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## Randy Reports: New Age 2009

At Renstrom Dental we think we are entering into a new age. All of us are. When I started working in the lab business, gold prices were regulated at \$42 per ounce. The gold standard was good for dentistry. Gold was easy to work with and it worked well in the mouth. At the time, I believe we were producing more full cast work than ceramics. Then gold prices crept up, soon reaching near \$300 an ounce, and people were trying to find a base metal that would work as well as gold. Nothing did. Now gold is around \$1000 an ounce and many of us are looking for a good alternative.

To me, that means technology. Computer technology and space age materials are now starting to come together to make a definite separation between time consuming, hand layered restorations and machine made restorations that just need to be refined after milling. I believe the hand layered techniques are always going to be a better way to recreate colors and translucencies of natural dentition, especially in the anterior region. I also believe it is time for us to offer, and you to decide, if a machine

milled all ceramic is a good choice for your posterior restorations. Whereas the handmade crowns can run over \$300.00, a milled crown of Lithium Disilicate such as e.max CAD could run closer to \$200.00.

It all comes down to this. It is now possible to utilize some of the best technicians in the country to fabricate truly life-like all ceramic anterior work and at the same time have milled all ceramic in the posterior. In the end it will all turn out better looking and less expensive than using PFM's. An example of this would be; if you were to restore one full arch, 6 anteriors in porcelain to Zirconium and 8 posteriors in e.max CAD it would cost \$3390.00. The same case in PFM would run \$3410.00. If your patient has a reduced ability to pay, you could get them all done in e.max CAD for \$2940.00.

We came up with this price structure in an attempt to make sense of labor and material costs. A labor intensive procedure like hand layering by experienced technicians is expensive. We can now offset that cost with a restoration that is made by machine and then, brought to our

higher standards by hand.

As always, we will continue to have PFMs available. In fact they are still our time tested, bread and butter restoration. I just wanted you to know that there are alternatives and that they are very good ones. For our dentists who are sending their cosmetic work here and the single posteriors somewhere less expensive, here is an alternative that can get you a better looking restoration with our quality, for a less expensive price. For our dentists who want to get away from the volatile gold market, here is a way to go all ceramic for at or less than PFMs. It is just something to think about.



### Full Arch Price Comparison

<b>Case 1</b>	
All PFM's:	\$3,410
<b>Case 2</b>	
Anteriors: Porc to Zirconia	
Posteriors: e.max CAD	\$3,390
<b>Case 3</b>	
All e.max CAD	\$2,940

### Case Study: IPS e.max CAD crowns



After numerous clinical studies, Renstrom Dental Studio is now recommending the comprehensive IPS e.max system by Ivoclar Vivadent. From metal free bridgework, crowns, implants, veneers, and combination cases, e.max is an excellent choice that can deliver optimal results. IPS e.max enables multiple fabrication techniques and offers patented lithium disilicate—a state of the art material that demonstrates the highest strength in glass ceramics. IPS e.max Press (400 MPa) and IPS e.max CAD (360 MPa) both fulfill the strength and esthetics desired in every crown and bridge case.

The case featured below shows tooth number 27 and 28 being restored with IPS e.max CAD crowns. This predictable biocompatible material is the perfect indication for this area in the mouth and can be adhesively or conventionally cemented depending on the restoration and preparation design. Renstrom’s inlab CAD/CAM system by Sirona was used to scan the dies and mill the crowns out of the lithium disilicate blocks. The bluish-grey blocks come in a pre crystallized format with the option of using the medium opacity, high opacity, low translucent, or now the new high translucent blocks. The low translucent blocks are intended for the fully anatomical restorations which is what was used in this case.

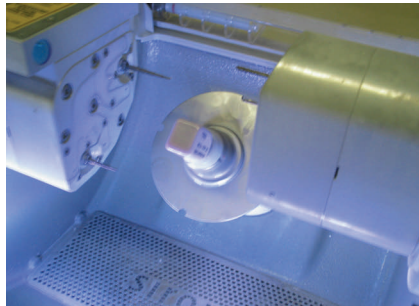
After the blocks are milled they are said to be in their “soft” state where adjustments and cut backs can be made if needed. Any staining or glazing can be done before or after being sintered in the 60 minute crystallization process. The crowns are crystallized without shrinkage and acquire their final strength while also revealing shade, translucency, and brightness. This monolithic structure has distinct advantages, one of them being that the veneering ceramic can be eliminated and exceptional esthetics can still be attained. Greater structural integrity can be achieved without the need for a strong bond interface between a core substructure and veneering ceramic.

Choosing the proper materials to use for each case can sometimes be confusing, especially now with so many options out there. At Renstrom we evaluate each case and suggest the best material for your specific case needs. If your case could be made e.max we’ll be sure to inform you, otherwise we would encourage you to simply write **“make it e.max CAD”** on your next prescription.

e.max CAD  
crowns \$40  
off now  
until July!



Photographic images are taken of the dies and displayed on the inlab software. The technician defines the margin and adds proper support where needed.



Once the design is approved, the crowns are milled out of the low translucent lithium disilicate block in the MC XL milling unit.



After milling, the crowns appear in a pre-crystallized soft state.



Adjustments are made in the soft state and the contours are redefined.



After firing, the crowns reveal the desired shade and brightness.



Stain and glaze is added for the final touches on the e.max CAD crowns.

## Renstrom Assistant's Continuing Education Seminars (A.C.E.S.) Update

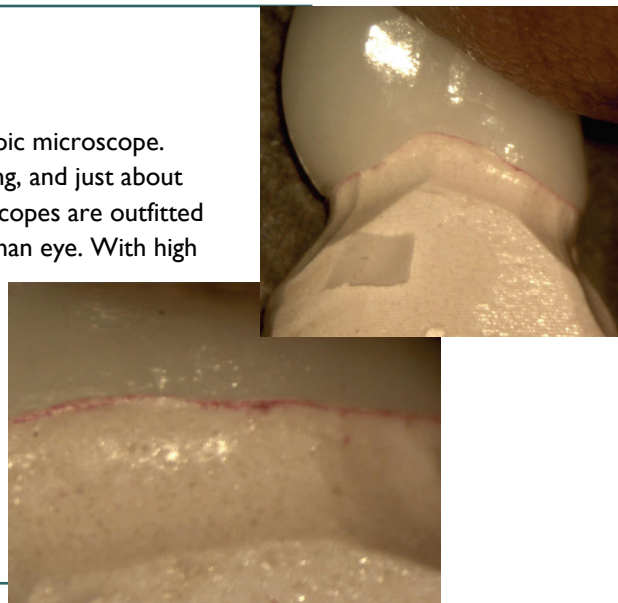
Well trained and fully utilized dental assistants play a pivotal role in today's successful dental practice. There are huge benefits for dentists who delegate tasks to their assistants. Office efficiency is the most obvious benefit of full utilization of auxiliaries, but there is another benefit that is often overlooked. A job that provides a variety of challenging tasks is a key factor in preventing boredom and eventual burnout that can occur when most of the day is spent suctioning. Auxiliaries are the "personality" of your practice and you want that personality to be upbeat and energized. A patient's impression of a practice is directly related to the attitude of the staff.

We have developed the Assistant's Continuing Education Seminars (ACES) to help train dental office staff to perform some of the tasks now performed by the dentist. We envision restorative appointments where preliminary shade, photos, pre-op impressions, reduction guides and temporary matrices have all been accomplished before the doctor even enters the treatment room. Our ACES program will give chairside assistants the skills they need to accomplish these tasks. Individual offices can then decide how to incorporate these new skills into their crown and bridge appointments. The ACES program is a series of four hands-on courses, Photography, Shade-Taking, Temporaries and Impressions/ Matrices. The photography course was held in May and the shade-taking course is planned for June 15th. The remaining two courses will be scheduled for late summer and fall. Because of the hands-on nature of these courses, attendance will be limited to improve the quality of the instruction. If there is enough demand, courses will be repeated later in the year.

Jeff Benson DDS, program director

### Microscope Derived Dental Excellence

Every technician's bench at Renstrom is equipped with a stereoscopic microscope. These microscopes are used for added accuracy, die trimming, fitting, and just about everything else involved with the fabrication of a restoration. The scopes are outfitted with two different magnifications levels that are 10x that of the human eye. With high magnification and high resolution observation the slightest details and specifications can be accomplished. To help us be even more effective we've now added a camera to one of our microscopes in the lab. With the microscope camera the quality images can be used as a learning tool, second opinions, emailing, and so much more. Essentially it is just another tool that will help improve the final product and overall quality of the work!



### Featured Technician : Kris Schmitz

**Kris Schmitz**  
Cerapist

#### My role at Renstrom

In the porcelain department Kris works with different porcelains to design life like restorations. She enjoys working with new products and introducing them to other technicians. Kris also helps to maintain the supplies in the porcelain department and assures that all of the equipment is running properly. When patients come into the lab Kris takes custom shades and consults with the patient about their expectations of the case.



#### My Renstrom Mission

As a technician I am always striving to produce the best results for the patient. Working with different materials and products help our Renstrom team stay abreast in this industry. I am always interested in learning new techniques and about improvements in technologies that allow us to advance in what we do.

#### Advanced Dental Lab Training

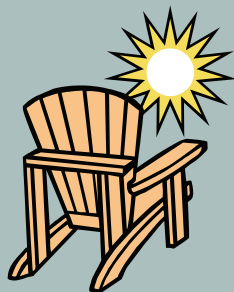
- Attends the Minnesota Dental Lab Association meetings
- Certified Dental Technician
- Attends hands on training courses, most recently a zirconia course instructed by Bill Zanin



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*Our goal is to get you  
patient referrals with  
every case we do!*



**Have an enjoyable  
summer!**

**We're on the web!  
[www.renstrom.com](http://www.renstrom.com)**

## Renstrom Dental Studio Upcoming Events

### Assistants Continuing Education Seminars:

**June 15th 2009**

*Dental Shade Matching for Dental Assistants*

*Presenter: Bob Boyd, Vident*

**August and September 2009**

*Impression Taking and Making Temporaries*

*Dates still to be determined*

**September 9th 2009**

*IPS.emax Seminar*

*Presenters: Jane Shortidge and Emily Brown,*

*Ivoclar Vivadent*

**Held at:**

**Renstrom Dental Studio**

**4225 White Bear Parkway, Suite 1240**

**Vadnais Heights, MN 55110**