Instructions for use for

#### **Bars**

Application, 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.

#### Intended Use

The bars manufactured by Cendres+Métaux SA serve as connectors for tooth- or implant-supported removable dental prostheses.

#### Traceability of lot numbers

The lot numbers of all components must be recorded to ensure that they can be traced.

## Disinfection

After any fabrication or modification, the prosthetic work, incl. female part component, must be cleaned and disinfected according to national guidelines.

When selecting the disinfectant, it is essential to ensure that:

- it is suitable for cleaning and disinfection of dental prosthetic
- it is compatible with the materials of the products to be cleaned and disinfected.
- it has tested efficacy in disinfection.

All parts made of plastic must be disinfected with a high EPAregistered disinfectant prior to use.

Recommended: Cidex® OPA Solution. Strictly follow manufacturer's instructions.

# MP-Clip

#### Warnings

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.

Please contact your Cendres+Métaux sales representative for further information.

The following items contain nickel: 200004366 MP-Clip spacer with sleeve X 200004367 MP-Clip spacer with sleeve X

- The device has not been evaluated for safety and compatibility in the MR environment.
- The device has not been tested for heating or migration in the MR environment.

These operating instructions are not sufficient for immediate use of the attachment. Knowledge of dentistry and dental technology as well as instruction on the handling of the Cendres+Métaux attachments by an experienced person are required. Training courses are regularly provided by Cendres+Métaux, among others. The activation, deactivation, repair and periodic maintenance of attachments should be carried out solely by specialists. Only original auxiliary tools and parts should be used for this work.

#### **Precautions**

- The parts are delivered non-sterile. Proper preparation of the parts before use in patients is explained in the section «Disinfection».
- Ensure the attachment is cleaned regularly to avoid soft tissue inflammation.
- During intraoral use, all products should generally be secured against aspiration.
- No cutting work should be performed in the patient's mouth.
- The male parts must be placed parallel to the direction of insertion.
- Undercuts must be blocked out.

#### Further hints

for processing precious metal alloys are available in the Dental documentation of Cendres+Métaux and in the Internet by visiting www.cmsa.ch/dental.







Cendres+Métaux SA

Rue de Boujean 122

CH-2501 Biel/Bienne

## MP-Clip

Sleeve X=Steel

Integration: Polymerising into place

Retention insert G = Galak

Mouth-resistant plastic

Male part K = Korak
Integration: Burnout plastic for use when casting

#### Ackermann-Bar

Female part A / Female part B E = Elitor®

Supplied: Hardened Integration: Polymerisable

Male part P3 = Protor® 3

Supplied: Annealed

Integration: Soldering or laser weld: link to instructions for use

«laser welding instructions of Cendres+Métaux»

Lenghts: 60 and 200 mm Decomposable parts Spacer in brass

For implant's vertical translation

Note: Do not put the brass spacer in tin in the mouth.

#### Indications

Tooth and tooth/gingival supported dentures Implant-supported dentures, partial dentures and coverdentures, especially in cases of severe partial edentulousness, partial dentures and coverdentures on extremely weak abutment teeth.

#### Contraindication

- Unilateral dentures without transverse support.
- Restoration of abutment teeth with severe periodontal damage.
- Hybrid dentures which are fitted with a single root cap.
- Where patients have an existing allergy to one or more elements of the attachment materials.
- Unwillingness of the patient to correctly follow the aftercare/ recall instructions.
- Patients with bruxism or further uncontrolled para-functional habits.

#### Instructions

## Positioning of the bar

After the master model is prepared and articulated, the path of insertion and the available space for the bar and the denture teeth are decided. The teeth are set up in wax and an index is taken. The abutment crowns and cap copings are waxed up as usual. Trim the bar to fit between the abutments. A low profile will provide the best force distribution. Ensure that the bar is placed parallel to the path of insertion.

**MP-Clip:** Final contouring between the bar and the gingival tissue must be made by filling the space with wax. For a one stage casting, the bar and the abutments must be joined together. The bar and the abutments can also be cast separately and then soldered together. Riders are now placed on the bar and checked for position against an articulated opposing model. Sprues are attached to the abutments and onto one of the lateral surfaces gingivally to the bar. Spruing to the round bar profile should be avoided.

**Ackermann-Bar:** The position of the set up teeth in the plaster cast should be taken note of. The space between the bar and mucosa

#### Colour code of MP-Clip retention elements

Yellow standard retention
White moderate retention
Red extra retention

### E = Elitor®

Au 68.60 %, Pt 2.45 %, Pd 3.95 %, Ag 11.85 %, Cu 10.60 %, Ir 0.05 %, Zn 2.50 %  $T_{\rm s}{-}T_{\rm l}$  880 ${-}940\,^{\circ}{\rm C}$ 

#### P3 = Protor® 3

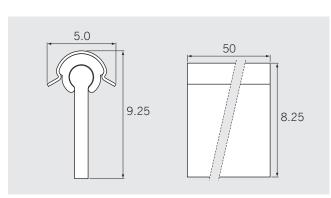
Au 68.60 %, Pt 2.45 %, Pd 3.95 %, Ag 11.85 %, Cu 10.60 %, Ir 0.05 %, Zn 2.50 %  $T_{\rm s}{-}T_{\rm i}$  880 ${-}940\,^{\circ}{\rm C}$ 

#### K = Korak

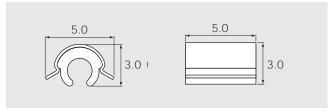
Non-residual burnout plastic for use when casting

#### G = Galak

Biocompatible, mouth-resistant plastic



MP-Clip



Female part MP-Clip

must be wide enough so that a rider placed inposition (with the space maintainer) should not touch the mucosa.

Once bent, the bar is soldered to the abutments and the construction heat treated in accordance with the requirements of the alloy. The bar should be finished and polished.

## Mounting in resin

The bar construction is now tried on the model, the space between the bar and the mucosa is to be blocked out with wax and also the root caps are covered with a thin layer of wax. A duplicate model is cast from the working model. On the duplicate model the appropriate places for clips are defined and the formerly blocked out part of the plaster "bar" scraped off, so that the clip is not overextended when being seated on the duplicate model. The clip is seated and raised to its highest point by inserting the spacer supplied with the clips. The spacer must support the clip so that the latter is not resting on the bar once the prosthesis is completed. Using a cement all the undercuts on the bar are blocked out.

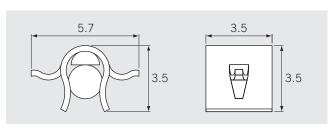
**MP-Clip:** Fit the processing riders completed with the metal backings onto the finished bar. The flanges of the processing riders must not extend further than the bottom of the bar, therefore, they must be reduced to fit the alveolar ridge accordingly.

With the aid of the plaster key the teeth are set up and processed on the model. The prosthesis is then finished off in the normal manner. The channel in the part of the prosthesis which lies over the bar is finished with suitable burs and is lightly widened but not deepened and slightly extended beyond the ends of the bar. Care should be taken to ensure also that sufficient free room is available for the ends of the clips to flet. After periods of use it may be necessary to further activate the wings.

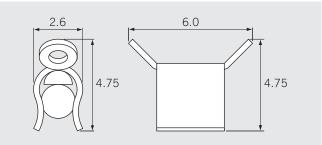
**MP-Clip:** Once the bar has been removed from the processed denture the processing riders can be easily removed with a sharp pointed instrument.

#### Relining

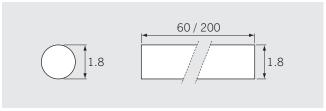
Remove the riders and the metal backings from the denture. Roughen the denture base with an appropriate bur. Using the denture as a custom tray, take a wash impression. The impression is then poured in stone. An index is made of the denture and the model. Sufficient acrylic is removed from the denture base to accommodate the new rider. The processing riders (including the metal backings) are now placed on the bar of the model. The flanges of the processing riders may have to be reduced in length to fit the alveolar ridge (see above).



Ackermann-Bar A female part



Ackermann-Bar B female part



Ackermann-Bar male part

#### Replacement of an Ackermann clip

A partial impression is taken of the underside of the prosthesis (area where the clip needs to be replaced) with a relatively stiff elastomer, e.g. silicone. Then the acrylic over the retention tags in the prosthesis is removed with a round bur. The clip can now be removed by means of a strongly heated pair of heavy pliers. The bed of the clip is enlarged and an opening is created to the labial or lingual surface of the prosthesis. Excess material of the silicone model is trimmed away so as to have the silicone bar «cleared». A new clip is placed on the model exactly at the place of the old clip. The wings are covered with wax to allow a free spring movement. The model with the clip is placed into the prosthesis and the void around the clip is filled with acrylic from labially or lingually i.e. through the hole previously created.

#### Note

Do not heat or solder the Ackermann clips, otherwise the alloy will not have the necessary spring properties.

#### **Aftercare**

Inside the mouth, retainers for prosthetic work are more or less exposed to stresses in a constantly changing environment, and hence wear. Wear occurs everywhere in everyday situations and cannot be avoided, only reduced. The intensity of wear depends on the system as a whole. Our endeavour is to use materials that are optimally matched to one another, in order to reduce wear to an absolute minimum. The good fit of the denture on the mucosa has to be checked at least once a year and a lining may have to be provided in order to eliminate swinging movements (overloads), especially in the case of free-end prostheses. We recommend replacing the friction insert (wearing part) at the annual check-up as a precaution.

Patients can obtain information and recommendations about the use, removal and care of prostheses on the patient website at www.cmsa.ch/dental/infos.

# Care & cleaning

Ideally you should clean your teeth and your denture after every meal. Cleaning your denture also involves cleaning the connecting element. The gentlest method is to clean the connecting element under running water with a soft toothbrush. For the most thorough cleaning, the denture has to be placed in a small ultrasonic device with a suitable cleaning additive. High-precision attachments must never be cleaned with toothpaste because this can cause damage. You should also be wary of unsuitable cleaning solutions or tablets. These can also damage the high-quality connecting element or interfere with its functioning. The connecting elements fixed in your mouth, e.g. on remaining teeth or on implants, must be cleaned only by using water and a soft toothbrush as well as an interdental brush. Do not use toothpaste in order to avoid premature damage to the connecting element. Ensure the attachment is cleaned regularly to avoid soft tissue inflammation.

Please contact your Cendres+Métaux agency for advice and additional information.

#### Disclaimer

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

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This attachment is part of a comprehensive conception and may only be used or be combined with the corresponding original components and instruments. If this is not the case, any responsibility by the manufacturer will be refused.

In case of complaints the lot number must always be specified.

### Markings on the packaging / Symbols

Manufacturer

**REF** Catalogue number

**QTY** Batch code Quantity

Consult instructions for use

Rx only Caution: US Federal law restricts this device to sale by or on the order of a licensed (healthcare)

practitioner.

Cendres+Métaux products with CE labelling meet the requirements of the relevant European requirements.

Do not re-use

∧ Non-sterile

Keep away from sunlight

Caution, consult accompanying documents





**(€** 0483

