks.

D194 KF 23  $29.65
This bur is particularly suitable for finishing of ceramic-metal frames.

D198 KF 23  $26.90
Due to the fine cut a smooth surface can be produced on hard alloys as well.

D194 KF 50  $38.50
The KF cut if perfectly suitable for finishing of metal ceramic veneers.

D200 KF 23  $31.00

D225 KF 23  $26.75

D237 KF 23  $25.00

D263 KF 40  $34.00

D289 KF 23  $23.90

D292 KF 23  $29.65
**Diatit Cutting Tools**

### KM: Cross cut medium

- For finishing of larger surfaces on precious metals, non-precious metals, resins and plaster
- Efficient removal of material, smooth surface of object, smooth running of tool
- Universal application possibilities, therefore reduced frequency of tool exchange

<table>
<thead>
<tr>
<th>Material</th>
<th>Plaster</th>
<th>Denture</th>
<th>Acrylic</th>
<th>Composite</th>
<th>Precious Metal</th>
<th>CrCo, Non-Precious</th>
<th>Ceramic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed (rpm)</td>
<td>15-20,000</td>
<td>15-18,000</td>
<td>15-20,000</td>
<td>15-20,000</td>
<td>15-20,000</td>
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</table>

- D001 KM 23 $26.90
- D184 KM 16 $24.20
- D194 KM 50 $36.90
- D225 KM 23 $23.90
- D257 KM 23 $25.00
- D277 KM 23 $23.90
- D137 KM 23 $26.90
- D187 KM 23 $28.50
- D198 KM 23 $23.90
- D237 KM 23 $23.90
- D263 KM 40 $35.90
- D289 KM 23 $20.40
- D141 KM 23 $28.50
- D194 KM 23 $28.50
- D200 KM 23 $28.50
- D257 KM 16 $35.00
- D277 KM 14 $35.00

**KG: Cross cut coarse**

- For coarse and efficient pretreatment of large surfaces on precious metals, non-precious metals, resins and plaster
- Extensive removal of material, increased surface roughness than the finer brendent cut tools

<table>
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<tbody>
<tr>
<td>Speed (rpm)</td>
<td>10-15,000</td>
<td>8-12,000</td>
<td>10-17,000</td>
<td>15-20,000</td>
<td>15-20,000</td>
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</table>

- D001 KG 23 $25.00
- D184 KG 16 $24.20
- D194 KG 50 $39.50
- D225 KG 23 $23.90
- D257 KG 23 $25.00
- D274 KG 60 $39.50
- D137 KG 23 $26.90
- D187 KG 23 $25.50
- D194 KG 40 $34.00
- D237 KG 65 $37.50
- D263 KG 60 $39.50
- D289 KG 23 $20.40
- D141 KG 23 $28.50
- D194 KG 23 $39.50

**QM: Horizontal cut medium**

- Suitable for finishing of larger surfaces as well as for more delicate work on precious and non-precious metals and resins
- Very fine, economic removal of material producing a smooth surface
- High running smoothness protects the motor and wrist

<table>
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<tr>
<td>Speed (rpm)</td>
<td>15-20,000</td>
<td>15-28,000</td>
<td>15-20,000</td>
<td>15-20,000</td>
<td>15-20,000</td>
<td>15-20,000</td>
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</tbody>
</table>

- D137 QM 23 $23.90
KS: Cross Super Coarse

- Especially for processing of plaster, also suitable for coarse types of work on resin
- Extensive removal of material
- The size of the individual cut space avoids loading with shavings

<table>
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<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

D194 KS 60 $40.00  
D194 KS 70 $43.00

GG: Straight Cut Coarse

- To perform cuts in resin or shellack plates
- Very economic cutting of plates
- Single, straight cutting edges

<table>
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<tr>
<td>Speed (rpm)</td>
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<td>B-12,000</td>
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<td>N/A</td>
<td>N/A</td>
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</tr>
</tbody>
</table>

D468 GG 16 $20.40  
D468 GG 23 $20.50

Power Cutting Burs for CoCr & Non Precious

KC: Cross Cut Chrome-Cobalt

- Especially for processing of chrome-cobalt alloys
- Excellent removal of material, smooth surface
- The resulting metal scraps cause fewer irritations to the skin since they are larger and exhibit a coarse structure

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<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>10-20,000</td>
<td>N/A</td>
</tr>
</tbody>
</table>

D194 KC 40 $36.50  
D251 KC 60 $42.00  
D292 KC 23 $25.50

Designed strictly for quick Titanium finishing

KT: Cross Cut Titanium

- Especially for processing of titanium
- The special cut increases the cutting volume with reduced friction. Overheating of titanium is avoided
- Economic, careful removal of material, smooth surface

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<tr>
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<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>10-20,000</td>
<td>N/A</td>
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</tbody>
</table>

D001 KT 14 $23.00  (10-15,000 rpm)  
D001 KT 23 $23.00  (10-15,000 rpm)  
D194 KT 23 $25.00  (20-25,000 rpm)

D194 KT 40 $31.00  (20-25,000 rpm)  
D194 KT 50 $35.90  (20,000 rpm)  
D198 KT 23 $26.90  (25-30,000 rpm)

D263 KT 40 $34.00  (20-25,000 rpm)
Diatit and tungsten carbide burs for the handpiece

Rapid Microbur with a 3.1mm diameter suitable for exposing the preparation margins.

**Tungsten Carbide**
#H00 1NH 31
$19.25

<table>
<thead>
<tr>
<th>Application Field</th>
<th>Plaster Resin</th>
<th>Denture Resin</th>
<th>Veneer Resin</th>
<th>Precious Metal</th>
<th>CrCo/NPM</th>
<th>Ceramic</th>
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<tbody>
<tr>
<td>Working Speed RPM</td>
<td>10-20,000</td>
<td>10-18,000</td>
<td>10-20,000</td>
<td>10-20,000</td>
<td>15-20,000</td>
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**Diatit**
#D19 4KF 40
$36.90

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**Diatit**
#D19 4KM 40
$36.90

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<td>15-20,000</td>
<td>15-20,000</td>
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</tr>
</tbody>
</table>

Universal bur with relief cut.

**Tungsten Carbide**
#H27 4GH 40
$45.50

<table>
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</tbody>
</table>

Bur with relief cut for quick removal of denture resin. Perfectly suitable for plaster.

**Tungsten Carbide**
#H26 3SH 60
$39.50

<table>
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<tr>
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<td>12-18,000</td>
<td>8-12,000</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Friction Grip - Diabolo for all ceramic cores
Fast, efficient preparation of each type of Zirconia, Alumina Oxide and other hard tooth materials.

Diamond crystals are embedded into a special mixture of binding material.

Carefully selected natural diamonds are entirely integrated into a mixture of metal and binding material. Due to the special manufacturing process, worn out diamond grit is automatically removed and replaced with new diamonds so that automatic sharpening is achieved. The auto sharpening effect enables it to perform highly difficult processing of dental material in a simple, fast, and efficient way.

Diabolo-Cleaner
#340 010 00 $13.50

Friction Grip Adapter
#340 010 02 $7.50

Flame
#FF 250 016
$51.95

Round Tip
#FF 263 014
$51.95

Rounded Cylinder
#FF 141 023
$46.50

Inverted Cone
#FF 227 023
$46.50

Torpedo
#FF 289 023
$46.50

Round Tip
#FF 263 023
$46.50

Assortment
Includes 1 of each style
#330 011 66
$260.00

In the case of electro deposited grinding tools, the diamond crystals have been attached to the bur blank in a metal bond.

In the bredent sintering method, the razor sharp diamond crystals are embedded in an adapted mixture of binding material.
Bredent Milling Machine BF-2
Non-broken arm design for comfort and precision.

- For milling, surveying and drilling. Can be locked in any position or used as a free-floating milling arm
- The survey platform allows a vertical range of movement up to 90 degrees
- Rigid construction made of aluminum and stainless chromium steel
- Very smooth, vibration-free running; quick change for rapid bur exchanges
- Micrometer control with depth stop and drilling gauge for ultra-precision
- Precision guides ensure long service life
- Ergonomic table raises to eye level

BF-2 Milling Unit
#140 008 92

*Call for more information: 1.877.328.3965
*Convenient financing with Priority Leasing, Inc. Call to request a credit application today! 1.800.761.2118.
Milling Unit BF-2
The milling unit that is simply perfect - even in its price/performance ratio.

Excellent milling of wax due to the adjustable speed control.

The Bredent polishing bur provides a high shine on metal surfaces.

Selecting a low speed prevents clogging of the drillholes when creating interlocks in wax.

Selecting a high speed ensures safe and precise drilling even in hard CoCr alloys.

Time and money can be saved by marking the clasps and surveying with a single unit.

Scraping wax surfaces parallel or conical and placing the attachment can both be done with the BF-2.

Technical Data
- Power supply: 230 volts / 50/60 Hz
- Power rating: 80 watts
- Speed: 0 - 30,000 rpm
- Chuck: Ø 2.35 mm.
- Fuse: thermal overload protection
- Torque: 2.6 Ncm.
- Weight: 18 kg.
- Dimensions: 250 x 370 x 510 mm

Assortment
- 4 pieces:
  - 1 Milling Unit BF-2
  - 1 Handpiece BF-2
  - 1 Model Support BF-1
  - 1 Control Unit BF-2

BF-2 Milling Unit
#140 008 92
*Call for more information: 1.877.328.3965
*Convenient financing with Priority Leasing, Inc.
Call to request a credit application today! 1.800.761.2118.

Model Support BF-1
#730 001 70
$715.00

Milling Base
#140 008 93
$159.00

Transfer Device
2.35 mm Shaft
#360 012 65 $25.50
3 mm Shaft
#360 011 63 $25.50

Hand Wheel for Tapping
#33001154 $48.50

Accessories / Spare Parts
- Chuck Ø 3 mm
  #730 001 53 $103.00
- Brenometer
  #310 000 02 $124.00
- Milling & Drilling Oil
  #550 000 08 $25.50
Milling Bur System
Three-Stage milling burs for wax, metal and polishing.

Step 1: Wax
Large cutting volume takes up wax chips easily and avoids smearing of the milling wax.

Step 2: Metal
Sharp cutting edge provides maximum cutting performance in the wax. Optimized twisting angle ensures rapid removal of the wax chips.

Step 3: Polish
Highly precise cutting edge. Extremely smooth cutting edge due to polished ledge. - Produces mirror finish milling surfaces.

Parallel Burs

Flat-Top Wax Milling Burs
- 0.7mm F116 2W 07 $25.95
- 1.0mm F116 2W 10 $25.95
- 1.5mm F116 2W 15 $25.95
- 2.3mm F116 2W 23 $25.95

Round-Top Wax Milling Burs
- 0.7mm F137 2W 07 $25.95
- 1.0mm F137 2W 10 $25.95
- 1.5mm F137 2W 15 $25.95
- 2.3mm F137 2W 23 $25.95

Flat-Top Metal Milling Burs
- 0.7mm F116 2H 07 $43.50
- 1.0mm F116 2H 10 $43.50
- 1.5mm F116 2H 15 $43.50
- 2.3mm F116 2H 23 $43.50

Round-Top Metal Milling Burs
- 0.7mm F137 2H 07 $43.50
- 1.0mm F137 2H 10 $43.50
- 1.5mm F137 2H 15 $43.50
- 2.3mm F137 2H 23 $43.50

Cut With Relief for smooth milling surfaces & extended edge life of the bur.
Optimized machining angle for maximum cutting performance.

Polished Ledge
Special inclination of the machining angle ensures minimum removal of material.
Flat-Top Polishing Milling Burs

0.7mm  F116 2P 07  $25.95
1.0mm  F116 2P 10  $25.95
1.5mm  F116 2P 15  $25.95
2.3mm  F116 2P 23  $25.95

Parallel Milling 3 Step Kit - Flat Top
Contains:
1 of F116 2W ** (wax bur)
1 of F116 2H ** (metal bur)
1 of F116 2P ** (polishing bur)
$91.00

**Choose size:
0.7mm Parallel Milling Flat Kit  #330 008 16
1.0mm Parallel Milling Flat Kit  #330 008 17
1.5mm Parallel Milling Flat Kit  #330 008 18
2.3mm Parallel Milling Flat Kit  #330 008 19

Round-Top Polishing Milling Burs

0.7mm  F137 2P 07  $25.95
1.0mm  F137 2P 10  $25.95
1.5mm  F137 2P 15  $25.95
2.3mm  F137 2P 23  $25.95

Parallel Milling 3 Step Kit - Round Top
Contains:
1 of F137 2W ** (wax bur)
1 of F137 2H ** (metal bur)
1 of F137 2P ** (polishing bur)
$91.00

**Choose size:
0.7mm Parallel Milling Round Kit  #330 008 20
1.0mm Parallel Milling Round Kit  #330 008 21
1.5mm Parallel Milling Round Kit  #330 008 22
2.3mm Parallel Milling Round Kit  #330 008 23

Tapered Burs

Flat-Top Wax Milling Burs

2°  F186 2W 23  $45.50
4°  F186 2W 31  $45.50
6°  F186 2W 40  $45.50

Flat-Top Metal Milling Burs

2°  F186 2H 23  $45.50
4°  F186 2H 31  $45.50
6°  F186 2H 40  $45.50

Flat-Top Polishing Milling Burs

2°  F186 2P 23  $45.50
4°  F186 2P 31  $45.50
6°  F186 2P 40  $45.50

Round-Top Wax Milling Burs

2°  F200 2W 23  $45.50
4°  F200 2W 31  $45.50
6°  F200 2W 40  $45.50

Round-Top Metal Milling Burs

2°  F200 2H 23  $45.50
4°  F200 2H 31  $45.50
6°  F200 2H 40  $45.50

Round-Top Polishing Milling Burs

2°  F200 2P 23  $45.50
4°  F200 2P 31  $45.50
6°  F200 2P 40  $45.50
**Milling Bur System**

**Groove Burs**

**Flat Groove Burs for Metal**

<table>
<thead>
<tr>
<th>Diameter</th>
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<th>Price</th>
</tr>
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<tbody>
<tr>
<td>0.7mm</td>
<td>F538 2H 07</td>
<td>$27.50</td>
</tr>
<tr>
<td>1.0mm</td>
<td>F538 2H 10</td>
<td>$27.50</td>
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<tr>
<td>1.2mm</td>
<td>F538 2H 12</td>
<td>$27.50</td>
</tr>
<tr>
<td>1.5mm</td>
<td>F538 2H 15</td>
<td>$27.50</td>
</tr>
<tr>
<td>2.0mm</td>
<td>F538 2H 20</td>
<td>$27.50</td>
</tr>
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</table>

The groove bur exclusively serves to prepare grooves. For this purpose the groove bur is only moved up and down in the vertical axis. The cut on the face simplifies extending the grooves to the cervical direction. At speeds of 15,000 - 20,000 rpm a fine cutting performance and a mirror-like high luster on the milling surface are obtained.

**Shoulder Burs**

**Flat Shoulder Burs for Metal**

<table>
<thead>
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<th>Code</th>
<th>Price</th>
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<tr>
<td>2.9mm</td>
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<td>$35.95</td>
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The occlusal shoulder is prepared with a special shoulder bur. The shoulder bur features a face cut which smoothens the bottom of the shoulder. Optimum use of this tool is ensured at speeds of 15,000 - 20,000 rpm. A mirror-like luster on the milling surface is achieved with the relief cut. Additional polishing is not required.

**Preparation of a Shoulder-Groove Attachment**

1. It is recommended to wax the entire crown in wax prior to starting the milling work.
2. In the first step a shoulder with a margin step is prepared with a round 2.3mm parallel wax bur.
3. The insertion grooves are then prepared with the flat 1.0mm groove bur.
4. The final wax step is to mill an occlusal shoulder with the 2.7mm shoulder bur.
5. After casting the crown, the parallel surface is finished with the 2.3mm round metal bur.
6. The insertion groove is finished with the same groove bur. The bur should only be moved up & down in the vertical axis.
7. The occlusal shoulder is reworked with the 2.7mm shoulder bur.
8. Finally, a high luster is achieved on the parallel surface using the 2.3mm round polishing bur.
9. The bredent milling burs produce such a high shine that additional polishing is not needed.
10. A secondary element with anatomy is created with the Pi-Ku-Plast pattern resin.
11. The secondary element is cast and fitted onto the crown.
12. The low shrinkage of the Pi-Ku-Plast pattern ensures excellent precision of fit of the two pieces.
Milling burs for non-precious and titanium

**Metal Milling Bur, Parallel - Flat top**

- Ø 1.0 mm  
- Ø 1.5 mm  
- Ø 2.3 mm  
  Working speed on non-precious metal 20,000 - 25,000 R·min⁻¹

**Metal Milling Bur, Tapered - Flat Top**

- 2° taper  
- 4° taper  
- 6° taper  
  Working speed on non-precious metal 20,000 - 25,000 R·min⁻¹

**Metal Milling Bur, Parallel - Round top**

- Ø 1.0 mm  
- Ø 1.5 mm  
- Ø 2.3 mm  
  Working speed on non-precious metal 20,000 - 25,000 R·min⁻¹

**Metal Milling Bur, Tapered - Round Top**

- 2° taper  
- 4° taper  
- 6° taper  
  Working speed on non-precious metal 10,000 - 20,000 R·min⁻¹

**Polishing Bur, Parallel - Flat top**

- Ø 1.0 mm  
- Ø 1.5 mm  
- Ø 2.3 mm  
  Working speed on non-precious metal 10,000 - 20,000 R·min⁻¹

**Polishing Bur, Parallel - Round Top**

- Ø 1.0 mm  
- Ø 1.5 mm  
- Ø 2.3 mm  
  Working speed on non-precious metal 10,000 - 20,000 R·min⁻¹

**Abrasive burs for titanium, precious and non-precious metal and milling work**

A rich quantity of milling and drilling oil is applied onto the milling surface and a speed of 20,000 - 25,000 rotations per minute is used for milling. While adding a copious amount of milling and drilling oil, the milling surface is prepolished with the polishing bur at 20,000 rotations per minute and then polished to high luster at 10,000 rotations per minute.

The cutting edge geometry has been especially designed for rapid removal of material. The relief ensures smooth running and allows very smooth

All milling burs are also available in a 3.0 shaft diameter as special order. Please refer to special order items terms.
Diacryl
Diamond instruments for acrylic.
Benefit: Tremendous noise reduction compared to carbides.

Save time and improve quality by grinding acrylic with diamond coated Diacryl rotary instruments. Thanks to their uniform, coarse grit diamond particles with sharp edges and their specific shapes, Diacryl diamond instruments are excellent for trimming acrylic dentures quickly and accurately. Thanks to their extra coarse diamond grit and large diameter, these instruments grind aggressively and quietly.

Diacryl Grinding Instrument Kit
Coarse Instrument
Papilla Instrument
Round Tip Instrument
Pointed Tip Instrument
Universal Instrument
Rubber Instrument
#340 010 70 $282.00

Set-up Grinding Tool
Two grinding tools in one.

Grinding without exchanging tools in a single working step
• quick adaptation of the underside of the tooth to be set up
• grinding in of occlusal stops

The extra coarse diamond grit and large diameter help to grind aggressively. They are perfect for reducing large areas of acrylic. The hollow shape keeps them cool and enables them to be used at a higher speed.

The universal diamond instrument can be used in lingual and palatal areas. For grinding large papillae and root attachments or lingual bars.

The pointed flame shape permits the papillae and alveolar attachments to be ground interdentally.

The large grinding area with its optimized shape and selected natural abrasive diamonds ensure maximum removal of material and thus accurate and quick grinding.

The small, precisely shaped grinding tip with fine, perfectly cutting diamond grains provides the ideal precondition for well-aimed and rapid grinding of occlusals contacts.

80 to 100µ
160 to 180 µ

Set-up Grinding Tool
1 piece
#340 010 10
$62.50

The universal diamond instrument can be used in lingual and palatal areas. For grinding large papillae and root attachments or lingual bars.
Special Diamonds for the Veneering Technique

Perfect finishing of acrylic and ceramic veneers.

The concave part of this tool ensures perfect contouring of the approximal surfaces around the neck of the tooth. Enhanced aesthetics in less time.

The conical grinding tool has a coated face which provides for universal application. The entire design process can be completed with this tool.

The very thin tip of this tool allows the efficient design of tooth necks for single crowns and bridges.

This tool can easily create uniform enamel bulges at the tooth neck. All tools can be used on ceramic and acrylic veneer materials.

#340 008 40
$27.95

#340 008 30
$27.95

#340 008 50
$27.95
Diagen

**Diagen instruments for zirconium oxide, metal, porcelain, procera and in-ceram.**

![Image of Diagen tools]

The diamond instrument with exceptional grinding performance thanks to the special Diagen diamond bonding. High grinding performance and abrasion on metal and porcelain surfaces - only minimal pressure has to be exerted. The prolonged service life in comparison to conventional bonding systems provides for a wide range of applications and high efficiency.

**Diagen Turbo Grinder DTG 5 piece Kit**
- Cone, 3.5 x 11 mm
- Cylinder, 4.8 x 14 mm
- Cylinder, 6.5 x 13 mm
- Disc, 15 x 3.5 mm
- Disc, 22 x 4.5 mm

#340 002 00
$211.00

Maximum grinding power and abrasive capacity on metal and ceramic surfaces at reduced pressure. Increased surface life compared to conventional binding material allows for a wide range of applications and thus high efficiency.

**Diagen Cone**
- 3.5 x 11 mm, 2 pieces

#340 001 50 $58.95

**Diagen Cylinder**
- 4.8 x 14 mm, 2 pieces

#340 001 60 $63.95

**Diagen Cylinder**
- 6.5 x 13 mm, 2 pieces

#340 001 70 $80.00

**Diagen Disc**
- 15 x 3.5 mm, 2 pieces

#340 001 80 $80.00

**Diagen Disc**
- 22 x 4.5 mm, 1 piece

#340 001 90 $80.00

**Diagen Disc**
- 22 x 2 mm, 1 piece

#340 002 20 $60.00

**Diagen Inverted Cone**
- 12 x 6 mm, 1 piece

#340 002 40 $62.50

**Diagen Inverted Cone**
- 6 x 8 mm, 1 piece

#340 002 50 $51.50

**Diagen Inverted Cone**
- 6 x 8 mm, 1 piece

#340 002 40 $62.50

**Diagen Inverted Cone**
- 6 x 8 mm, 1 piece

#340 002 50 $51.50

**Diagen Inverted Cone**
- 6 x 8 mm, 1 piece

#340 002 50 $51.50

**Diagen Turbo Grinder Ceramic 5 piece Kit**
- Cone, 3.5 x 11 mm
- Inverted Cone, 12 x 6 mm
- Inverted Cone, 6.0 x 8 mm
- Lens, 22 x 12 mm
- Disc, 22 x 2 mm

#340 002 05 $230.00

**Diagen Inverted Cone**
- 12 x 6 mm, 1 piece

#340 002 40 $62.50

Gentle and pressure-free grinding allows perfect finishing and efficient removal of material.

Grind gently, without exerting pressure, to trim the restoration optimally and reduce the material quickly.

The various shapes allow a large application in all areas.

As it only warms minimally during grinding and reduces the material rapidly, this grinding system is perfect on porcelain.

The diamonds are gripped in place to permit even the hardest acrylics, metals and porcelains to be ground.

Thanks to their Diagen diamond bond, these instruments are well suited for reducing wide areas of material quickly.
The cylindrical shape is perfectly suitable for parallel processing.

The inverted cone with recess provides a cooling effect and thus the perfect precondition for processing zirconium oxide.

Due to their diamond coating, Diagen Turbo grinders represent the ideal tools for processing materials such as glass ceramic or zirconium oxide.

Rapid and convenient shaping of implant suprastructures. The fine diamond particles produce a smooth surface.

The variety of different shapes allow to obtain a wide indication range.

Extremely hard alloys and ceramic materials can be processed as easily as gold.

---

**Abraso-Gum**

For polishing of the occlusal surface.

The tip of the Abraso-Gum has a very fine diameter of only 3mm. It finishes the occlusion and grooves very precisely. The system has 3 different textures ranging from Semi-Precious (PM) to Non-Precious (NP).

**Abraso-Gum Assortment**

#520 001 52 $65.00

- 12 Abraso-Gum red
- 12 Abraso-Gum blue
- 12 Abraso-Gum green
- 12 Abraso-Gum black
- 12 Abraso-Gum brown
- 1 Gummy Holder

**Gummy Holder**

#350 002 30 $11.00
Giflex-TR diamond discs
Controlled saw cuts due to the perforated design.

Giflex-TR is a disc for handpieces that features diamond-coating on both sides and is especially suitable for cutting dies out of plaster, refractory and resin. Calculated chip spaces in the area of the diamond coating ensure quick removal of the grinding dust and increase the cutting performance of the disc. Giflex-TR allows for quick, smooth, and reliable cutting even of very hard plaster and resin. Troublesome chattering and jamming of the disc is avoided.

Larger holes in the diamond free section reduce the friction heat. The disc will not overheat even if deep cuts are carried out. The running transparency allows for a better view into the saw cut.

The grinding dust is removed quickly through the perforations in the diamond free area so that jamming of the disc is avoided.

Giflex-TR 45 mm
Shaft diameter: Standard 2.35 mm
Diameter: 45 mm
Thickness: 0.3 mm
Recommended Speed: 10,000 - 15,000 RPM
Giflex-TR 45 mm #340 001 10
$57.50

Giflex-TR 37 mm
Shaft diameter: Standard 2.35 mm
Diameter: 37 mm
Thickness: 0.3 mm
Recommended Speed: 15,000 - 18,000 RPM
Giflex-TR 37 mm #340 000 20
$50.50

Giflex-TR 30 mm
Shaft: Standard 2.35 mm
Diameter: 30 mm
Thickness: 0.3 mm
Recommended Speed: 10,000 - 15,000 RPM
30 mm #340 001 20
$46.50

Giflex-TR 25 mm
Shaft: Standard 2.35 mm
Diameter: 25 mm
Thickness: 0.3 mm
Recommended Speed: 20,000 RPM
25 mm #340 000 25
$40.50

0.30 mm: Perfectly suitable for extremely difficult space conditions.

0.37 mm: The universal disc

0.45 mm: The disc for optimal processing

0.25 mm: For difficult work
Transflex-T diamond discs

The highly flexible grinding wheel with transparency for safe, concerted grinding.

Transflex diamond discs

Diagonally arranged cutouts for running transparency with high breaking strength and optimal grinding capacity.

Silicone Burs

Individually usable burs for all silicone materials
The crowns are shaped as usual using dentine material.

The incisal end is cut back using the mamelon cutter.

The individual shades can be applied onto the dentine core - regardless of whether firing has been carried out or not.

The incisal edges of the finished crowns exhibit a vivid display of colors.

Spot Clip
Hemostat with spot-shaped holding area simplifies veneering.

Spot Clip simplifies the application of stains and glaze material. No smearing of stains, no subsequent application of stains in the area of the holding spot of the clip is required.

Mamelon Cutter
Simplifies the incisal design of ceramic crowns.

Every ceramic specialist is familiar with the problems of metal-ceramic crowns without a metal margin: the holding spot of the hemostat is not sufficiently covered by base material (opaque). The problem can be solved with Spot Clip.

The clip only covers a tiny spot of the surface to be veneered. The base material can be easily applied around the holding spot of a clip.

After removing the Spot Clip, the aqueous base material fills the holding spot of the clip. This way a uniform smooth layer of base material is obtained.

Spot Clip simplifies the application of stains and glaze material.

Mamelon Cutter
1 piece
#310 000 01
$43.95

Large mamelon cutter for upper jaw incisors

Small mamelon cutter for lower jaw incisors

Bredent Spot Clip with Supporting Ring
1 piece
#310 000 07
$142.00

Bredent Spot Clip with Supporting Ring
1 piece
#310 000 07
$142.00

Bredent Spot Clip with Supporting Ring
1 piece
#310 000 07
$142.00
Cervical Disc
For quick, precise cutting of the cervical margin.

This precision steel cutting disc is 0.1 mm thick and 3.0 mm in diameter. It increases precision and reduces working time when cutting the margin on wax or plastic copings. You can achieve a better marginal fit with the cervical disc than with a scalpel.

Cervical Disc
1 piece
#320 009 10
$92.00

Precise 0.1 mm steel disc with 3 mm diameter. Guaranteed exact, clean cut.

Comparison between a scalpel (left) and the Cervical Disc (right).

Cervical Disc creates a precise cut around the margin so that a second wax-up on the margin is not necessary.

Articulation Paper Holder
Repeated picking up and placing down of the handpiece and articulation paper are no longer necessary.

Articulation paper holder size 2
1 piece
20 mm
#360 012 20
$24.50

Grinding in a flick of the wrist!
Ceramix
• Accurately measure
& dispense ceramic materials!

Dispensing syringe designed to accurately measure and dispense ceramic materials. Reproduce individual shade mixtures while minimizing waste. The syringe is made up of a cylindrical tempered glass scale and a smooth, machined stainless steel plunger.

To use Ceramix, simply select the desired quantity by pulling the plunger until it reaches the chosen number on the scale. Make sure the porcelain powder is condensed well in its container and insert the syringe. Extrude the selected amount on to your favorite ceramic mixing tray and mix the porcelain as usual. Ceramix can also be used to make custom shade tabs.

Quick Tool
• Safe & uniform grip!

Diamond tip instrument designed to produce a safe and uniform grip of crowns and bridges for easy handling. Porcelain crowns are held without any pressure due to the three diamond plated tips and the adjustable locking mechanism; even electro-formed copings can be safely secured.

In the case of reduced spaces such as in lower anterior crowns, a diamond tip can be removed. Additionally, the Quick Tool from Bredent has an integrated “slide condenser” that can be used for controlled condensing of porcelain during the build-up stage. The diamond tips for this instrument can also be purchased separately.
Ergonomic Wax Knife
• Dual tipped, all-in-one, light weight instrument for fast and accurate waxing of removable prosthetics!

Dual tipped, all-in-one, light weight instrument for fast and accurate waxing of removable prosthetics. Suitable for right and left handed users. A unique, edged shaped tip allows fast waxing and carving of age-specific interdental papillae. The other end is an edged shaped spoon that is suitable for easy festooning as well as applying large amounts of wax. The spoon shaped tip has an additional curvature that makes it ideal for carving and shaping the peripheral border and transition areas of a denture. Natural looking wax-ups are created quickly and comfortably with the Ergonomic Wax Knife from Bredent.

“The Cobra” • Repositioning Tweezers
• Quickly grab and secure small components!

Uniquely machined jaw tips designed to quickly grab and secure small components such as crowns, implant screws, attachments, and denture teeth. Minimize the loss of these items during steam cleaning with the Cobra!

“The Cobra” Repositioning Tweezers
#310 001 15
$65.00
Quick Change
Interchangeable system of instruments for: ceramics, c&b waxing and waxing of removable prosthetics

- Corrosion resistant
- Proper storage of sensitive ceramic blades
- Ceramic brushes can be perfectly stored in a hanging position
- Maximum safety when replacing heated tips

**PROPER STORAGE!**

- **Holder**
  - 1 piece #310 010 30
  - $130.00
- **Carbon Handle**
  - 1 piece #310 010 31
  - $70.00

**Blades**

- **Croco Smooth**
  - #310 010 32
  - $34.50
- **Croco Serrated**
  - #310 010 33
  - $34.95
- **Fissure Tool**
  - #310 010 34
  - $36.50
- **Adapter**
  - #310 010 35
  - $16.50
- **Blade according Zahle**
  - #310 010 40
  - $40.00
- **Probe 0.8**
  - #310 010 41
  - $29.75
- **Probe 1.1**
  - #310 010 42
  - $29.00
- **Koli Brush size 6**
  - #310 010 44
  - $23.95
- **Koli Brush size 8**
  - #310 010 45
  - $29.00
- **Koli Brush size 8B**
  - #310 010 46
  - $64.50
- **Blade**
  - #310 010 37
  - $40.00
- **Blade**
  - #310 010 39
  - $40.00

**Magic Contrast Brushes**

- **Magic Contrast Brush size 6**
  - #310 010 53
  - $35.95
- **Magic Contrast Brush size 8**
  - #310 010 54
  - $40.50
- **Magic Contrast Brush size 8B**
  - #310 010 55
  - $62.50
- **Twin Point**
  - #310 010 56
  - $34.50
- **Olive with Teeth**
  - #310 010 57
  - $34.50

**Thermo-Pen**
Portable flameless device!

Fast and efficient adaptation of thermoplastic clasps and accessories

- Can reach temperatures up to 250°C or 482°F
- Has an adjustable temperature controller
- Can be refilled using a high quality butane gas

**Thermo-Pen**
- #110 014 70
  - $305.00
**Transfuser**

Safe and simple filling of investment material

- No formation of air bubbles thanks to the highly flexibility of the silicone tip
- Ideal handling in narrow areas through the use of the bent tip
- Liquid repellent tip

### Transfuser

<table>
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<tr>
<th>Description</th>
<th>Price</th>
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<td>4 pieces #390 S00 04</td>
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Previously, air could be entrapped when pouring investment material into the modelation. Highly flexible, soft tip - no risk of damage to the wax modelation. Narrow areas are carefully and completely filled without damaging the modelation. Perfect flow of material and bubble-free condensing with the Transfuser.

---

**Waxpool Duo**

All-in-one wax dipping unit and wax knife

- Digital controls for added comfort
- °C or °F can be selected
- Exchangeable lids
- Precise temperature control for producing accurate copings
- High performance heating elements reduce melting time of waxes
- Recessed dipping well helps avoid finger burning
- Dipping pots reach a melting temperature of up to 120°C (250 °F)

### Waxpool Duo Dipping Unit

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</table>

- Fatigue-free working due to ergonomic design of wax knife
- Special heat insulating grips
- Fast exchange of waxing tips
- Boost key for quick heating of wax knife to final temperature of up to 240°C (464°F)
- Burn resistant cable

### Waxpool Duo Dipping Unit & Wax Knife Handpiece

4 pieces:
- 1 Waxpool Duo Unit
- 1 Waxpool Duo Handpiece
- 2 Contouring Blades of choice #110 015 20

$630.00

---

**Contouring Blade**

- size 1: #320 WP4 G1 $46.50
- size 3: #320 WP4 G3 $46.50
- size 5: #320 WP4 G5 $46.50
- Standard: #320 WP4 72 $46.50

---

**Previously, air could be entrapped when pouring investment material into the modelation.**

**Highly flexible, soft tip - no risk of damage to the wax modelation.**

**Narrow areas are carefully and completely filled without damaging the modelation.**

**Perfect flow of material and bubble-free condensing with the Transfuser.**
# Gnathoflex Premium

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For order number, replace _ with A, B, or C as per required mold size

$25.50 each

**Gnathoflex Premium 16 pc. kit**
16 forms in size A  
#429 P00 0A $318.00

**Gnathoflex Premium 16 pc. kit**  
16 forms in size B  
#429 P00 0B $318.00

**Gnathoflex Premium 16 pc. kit**  
16 forms in size C  
#429 P00 0C $318.00

**Isoflex**  
20 ml Ceramic insulating liquid  
#540 010 13 $45.000

**Video**  
Gnathoflex Premium Video  
(Free with purchase of any Kit)  
#VID-BREGNA $10.00

Assortment: **Gnathoflex Premium**  
48 pieces, consisting of 16 different molds in 3 sizes A-B-C  
#429 P00 48 $798.00
**NEW! Aesthetic Gnathoflex**

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</table>

For order number, replace _ with B, C, or D as per required mold size

$25.50 each

**Aesthetic Gnathoflex 36 pc. Assortment**

12 forms in 3 sizes - B, C, D

#429 A00 36  $695.00

**Isoflex ceramic insulation liquid**

Required when using the Aesthetic Gnatho Flex with porcelain.

20 ml  #540 010 13  $45.00
Wax occlusals

The copings are prepared as usual, using wax or acrylic.

To compensate for the thicknesses of the Gnathoflex, the bite is raised by .5 mm.

Fill Gnathoflex with wax and wait until the wax begins to gel.

Once the wax has hardened, place the Gnathoflex occlusal onto the coping.

Close the articulator in the position of the maximal intercuspation and attach the occlusal to the coping using a drop of wax. Depending on the situation, two or more Gnathoflex occlusals can be placed simultaneously or one after the other. The contact can be strongly varied by raising or lowering the antagonist.

High-luster, gnathologically shaped wax occlusals with perfect contact to the antagonist are the perfect basis for smooth and precision-fit casting. Gnathoflex Premium helps to save time during the preparation of the wax model as well as during finishing of crowns and bridges.

Acrylic occlusals

Prepare the structure as usual and apply crown and bridge acrylic (dentine).

No separating agent is required when filling the Gnathoflex with acrylic. First fill the cusps with incisal and then fill the mold completely with dentine.

Place Gnathoflex on the bridge, close the articulator and polymerize with UV light in order to fix the bite.

Then the bridge is removed, interdental contact areas are applied and polymerization is completed.

Ceramic occlusals

The opaque is fired on the metal structure. Hold the Gnathoflex with the tweezers and apply Isoflex insulating liquid onto the inner surface. Tap several times on the Gnathoflex to remove excess Isoflex insulating liquid. Fill incisal into the cusps and brush out form the cusps toward he margins. Fill the Gnathoflex with dentine and place on the bridge structure. Close the articulator and turn it. Fix the Gnathoflex occlusals to the bridge using dentine material. Dry the object and carefully remove the Gnathoflex. The other occlusals are prepared accordingly.
**NEW! Seracoll UV**

**Light curing wax adhesive liquid.**

Seracoll UV is a new light curing wax adhesive liquid from Bredent that is designed for use in creating stress-free connections in C&B and implant bar wax-ups. It is also suitable for fabricating wax-ups for the copy milling technique. Seracoll UV is totally homogenous with waxes and cures in any light curing unit with a UV or LED wavelength range of 270 – 580 nanometers in approximately 10 seconds; and, it burns-out clean and residue-free. This light curing liquid adhesive for waxes is highly accurate and saves time compared to using pattern resins for similar applications.

- Low viscosity
- Light curing, cures in all dental units
- Versatile
- Highly accurate and stable
- Clean burning
- Saves time
- Convenient packaging prevents spillage during use

**Seracoll UV**

#540 011 51

$44.00

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**NEW! compoForm UV**

Light-curing composite for modelling, fixation of separated bridges and for quick fabrication of post and core restorations. compoForm UV burns out without leaving any residue and produces homogeneous casting results.

**Individual modelling directly from the syringe. Thanks to immediate hardening with a polymerization lamp, the model can be built up in a safe and controlling manner.**

The stability of compoForm UV renders the material perfectly suitable for the transfer of the jaw situation and, consequently, stress-free working is ensured.

**compoForm UV**

2 x 3 mL syringes
10 application cannulas

#540 011 50

$79.50

**Accessories**

Application cannulas
25 pieces

#580 000 18

$20.50

- compoForm UV can be used in conjunction with modelling wax and is perfectly suitable for interlocking the model prior to investing. This way investing without any deformation is possible.

- Modelling and further processing of telescopic and conical crowns can be perfectly controlled by means of a visual check of the layer. The high stability of the hardened composite allows reworking with a bur.

- Thanks to low shrinkage and burning without any residue, the composite is ideal for fixation of bridges to be soldered.

- Model cast extensions can be fabricated in a simple and time-saving manner. compoForm UV can be easily removed from the plaster.

- Undercuts on dies can be quickly and completely blocked out.

- Burning without any residue and reduced swelling behavior provide perfect preconditions for top-quality casting results.
**Standard Modelling Wax**

Standard modelling wax for crowns, bridges, and inlays with a solidification point of 50 degrees celsius.

**Standard Modelling Wax - Beige, 70g**
#510 007 85  
$21.50

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**Bredent K2 Exact Carving Wax**  
**Highly precise, pure sculpting wax.**

Bredent K2 Exact Carving Wax will be delivered as a 60 g., fully anatomical first molar. For crowns, bridges, and inlays. The recently developed components of this wax offer maximum stability for modeling and ideal scraping properties. Raw materials which have undergone multiple purity checks guarantee optimal casts. As a result of better luminous reflectance, the natural dies make it easier to shape crowns and bridges anatomically.

**K2 Exact Gray** 60 g  
#510 009 02  $27.50

**K2 Exact Yellow** 60 g  
#510 009 03  $27.50

**K2 Exact Beige** 60 g  
#510 009 04  $27.50

**K2 Exact Green** 60 g  
#510 009 05  $27.50

---

**Clean casts and burnout**

**Marble base and clear acrylic dome**  
(does not include wax)  
#320 004 20  
$42.50
**Splendido Wax**

The light green color of this wax provides for improved light reflection and facilitates determination of the final contouring. The opacity of this wax allows for improved determination of the depth of the fissures in the wax pattern. This wax is suitable for fabricating all types of patterns - crowns, bridgework, inlays - and can be milled. “Splendido hard” can be milled at room temperatures of up to 40°C, making it particularly suitable for use in summer.

- **Splendido medium, light green** 25g
  - #510 006 90
- **Splendido hard, light green** 25g**
  - #510 005 90

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**Cervical Wax**

In order to achieve a perfect marginal seal on crowns, inlays, onlays, etc., the wax must adapt well and be completely shrink-free. Cervical Wax is used for forming the cervical margin and adheres perfectly to the coping and sculpturing wax.

- **Cervical Wax, red** 25g
  - #510 006 05

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**Wax For Outer Copings**

For fabricating outer copings onto metal. Easily spread and, while cooling, will not form creases on the surface exposed to the metal. Extremely good precision of fit, thanks to the minimal shrinkage.

- **Wax for outer copings, yellow** 25g
  - #510 004 20

---

**Undercut Wax**

This wax was developed in order to block out cavities in dies. It exhibits minimal shrinkage and adheres well. Its white color contrasts well with all types of die material.

- **Undercut wax, white** 25g
  - #510 004 80

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**Sticky Wax**

As it sets quickly and adheres very well, this sticky wax can be used for all techniques. It is easily boiled off, without leaving residue, thus guaranteeing clean surfaces.

- **Sticky wax, dark red** 25g
  - #510 004 00

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**KBI Wax**

KBI is a new generation sculpturing wax, exhibiting the following properties: Minimal shrinkage, remains where placed, easily sculptured and forms firm shavings which leave a smooth surface. Ideal for any wax-up technique. The light blue color enables the technician to view the contours and surface structure of the pattern in greater detail. “KBI hard” is available for use in summer. Both waxes are suitable for milling.

- **KBI medium, light blue** 25g
  - #510 009 10
- **KBI hard, light blue** 25g**
  - #510 009 20

---

**Life Color Wax**

This wax was developed specifically for use with the M.A. Polz technique of wax-up. It is ideal for training apprentices, as the anatomical contours are more readily recognized. This wax exhibits minimal shrinkage and is available in two consistencies - medium and hard.

- **Life color wax, tooth colored, medium** 25g
  - #510 008 00
- **Life color wax, tooth colored, hard** 25g
  - #510 008 10

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**Tooth Colored**

- **Life color wax, tooth colored, medium** 25g
  - #510 008 00
- **Life color wax, tooth colored, hard** 25g
  - #510 008 10

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**Gecko Sculpturing Wax**

This sculpturing wax is available in the same colors as dental stone, for orientating the wax pattern to the model. The colors give an overall view of the pattern and the remaining dentition, thus enabling the user to compare them objectively. These waxes are based on new conceptions for speeding up fabrication of wax patterns and improving their precision, and are intended to meet the demands of everyday dental technology. Close cooperation with dental technicians and master technicians enabled the waxes to be optimized for use in all branches of dental technology. These waxes can be applied precisely, have excellent contouring, and produce firm shavings which leave a very clean surface.

- **Gecko green for Die Keen, 25g**
  - #510 006 01
- **Gecko beige for Fuji Rock, 25g**
  - #510 006 02
- **Gecko red for Vel-Mix-Stone, 25g**
  - #510 006 03
- **Gecko yellow for Super Die, 25g**
  - #510 006 04

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**Life Color Wax**

This is the classic supplement to the tooth colored Life Color wax. It is ideal as a cervical and coping wax as its dark base color improves the color contrast of the fissures. It is also available in two consistencies - medium and soft.

- **Life color wax, dark brown, soft** 25g
  - #510 008 20
- **Life color wax, dark brown, medium** 25g
  - #510 008 30

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**Dark Brown**

- **Life color wax, dark brown, soft** 25g
  - #510 008 20
- **Life color wax, dark brown, medium** 25g
  - #510 008 30
Dipping Waxes
Accurate, precise fitting copings.

Using this method you can save up to 90% of your material costs compared to copings made using vacuum forming systems. The dipping wax requires no separating medium for removal from smooth preparations or metalwork. The wax forms a constant thickness. Dipping wax is supplied as beads.

Dipping wax canary yellow, 130g #510 008 50  $56.95
Dipping wax red, 130g #510 008 60  $56.95
Dipping wax green, 130g #510 008 70  $56.95

An extremely precise pattern produced using our dipping wax without the need to re-wax the cervical margin.

Using this method you can save up to 90% of your material costs compared to copings made using vacuum forming systems. The dipping wax requires no separating medium for removal from smooth preparations or metalwork. The wax forms a constant thickness. Dipping wax is supplied as beads.

Shows the constant wax thickness and excellent marginal fit without having to re-wax the cervical margin. Dipping wax is supplied as beads.

The dipping wax requires no separating for removal from smooth preparations or metalwork. Hence it is ideal for precision dental technical work.

Use the white wax to block out undercut or to build up the ideal form of preparation. It does not adhere to the other waxes.

Use the dentine colored wax in conjunction with castable ceramics and when producing Life Color wax copings.
Elaflex
Super-elastic dipping wax for highly precise wax copings.

Even in inlays, the cavities can be precisely prepared using Elaflex. This way, modeling is simplified.

Elaflex is so flexible that the wax coping is not deformed when it is removed.

Elaflex is self-insulating on all metal parts that are polished to high luster.

Elaflex, purple
130g.
#510 009 00
$56.95

Visio-Dip
Dipping wax allowing visual control at a wax thickness of 0.3 mm.

At a wax thickness of more than 0.4 mm the die is no longer visible.

The die becomes visible at a layer thickness of 0.3mm. Less finishing work is required if a precise wax thickness is ensured.

Visio-Dip, mustard yellow
130g.
#510 007 30 $56.95
Biotec Wax System

The Biotec Wax System is a full line of waxes, pontics, sprues and liquids designed specifically for pressable ceramics. The low shrinkage and clean burnout characteristics of these components makes them ideal for cases which require the utmost precision.
Biotec modelling wax
Modelling wax made for the best modelling properties, shrinkage and complete burn out.

- The excellent scraping properties ensure perfect fit of the wax crown on the die.
- Wax residues can be blown away easily.
- Low shrinkage leads to high precision of fit.
- Residue-free burn out is the prerequisite for homogeneous casting.
- Perfectly suitable for modelling pressable ceramic crowns and inlays.

Biotec Modelling wax, green
60 g
#510 006 11 $29.95

Biotec Modelling wax, gray
60 g
#510 006 10 $29.95

Biotec wax for outer copings
Modelling wax for uniform layering with low shrinkage and outstanding burn out properties.

Biotec wax for outer copings
28 g
#510 006 13 $26.95

Uniform coping thickness due to perfect scraping properties. When the die shines through, a layer thickness of 0.3 to 0.4 mm has been achieved.

Low shrinkage and excellent burn out properties ensure utmost precision of fit and homogeneous castings.
**Biotec cervical wax**

Modeling wax for precision-fit crown margins due to low shrinkage and outstanding burn out properties.

**Biotec cervical wax**

28 g  
#510 006 12  $25.50

**Biotec blocking out wax**

Special wax for blocking out undercuts with very good scraping properties. No discoloration on the plaster model after boiling out.

The special consistency of this wax, minimum shrinkage and extremely low quantity of residues of combustion ensure perfect fit of the crown margin.

**Biotec blocking out wax**

28 g  
#510 006 15  $25.50

The special components of the blocking out wax ensure perfect blocking out of undercuts.

Easy and quick scraping allows one to save time.

No color additives penetrate into the plaster surface after boiling out the model. The master model remains clean.
Biotec milling wax
Excellent milling wax with superb modelling properties.

Biotec Milling Wax
28 g
#510 006 14 $25.50

Enormous amount of time is saved due to good modelling properties since no other wax is required for the shear distributor.

For selection of milling burs, see page 74-77.

Outstanding scraping and milling properties since sticking of wax to the bur is avoided.

Extremely accurate milling wax to produce smooth and shining surfaces during milling.

Can be used for pressed ceramics since the wax burns out almost entirely.
**Biotec wax sprues**

Sprue wax with organic components, highly flexible and burns out completely.

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High flexibility and low elastic recovery after shaping allow specific stress-free attaching of the sprues. Residue free burn out is the basis for perfect casting results. Perfectly suitable for modeling pressed ceramic crowns and inlays.

**Isobre wax insulating liquid**

Micro-fine insulating liquid on organic basis for reliable, exact separation of the wax pattern against all materials.

Isobre wax insulating liquid on organic basis is absolutely reliable, solvent-free and can be washed off easily. Neutral against plastic, ceramic, metal, plaster and painted surfaces. Even when the insulated surface has dried, Isobre wax insulating liquid will produce a highly efficient, micro-fine insulating layer which ensures simple and safe removal of the wax pattern. Highly absorbing surfaces must be insulated 2 to 3 times.

<table>
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<th>Isobre wax insulating liquid</th>
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**Wax-Lite surface tension reducing agent**

Alcohol-free surface tension reducing agent for bubble-free investing of wax patterns.

Wax surfaces that are coated with this agent allow the flowing of the investment material into very fine recesses of the wax pattern so that smooth, homogeneous surfaces and clean occlusal surfaces result. With the spray bottle, micro-fine layers of Wax-Lite can be applied on the wax surface. Tension free investing of very thin patterns is ensured due to the absence of evaporation cooling of the alcohol.
Biotec pontic blocks without collar B-MKBL OG
Ash free pontics with properties similar to modeling wax. Ideal for pressable ceramics.

Refill Packages (RP):
Each form and size is available as a refill package
25 pieces each
$58.50

Mini kit:
2 blocks of each 18 forms
#B13 000 MK
$107.50

The melting point, hardness and scraping properties are adapted to the modeling waxes to allow simple and specific connecting of the pontics with the crown pattern. The extremely low quantity of residues of burn out of the Biotec pontics provide perfect preconditions for smooth, homogeneous cast surfaces. The ash free burnout makes it ideal for pressable ceramics.
Between Blocks BW-BL

This is a porcelain wrap-around pontic with no lingual collar. It is designed to use the same amount of metal as a hollow pontic.

Available in 25 piece refill kits $58.50
Available in yellow wax only

**BW-BL Between Blocks 36 piece Mini Kit**
2 blocks of each 18 forms
#D00 00B MK $107.50

**BW-BL Between Blocks 90 piece Kit**
5 blocks of each 18 forms
#D00 180 05 $252.00

**Posifix**
The ideal, gray sticky wax for positioning wax patterns.
50g #430 016 37 $38.95
**In Between Pontics BWG**

This is a porcelain wrap-around pontic with no lingual collar. It is designed to use the same amount of metal as a hollow pontic.

For order number, replace _ with A, B, or C as per required pontic size

**Available in 25 piece refill kits $23.50**

**Available in yellow wax only**

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BWG In Between Pontics 108 piece Mini Kit
2 pieces of each 54 forms
FREE BWG Instructional Video
#D00 000 MK $107.50

BWG In Between Pontic 270 piece Kit
5 pieces of each 54 forms
#D00 540 05 $252.00

**Posifix**
The ideal, gray sticky wax for positioning wax patterns.
50g #430 016 37 $38.95
Hollow Pontic Blocks HP-BL

Available in 25 piece refill kits only $58.50
Available in blue wax only

HP-BL Hollow Pontic Blocks 36 piece Mini Kit
2 blocks of each 18 forms
#A11 000 MK $107.50

HP-BL Hollow Pontic Blocks 90 piece Kit
5 blocks of each 18 forms
#A11 180 05 $252.00

Posifix
The ideal, gray sticky wax for positioning wax patterns.
50g #430 016 37 $38.95
Pontics with Shallow Collars for Ceramic
This is a full body design with a traditional lingual collar.

Available in 25 piece refill kits only $58.50
Available in blue wax only

FGMK-BL Pontics with shallow collars for ceramic 90 piece Kit
5 blocks of each 18 forms
#A01 180 05 $252.00

Posifix
The ideal, gray sticky wax for positioning wax patterns.
50g #430 016 37 $38.95
AK-BL Pontics with Aesthetic Anatomical Occlusals
This is a fully anatomical aesthetic occlusal pontic design with hollow interiors.

Available in 25 piece refill kits only $58.50
Available in blue wax only

AK-BL Pontics with Aesthetic Occlusals 60 piece Kit
5 blocks of each 12 forms
#A12 120 05 $170.00

Posifix
Gray wax for positioning pontics and wax patterns.

Posifix wax simplifies placement of individual pontics and pontic blocks. Posifix is sticky enough to hold the patterns precisely in place but still can be removed cleanly without any residue.
Aesthetic & Ergonomic Pontics for Ceramic

Available in 25 piece refill kits $58.50
Available in blue wax only

AEMK-BL Aesthetic & Ergonomic pontics for ceramic 36 piece Mini Kit
2 blocks of each 18 forms
#A02 000 MK $107.50

Posifix
The ideal, gray sticky wax for positioning wax patterns.
50g #430 016 37 $38.95
Chrome Cobalt Bonding Agent
Pre-opaque that allows porcelain to be fired onto chrome cobalt & non-precious alloys.

- Prevents metal oxides from chrome cobalt alloys, non-precious and semi-precious alloys.
- Results in an excellent ceramic bond while retaining the original shade of the porcelain.
- As it is a ceramic material, it bonds extremely well with opaques.
- A layer of 10-20 microns is sufficient. No dark margins, even close to metal collars.
- Compensates for discrepancies between the coefficients of expansion of porcelain and metal.
- Can be applied without using any extra procedures or equipment.

Chrome Cobalt Bonding Agent Instructions

1. Pre-treating the metal coping:
After trimming and finishing the coping, sandblast it. Following this, the coping should either be boiled for 10 minutes in distilled water or thoroughly steam cleaned. At this stage the coping should only be held with tweezers. The coping must be thoroughly dried before the chrome cobalt bonding agent is applied.

2. Applying the bonding agent
Mix the chrome cobalt bonding agent into a thin consistency using distilled water. Apply one masking coat of chrome cobalt bonding agent with a staining brush. While doing so, go over the metal/porcelain junctures to avoid discolorations in the border zones.

Important:
Chrome cobalt bonding agent can be mixed only once. Should the mix dry out, it is no longer suitable for use.

Troubleshooting:
- Cracks in the chrome cobalt bonding agent:
  Consistency or layer too thick. Sand-blast and reapply properly.
- Blisters in the chrome cobalt bonding agent:
  We recommend degassing the coping before the bonding agent is fired, by heating to 980°C in vacuum and holding for 10 minutes.
- Green/Black spots:
  Either the bonding agent was mixed too thinly, the coping was moist or greasy or dried out material was re-used.
- Cracks in the porcelain:
  Can occur if the metal coping is disproportionately small in relation to the volume of the porcelain or if the metal connectors are defective. Should a reddish-brown layer appear instead of a yellow one, then the alloy is unsuitable. Simply use another commercially available chrome cobalt alloy.

To date, only three alloys have been proven unsuitable: Crutanium, Crystalloy and Ticonium.

3. Firing the chrome cobalt bonding agent
May vary according to individual furnaces. Recommended values:
Initial Temperature: 650°C.
Final Temperature: 980°C in vacuum.
Rate of Temperature increase: 55°C per minute.
Once the final temperature has been reached, remove the coping from the furnace. The coping should now have a yellow or golden yellowish appearance. At this stage, the opaque can be applied, according to the porcelain manufacturer’s instructions.

Many dental laboratories have successfully worked with our chrome cobalt bonding system. Despite this, we recommend testing the bond on a sprue button made from your chrome cobalt alloy. Poorly processed alloys can also lead to defects. Often alloys are overheated and burnt during casting.

Chrome Cobalt Bonding Agent
8 ml  #520 003 21  $78.50
39 ml  #520 003 20  $294.00

Ceram-Bond
For increased reliability with alloys.
The premixed, ready-to-use Ceram-Bond allows you to omit oxide firing when veneering metal frameworks. Ceram-Bond is applied immediately after finishing, sandblasting, and cleaning metal framework. This micro-fine layer improves bonding of the ceramic material to the metal framework, protects against spalling and offers increased reliability.

Ceram-Bond
7 g    #520 003 23    $78.50
Microceramic

Perfect cast surfaces due to microfine investment layers for crowns and bridges and CoCr work.

In the field of crowns and bridges, Microceramic is especially suitable for non-precious alloys since very cast surfaces are obtained. The Microceramic is adapted to the expansion of the investment material.

An extended processing time span allows precise application of the Microceramic. Microscopically fine ceramic particles ensure perfect reproduction of very fine details of wax models.

The difference after sandblasting with glass beads can be clearly recognized: The entire oxide layer can be easily removed so that less working time is required.

Devesting is simplified since there is no bonding between the investment material and Microceramic.

Microceramic
125 ml
#550 000 12
$31.50

Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
<th>Price</th>
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<tbody>
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<td>3 brush size A + 1 brush holder</td>
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<td>$25.95</td>
</tr>
<tr>
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<td>#330 011 47</td>
<td>$25.95</td>
</tr>
<tr>
<td>3 brush size C + 1 brush holder</td>
<td>#330 011 48</td>
<td>$25.95</td>
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</table>

Microceramic avoids extreme formation of oxide on non-precious metal alloys. Cast objects are only sandblasted with 50 micron glass beads to obtain almost perfect high luster. Consequently, time for further processing is saved.
Pi-Ku-Plast HP 36
For accurate, stable and millable resin dies and frameworks.

Optimum contouring properties, will not slump. Available in 5 different transparent colors to allow the thickness to be checked and to contract well within the wax. When used with the Pi-Ku-Plast separating agent, resin inner copings can be base for producing milled restorations. Ideal for connecting bar sections for soldering.

Due to the multigrain design, Pi-Ku-Plast absorbs less monomer and therefore has less shrinkage. Various grain sizes shift into the gaps of each other for a compact, sturdy application. The burnout is clean and complete. In burnout, Pi-Ku-Plast does not expand but collapses. This puts no internal stress in the casting ring, resulting in a clean, stress-free casting.

Optimal control of layer thickness thanks to the transparent colors of Pi-Ku-Plast HP36

Thanks to the smooth, high-lustrous reproduction of the metal surface of the primary element, a perfect inner surface of the secondary crown is obtained.

By using Pi-Ku-Plast Separating Agent, Order No. 540 001 82, for the first time ever, resin primary elements can be produced on varnish-coated dies. This is the perfect basis for milled restorations.

Entirely gap-free fit of the Pi-Ku-Plast outer coping allows perfect precision of the secondary elements.

Implant bars can be secured in place rigidly with optimal dimensional stability.
Pi-Ku-Plast HP 36
For accurate, stable and millable resin dies and frameworks.

The competitor’s resin and Pi-Ku-Plast HP in the incineration test. At 275°C the competitor’s product foams and expands considerably. At 300°C the competitor’s product reveals distinctive expansion whereas Pi-Ku-Plast reduces in volume.

Identical copings produced with brush resin. The competitor’s resin and Pi-Ku-Plast HP 36, prepared for investing. The considerable expansion of the competitor’s resin during the incineration phase resulted in the fracture of the investment material die in the casting ring. After casting, the crown is sealed with a lid and cannot be used. A section through the cast crown shows the fractured die.

Through friction heat during grinding and high heat sensitivity, the plasticity phase of the competitor’s resin can be reached. Deformation of the model, rough grinding surfaces, and inadequate fit may result.

Pi-Ku-Plast features dimensional stability; during grinding fine shavings are obtained and a smooth grinding surface is ensured. Allow the wax element to cool down to obtain a tension free bridge model. Separate using a thin blade and connect using Pi-Ku-Plast HP 36.

The extremely low shrinkage of Pi-Ku-Plast allows to obtain a tension free model and precision fit casting.

REFILL PACKAGES

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparent</td>
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<tr>
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<td>Orange</td>
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<td>Blue</td>
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<tr>
<td>Red</td>
<td>$40.00</td>
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</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
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<tbody>
<tr>
<td>Monomer 100 ml</td>
<td>$40.00</td>
</tr>
<tr>
<td>Cleaner 100 ml</td>
<td>$54.00</td>
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<tr>
<td>Separating Agent</td>
<td>$27.50</td>
</tr>
<tr>
<td>3 brushes, Size A + holder</td>
<td>$25.95</td>
</tr>
<tr>
<td>Vessel for Monomer 8 ml</td>
<td>$12.50</td>
</tr>
<tr>
<td>Vessel for Polymer 8 ml</td>
<td>$12.50</td>
</tr>
<tr>
<td>Vessel for Cleaner 8 ml</td>
<td>$12.50</td>
</tr>
</tbody>
</table>

Pi-Ku-Plast HP36 Asst. Kit

$189.00
100 ml Monomer
100 ml Cleaner
85 g Polymer
1 Brush size A
1 Brush size B
3 Vessels

Transparent Kit #540 002 16
Yellow Kit #540 002 17
Orange Kit #540 002 18
Blue Kit #540 002 19
Red Kit #540 002 20
Ropak
Light curing pink opaquer for chrome cobalt frameworks.

Ropak light-curing opaque
10 ml Ropak uv-f liquid
#520 001 64 $32.00

Ropak light-curing opaque
10 g Ropak uv-p powder
#520 001 65 $57.00

The viscosity of Ropak UV can be adjusted to the individual requirements.

Mix powder and liquid on a mixing tray to obtain a homogeneous consistency.

Use disposable brush to apply the material. Ropak UV will coat the object even if it exhibits a thin consistency.

Apply thinly using the disposable brush; even dark metal elements will be coated in an aesthetic way.

Light curing liquid opaque for masking chrome cobalt prior to adding the acrylic. Because of its pink color, when the opaque is applied to framework, the chrome cobalt becomes almost invisible inside the acrylic. Cures in less than two minutes.

Tooth-colored UV Opaquer
To enhance aesthetics in the area of acrylic teeth.

Tooth-colored UV Opaquer
10 ml
#540 001 05 $45.50

Tooth-colored UV Opaquer is particularly suitable for the anterior area.

The tooth-colored opaque that features a fine coating capacity is applied to the desired area.

This way perfect coating of the metal and thus aesthetic restorations are obtained.
Diephos Dentine is a light curing, tooth colored die spacer to be used when fabricating all ceramic restorations such as veneers or inlays. An excellent alternative to blue, green and red die spacers; it prevents the color of the die stone to shine through. This enhances the visual perception of the dental technician allowing them to create highly aesthetic restorations.

- Allows accurate shade matching to the patients dentition
- Cures in 90 seconds (under 400nm or greater wavelength of UV light)
- Applies quickly and evenly
- Integrated brush in bottle cap
- Makes die surfaces abrasion resistant

**NEW! Diephos Dentine Tooth Colored UV Die Spacer**

Used when fabricating all ceramic restorations such as veneers or inlays.

Diephos Dentine is a light curing, tooth colored die spacer to be used when fabricating all ceramic restorations such as veneers or inlays. An excellent alternative to blue, green and red die spacers; it prevents the color of the die stone to shine through. This enhances the visual perception of the dental technician allowing them to create highly aesthetic restorations.

**Light-curing die spacer, transparent**

Results in dies which are smooth and hard as glass. Light curing die can be applied in the required thickness, thanks to its translucent color. This is the first die spacer which also toughens the die against mechanical loads. Retention beads and crystals adhere to it extremely well.

**Mixing block**

| 10 pieces | #330 011 44 | $49.00 |

**Disposable brush**

| 100 pieces | #330 011 42 | $25.50 |

**Brush holder straight**

| 12 pieces | #330 011 49 | $25.50 |

**Brush holder bent**

| 12 pieces | #330 011 41 | $25.50 |

**Light curing die spacer, opaque**

Swift application due to excellent masking of color.

**Light-curing die varnish is available in three different opaque colors. The fine masking capacity allows to obtain a uniform color of the varnish layer.**

**During the application the die varnish diffuses into the plaster surface. Depth polymerization leads to abrasion resistant bonding to the die. Light curing die varnish resists high mechanical stress. Even steam blasting the units does not affect the strong bonding.**
Porcelain mixing liquid

- Much less shrinkage thanks to improved condensing properties
- Prevents occlusal and interdental contraction cracks in the porcelain
- Easier to condense

**Tip:**
Mix the porcelain slightly thinner, to obtain the ideal consistency leave it for two minutes, if building-up takes a long time, stir the mixture from time to time if necessary and add a few drops of porcelain mixing liquid because the porcelain already begins to condense on the mixing slab.

Stain liquid

- Provides for an absolutely even glaze
- Holds the stains in place perfectly on porcelain
- Thanks to a new formula, this stain liquid can be used for inlay stains

Plaster Solvent

Readily mixed solution for removing plaster residue from all surfaces.

- Provides for an absolutely even glaze
- Holds the stains in place perfectly on porcelain
- Thanks to a new formula, this stain liquid can be used for inlay stains

**Plaster Solvent**

1 liter  #520 001 19  $24.95

- Provides for an absolutely even glaze
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Oxide-Stop for Precious Metals
Prevents polished, precious and semi precious alloy surfaces from oxidizing while being soldered with a flame or in a furnace and while firing porcelain.

Colloidal Graphite
Anti-flux agent for soldering and casting.

Colloidal Graphite
Used for establishing pre-contact areas when making attachment and telescopic work. This low viscosity, special graphite blend is used to coat inner copings with a thin layer of film in order to localize pre-contacts on the outer copings. Its low viscosity allows this anti-flux to be applied easily to any area, thus preventing wetting or penetration by the solder. Especially suitable for difficult cases. Dilute with water.

20ml  #540 007 06       $45.50
Silano-Pen
Safe, easy to use, inexpensive bonding system.

Gap-free, reliable chemical bonding of metal/resin, ceramic/resin, resin/resin

Secure bonding system for new acrylic veneers

Chemical bonding between acrylic and ceramic

Reliable bonding with acrylic veneer repairs

Simple preparation of metal frameworks for the repair of damaged veneers.

Gap-free bonding of new acrylic veneers on gold, non-precious metal and titanium.

Outstanding bonding from veneer resins on metal/ceramic transition zones.
Gap-free bonding with....

Cr-Co framework
Reliable bonding of acrylics to chrome cobalt retentions and facings.

Characterizing
Gap-free bonding of acrylic resins to prefabricated acrylic and ceramic teeth.

Solder free bonding
Pretreatment of bonding surfaces reduces their size due to increased bonding strength.

Full dentures
No discoloring of teeth in denture acrylics due to chemical bonding in cervical areas.

Processing instructions
Time saving, easy activating of metal frameworks.
For light curing veneering resins.

Silano-Pen Assortment Kit
1 Silano-Pen
1 Gas Cartridge*
2 x 2.5 ml Bonding Agent
1 Brush holder, straight
100 disposable brushes
1 Plastic bowl
3 Cleaning brushes
#320 004 70  $765.00

Refill packages
1 Silano-Pen
1 Gas Cartridge*
2.5 ml Bonding Agent
12 Brush holder, straight
100 disposable brushes
12 Plastic bowls
15 Cleaning brushes
#320 004 71  $335.00
#540 008 30  $350.00
#540 008 20  $78.00
#330 011 49  $25.50
#330 011 42  $25.50
#230 001 30  $12.25
#350 004 41  $39.50

*One gas cartridge is enough for the production of approximately 2000 veneers.
Heat Absorbent Paste

Apply the heat absorbent paste very close to the joint.

This paste will not melt when warmed.

Acrylic, porcelain or other heat-sensitive materials are no longer harmed by heat.

Retention Beads and Crystals

Optimum retention leads to the strongest possible acrylic-metal junctures.

Retention adhesive, white - no capillary action, solubilizes the crystals and adheres perfectly as well as having a long working time.

Crystals have double the retentive area of beads.

Retention Beads
Retention Beads 0.2 mm #530 020 10
Retention Beads 0.4 mm #530 022 00
Retention Beads 0.6 mm #530 021 00
Retention Beads 0.8 mm #530 020 00
$31.50

Retention Crystals
Retention Crystals 0.2 mm #530 004 80
Retention Crystals 0.5 mm #530 005 00
Retention Crystals 0.8 mm #530 005 10
$31.50

Retention Adhesive
This new type of retention adhesive prevents any capillary effect when the retention beads are sprinkled onto it.

20 ml bottle #540 007 11 $28.50
20 ml thinner #540 007 12 $22.50

There is no better method of protecting against heat. This paste will not melt when warmed. Acrylic, Porcelain, or other heat-sensitive materials are no longer harmed by heat.
Metal Polishing Set

This introductory set includes everything needed to polish metal from pre-polishing to a high shine.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abraso Star K50</td>
<td>Low abrasion</td>
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<td>$28.50</td>
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<tr>
<td>Abraso Star K80</td>
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<td>$28.50</td>
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<td>Abraso Soft Metal</td>
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<td>1</td>
<td></td>
</tr>
<tr>
<td>Abraso Buff Metal</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>High Luster Buff Metal</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Pumice Polishing Paste</td>
<td>for polishing acrylic and metal.</td>
<td>1 piece</td>
<td>$13.95</td>
</tr>
</tbody>
</table>

Pumice Polishing Paste

Abrasol Star Glaze

Universal high luster polishing paste for precious metals, non-precious alloys and acrylics.

<table>
<thead>
<tr>
<th>Item</th>
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<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abraso Star Glaze</td>
<td>Universal high luster for precious metals and acrylics.</td>
<td>1</td>
<td>$19.95</td>
</tr>
</tbody>
</table>

Acrylic Polishing Set

Highly recommended for dentist offices!

This introductory set includes everything needed to polish acrylic. For an extreme high shine it is recommended to use the Abraso Star Glaze.

<table>
<thead>
<tr>
<th>Item</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Abraso Star K50</td>
<td>Low abrasion</td>
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<td>$28.50</td>
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<tr>
<td>Abraso Soft Acrylic</td>
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<tr>
<td>Abraso Buff Acrylic</td>
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<tr>
<td>High Luster Buff Acrylic</td>
<td></td>
<td>1</td>
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</tr>
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<td>Pumice Polishing Paste</td>
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</tr>
</tbody>
</table>

High Luster Buff Acrylic
Abraso Soft Acrylic

The open pore, special nonwoven fabric and bleached bristles absorb more polishing paste due to the heat generated during polishing and reduces the working time by up to 50%.

Abraso Buff Acrylic

Three rows of high grade bristles and layers of special textile guarantee outstanding results when pre-polishing.

The bristles are bleached. The bleaching roughens and softens the bristles. The rough surface retains the pumice better and polishes the acrylic more actively without harming the surface.

The special textile layers retain the polishing paste or normal pumice much longer than conventional brushes. The polishing paste no longer has to be applied continually. As the nonwoven fabric absorbs more air it is gentler on the acrylic and the surface remains cooler. The surface is not harmed.

Bleached bristles are harder than goat-hair and softer than black bristles. Bleaching roughens the surface and retains all types of polish better. This simplifies polishing of acrylics and enables the surface to be conditioned perfectly.
Acrylic High-shine Polishing
The air is circulated continually to polish acrylic coolly and gently.

This high luster buff is ready for immediate use on a polishing motor and can be used easily and without fraying. Specially selected fabric prevents the acrylic from overheating.

High Luster Buff Acrylic

<table>
<thead>
<tr>
<th>Description</th>
<th>Diameter</th>
<th>Layers</th>
<th>Code</th>
<th>Price</th>
</tr>
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<tbody>
<tr>
<td>1 piece</td>
<td>Ø 60 mm</td>
<td>25</td>
<td>#35000940</td>
<td>$15.50</td>
</tr>
<tr>
<td></td>
<td>Ø 100 mm</td>
<td>35</td>
<td>#35000820</td>
<td>$12.50</td>
</tr>
</tbody>
</table>

The fiber reinforced outer layers provide this buff with its previously unheard of stability.

The 35 layers of textile have been welded into place ultrasonically to prevent them from rotating, and, due to their high strength, create a perfect high shine.

The loose woven textile circulates the air during high luster polishing and prevents the acrylic from overheating. Therefore, it polishes very gently.

High Luster Polishing with a Handpiece
Produce a radiant high luster, even in the tiniest areas.

Cotton Buff
15 pieces Metal / Acrylic
Ø 22 mm  #35000650  $35.00

Fluffy, soft cotton fibers create a mirror like finish on soft alloys.

Super soft cotton threads polish palatal rugae optimally and do not leave rough areas which would trap deposits.
For optimum, abrasive pre-polishing right up to high luster polishing - specially developed polishing pastes enhance the properties of all polishing brushes. This saves time, allows the user to work in a relaxed, non-stressed manner and improves the quality of the work.

**Acrypol High Luster Paste**

Acrypol High Luster Paste for acrylics and composites
170 g #520 001 70
$21.00

Slightly abrasive material creates a virtually perfect high luster. Simply polishing over the surface with a cotton buff is all that’s needed to produce a perfect high luster.

**Pumice Polishing Paste**

*Great for Dentist Office use!*  
This long lasting Pumice Paste is used in place of the Pumice + Water mix. It reduces airborne pumice particles that enter the lungs. Cross contamination due to remixing of pumice is eliminated.

Pumice Polishing Paste for polishing metal and acrylics
3 pieces, 500 g each #520 001 60 $38.00  
1 piece, 500 g #SP 0160 $13.95

The gentle polishing properties allow all traces left from finishing to be removed from all soft alloys in seconds.

Pumice Polishing Paste for polishing metal and acrylics
3 pieces, 500 g each #520 001 60 $38.00  
1 piece, 500 g #SP 0160 $13.95

The low abrasion particles of this pumice polishing paste simplify polishing metal-acrylic junctures.

Pumice polishing paste diffuses into the brush and polishes for a very long time.

**Abraso Star**

**Abraso Star K50**  
High abrasion, 320 g #520 001 62 $28.50

**Abraso Star K80**  
Low abrasion, 320 g #520 001 61 $28.50

Abraso Star K80 is highly abrasive, which simplifies polishing all non-precious alloys.

As K50 and K80 stick to all polishing brushes well, abrasive polishing can be carried out longer than when using conventional polishing pastes.

Specially selected raw materials guarantee an absolute mirror-like finish on all dental acrylics.
Polishing Pastes

Abraso Star Glaze

Abraso Star Glaze
high luster polishing paste for metal, acrylic and composite
50 ml
1 piece
#520 001 63 $19.95

The excellent polishing properties reduce the effort required when polishing with a handpiece.

Abraso Star Glaze creates an optimum high luster quickly and easily.

Diamond Polishing Paste

Polishing paste with a high diamond content and long lasting, impregnated, hard felt wheels provide for the best possible finish on all porcelains.

Great for Dentist Office use!

Diamond Polishing Paste
5 g
#540 001 40 $107.00

Felt wheels
Unmounted, 12 mm Ø
100 pieces
#350 007 10 $82.95

The special consistency of the polishing paste enables it to diffuse into the felt and polish for up to five times longer.

The paste liquefies during polishing and can be pushed backward and forward on the facing without splashing.

Abraso-Fix

Fine abrasive particles integrated into the bristles enable all dental materials to be pre-polished without using polishing paste.

Round Brushes Assortment Kit
1 round brush yellow
1 round brush red
1 round brush blue
1 round brush green
#350 007 51 $43.95

Yellow-extrafine
#350 005 80 $23.95
The fine polishing particles create an optimum pre-high luster on all facing acrylics in the shortest possible times.
For: Composites and acrylics.

Red-fine
#350 006 00 $23.95
The soft abrasiveness makes it possible for an exact high luster finish even on secondary attachments.
For: Precious and semi-precious metals.

Blue-regular
#350 005 70 $23.95
The gentle abrasiveness enables all outer telescopes to be polished to a high luster accurately.
For: Non-precious and hard semi-precious metals.

Green-coarse
#350 005 90 $23.95
Perfect for quickly pre-polishing stippled chrome cobalt denture basis.
For: Chrome cobalt and non-precious metals.
**Abraso-Fix**

Abraso-fix polishers are suitable to pre-polish attachment components such as the VKS ball without the risk of over reducing material.

Abraso fix polishers (when brand new) must be run against a coarse diamond or truing stone in order to expose the abrasive particles. When polishing different materials, Abraso-fix polishers should be cleaned between applications using the aforementioned method.

All surfaces to be polished with Abraso-fix MUST be sandblasted first in order for them to polish properly.

Use elliptical movements and speeds of 10,000 to 15,000 RPM on sandblasted surfaces when polishing with Abraso-fix.

---

**Titanium Finishing**

Finishing Titanium rationally using cutters, polishers, brushes and pastes developed specifically for use on Titanium.

Extra-sharp blades, special blade geometry cutter and cutter blades combined with Diatit wear-resistance, which has been proven for many years, guarantee that titanium can be finished quickly without harming the material yet reducing heat development. The titanium Diatit-cutter grinds exceptionally abrasively yet runs extremely smoothly on the titanium surface. Thus, one can work accurately and quickly to achieve a uniformly smooth ground surface.

20,000 rpm  
#D194 KT 50  $35.90

20-25,000 rpm  
#D194 KT 40  $31.00

25-30,000 rpm  
#D198 KT 23  $26.90

10-15,000 rpm  
#D001 KT 14  $23.00

The cotton polishing buff, for use in a handpiece, and the Abraso-Star Glaze universal high-luster polishing paste create a fascinating, perfect high luster.

15 pcs. Ø 22mm  
#350 006 50  $35.00

The pre-polishers are matched to titanium to create a uniform, smooth surface on the restoration which can be polished immediately.

Abraso-Star Glaze  
50 ml  
#520 001 63  $19.95

Cylinder Bur, 23mm x 6mm Ø  
2 pieces  
#350 008 80  $20.00

Wheel Bur, 3mm x 22mm Ø  
2 pieces  
#350 008 70  $15.50
NEW! bre.Lux
Polymerization Multi Talent for Practice and Laboratory

To date, several devices were necessary for processing facing and dental materials. With bre.Lux the concept of processing all current materials with one single device becomes reality for the first time.

ENERGY

The bre.Lux Power Unit consists of one LED light polymerization device with 21 power LEDs in 3 different capacities, from 370 nm to 500 nm. The LEDs have a useful life of 20,000 hours. The bre.Lux LED N manual lamp (with spiral cable) features a capacity ranging from 370 nm to 500 nm. The flexible hose - with receptacle ring for the manual lamp - serves as a third hand and allows two-handed work.

PERFORMANCE

• Fixation / Hardening / Intermediate polymerization and final thorough hardening directly in the workplace and with one single device

• 370 - 500 nm covers the needed wavelength range, for the manual lamp as well

• Performance delay and reduction minimize the properties and results of dental materials

• Start-up delay and polymerization time can be easily combined

• Large volume for 2 models, optimally and uniformly illuminated

Please take note of the application recommendations for Bredent products.

CONSISTENCY

The membrane keyboard already comes with several parameters. On the left side: Reduced power for the start-up phase with 20 and 40 seconds and for continuous operation at full power as well. The combinations (such as start-up with reduced power) can be combined with the programmed running times of 60 to 360 seconds according to demand.

Example: 40 seconds with reduced power combined with a 180-second total running time means the total running time is lowered from 180 to about 40 seconds, and the running time would still be 140 seconds under full power.

Keyboard layout of the light polymerization device
(1) Display
(2) 20 seconds, 50% power
(3) 40 seconds, 50% power
(4) Continuous operation, 70% power
(5) 90 seconds, full power
(6) 120 seconds, full power
(7) 180 seconds, full power
(8) 360 seconds, full power
(9) Continuous operation, full power

Keyboard layout for the manual lamp
(1) Continuous operation, start/stop
(2) 15 seconds
(3) 30 seconds
The new veneering system
visio.lign has multi-layer novo.lign A veneers for anterior teeth, novo.lign P veneers for posterior teeth and a bonding system in perfectly matched shades. Additional tooth and gingiva materials complete the system.

Your benefits
• Color is stable and resistant thanks to industrially manufactured veneers
• Esthetic appearance thanks to anatomical shape and layering design
• Reproducible thanks to the use of identical moulds from the planning to the completion stages
• Time-saving and profitable
• Available in the classic A-D shades
• Resistant to plaque and abrasion thanks to complete hardening below 120°C and at a pressure of 250 bars
• Dual-hardening fixation system ensures complete hardening during processing

Discover the wide indication range of visio.lign which will facilitate your daily work routines in the laboratory and support you during the fabrication of esthetic restoration.

From the veneer-up to the definitive restoration

Selecting shade and design The esthetic try-in supports planning and transferring and...is the basis for a perfect wax-up of the framework and guarantees...individual restoration according to the patient’s wishes.

Indication examples

Removable restoration on telescopic crowns with novo.lign A Implant-supported bar restoration with novo.lign veneers CoCr Clasp restoration in the lower jaw with novo.lign A in the transparent key silicone visio.sil Screw-retained bar bridge made of biocompatible Bio XS resin. Stress-free bonding to SKY UVE-Abutments

visio.lign - the system for guaranteed esthetics

For more information call 1.877.328.3965 or visit us at www.xpdent.com.
The range of biocompatible materials available guarantees a wide and varied application range of the system.

bre.crystal

Features long-term stability, provides a dense and smooth surface. This results in enhanced comfort of wearing full dentures.
- No residual monomer - high biocompatibility
- Limited water absorption - constant suction effect, lasting precision fit
- Available in the shades: crystal clear, pink 1, pink 2, pink 3, pink stippled
- To be processed at 260ºC

bre.dentan

An industrially polymerized thermoplastic resin which increases the resistance to fracture and the biocompatibility of crowns and bridges.
- Three different dentine shades are available
- Can be veneered with conventional C+B resins
- Available in three common dentine shades: A, B, C
- To be processed at 260ºC

bre.flex

Unbreakable denture base material for partial dentures. The indication range also includes splints and sports mouthguards.
- Available in the shades: translucent, pink 1, pink 2, pink 3, tooth shade B
- To be processed at 222ºC

Bio Dentaplast

Clasps and attachments which are normally made of metal can be produced using tooth-colored Bio Dentaplast. The esthetic appearance of teeth at which retaining clasps have been attached is improved. Additional indications are:
- Crowns and bridges (temporary)
- Telescopic and attachment work
- Tooth-colored clasps
- Shades A1, A2, A3, B2, B3 based on the VITA® shade guide
- To be processed at 220ºC

Bio XS

The high-melting Bio XS features dimensional and thermal stability and is stress-free to simplify the fabrication of precision-fit dentures.
- The extremely stable thermoplastic resin is perfectly suitable for the fabrication of metal-free veneers of crowns and bridges and for telescopic and attachment work.
- Supplied in cream color
- To be processed at 380ºC

For more information call 1.877.328.3965 or visit us at www.xpdent.com.
CUT THIS PAGE OUT AND PHOTOCOPY BEFORE USING

PLEASE FAX ORDERS TO: 786.433.4634

Date: _____________________ Cust. Fax#: _____________________ Cust. PO#: _______________

FROM
Laboratory/Office Name: ___________________________________________ Cust. #___________________
E-Mail: ___________________________________________________________________________________
Contact Name: ____________________________________________ Telephone: _____________________
Street Address: ____________________________________________________________________________
City: __________________________________ State: _________ Zip: ___________________________

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(Shipping charges not included. Sales tax applicable to Florida orders.)

□ Charge to established account  Account #______________________
□ C.O.D. (FedEx charge applies)  □ Please send a Credit Application with my order
□ Visa/Mastercard
□ Discover
□ American Express
□ Check Enclosed (Order ships when check has cleared)
□ Wire Transfer

Card Number: __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __
Expiration Date: ___ / ___  CID#: __________ (Required for credit card orders)
Print Name: ______________________________
Signature: ______________________________

Total

Shipping Method
□ FedEx Ground
(4-7 Business Days)
□ FedEx Express Saver
(3rd Business Day by 4:30 PM)
□ FedEx 2nd day
(2nd Business Day by 4:30 PM)
□ FedEx Standard Overnight
(Next Business Day by 4:30 PM)
□ FedEx Priority Overnight
(Next Business Day by 10:30 AM)
CONVENIENT PAYMENT OPTIONS:

Establish an “Open Account”:
A completed XPdent credit application must be submitted for approval before an open account can be established. Open invoices are payable within 30 days from the date of the invoice. (Past due balances are subject to a finance charge of 1.5% per month).

Pay by Check, C.O.D. or by Visa, M/C, A/X or Discover.
All orders are payable in U.S. Dollars. Returned checks are subject to a $25.00 charge.

DELIVERY TERMS:

Freight Options:
All orders will be shipped via FedEx Ground. Special Overnight, 2nd Day, and 3rd day delivery are available at an additional cost.

Special orders require a 25% non-refundable deposit when order is placed.

Orders placed after 3:30 p.m. will be processed next business day.

RETURN POLICY:

Merchandise:
XPdent Corporation reserves the right to correct any defective products, before a return will be considered.
1. Returns are not accepted after 30 days from the date of the invoice.
2. All returns must have prior authorization from XPdent. To arrange for a return authorization please call us at (877) 328-3965.
3. Return Authorization # issued by XPdent must be on the outside of the package when returning an item. No packages will be accepted without this number.
4. A copy of the invoice must be enclosed with the return. All returns should be sent to:

XPdent RMA # _________
12145 S W 131 Avenue
Miami, FL 33186

5. Items must be returned complete and unused in the original container, unmarked, with seals intact. All items should be returned unopened.
6. Special ordered items may not be returned for credit or exchange.
7. Absolutely no returns will be accepted on incomplete cards of teeth.
8. Any shortages must be reported within 48 hours of receipt of merchandise.
9. Returns must be sent by traceable carrier (i.e. UPS, FedEx, etc.)
10. Return freight costs are the responsibility of the customer.
11. Returns not following the above policies will be refused or subject to a restocking charge.
12. Returns meeting all of the above policies receive the appropriate credit or refund.

BUSINESS HOURS (Eastern Time):
MONDAY - THURSDAY 8:30 AM - 6:30 PM
FRIDAY 8:30 AM - 5:00 PM

PLEASE CALL US AT 1-877-328-3965
OR FAX US AT (786) 433-4634

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