

Sterngold *Attachments*™



ERA®
Attachment Systems

A "SNAP" to Use and Maintain

ERA

Attachment Systems

The **Stern ERA®** is our response to the dental professional's need for a simple, dependable and highly versatile attachment system for removable prostheses. ERA®s are the most popular resilient dental attachments prescribed today. Used in removable partial denture treatment, tooth supported overdentures and implant cases, **ERA®** is an excellent choice for both experienced practitioners and those new to attachment procedures.

Before the **ERA®** concept was developed, dental professionals and their patients were experiencing problems with some resilient attachments. They were too expensive, complicated to fabricate, and too fragile or unreliable for long term patient service.

The **ERA® System** alleviates these problems by using new materials and patented designs. **ERA® attachments** consist of a metal female component, which is intraorally fixed; and a replaceable, high density nylon male anchored in the denture base.

- They are low in cost. By eliminating the machining of expensive gold alloy components, ERA attachments are affordable to many more patients.
- They are easy to use. Fabrication and maintenance procedures have been simplified.
- They are tough and reliable. In vitro studies* and clinical experience show **ERA® attachments** to be long lasting, and patients find them comfortable and easy to live with.

Worldwide...dentists prescribe, and technicians fabricate, thousands of **ERA®** retained restorations every month. And patients put them to hard daily use. You can join in their success.

*Study conducted by Jonathan M. Wohlford, D.D.S., Medical College of Virginia, School of Dentistry.



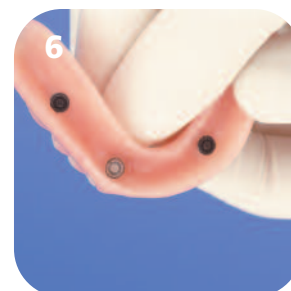
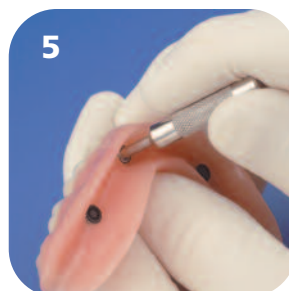
Black = Processing Male
 White = Light Retention
 Orange = Moderate Retention
 Blue = Heavy Retention
 Grey = Very Heavy Retention
 Yellow = More retention than grey
 Red = The Most retentive

All **ERA® males** use the same color code

Changing the **ERA® Male**:

All **ERA® males** are mechanically anchored in the denture base. They provide both vertical resiliency and universal hinge movement. Worn males are removed with a specially designed bur and new ones snap into a metal jacket permanently processed into the denture. There is a specifically designed metal jacket for each type of **ERA® male**: partial denture, ERA®-RV, Micro ERA®, and overdenture. You can also anchor the males directly in the denture acrylic without the metal jacket.

1. Core Cutter Trepine Bur.
2. Bur removes the center post of the male.
3. Pop the remnant of the male out with any sharp instrument.
4. Put a new male on the Seating Tool.
5. Snap the new male into the metal jacket.
6. New male in place.

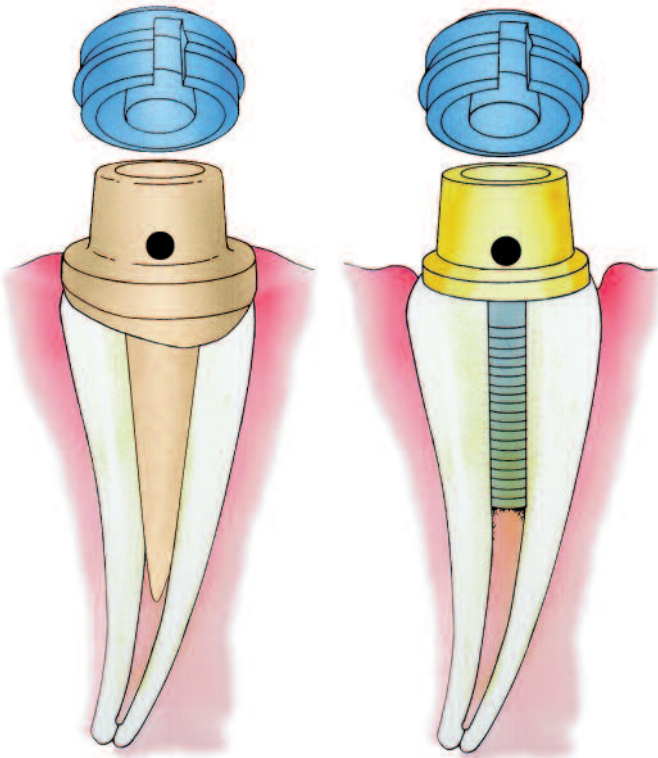




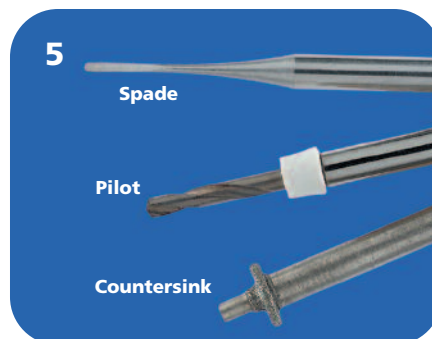
ERA® Overdenture Attachments including the new Micro ERA Overdenture

There are two female designs and two sizes for root retained overdentures. The **ERA Overdenture Attachment female** is a plastic pattern that is incorporated into the wax-pattern for a post and root-cap coping. It is cast in a hard alloy. It comes in the original size and the new Micro, which is 20% smaller. The Micro saves 0.5mm in height and almost 1 mm in width, with no loss of retention or longevity. The **ERA Direct Placement Overdenture Attachment female** is manufactured in surgical stainless steel and cemented into a root specially prepared to receive it.

The stainless steel females are made in a choice of two post diameters and four post angles to accommodate most patient's needs. The attachment functions normally when set up to about 7° out of parallel with the case's path of insertion. All ERA Direct Placement females are titanium nitride coated.



1. Plastic patterns for the ERA® Overdenture female. Stainless steel females for direct clinical placement.
2. Two post diameters, 1.3mm and 1.7mm. The titanium nitride coating extends onto the post to identify the larger version.
3. Angled posts: 0° (straight), 5°, 11°, and 17°.
4. Alignment handles help you carry the female to the root and aid in evaluating the attachment's angulation.
5. Specialized burs for root preparation:
 - Spade Drill for removing gutta percha.
 - Pilot Drill with depth reference ring for post preparation.
 - Countersink Bur for shaping the occlusal surface of the root to support the female.
6. Overdenture males. Used with both laboratory cast and prefabricated, stainless steel females.



ERA® Implant Abutments

This version of the **ERA®** combines the overdenture attachment concept with an implant abutment. It is made of titanium alloy. Its **ERA®** female is titanium nitride coated and works with the same overdenture males used for patients with natural root abutments. The prosthetic head of the abutments is now manufactured in the new micro size. This attachment is reduced 20% from the original, making it the smallest overdenture implant abutment, with no loss of performance. No overdenture abutment lasts longer and none can compare to the true vertical resiliency of the patented ERA Implant Abutment. There are straight and angled abutments to achieve functional parallelism even when implants are divergent. Like the **ERA® Overdenture Attachment**, the implant abutment functions normally when up to 7° off of parallel from the path of insertion. Place the abutment in the implant using either the **ERA® Abutment Wrench** or our **20N•cm torque wrench** with **ERA® adapter**. We make **ERA® Abutments** for **Sterngold-ImplaMed®** implants and for many other brands.

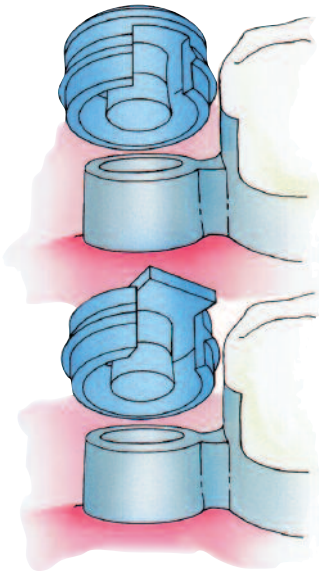
1. ERA® Abutment for Sterngold-ImplaMed and other standard external hex implants.
2. Two-piece angled abutment for divergent implants. The abutment base threads into the implant. The attachment female is bonded to the base. Use ERA® Lock™, a Bis-GMA resin.
3. Three attachment angles: 5°, 11° and 17°.
4. Alignment handles help you carry the female to the implant site and aid in evaluating the attachment's angulation.
5. The same ERA® male used with root retained overdentures is used with ERA® implant abutments. Now available with 20% smaller Micro Prosthetic Head.
6. We manufacture ERA® Abutments for most major implant brands and in varying cuff heights.

Now available in
Micro Head...

**the Smallest
Prosthetic Head
and the Only
with True
Vertical
Resiliency!**



ERA® Partial Denture Attachments

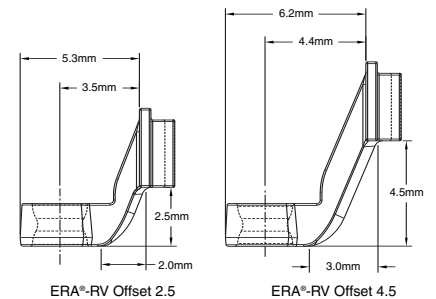
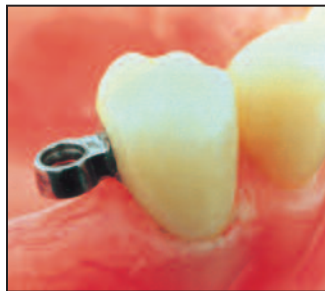
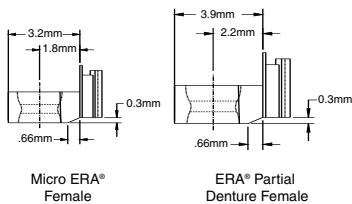


The female component is a plastic pattern which is incorporated as part of a crown wax-pattern and cast in a hard alloy. A metal female jig (which becomes part of your stone model) is available to hold the male in place for laboratory processing into the partial denture's acrylic saddle.

You have a choice of *three* male designs. The **ERA®-Reduced Vertical male (ERA®-RV)** has 0.4mm of vertical resiliency and universal joint hinging. The **Micro ERA® male** has the same resiliency and hinging, but needs 0.5mm less vertical space and has a diameter of almost 1.0mm less, making it the smallest extracoronal resilient attachment in the world. The **ERA®-RV** and **Micro ERA®** males also have a projection which contacts the abutment crown above the female eyelet. This resists vertical displacement of the partial denture's distal extension saddle. The **Standard ERA® Partial Denture** male is only sold as a replacement part for older cases.

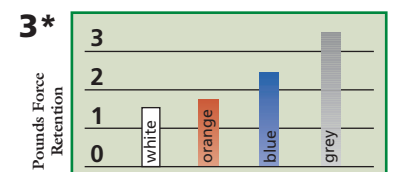
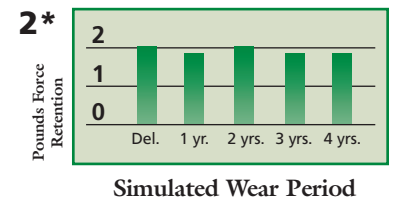
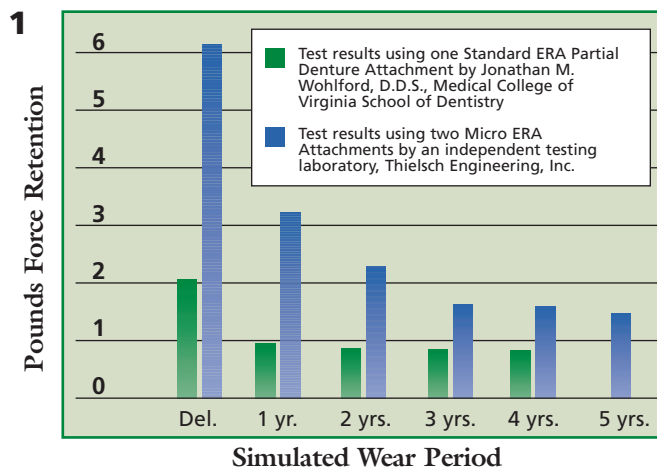


Within the **ERA®-RV** there are three female choices. The original female drops 0.3mm from its connection to the crown. Bone loss in the edentulous area could mean that there is a significant amount of space between the attachment and the tissue. Now you can place the female eyelet closer to the tissue with two offset females. The bottom of the **ERA®-RV Offset female 2.5** drops 2.5mm from its connection to the crown and the **ERA®-RV Offset 4.5** drops 4.5 mm. We made extensive use of state of the art product engineering software during the design and testing phases of these attachments to ensure that these females are as strong as the original.



ERA® Retention

1. Female retention of the original white male, indicative of both male and female wear.
2. Female retention of a new white male, indicative of female component wear.
3. Retention of new males in a "four year" female. Retention values taken after 20 insertion-removal cycles for new male wearing in.



*Study conducted by Jonathan M. Wohlford, D.D.S., Medical College of Virginia, School of Dentistry

Ordering Information

ERA® Implant Abutments fit the following implants:

Manufacturer	Group	Manufacturer	Group	Manufacturer	Group
Sterngold-ImplaMed®		4.0 ICE™ Self-tapping	A	IMTEC Corporation®	
3.3 Hex Cylinder	A	4.0 OSSEOTITE®	A	3.3 Universal Flare Cylinder	A
4.0 Hex Cylinder	A	4.0 Standard Threaded	A	3.75 Universal Self-tapping	A
3.75 Standard Hex Screw	A	4.25 External Hex Cylinder	A	3.75 Universal Self-tapping Coated	A
3.75 Self-tapping Hex Screw	A	3.25 Internal Hex Miniimplant®	E	4.0 Spike Cylinder	A
3.75 Self-tapping "SST" Hex Screw	A	TG OSSEOTITE® (4.8 Platform)	S	4.0 Universal Cylinder	A
4.0 Standard Hex Screw	A				
4.0 Self-tapping Hex Screw	A	Strauman		"O" Company	
4.0 Self-tapping "SST" Hex Screw	A	3.3 ITI TE™	S	3.25 Anti Rotational	E
5.0 RP "SST" Hex Screw	A	4.1 ITI TE™	S	4.0 Anti Rotational	D
3.75 RP Acid Etched	A				
4.0 RP Acid Etched	A	Zimmer (Paragon, Centerpulse)		Minimatic/Stryker	
5.0 RP Acid Etched	A	3.5 Bio-Vent® X™	A	3.3 External Hex Cylinder	A
5.0 WP	M	3.75 Swede-Vent™ Conical Neck CST	A	3.75 External Hex Screw	A
6.0 WP	M	3.75 Swede-Vent™ Standard	A	4.0 External Hex Cylinder	A
		4.0 Swede-Vent™ Standard	A	4.0 External Hex Screw	A
Nobel Biocare Brånemark System®		4.0 Bio-Vent® X™	A	4.75 External Hex Screw	A
3.3 Fixture	A	3.25 Micro-Vent® (3.5 head)	B	5.0 External Hex Cylinder	A
3.75 Fixture	A	3.3 Screw-Vent® (3.5 head)	B		
4.0 Fixture	A	3.5 Bio-Vent® (3.5 head)	B	OIC	
5.0 Fixture (Old Version)	A	3.7 Screw-Vent® (3.5 head)	B	3.0 Osteo Standard ST	A
3.75 MkII, Self-tapping Fixture	A	3.75 Screw-Vent® (3.5 head)	B	3.25 Osteo Standard ST	A
4.0 MkII, Self-tapping Fixture	A	4.3 Core-Vent® (3.5 head)	B	3.75 Osteo Standard ST	A
5.0 MkII, Self-tapping Fixture	M	4.25 Micro-Vent® (4.5 head)	C		
5.5 MkII, Self-tapping Fixture	M	4.5 Bio-Vent® (4.5 head)	C	INNOVA	
5.0 MkIV, Self-tapping Fixture	M	4.7 Screw-Vent® (4.5 head)	C	Innova 4.1 "B"	A
		5.3 Core-Vent® (4.5 head)	C		
Nobel Biocare (Steri-Oss®)		3.7 Tapered Swiss Plus™	S	Bud	
3.8 HL Cylinder	A	(4.8 platform)	S	3.25 Bud Screwvent	A
3.8 HL Threaded	A	4.8 Tapered Swiss Plus™	S	3.75 Bud Screwvent	A
4.5 HL Threaded	A	4.1 Straight Swiss Plus™	S		
3.8 Cylindrical	D	4.8 Straight Swiss Plus™	S	Biolok International	
3.8 Threaded	D			4.5 Silhouette Screw	A
4.0 Steri-Oss	D	Zimmer (Calcitek®, Centerpulse)		4.0 Micro-Lok Screw	A
3.25 Cylindrical	L	3.25 Integral®	E	4.0 Micro-Lok Cylinder	A
4.3 Replace® Select	T	3.25 Omniloc®	E	3.75 Micro-Lok Screw	A
		3.75 ThreadLoc™	A	3.3 Micro-Lok Cylinder	A
Interpore IMZ™		4.0 Integral®	D		
3.3 Hex Cylinder	A	4.0 Omniloc®	H		
3.75 Self-tapping Threaded	A	3.25 Spline®	J		
4.0 Hex Cylinder	A	3.75 Spline®	K		
4.0 Self-tapping Threaded	A	4.0 Spline®	K		
4.25 Hex Cylinder	A				
4.0 Cylinder	F	Lifecore Biomedical			
4.25 Cylinder	F	3.75 Restore® Self-tapping Screw	A		
3.3 Cylinder	G	4.0 Restore® Self-tapping Screw	A		
		3.75 Restore® External Hex Screw	A		
3i Implant Innovations®		4.0 Restore® External Hex Screw	A		
3.25 External Hex Miniimplant®	A	4.0 Restore® External Hex Cylinder	A		
3.25 ICE™ Miniimplant®	A	4.2 Sustain® External Hex Cylinder	A		
3.25 OSSEOTITE® Miniimplant®	A	3.75 Sustain® External Hex Screw	A		
3.3 Cylinder Miniimplant®	A	4.0 Sustain® External Hex Screw	A		
3.3 External Hex Cylinder	A	4.2 Sustain® External Hex	A		
3.75 ICE™ Self-tapping	A	MC Cylinder	A		
3.75 OSSEOTITE®	A	4.0 Sustain® Internal Bevel	D		
3.75 Self-tapping Threaded	A	Stage-1™	S		
3.75 Standard Threaded	A				
4.0 External Hex Cylinder	A				

*For ease in ordering,
reference the group letter.*

*For information and
ordering assistance, call*
800-243-9942
or
order online at
www.sterngold.com

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