

#### HOW TO

## USE A RETENTIVE PROSTHETIC MULTISYSTEM

Rhein 83 USA's OT Equator<sup>®</sup> profile offers elevated retention power and ease of use for a variety of implant-supported prosthetic cases.

Information provided by Rhein 83 USA Inc.

By now, most patients and dentists are well aware of the benefits of implants in terms of improved long-term oral health, as well as an improved quality of life for patients. Because of this, there have been many advances in recent years by manufacturers hoping to deliver easier, longer-lasting and more predictable implant outcomes.

One new such advancement has recently come about in the area of low profile castable, and direct implant overdenture attachments. In an effort to deliver a system that produces full functionality and ease of use, while working with any kind of implant-supported prosthetics, Rhein 83 USA Inc. developed **OT Equator® profile**, the newest line of low profile castable, and direct implant overdenture attachments.

The company redesigned its classic OT Cap sphere by removing the upper and lower radius sections of the attachment leaving only the central or Equator portion, which provides maximum retention with minimum height. With a low vertical profile of 2.1 mm and diameter of 4.4 mm, OT Equator is the smallest attachment system on the market.

This system offers multiple solutions for overdenture treatment planning where inter-occlusal space limitations are indicated. It is available in two versions— Castable and Prefabricated Titanium abutments—and is compatible with any implant brand on the market; cuff heights are available from 1 mm to 7 mm.

Female caps range in four levels of retention, and are easy to process by the dental laboratory, or during chairside procedures in the dental office.

Equator's specially designed stainless steel housings gives the female caps added stability and retention in the acrylic.

OT Equator castable low profile attachments are indicated for rootretained post and core overdentures (Fig. 1) and also positioned on implant-supported cast bar super structures (Fig. 2).

For best results during the casting procedure, it is recommended to use an alloy with a minimum Vickers Hardness of 240.

Implant abutments are gold because of a TiN (Titanium Nitride) coating that gives Equator an extremely smooth 1600 Vickers surface and extends the life of the female cap.









# OT Equator profile

#### OT EQUATOR FEATURES

 Small attachment design with retentive modulating faculties provides optimal stability
 Accessory components allow

for use with a variety of procedures Implantology kit attachment

available for all implant brands

Rhein 83 USA Inc. rhein83usa.com 

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## AT A GLANCE

**1.** The OT Equator profile castable attachments used for direct overdentures on natural roots

2. Here the castable attachments are set over connecting bar to balance removable over-structure.

3. Titanium attachments are screwed on the implants. An impression is taken using transfer plastic analogs.

4. Attachment analogs are placed into the stone model for proper position.

5. Reinforcement pins are placed on every tooth and waxed up using trail mask.

6. This cast reinforcement procedure can even be set directly in the patient's mouth.

7. The finished removable denture in resin. Retention can be monitored simply by choosing the proper color-coded retentive cap.

8. Using OT Bar Multiuse castable components, a passive bar is fabricated to link the three implants with the Elastic Seeger System.

9. The over-structure is waxed up together with OT Bar and Cast using the same block, which saves time and material.

**10.** Three OT Equator profile attachments are screwed on the implants where the connecting bar will be linked.

11. Using the proper tool (inset), the Elastic Seeger spring is compressed and inserted into the container cylinder. The Titanium screw then locks the implant's connecting bar structure in place.

12. The finished bar securely positioned.







**Clinical case** 

proper position (Fig. 4).

Screw abutments into the

implants and take an impression

During the laboratory proce-

dure attachment analogs will be

placed into the stone model for

the wax up design, and rein-

forcement pins are positioned

using the transfers (Fig. 3).

STEP Castable connectors are used in

giving extra support to the denture

teeth. Check position with silicone lab

STEP

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putty (Fig. 5).









STEP Once casting is completed, proceed with the placement of the )4 stainless steel housings using denture resin. After curing the housings in position (Fig. 6), select the proper retentive cap and snap into the housing using the OT Equator insertion tool. The completed denture is ready for insertion (Fig. 7).

**STEP** The diversification of OT Equator is represented by the

components make it easy to set connecting bars. Transfer for impression is inserted into the implant analog. Using OT Bar Multiuse castable components, a passive bar is fabricated to link the three implants with the Elastic Seeger System (Fig. 8).

**STEP** The over-structure is waxed up together with OT Bar and Cast Jб using the same block (Fig. 9).

**STEP** Screw the OT Equator abutments directly into the implant fixtures (Fig. 10).

**STEP** Bar will lock in place over the Seeger (for passive connection) implants by using the Elastic then the Titanium screw is used to securely lock the implants (Fig. 11).

### **Closing thought**

Fig. 12 illustrates the finished bar in place after the procedure has been completed. Characteristics of the OT Equator profile system include the smallest attachment on the market with retentive modulating faculties. The attachment is designed to produce to the prosthesis a superior stability in procedures where two implants are used to obtain a prosthesical retention. Plus, it provides the possibility to create a passive union between the two implants in the case in which a bar connection is needed, (ex: direct load), avoiding fusion problems owed to fusion or impression taking.

Seeger Ring System. These

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