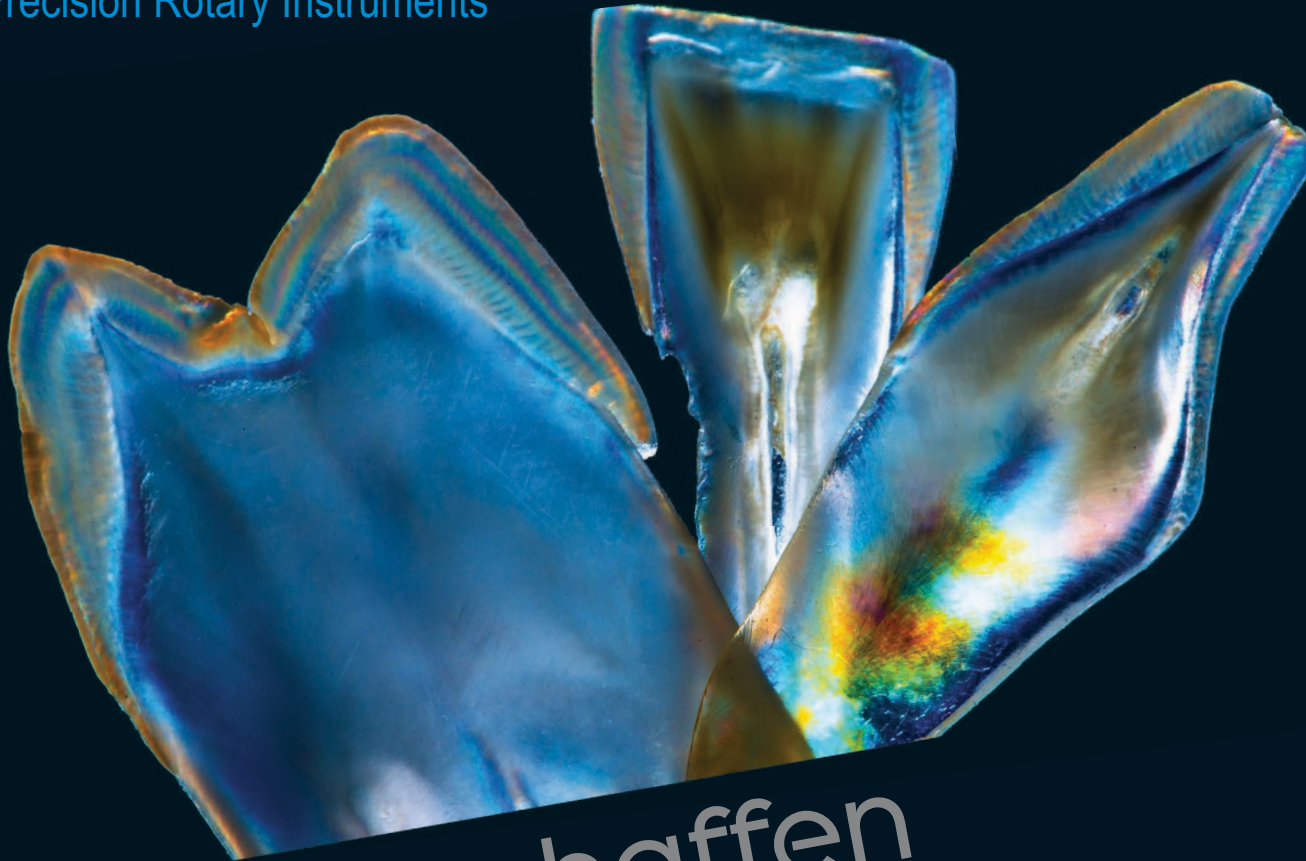




Wagner

Precision Rotary Instruments



Erschaffen
Create

Create

It is what the dental technologist does each day. It is a passion, a calling, a blend of technical knowledge with amazing artistry. It's a sharing of techniques and ideas with colleagues, and the use of rotary instruments is an integral part of that creative process. We strive to support that ongoing passion and artistry by working closely with dental technologists to develop new, innovative instruments.

With the advent of zirconia and lithium disilicate restorations, we realized that new instruments would be required to contour, shape and polish these harder materials. Over the past several years we have developed and continue to develop a unique and innovative line of instruments that allows ceramists to more effectively work with these harder materials. Our goal is to provide the finest instruments, expert knowledge and guidance required to support your business and to help your profits grow.

Personal Preference Guarantee

We understand that every ceramist has a personal preference for what works best. In keeping with our commitment to satisfaction and building long term relationships, we offer a personal preference guarantee. If for any reason you are not satisfied with the performance of one of our instruments, simply return it for a full refund within 3 months of invoice date. We'll even pay for the return shipping! So go ahead and try our instruments at no risk.

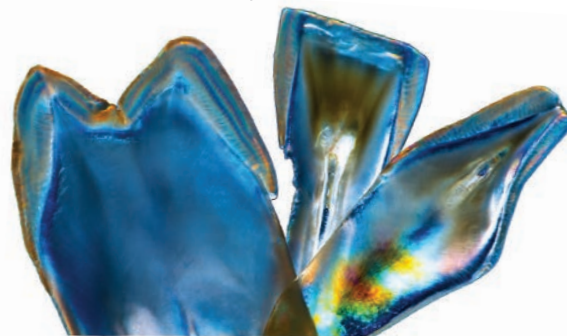
Whoops!—I Dropped My Rotary Instrument And Broke It!

It's not a good feeling when you drop a rotary instrument on the floor and then run your chair over it while you are looking for it. But, we have you covered. Just give us a call and we will replace it for you within a year of the purchase date, at no charge.

Thank you for considering using our rotary instruments.

Larry Powell
Managing Director

Wagner Precision Rotary Instruments



cover photo by dentalimages.org
Bill Marais | Eugene Royzengurt

What would you like to Contour?

Pre Sintered Zirconia

GS Green State Contour™ System..... 6

Pre Sintered Lithium Disilicate

SRST™ Sprue Removal System..... 4

Sintered Zirconia

Sintered Lithium Disilicate

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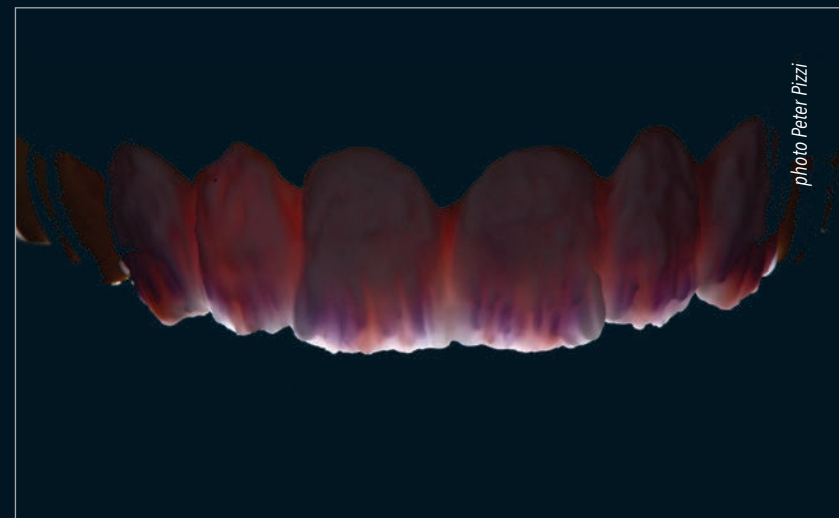


photo Peter Pizzi

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Step Bay, CDT, DTG

Design & illustrations by Lisa Braun

lisa-powell-braun.com

Product photography by John Robert Photography



Zirconia and lithium disilicate restorative materials are unique; they require the use of very different instruments than those we have used for years when contouring and shaping traditional feldspathic material. The ceramist must consider the need to gently contour restorations to prevent heat transfer that can lead to micro fractures and other problems. *Peter Pizzi, CDT, MDT*



The "Berrys"

RedBerry™, BlueBerry™, GoldenBerry™ and our new UltraBerry™ instruments were specifically developed for use with zirconia and lithium disilicate restorative materials. They are infused with a high concentration of uniquely shaped diamond particles that allows for more effective contouring and shaping of these materials. The "Berrys" reduce heat transfer, prevent microscopic surface scratches, and leave a smooth surface during the contouring process. This smooth surface eliminates the capillary effect that causes stains to be drawn to unwanted areas; that's industry unique, and we are certain you have never experienced diamond instruments that perform like our "Berrys."



ITEM BK1

- **UltraBerry™**—Coarse Plus, Diamond Infused
Preferred for zirconia contouring



- **RedBerry™**—Coarse, Diamond Infused
Preferred for zirconia contouring



- **BlueBerry™**—Medium, Diamond Infused Preferred for lithium disilicate contouring, or as a second step when contouring zirconia

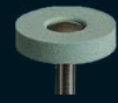


- **GoldenBerry™**—Super Fine, Diamond Infused Places a fast super high shine on zirconia or lithium disilicate restorations





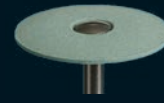
When a greater amount of material needs to be removed, a diamond infused Diacool™ will quickly and easily get the job done. Unique diamond particle shape and size, combined with a special binder, ensure zirconia and lithium disilicate restorations remain cool, thereby reducing the possibility of creating micro fractures while grinding. With only minimal pressure applied, restorations are quickly and safely reduced and shaped. Some ceramists prefer using a coarse Diacool™, just slightly more abrasive, yet they also remain cool and effective. Our large B406 wheel is an excellent choice for pressed lithium disilicate sprue connector reduction. For final contouring we recommend using our "Berrys."



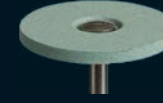
B401
15x3.5mm



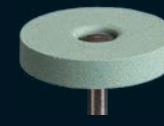
B404
12x2.5mm



B405
22x2mm



B410
22x2.5mm



B406
22x4.5mm



B403
3.5x11mm



B403C
3.5x11mm



B402
4.8x13mm



B402C
4.8x13mm



B409
6.5x13mm



B407
12x8mm

- Medium
- Coarse



ITEM DK1

Simple Techniques For Creating a Monolithic Hybrid

Now that the digital world has become a reality, let's make the most of it. We are now receiving digital files for printing in-house models (fig. 1), or fabricating monolithic restorations from just the files themselves. With the modelless application, we have been limited to layering techniques for fabricating natural looking restorations. This is now changing.

The available products that can be milled in the dental office or in the laboratory are still changing in the industry. So why not fabricate a much more lifelike restoration following the Monolithic Hybrid Technique? It's a simple two firing process for lithium disilicate or similar materials, that will set your restorations apart from others.

Once the restoration is designed, it then will be milled as a standard monolithic restoration (fig 2). I separate the milled restoration from the block with a ZR19mm diamond disc (fig.3). I use the same disc for contouring the interproximal line angles as well as the tooth formation, creating the ideal emergence. The sprue connector is quickly removed utilizing the diamond infused white section of the SRS 2 Step Sprue removal instrument (fig 4). The top section of the SRS instrument is a BlueBerry™. This top section smoothes the connector/restoration interface (fig 5). After sintering, I use a Diacool™ diamond infused instrument for bulk shaping. The abrasive nature of the Diacool™ is smooth and gentle, thereby eliminating the chipping which one might observe using other types of grinding materials.

The next step in fabrication of "Higher Quality Standard" restorations, is the ability to recreate the surface texture to simulate and mirror the surrounding dentition. The BlueBerry™ and RedBerry™ instruments assist in the contouring and smoothing of surfaces that will mimic the existing dentition. The RedBerry™ is my go-to instrument for bulk reduction. It safely reduces incisal length and helps to create ideal line angles (fig. 6). The BlueBerry™ contains a more subtle diamond. I use this for fine tuning surface texture and creating incisal irregularities for a more natural appearance (fig. 7). The restoration has now been shaped to the ideal size, where surface texture appears natural and mimics the surrounding dentition.

Now it is time to create the "Hybrid" cut-away. We are looking to replicate what is most commonly observed in natural dentition. We understand that color should come from within, rather than from externally placed stains that can produce unnatural results with regard to light diffusion and absorption.

Creating natural looking restorations is always our goal. To accomplish this, I use a Diacool™ 403 or 407 (fig. 8) to create small divots in the surface of the pre sintered restoration to allow for the ceramic material to be placed. The application of the ceramic material could either be with modifiers or internal staining techniques. I then place cuts at random places on the surface in order to create natural craze lines. (Craze lines are observed 85% of the time in natural dentition). The cuts are made with a ZR diamond disc on a 90° angle followed by cuts at a 45°



fig. 1



fig. 2



fig. 3

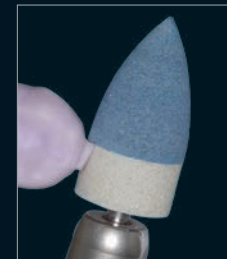


fig. 4



fig. 5

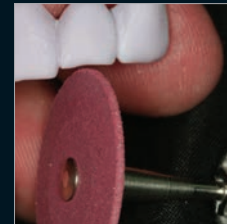


fig. 6

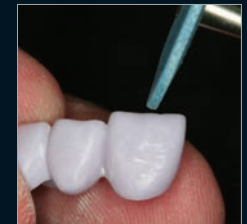


fig. 7



fig. 8

angle (fig. 9). With surface blemishes in place, we can begin to consider the fast application of internal staining as part of the "Hybrid Technique" (fig. 10). These steps are done as a time saving technique prior to the sintering process.

Prior to the second and final firing, a case appropriate ceramic overlay is applied (fig.11). In this situation I used a transparent neutral incisal. Once retrieved from the porcelain furnace, a simple touch up with a silicone wheel (fig. 12), and diamond polishing compound, is all that is required to complete a natural looking restoration (fig. 13).

Douglas Frye, C.D.T.
President, Functional Esthetics Dental Laboratory Inc.
Farmington, Missouri.




SRS™ Sprue Removal System For Pre Sintered Blue State Lithium Disilicate 2 Instruments In 1

Pre sintered, blue state milled lithium disilicate, is a hardened material. As a result, the process of sprue connector removal and smoothing can be time consuming and difficult.

Our SRS™ Sprue Removal System, developed by Todd Ehrlich, D.D.S., quickly removes the connectors and then smooths and polishes at the connector/restoration interface.



Step 1

The white diamond infused lower section quickly and safely removes the sprue connector.

Step 2

The blue upper section is actually our diamond infused BlueBerry™. This second step smooths and polishes at the connector/restoration interface.



ITEM SRS100



fig. 9



fig. 10



fig. 11



fig. 12



fig. 13



Mastering Green State Zirconia

The GS Green State Contour™ System provides a variety of instruments that offer a safe and efficient way to remove sprue connectors and contour your pre sintered zirconia restorations.

Sprue Connector Removal

A Safe 2 Step Process

After preliminary sprue/connector reduction is completed using our B501 silicone wheel, the technician should make final adjustments with the GS Contour 2 Step instrument GS100. This instrument should be used under loupes or a microscope at the very last adjustment point.



Step 1

The larger gray segment of this unique instrument quickly reduces the larger final mass (1- 2mm) of the connector with minimal risk of damage to the green state zirconia.

Anatomical Adjustments

Various anatomical adjustments can be made by using any of the ZHP diamonds or GS Green State Contour™ System instruments. You will find that making adjustments on your pre sintered restorations are simple and will save time.

ZHP Diamonds

Our 6 ZHP hand piece diamonds have a unique diamond shape and particle size. They provide a safe, gentle way to make subtle anatomical adjustments.



GSKIT2

Step 2

The ultra fine white tip then gently removes and smooths the final portion of any excess material remaining at the connector/restoration junction.



ZHP 1A



ZHP 1C



ZHP 2A



ZHP 2C



ZHP 2E



ZHP 3

GS Green State Contour™ System

Our GS Green State Contour™ System instruments will allow you to gently contour your pre sintered restorations. The instruments are available in 5 shapes. The GS104 Knife Edge is particularly well suited for opening and contouring interproximal areas without chipping.



GS100



GS101



GS102



GS103



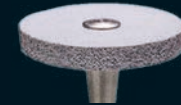
GS104



GS105



GS106



B501



B504

The GS Contour Diamond Blade

Our diamond coated blade was designed to open and contour interproximal areas. The blade can gently access tight areas without causing any damage. Blades are available in fine and ultra fine



GSBF Blade Fine

GSBU Blade Ultra Fine

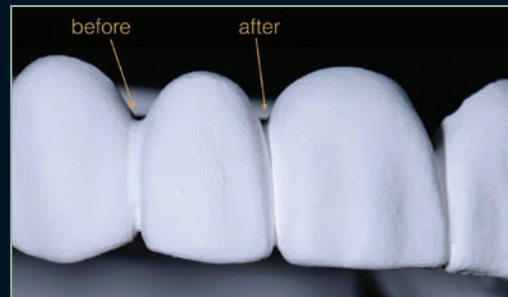


GSBK Diamond Blade Kit

1 Handle

5 Blades Ultra Fine

5 Blades Fine





You Gotta Keep It Separated

Aesthetics in dental technology is all about detail; whether it's finessing a line angle, sharpening a cusp tip, or balancing symmetry with natural asymmetry. One of these often forgotten details, I believe, is interproximal separation of multi unit bridges. Proper separation with regard to function and aesthetics is essential. The correct balancing of shadow and reflection will bring a multi unit case to life with a natural, lifelike appearance.

Yes, you might think this is obvious dental technology 101, but you would be surprised by some larger cases I've seen with units that just seem to "run together." I've seen this very same issue with many of the new zirconia hybrid bridges. Even the smallest burs from the most advanced milling machines do not have the ability to get in between those hard to reach places as much as we all would like. It's not enough to simply let this go... it needs to be fixed before you sinter the case. Trying to open and create natural embrasures after sintering has taken place is too difficult and will most likely cause micro fractures in your zirconia.

By utilizing my simple technique you will save time, and eliminate the potential of creating micro fractures in your restorations.



fig. 1

The extremely flexible, super thin, knife edged instrument (GS 104), is perfect for opening up interproximals and embrasures without chipping or gouging your cutback, while being able to round your line angles and keep a natural contour.



fig. 2

I use the diamond coated blade (GSBKIT), with a light sawing/scraping motion, that allows me to take the separation deeper and finer. This instrument has become absolutely essential in my small yet effective arsenal of zirconia instruments.

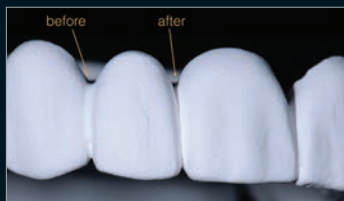


fig.3

Your zirconia is now ready for sintering. Remember, the objective for green state contouring is to reduce the number of adjustments and contour corrections often made in the sintered state. This will result in a much stronger, long lasting restoration for the patient, and less chance of you needing to remake the restoration.



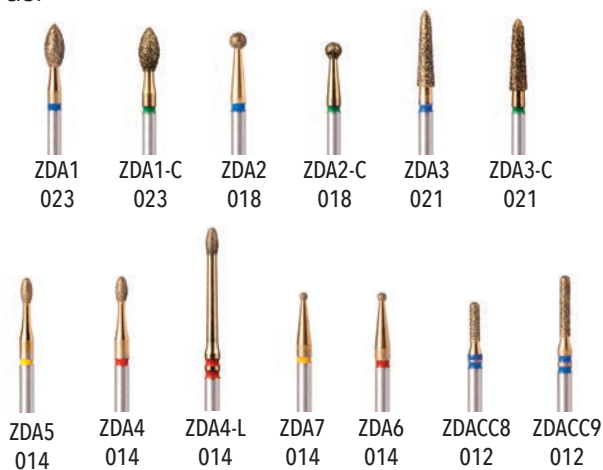
Lucas T. Lammott, DTG



Friction Grip Diamonds

For Zirconia & Lithium Disilicate Restorations

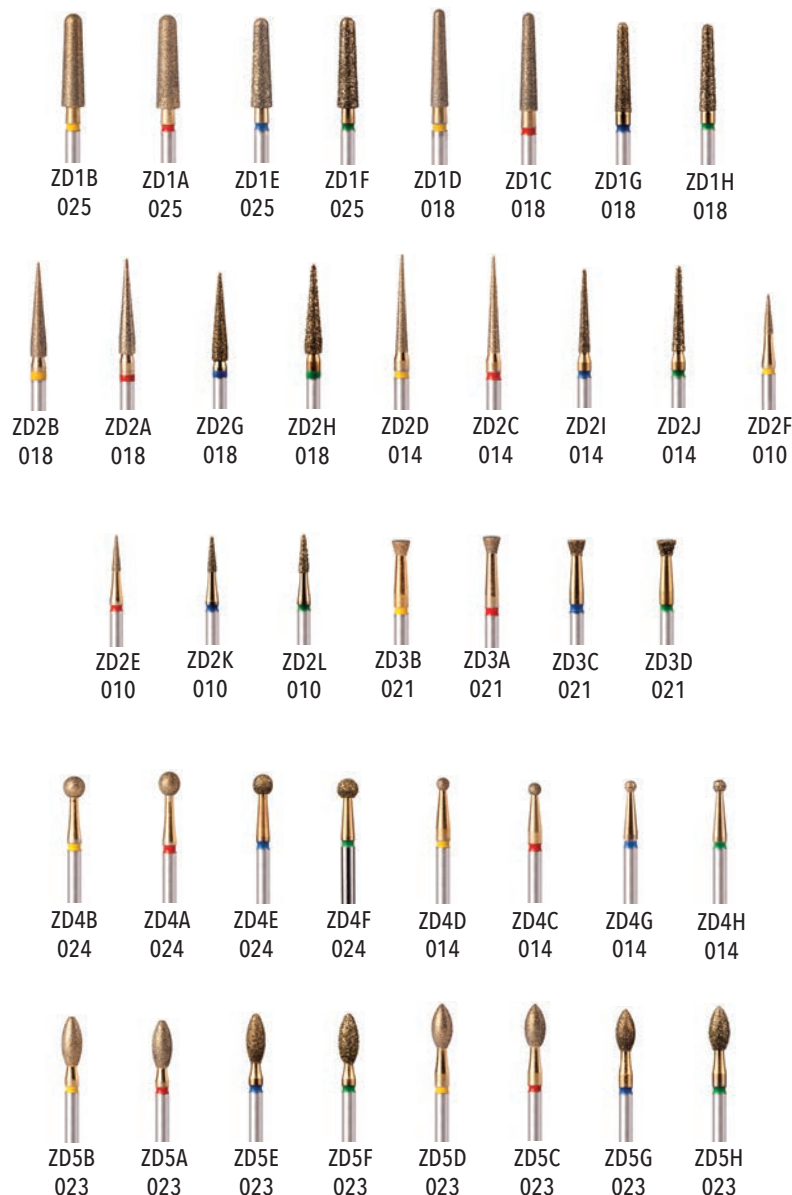
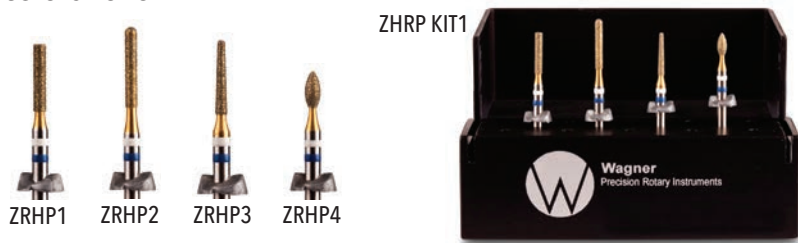
Our ZR FG diamonds have been layered with uniquely shaped particles that make them highly effective and safe to use with your all-ceramic restorations. Only minimal hand pressure is required to obtain maximum results. Our FG diamonds are long lasting, do not leave black marks, and are available in a variety of shapes and grits. Our ZR FG diamonds should always be used with irrigation to prevent heat transfer that can create micro fractures in your restorations. We can also produce custom shapes in a variety of grits to meet your specific needs.



ZRHP Diamonds

For All Ceramic Restorations

Our ZR Hand Piece diamonds provide a safe alternative to using FG diamonds when irrigation is not available. They are the perfect solution for final, minor contouring of all ceramic restorations.



- Yellow Stripe-Superfine Diamond Grit
- Red Stripe-Fine Diamond Grit
- Blue Stripe-Medium Diamond Grit
- Green Stripe-Coarse Diamond Grit
- Double Blue Stripe-Zirconia Crown removal

Getting the Most Out of Full Contour Zirconia

Through the widespread acceptance of CAD/CAM and full contour zirconia (FZ) restorations, it is important to understand the availability and advantages of zirconia specific rotary instruments. Utilizing the correct tools for processing milled green state zirconia, and the post sintered zirconia, provides an opportunity for product enhancement. Through the use of these zirconia specific rotary instruments, the availability of all needed tools is now complete. Now, let's look at getting the most out of full contour zirconia.

Providing high end FZ restorations obviously begins with a great material, design and milling strategy. That said, there are significant enhancements one can add to the product using little time and some additional knowledge. Utilizing the best tools and materials will further enhance the product, and do so very efficiently. In fact, two of the primary reasons that zirconia is the fastest growing indirect restorative material, are cost and low labor.

For full contour zirconia, the analog process begins after the milled zirconia is removed from the disk. In the green state, zirconia is quite soft and easily trimmed. Adjustment of the extra margin thickness is accomplished with HE Silicone™ Carbide Infused wheels and points (fig.1). The GS Contour 2 step instrument may be used at the final connection point between the sprue and actual restoration. This leaves an ultra smooth surface. For refining embrasures, it is best to use a friction grip pointed diamond (ZD1C OR ZD2A, fig.2) at a slower speed or the same shape in a hand piece slow speed tool (ZHP1C or ZHP2A-Ref HP chart). Additional green state adjustments or detailing such as subtle contouring, touching up occlusal anatomy, and surface texture can be easily added with the ZD2F or ZD1C (fig.3&4).

Historically, most green state zirconia is dipped into a shading material to obtain a monochromatic color that somewhat matches the desired shade after sintering to better enhance the FZ restoration. Once all final contouring is complete, a multi-coloring process can be utilized. Utilizing colorants for green state shading one can multi shade the FZ monolithic restoration (fig. 5). By nature, green state zirconia is quite absorbent. This absorbent property results in the colorants penetrating the surface of the material. By following the protocol one obtains the advantages of a monolithic restoration that is multi shaded.

Once sintered, all adjustments made with diamonds should be done with irrigation, so as to prevent introducing micro fractures into the restoration. First, crowns should be carefully tried on the die. Generally there is no adjustment needed. However, in the event of a prematurity, it is recommended to utilize a fit check paint or spray. Adjusting of axial walls or occlusal surface can be accomplished with a ZD1D high speed diamond and irrigation (fig.6). Proximal

contacts can be fine tuned and occlusal adjustments can be accomplished with a 1 mm round high speed diamond (ZD4D). Due to the hardness of zirconia it is critical to polish the surface of the restoration prior to final stain and glaze. Zirconia manufactured for dental is extremely homogeneous. This results in a surface that can be polished to a super smooth surface. For final contouring it is recommended to use a RedBerry™ (Coarse) followed by BlueBerry™ (Medium) and GoldenBerry™ for high shine polishing (fig.7). The Berrys actually leave a smooth surface as they reduce and contour. These instruments are also available in points for high shine polishing occlusal detail. Final stain and glaze may be accomplished with polishing compound.

Once the crown is delivered to the dentist it is just as important that any pre and or post insertion adjustments made by the dentist are also polished. The Wagner dentist ZR/LD chair side adjustment kit contains all the necessary tools for final intra oral adjustment and polishing.

With proper handling of zirconia by both the laboratory and dentist, these super high strength materials will offer patients years of service working in harmony with existing dentition.

Bob Cohen, CDT



fig. 1



fig. 2

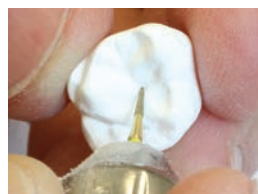


fig. 3



fig. 4



fig. 5



fig. 6

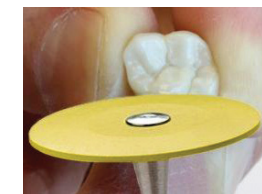


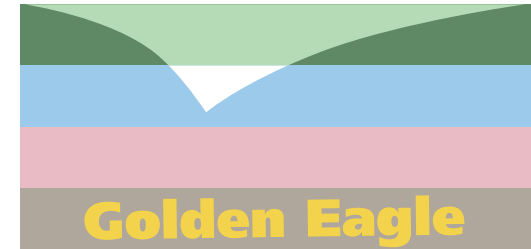
fig. 7

Handpiece Diamonds



Golden Eagle For Feldspathic Ceramics

Our Golden Eagles are infused with a high percentage of diamond and contour feldspathic ceramic beautifully. We also removed the yellow centers to give you more usable disc.



Knife Edge 26x2mm



B601
Extra Coarse



B621
Coarse



B631
Medium



B641
Fine High Shine

Flat Edged Wheels 17x3mm



B622-3
Coarse



B632-3
Medium



B642-3
Fine High Shine

Golden Eagle Kit

26mm: Extra coarse, coarse, medium, fine-high shine

17mm: coarse, medium, fine

Points: coarse, fine



ITEM GEK1

Large Point 5.5x18mm



B628
Coarse



B638
Medium



B648
Fine High Shine

Small Point 3.3x7.5mm



B623
Coarse



B633
Medium



B643
Fine High Shine



When Extremely Gentle Contouring or Polishing is Required

Cirrus represents an entirely new category of diamond infused instruments. When "Gentle" is required on virtually any type of restoration, these highly flexible instruments will provide the finessing needed.



Knife Edge 26x2mm



B811
All-Ceramic Restorations
Extra Coarse



B821
All-Ceramic Restorations
Coarse



B831
All-Ceramic Restorations
Smooths Precious, Semi Precious, NP Alloys
Medium



B841
All-Ceramic
Alloy Polishing
Removes Fine Lines • Creates a Mirror Shine
Fine



B851
All-Ceramic
Smooths Alloy Imperfections
Ultra Fine

Handpiece Carbides



photo Eugene Michael Royzengurt

Our handpiece carbide cutters are made from high quality tungsten carbide K10-K20, DIN ISO 513. The shanks are constructed from a high quality hardened steel, type 1.4035, also referred to as X46CrS13.

Our Cerulean Blue line of carbides have a super nitride coating made of TiAlN (Titanium Alumina Nitride). Their nanocomposite structure offers increased hardness, durability, and extremely smooth cutting.

Acrylic Heat, Self, Light Curing Superfine

				
Item	CHP412	CHP411	CHP414	CHP413
Diameter	018	023	023	040

Acrylic Heat, Self, Light Curing Fine

														
Item	CHP107	CHP108	CHP404	CHP112	CHP406	CHP403	CHP105	CHP405	CHP109	CHP110	CHP111	CHP106	CHP113B	CHP114B
Diameter	016	023	023	023	023	023	023	040	040	040	060	060	040	060

Acrylic Heat, Self, Light Curing Medium

					
Item	CHP100	CHP101	CHP103	CHP102	CHP104
Diameter	023	040	040	040	060

Handpiece Carbides

Nylon, Thermoplastic Fine



Item	CHP107	CHP108	CHP105	CHP112	CHP109	CHP110	CHP111	CHP106	CHP430B	CHP113B	CHP114B	CHP432B
Diameter	016	023	023	023	023	040	060	060	040	040	060	060

Nylon, Thermoplastic Medium



Item	CHP100	CHP102	CHP101	CHP103	CHP104
Diameter	023	040	040	040	060

Soft Lining Material Ultra Fine



Item	CHP433B	CHP434B
Diameter	040	060

Soft Lining Material Fine



Item	CHP107	CHP108	CHP105	CHP112	CHP111	CHP106
Diameter	016	023	023	023	060	060

Soft Lining Material Fine



Item	CHP430B	CHP431B	CHP113B	CHP432B	CHP114B
Diameter	040	040	040	060	060

Soft Lining Material Medium



Item	CHP100	CHP101	CHP103	CHP102	CHP104
Diameter	023	040	040	040	060

Handpiece Carbides

Composite Ultra Fine



Item	CHP433B	CHP434B
Diameter	040	060

Composite Super Fine



Item	CHP412	CHP411	CHP414	CHP413
Diameter	018	023	023	040

Precious Alloy Fine



Item	CHP402	CHP400	CHP401
Diameter	023	040	060

Precious Alloy Medium



Item	CHP419	CHP421	CHP418	CHP415	CHP420	CHP416	CHP417	CHP436B	CHP437B	CHP439B	CHP435B	CHP438B	CHP440B
Diameter	023	023	023	027	029	040	050	023	040	040	050	060	060

Handpiece Carbides

Semi Precious Alloy Fine



Item	CHP402	CHP400	CHP401
Diameter	023	040	060

Semi Precious Alloy Medium

Item	CHP419	CHP421	CHP418	CHP415	CHP420	CHP416	CHP417	CHP436B	CHP435B	CHP437B	CHP439B	CHP438B	CHP440B
Diameter	050	023	023	027	029	040	050	023	050	040	040	060	060

Non Precious Alloy Ultra Fine

Item	CHP433B	CHP434B
Diameter	040	060

Non Precious Alloy Super Fine

Item	CHP412	CHP411	CHP414	CHP413
Diameter	018	023	023	040

Handpiece Carbides

Non Precious Alloy Fine

														
Item	CHP408	CHP404	CHP402	CHP403	CHP407	CHP410	CHP406	CHP409	CHP405	CHP400	CHP401	CHP430B	CHP431B	CHP432B
Diameter	018	023	023	023	023	023	023	040	040	040	060	040	040	060

Titanium Super Fine

				
Item	CHP412	CHP411	CHP414	CHP413
Diameter	018	023	023	040

Titanium Fine

								
Item	CHP408	CHP404	CHP407	CHP403	CHP410	CHP406	CHP405	CHP409
Diameter	018	023	023	023	023	023	040	040

Titanium Extra Coarse

				
Item	CHP423	CHP425	CHP422	CHP424
Diameter	023	023	023	040

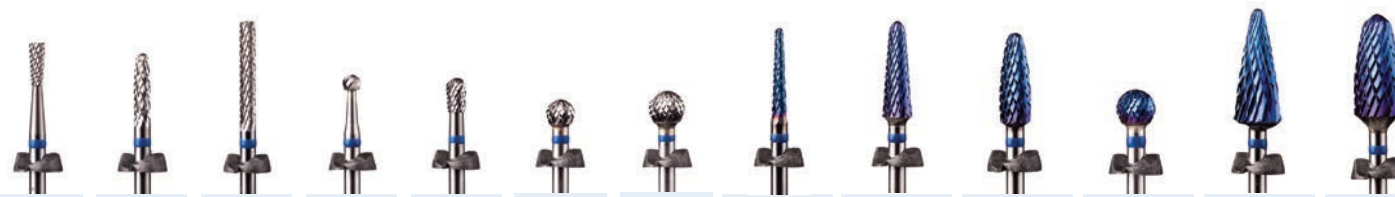
Handpiece Carbides

Chrome Cobalt Fine



Item	CHP408	CHP402	CHP407	CHP410	CHP409	CHP400	CHP401
Diameter	018	023	023	023	040	040	060

Chrome Cobalt Medium



Item	CHP419	CHP421	CHP418	CHP415	CHP420	CHP416	CHP417	CHP436B	CHP437B	CHP439B	CHP435B	CHP438B	CHP440B
Diameter	023	023	023	027	029	040	050	023	040	050	050	060	060

Gypsum Medium



Item	CHP416	CHP417
Diameter	040	050

Plaster, Acrylic, Thermo Plastic Extra Coarse



Item	CHP428	CHP429
Diameter	016	023

Carbide Scribe For Occlusal Ceramic Fissures



Item	CHP426
Diameter	010

Finishing Superfine-For Precious Alloy Fissure High Shine Polishing



Item	CHP427
Diameter	014

Steps to Zirconia Completion

Thanks to fast growing CAD/CAM and material technologies advancing so quickly, technicians are able to take more control over the lab production process; and at a lower price than previously thought possible. The demand for these new harder materials is growing at a remarkable pace, so now is not the time to fall behind. Getting the most from these new materials and processes requires new specialized instruments. Wagner Precision Rotary Instruments provides the solution, with the high quality of German manufacturing, and the cost effectiveness of better diamond engineering which makes for faster work, longer lasting instruments, and no harmful heat production.

I have found that there is an increase in the number of dentists that want full contour zirconia restorations. This material's strength, in the posterior region, is a great advantage, and the demand for polished monolithic zirconia crowns is on the rise.

Studies have shown that the monolithic zirconia crown, with a mechanically polished surface, has less enamel wear than a feldspathic crown. So, zirconia also appears to be more beneficial in terms of antagonistic tooth wear.

With this knowledge, I began designing zirconia linguals on my anterior bridges. It's a similar concept to a metal lingual, but crafted entirely from zirconia. The following case is a documentation of a zirconia bridge with a fully supported lingual. The specialized rotary instruments I used, make this technique possible in an easy, efficient, and low-cost way.

Zirconia connectors are separated by using a ZHP 2C (fig.1). This thin diamond tip which barely vibrates is ideal for the task. The ZHP 1A is a thicker diamond, and I like to use this on the awkward areas in between the margin and the sprue. The 501 silicone wheel (fig.2) easily removes the sprue and flash.

The unique two-step GS Contour has a bold gray area and a white tip. This revolutionary instrument smooths and polishes the zirconia in the green state, with the fine (gray) smoothing area (fig.3) and superfine (white) polish area (fig.4). After sintering, I cut the connectors with a ZR 19mm x0.26mm disc (fig.5) and smooth out the surface with a Diacool™ and a BlueBerry™ (fig.6&7). The ZR diamond disc has uniquely shaped particles and is multi-layered; it's more effective than a traditional diamond disc. The Diacool™ removes a greater amount of excess material, while the BlueBerry™ actually smooths the restoration as it contours. It's an interestingly unique instrument.

The comparison shows #7 finished with the GS Contour and a GoldenBerry™, resulting in a much better shine than #8-10, done with a series of standard medium and high shine polishing instruments (fig.8).



Step Bay, CDT, DTG
CDI Science



fig. 1



fig. 2



fig. 3



fig. 4

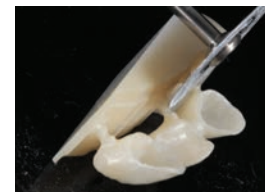


fig. 5



fig. 6



fig. 7



fig. 8

Traditional Acrylic Polishers

Our traditional acrylic polishers are available in 7 shapes and 3 grits.



photo Eugene Royzengurt



B101
Point Large
Coarse
12x22.5



B102
Point Medium
Coarse
10x20



B103
Bullet
Coarse
10x24



B104
Point Small
Coarse
5.5x16



B105
Round
Coarse
15x17



B113
Bullet
Coarse
10x24



B123
Bullet
Fine
10x24

Hot Blues

Heat Treated For Extended Life

Our HOT BLUE polishers have been heat treated allowing for extended life and are available in 4 convenient shapes and 2 grits.



B132
Point Medium
Coarse
10x20



B133
Bullet
Coarse
10x24



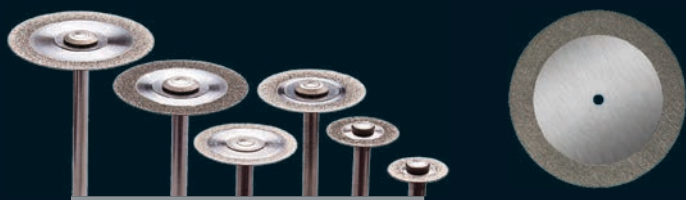
B135
Round
Coarse
15x17



B143
Bullet
Medium
10x24



ITEM APK1



Diamond Discs For Zirconia

While a traditional diamond disc works well with high fusing feldspathic ceramic, you have probably noticed that it's less effective and does not last as long when used with zirconia or lithium disilicate. Our ZR discs have a special diamond shape, grit, and tighter particle placement. They are more effective, last longer and stay cooler. Our 38mm and 30mm discs are recommended for cutting pressed sprues.

ITEM	DIAMETER-THICKNESS
ZR0824	08 mm x 0.24 mm
ZR1022	10 mm x 0.22 mm
ZR1422	14 mm x 0.22 mm
ZR1622	16 mm x 0.22 mm
ZR1922	19 mm x 0.22 mm
ZR1924	19 mm x 0.24 mm
ZR1926	19 mm x 0.26 mm
ZR2222	22 mm x 0.22 mm
ZR2224	22 mm x 0.24 mm
ZR2226	22 mm x 0.26 mm
ZR3030	30 mm x 0.30mm
ZR3836	38 mm x 0.36mm



ITEM ZR3836
ZR 38x36mm



ITEM ZR3030
ZR 30x30mm



Traditional Diamond Discs

Item-Grit-Diameter

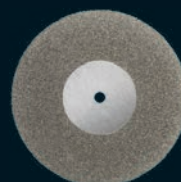
M=Medium 514-Thickness .17

C=Coarse 524-Thickness .27

Ceramic Contouring/Separation



24-M-19
24-C-19
24-M-22
24-C-22



24S-M-22
24S-C-22
One Side Coated



31-M-19
31-C-19
31-M-22
31-C-22



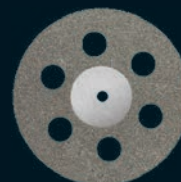
39-M-22
39-C-22



28-M-22
28-C-22



35-M-22
35-C-22



23-M-22
23-C-22



38-M-22
38-C-22



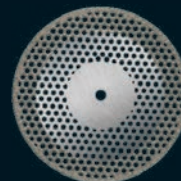
37-M-22
37-C-22



32-M-22
32-C-22



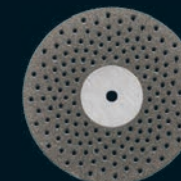
27M-22
27-C-22



49-M-22
49-C-22



50-M-22
50-C-22



51-M-22
51-C-22

Acrylic Separation/Contouring



29-M-22
29-C-22



33-M-22
33-C-22



34-M-22
34-C-22



36-M-22
36-C-22



32-M-22
32-C-22

Die Trimming

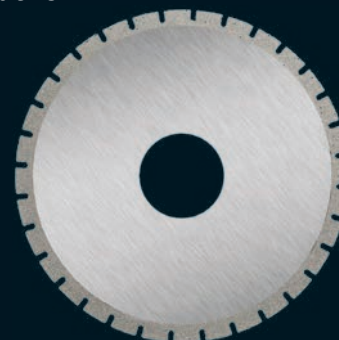


52-M-30
52-C-30
40-M-40
40-C-40
45-M-45
45-C-45

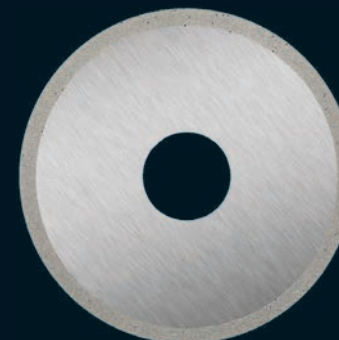


53-M-30
53-C-30
41-M-40
41-C-40
55-M-45
55-C-45

Lathe



100-M-80
100-C-80



99-C-70
101-M-80
101-C-80

Silicone Infused

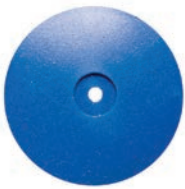
Our silicone carbide instruments are available in a variety of shapes and sizes and have been designed to meet the needs of the most discriminating technician.

For Ceramic And Alloy Restorations

Medium



511 Wheel
22x3.2mm



512 Knife Edge
22x3.2mm



513 Knife Edge
16x2.5mm



515 Cylinder
20x7mm
B903 Holder Only



516 Pointed Cylinder
25x6mm
B903 Holder Only



518 Wheel
16x2.5mm



517 Knife Edge
15x2.5mm

Coarse



B501 Wheel
22x3.2mm



B502 Knife Edge
22x3.2mm



B504 Point
15.5x5.6



B505 Cylinder
20x7
B903 Holder Only



B506 Pointed Cylinder
22x6.5
B903 Holder Only

For Ceramic Restorations

Specifically developed for use with ceramics, these instruments are perfect when a light touch is required. They are available in fine grit (pink) and medium grit (gray).

Fine



B711 Wheel
22x3.2mm



B712 Knife Edge
22x3.2mm



B713 Cylinder
7x20
B903 Holder Only

Medium



B701 Wheel
22x3.2mm



B702 Knife Edge
22x3.2mm



B703 Cylinder
7x20
B903 Holder Only

For Alloy Restorations

Suitable for preparing precious, semi-precious, non precious, and chrome cobalt alloy restorations.

Coarse

For Chrome Cobalt and Non Precious Alloys.



B251 Wheel
22x3.2mm



B255 Wheel
25x1.5



B254 Barrel Only
7x20
B903 Holder Only



B258 Pin Only
2x20
B901 Holder Only



B259 Pin Only
2x20
B901 Holder Only



Medium

For Chrome Cobalt and Non Precious Alloys



B211 Wheel
22x3.2mm



B212 Knife Edge
22x3.2mm



B214 Barrel Only
7x20
B903 Holder Only



B218 Pin Only
3x22
B901 Holder Only



B219 Pin Only
2x20
B902 Holder Only

AeroFlex

For pre polishing precious, semi-precious, non precious alloys. AeroFlex are flexible sponge like discs that reduce heat buildup.

B311 Wheel
Medium
22x3

B312 Wheel
Fine
22x3

Fine

For Precious, Semi Precious, Non Precious Alloys



B221 Wheel
22x3.2mm



B222 Knife Edge
22x4



B224 Barrel Only
7x20
B903 Holder Only



B225 Barrel Point
5.6x17.5



B225 Point
5.6x17.5



B229 Pin Only
3x22
B901 Holder Only



B228 Pin Only
2x20
B902 Holder Only



B226 Knife Edge
15x2.5



B227 Wheel
15x2.3

Chairside

Contour...Adjust...Polish...Or Remove

Zirconia

Lithium Disilicate

Nano Hybrid Composites

RedBerry™, BlueBerry™, GoldenBerry™ RA Latch instruments were specifically developed for use with zirconia, lithium disilicate, and nano hybrid composite restorative materials.

Infused with a high concentration of uniquely shaped diamond particles, these instruments are amazingly effective for chairside contouring and shaping.

Our FG diamonds also offer a unique diamond shape providing fast, safe, final adjustments. Our CC8 and CC9 will effortlessly cut through a crown.



ITEM RAFG1

Master Assortment

- 2 RA RedBerry™ Coarse
- 2 RA BlueBerry™ Medium
- 4 RA GoldenBerry™ Fine High Shine
- 7 FG For Adjusting
- 2 FG For Removal



ITEM RA1

RA Assortment

- 2 RA RedBerry™ Coarse
- 2 RA BlueBerry™ Medium
- 4 RA GoldenBerry™ Fine High Shine



ITEM FG1

FG Assortment

- 7 FG For Adjusting
- 2 FG For Removal



- FG**
- Blue Stripe-Medium Diamond Grit
 - Red Stripe-Fine Diamond Grit
 - Yellow Stripe-Superfine Diamond Grit
 - Double Blue Stripe-Zirconia Crown removal
- RA Latch**
- Course
 - Medium
 - High Shine

In looking for instruments that minimize my finishing time, while achieving harmonious integration of the composite resin with existing tooth structure, I came across the "RA Latch Berrys." They have become my primary armamentarium for preparation, finishing, and polishing my nano hybrid composite, as well as my zirconia restorations.

I use the friction grip diamonds to prepare and contour my restorations. Initial polishing is quickly accomplished with the RedBerry™ and BlueBerry™. I obtain a final super gloss with GoldenBerry™ finishing cups and points.

The combination of these instruments provides a multifunctional, efficient system for preparing teeth and then contouring, shaping, and polishing the final restorations.

Carlos Sanchez
DDS, FAGD, PA



Composite Polishing System

2 Step Polishing

Our 2 Step diamond infused composite polishing instruments provide just the right shapes for quick and efficient polishing of composite materials.



Item Kit LC100—Handpiece Instruments



LCWM Wheel
Medium
15x2.3mm



LCKM Knife Edge
Medium
15mm



LCPM Point
Medium
5.5x16mm



LCWF Wheel
Fine
15x2.3mm



LCKF Knife Edge
Fine
15mm



LCPF Point
Fine
5.5x16mm



Item Kit DC100—RA Instruments



DCCM Cup
Medium
7x7mm



DCPSM Small Point
Medium
3.3x7.5mm



DCPM Point
Medium
5x10.5mm



DCKM Knife Edge
Medium
10x0.2mm



DCCF Cup
Fine
7x7mm



DCPSF Small Point
Fine
3.3x7.5mm



DCPF Point
Fine
5x10.5mm



DCKF Knife Edge
Fine
10x0.2mm

W1 Handpiece

Our W1 handpiece is an ergonomic, lightweight, brushless, quiet and durable handpiece with vibration-free operation. It has a precision foot control and a soft-touch, easy-to-clean touch pad. Made in Europe, it comes with a two year warranty that includes a loaner program. It operates at speeds up to 40,000 rpm. UltraBerry™, RedBerry™, BlueBerry™, and GoldenBerry™ rotary instruments are included.



The Wet Box

The Wet Box eliminates workbench flooding when using FG diamonds that require irrigation. Excess water is collected in the rear angled tray, and passes through a waste tube.

Calais Diamond Polishing Compounds

Calais multi micron diamond polishing compounds produce a beautiful high shine on all types of restorations. Calais is available in 3 separate formulations, providing maximum effectiveness on the different restorative materials. Each jar comes with a unique applicator brush that picks up, holds, and distributes the polishing compound with incredible efficiency.



Calais
Item CAL1
10Gr
For Feldspathic Ceramic



Calais LD
Item CALLD
9Gr
For Lithium Disilicate



Calais ZR
Item CALZR
9Gr
For Zirconia

ENHANCE CAD/CAM Scanning Spray

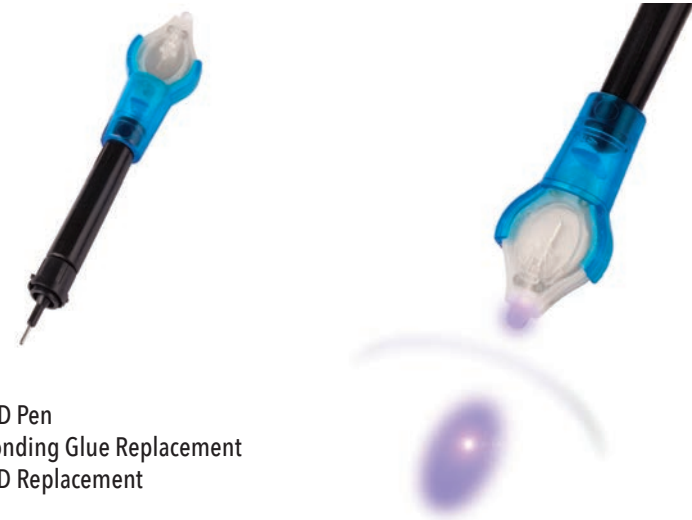
Enhance covers with a fine, dry powder film, and comes with a pin point nozzle for detailed spraying. The powder can be easily removed with a brush. Enhance is environmentally friendly, uses a non flammable propellant, and is insoluble in water or alcohol. It's contents are non-toxic.



LED Bond

LED Activated Bonding Pen

With just a drop of bonding material, followed by a 5 second exposure to the LED, your desired material will be cured and bonded. The pen will firmly attach commonly used dental lab materials. Great for use with waxups, without concerns for distortion. Also may be used for die repair. The bonding material can be safely drilled and polished.



Item

LEDK LED Pen

LEDG Bonding Glue Replacement

LED1 LED Replacement

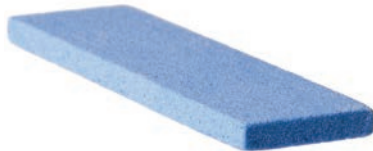
Disappearing Peg

Our refractory peg virtually eliminates the difficult divesting process after ceramic firing. No digging or scraping is required to remove the remaining peg material. A quick swipe of a brush or gentle air stream, will easily remove remaining peg material. Perfect for all-ceramic restorations.



Item CRP1

Dressing Tool



Dressing Tool without Diamond
ITEM DT1



Dressing Tool with Diamond
ITEM DTD1



Instruments—Overview & Usage Guidance

When it comes to chairside adjusting or in lab final adjustments, every case is treated differently, as each restoration is in fact different in size, shape, and what and how much material needs to be removed/adjusted. There is also personal preference for what instruments work best. Our guide should be helpful in determining when to use each instrument.

When A Greater Amount Of Restorative Material Needs To Be Removed

When a greater amount of zirconia or lithium disilicate needs to be removed from the restoration, it is recommended that a Diacool™ is utilized first. Diacools will safely and effortlessly remove material. If the restoration is wetted slightly, the Diacool™ will be slightly more aggressive. Diacools, like our other instruments, will stay cool and will not introduce micro fractures into the restoration. Diacools are for lab use only.

After Using A Diacool™ OR When A Smaller Amount Of Restorative Material Needs To Be Removed

After a Diacool™ is utilized or if only a minor amount of material needs to be removed, the “Berry” instruments are recommended. The Berrys are available for both lab use and chair side use. Berry instruments designed for lab use begin with the prefix “B.” Berry instruments designed for chairside use begin with the prefix “D.” Lab instruments marked with a “B,” must never be used intraorally. The Berry instruments are comprised of 4 different grits. Each Berry instrument is available for both lab use “B” Prefix and “D” chairside use. Instruments marked with a “B” prefix may not be used intraorally, and instruments with a “D” prefix cannot be used in the lab environment.

● **UltraBerry™** Coarse Plus ● **RedBerry™** Coarse ● **BlueBerry™** Medium ● **GoldenBerry™** Fine/Super High Shine

Each of these instruments is industry unique. Each will reduce the restorative material as needed, but they also leave a smooth pre polish finish. This is like accomplishing 2 steps in 1. This smoother surface finish is particularly helpful in the margin areas where at times it can be difficult to control placement of the stains. By eliminating the scratches that other instruments leave, the capillary effect is eliminated, thereby keeping the stain in the area it was applied to.

Personal Preference Sequence For Berrys

Ceramists and dentists have their own preferred method for contouring, shaping and making final adjustments. There is really no correct method to follow, only our basic guidelines. Ceramists and dentists should feel free to use the instruments according to their own personal preferences. However, as a general guide, here are some basic suggestions.

Handpiece Instruments—In The Lab

We suggest using a Diacool™, (when a greater amount of material needs to be removed) followed by an UltraBerry™, RedBerry™, BlueBerry™ and GoldenBerry™.

Please note that most ceramists prefer the RedBerry™ for contouring zirconia and the BlueBerry™ for contouring lithium disilicate.

Friction Grip Diamonds—Chairside & In the Lab

ZDA friction grip diamonds are the shapes that dentists seem to prefer. The ZD friction grip diamonds are the shapes that cera-mists seem to prefer. However, it is possible to use either type in either situation. The classifications of “ZD” and “ZDA” are for general guidance only. ZDA diamonds 1,2,3,4,5,6,7, are for making adjustments. The ZDCC8 and ZDCC9 are for zirconia or lithium disilicate removal.

Please always use a hand piece with irrigation; this greatly extends diamond life and helps prevent micro fractures from occurring.

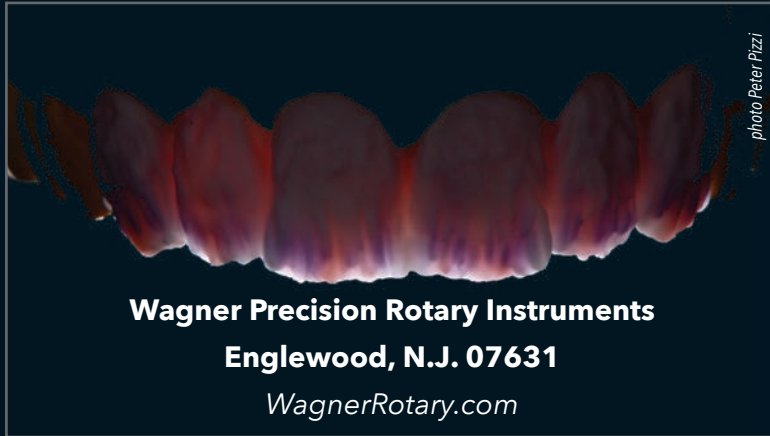
The RA Latch Berrys

The RA latch Berrys are available in a variety of shapes including cups, large points, small points, knife edge. These will smooth over adjusted restorations just prior to insertion. Usage follows the same recommendations as for the HP variety used in the lab. Usually dentists begin with a RedBerry point or cup, followed by a BlueBerry point or cup. The final step is high shine polishing. This is accomplished by using the GoldenBerry large point, small point, cup or knife edge instruments.

Extending Instrument Life

You can maximize instrument usage by allowing the instrument to do the work. Be careful not to use heavy handed pressure. Follow recommendations for maximum RPM speed, usually 8,000 rpm or less. Higher usage speeds will significantly reduce instrument life and transfer heat to the restoration. Only use friction grip diamonds with a hand piece that has irrigation. The water spray keeps the diamond particles from burning up and helps to eliminate micro fractures in your restoration. Intermittently dipping the restoration in water may create thermal shock; hot, to cold, to hot. Therefore this technique is also not recommended.





Wagner Precision Rotary Instruments
Englewood, N.J. 07631
WagnerRotary.com

1.888.223.2231 | 1.201.541.9700



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