

**Anchors**

Activation, deactivation, repairs and regular servicing of attachments should only be carried out by trained personnel using original instruments and components.

Mechanically cleaning attachments with a toothbrush and toothpaste can cause premature wear and tear of the functional components.

Upon publication, these instructions for use supersede all previous editions.

*The manufacturer is not liable for any damages due to the user disregarding the instructions for use below.*

**In general:****Traceability of lot numbers**

If attachments are assembled from components with different lot numbers, all relevant lot numbers have to be recorded to ensure that they can be traced.

**Technique for using the auxiliary parts (Galak)**

Here the spacers generally replace the anchor female parts during resin-polymerization in the dental laboratory. These are then removed from the finished polymerized denture. The polymerization or resin-bonding of the original female parts is done by the dental surgeon directly in the mouth of the patient after cementing of the root canal caps. The spacers are also an excellent protection for the male parts during polishing. In case of modifications or additions the spacer can be used together with the transfer jig for impression-taking or construction of the model. With the retentive anchors Gerber RZ 32.02, Mini-Gerber 32.07, Mini-Gerber PLUS 32.14 or Mini-Clic® 32.12 the spacer can be used as a provisional friction-grip element.

**Duplicating aids**

These red parts are slightly overdimensioned compared to the original parts. The result is an optimal gap for the duplicating and resin-bonding technique. The red parts can also be used for the spacer technique (Galak).

**Operator removable works**

For screw-retained dentures, crowns, bridges, implant supra-structures or individually milled or prefabricated bars on root canal caps see Schubiger SB 33.02.

For fixed crown- and bridgework, see general guidelines for slide attachments / «Operator removable screw-retained works».

**Twin crowns**

With two root canal caps in succession in the posterior region of a quadrant, the combined use of a rigid anchor with a resilient anchor is recommended. Normally, the rigid anchor will be placed on the anterior and the resilient one on the posterior abutment. The two root canal caps must **not be** blocked. Thus, rocking movements and overloads can be prevented.

**Occlusal metal surfaces**

Occlusal metal surfaces above female parts assure that they remain in the resin. The female parts must never be soldered, but must be polymerized directly into the removable denture in the patients mouth by the dental surgeon.

**Denture framework**

For bilateral insertion and free-end dentures cast transversal connections such as plates in the upper, sublingual connectors in the lower jaw are used. It is important that these constructions are absolutely rigid (no springiness).

**Transversal blocking**

Rigid unilateral dentures must be blocked transversally, generally with Cendres+Métaux attachments (see chapter «Slide attachments» in the Dental documentation of Cendres+Métaux.

**Precautions when soldering OSV****Important!**

**The alloy OSV must not be annealed or hardened after soldering** (danger of fracture due to embrittlement of the alloy.)

If components of anchors oxidize strongly during soldering, the oxide layer may not easily be removed by pickling. In this case, remove the oxide layer with a glass brush. Do not use sandblasting or any other abrasive products such as prepolishing paste.

**Dismantling of the attachment**

Separate the male and female parts before soldering and, if they are made up of components, dismantle them.

**Pickling**

Pickled parts slide better if they are placed in soap water (ultrasonic bath) after pickling.

**Thread**

If desired, thread cutters and tap dies are available for specific attachments.

**Disinfection**

**The product is delivered non-sterile.** Every prosthetic construction must be cleaned and disinfected before every try-in or permanent fitting.

**Further hints**

For processing of precious metal alloys, soldering and casting-on see Dental documentation of Cendres+Métaux.

**Allergies**

With patients having an existing allergy to one or several elements of the materials contained in any one attachment, this particular product must not be used. With patients suspected of having an allergy to one or several of these elements contained in any one attachment, this product can only be used after preliminary allergological testing and proof of a non-existing allergy.



**32.12.2 TO****Female part**

Integration by: Polymerization

**Male part**

Integration by: Soldering

T = Titanium (grade 4)

O = OSV

**32.12.2 TV****Female part**

Integration by: Polymerization

**Male part**Fitting: Soldered or cast-on, **cannot be laser-welded****Retention insert**

Mouth-resistant elastomer.

For safety reasons, the retention insert is not to be removed from the housing!

T = Titanium (grade 4)

V = Valor®

= Nitrile

**Indications****Rigid, removable dentures on root canal caps:**

- Insertion dentures
- Unilateral free-end dentures, transversally blocked
- Combined insertion and free-end dentures
- Bilateral free-end dentures
- Hybrid dentures

**Contraindications**

- Unilateral dentures **without** transverse locking
- Periodontally strongly damaged abutment teeth
- Hybrid dentures anchored on one single root canal cap

**Please note:**

When using the anchor Mini-Clic® in combination with dentures having clasps, **the direction of insertion between these elements must be identical**. Otherwise, there is the danger of wear of the nitrile retention ring which can strongly reduce the hold of the denture.

If needed, a friction-grip metal female part (052 155) is available.

**Equipment necessary for correct processing**

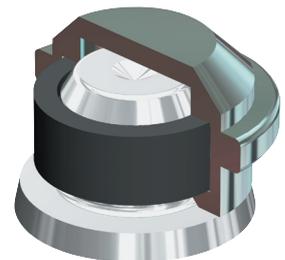
Parallelometer, auxiliary parts and instruments (see Dental documentation of Cendres+Métaux).

**T = Titanium (grade 4)**

Ti &gt; 98.9375%

**O = OSV**Au 60.0%, Pt 10.5%, Ag 7.0%, Pd 6.5%, Cu 14.0%,  
Zn 2.0%T<sub>s</sub> – T<sub>L</sub> 960–1065°C**V = Valor®**

Pt 89.0%, Au 10.0%, Ir 1.0%

T<sub>s</sub> – T<sub>L</sub> 1660–1710°C

**Instructions for use****Version TO for soldering**

Model the surface of the root canal cap at right angles to the direction of insertion. Mill the cast surface horizontally. Place the male part using the parallelometer insert (070 137) parallel to the direction of insertion and fix it with wax. Make a small soldering block and allow good flame access. After soldering benchcool to room temperature (have optimal mechanical properties). See note on page 1.

**Versions TV for casting-on or soldering**

**Note:** The male part made of Valor® can be identified by the mark on the cylindrical part.

Model the surface of the root canal cap at right angles to the direction of insertion. Shorten the root canal post to this height. Place the male part using the parallelometer insert (070 137) parallel to the direction of insertion and finish modelling around the base. Invest, cast and benchcool to room temperature (have optimal mechanical properties). After deinvesting do not sandblast the cast male part (danger of change of the dimensions). Clean ultrasonically. Check the function on the master model.

**Polymerization of the female part T**

This anchor was constructed for simple polymerization into the denture resin. This is why there are no duplicating aids for resin-bonding into a metal frame. (If necessary block out individually). Place the root canal cap with the anchor on the master model. Then block out any undercuts or papilla gaps with cement, wax or Flexistone. Before polymerizing the female part it is recommended to protect the inside from penetration of resin by applying a little vaseline. Mount the female part and finish the resin work as usual. If any resin has penetrated between female part and the base, remove it with a pointed instrument.

**Modifications / underlining**

In the case of a transformation or a underlining of the denture use the transfer jigs (070 325) for the reconstruction of the position of the male part on the working model. The heating rod (072 601) allows fast removal of a female part from the denture without damaging it. It is introduced into the female part, the other end is heated over a bunsen flame until the resin surrounding the female part becomes soft. Then the female part can be removed from the denture simply by pulling out. This female part **must not be** used again and must be replaced by a new one. If the female part is to be re-used, don't use the heating rod.

**Attention**

- The nitrile insert must for safety reasons not be removed from the housing. If necessary replace the whole female part.
- In order not to impair the quality of the retention insert, do not vaporize or treat the female part with any cleaning products.

**Additional information**

- The Mini-Clic® female part is compatible with the male part of the Micro-Fix®.
- The replacement female part from the Micro-Fix® program (052 155) can be used as friction-grip element.
- Thanks to the conception of the Mini-Clic®, wear of the male part by the nitrile retention ring is, based on today's knowledge, practically impossible. It is, however, possible, that because of minimal inaccuracies between the situation in the mouth and the master model the retention strength may become weaker at the beginning or after a short time after placement in the mouth. Usually, the desired long-lasting hold is again obtained by replacing the female part in the mouth. Otherwise, the construction must have to be reconsidered or the alternative of the friction-grip metal female (052 155) part must be applied.