

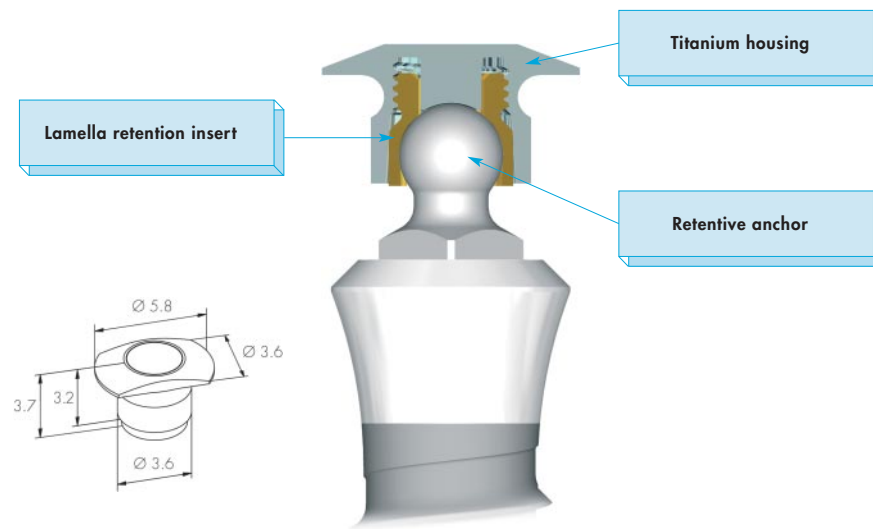
Straumann is the exclusive industrial partner of the ITI (International Team for Implantology) in the areas of research, development, and education.



### Principle of function\*

The titanium housing with unique retention wings in the form of an ellipse helps ensure the matrix remains fastened in place, which provides a secure denture for predictable stability and durability.

The connection between the insert and the housing is threaded and the four lamellas of the insert act as a spring. The retention force can be easily adjusted by using the Elliptical Matrix screwdriver to tighten or loosen the lamella to accommodate the individual requirements of the patient.



\* Working with this product is identical to working with the matrices described in the brochure "Fabrication of an overdenture using retentive anchors" (LIT 065), with the exception of the adjustment of the retention as described.

In the event that the lamella retention insert needs to be changed, it can be easily and quickly replaced by the clinician without removing the titanium housing from the overdenture. This simple procedure will not damage the denture.

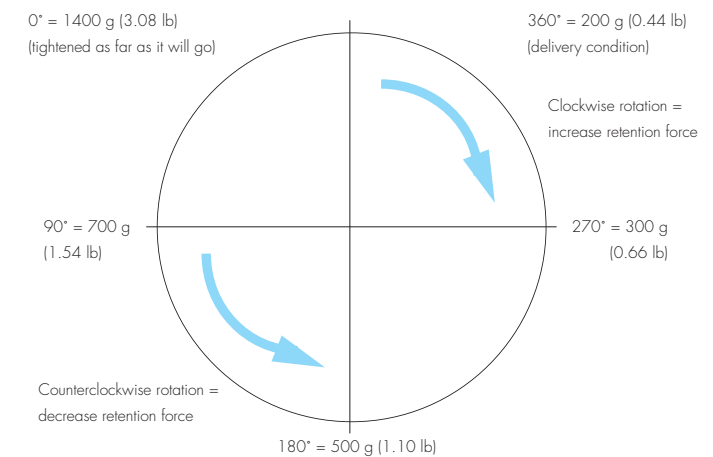


### Retention force adjustment

The lamella insert of the Elliptical Matrix comes with a preset retention force of approximately **200 g (0.44 lb)**. If necessary, this can be increased by using the corresponding screwdriver to adjust the retention for optimized stability and patient comfort. The maximum recommended retention force is **1400 g (3.08 lb)**. Rotate clockwise to increase retention, or counterclockwise to decrease it.



#### The connection between tightening angle and retention force:



\* Slight deviations from these average values are possible due to the unavoidable manufacturing tolerances of the lamella retention insert and retentive anchor. If signs of wear are evident on the retentive anchor, the retention force may no longer apply, and the retentive anchor must be replaced.

#### Caution:

Always begin with the preset retention force of 200 g/0.44 lb (matrix as supplied) and adjust it accordingly based on the patient's comfort level and clinical requirements.

## The new Elliptical Matrix for retentive anchors – the next generation

The Elliptical Matrix is used in conjunction with the retentive anchor and provides for a long lasting removable overdenture. The precision fit and stability of the Elliptical Matrix can increase patient satisfaction and confidence.

#### Reliable

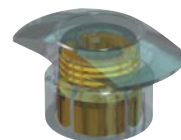
The retentive anchor abutment utilizes the proven Morse taper implant-to-abutment connection, which provides a stable foundation for the denture. The titanium housing of the Elliptical Matrix has an insert screwed into it with gold lamellas that firmly grip the retentive anchor. The elliptical shape of the titanium housing enhances the retention of the matrix into the denture for long-term durability. It also provides an additional safeguard against rotation.


#### Simple




The lamella insert can be easily and quickly replaced without removing the titanium housing from the denture. Using the specially designed screwdriver (046.154), the retention force can be adjusted progressively between 200-1400 g (0.44 - 3.08 lb) during treatment for reduced patient chair time.

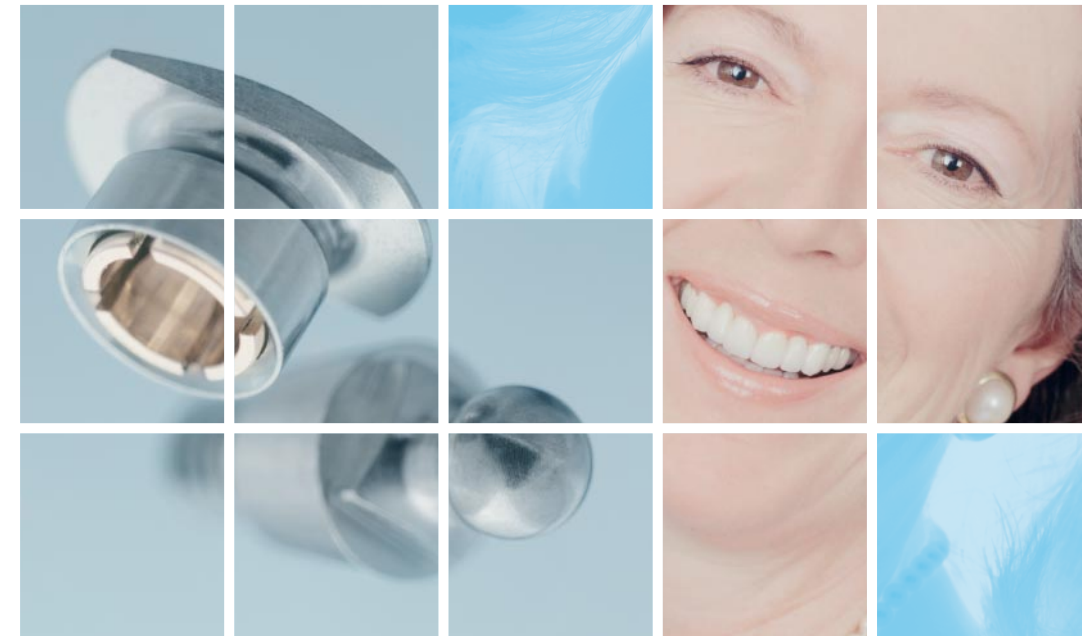
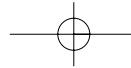
#### Versatile

The housing wings can be shortened for added flexibility. The Elliptical Matrix offers the option of being processed in the denture chairside. The Elliptical Matrix can be retrofitted into an existing denture and is therefore compatible with retentive anchor abutments that are already in place.



 Product overview

Art. No.		Article	Dimension	Material
048.456		Elliptical Matrix, includes lamella retention insert	Height 3.2 mm, Ø 3.6 mm	Elitor®/titanium/zinc
048.457		Spare lamella retention insert	Height 2.6 mm	Elitor®
046.154		Screwdriver	Length 37.0 mm	Stainless steel



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PROSTHETICS

**Hybrid restoration with the Elliptical Matrix for the retentive anchor**

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