With the publication of these instructions for use all previous Editions are no longer valid.

The manufacturer refuses any liability for damages due to Disregard of the instructions for use below.

# Intracoronal slide attachments

- Cylindrical Slide Attachment
- Plasta
- Beyeler
- McCollum
- Pt-Snap
- Biloc®
- CM-Box®

# Extracoronal slide attachments

Conex<sup>®</sup>-System

- Conex®
- Conex<sup>®</sup> screw-retained
- Mini-Conex®

Fig. 1

#### Product description

The attachments listed in (Fig. 1) are intended for dental prosthetics.

#### Intracoronal slide attachments

- Cylindrical Slide Attachment (Intracoronal, non-adjustable slide attachments, friction-grip)
- Plasta (Intracoronal, non-adjustable slide attachments, frictiongrip)
- Beyeler (Intracoronal, non-adjustable dovetail slide attachment, friction-grip)
- McCollum (Intracoronal, adjustable slide attachment, frictiongrip)
- Pt-Snap (Intracoronal, retentive snap attachment, adjustable)
- Biloc<sup>®</sup> (Intracoronal, adjustable attachment with friction-grip)
- CM-Box<sup>®</sup> (Intracoronal, adjustable attachment, friction-grip)

#### Extracoronal slide attachments Conex<sup>®</sup>-System

- Conex® (Extracoronal attachment, friction-fit, retentive)
- Conex<sup>®</sup> screw-retained (Extracoronal attachment, screw-retained)
- Mini-Conex® (Extracoronal attachment, friction-fit or retentive)

Intended use

The attachments listed in (Fig. 1) are prefabricated parts, which are intended to be used in the mouth for removable or fixedremovable restorations using friction, retention or screw fixation.

#### Indications

## Intracoronal slide attachments

# Cylindrical Slide Attachment

- Fixed bridges in the anterior region
- Compensation of non-parallelism of abutments as well as subdivision of bridges

# Plasta

- Fixed bridges in the anterior region
- Compensation of non-parallelism of abutments as well as subdivision of bridges

#### **Beveler**

- Fixed bridges in the posterior region
- Compensation of non-parallelism of abutments as well as coupling or subdivision of bridges

#### McCollum

- Dentally and dentally-gingivally supported dentures:
- Insertion dentures
- Rigid, uni- and bilateral free-end dentures
  - Dentures with one insertion and one free-end saddle

#### Pt-Snap

- Dentally and dentally-gingivally supported dentures:
- Insertion dentures
- Rigid unilateral and bilateral free-end dentures
- Dentures with one insertion and one free-end saddle

#### Biloc®

- Rigid, dentally-gingivally supported restorations:
- Insertion dentures
- Bilateral free-end dentures
- Insertion and unilateral free-end dentures in combination
- Unilateral free-end dentures with transversal connection

#### CM-Box®

- Rigid, dentally-gingivally supported restorations:
- Insertion dentures
- Bilateral free-end dentures
- Combined insertion and free-end dentures
- Unilateral free-end dentures with transverse blocking



Phone +41 58 360 20 00 Fax +41 58 360 20 11 info@cmsa.ch

The products carry the CE Mark. See packaging for details.

Rx only

# Extracoronal slide attachments Conex<sup>®</sup>-System:

## Conex®

- Interdental insertion dentures
- Rigid unilateral and bilateral free-end dentures
- Interdental insertion denture and free-end parts in combination

#### Conex<sup>®</sup> screw-retained

Screw-retained restorations supported on implants or natural teeth Compensating for non-parallel abutments

#### Mini-Conex®

Only for use in case of limited space.

#### Contraindications

- 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.
- Restorations without milled brace support (all the products listed in Fig. 1 except «Cylindrical Slide Attachment», «Plasta», «Beyeler»)
- Unilateral free-end dentures without transverse support (all the products listed in Fig. 1 except «Cylindrical Slide Attachment», «Plasta», «Beyeler»)
- Removable dentures (in the case of «Cylindrical Slide Attachment», «Plasta», «Beyeler» and «Conex<sup>®</sup> screw-retained»)

# 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.

Auxiliary instruments may contain nickel.

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.
- When reducing the denture framework to minimum height, take note of the description in the section «Denture frameworks».

# Materials used and processing

Description and abbreviations for materials:

- C = Ceramicor®
- D = Doral
- O = OSV
- X = Steel
- H = HMA 20K = Korak. Burnout plastic.

Minimum proof stress (Rp 0.2%) required of the casting alloy 500 N/mm<sup>2</sup>

Detailed information about the materials and their classification can be found in the specific material data sheets and the catalogue. See website www.cmsa.ch/dental or the dental documentation from Cendres+Métaux (available free of charge from all subsidiaries, branch offices and agencies of Cendres+Métaux).

#### Intracoronal slide attachments

# Cylindrical Slide Attachment

Female part C = Ceramicor<sup>®</sup> Fitting: Cast-on Male part C = Ceramicor<sup>®</sup> Fitting: Cast-on, soldered or laser

# Plasta

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

# Beyeler

Female part C = Ceramicor® Fitting: Cast-on Male part C = Ceramicor® Fitting: Cast-on, soldered or laser

# McCollum

Female part C = Ceramicor<sup>®</sup> Fitting: Cast-on Male part C = Ceramicor<sup>®</sup> Fitting: Cast-on, soldered or laser

# Pt-Snap

Female part H = HMA 20 Fitting: Casting-on with precious metal and non-precious metal alloys Male part C = Ceramicor<sup>®</sup> Fitting: Cast-on, soldered or laser

# Biloc®

Female part C = Ceramicor® Fitting: Cast-on Female part D = Doral Fitting: Polymerization Male part K= Korak Fitting: Burnout plastic for use when casting

# CM-Box®

Female part C = Ceramicor® Fitting: Cast-on Female part D = Doral Fitting: Polymerization Activating screw O = OSV High strength precious metal alloy

# Extracoronal slide attachments

# Conex<sup>®</sup>-System:

# Conex®

Female part C = Ceramicor<sup>®</sup> Fitting: Cast-on Male part C = Ceramicor<sup>®</sup> Fitting: Cast-on, soldered, laser, polymerized or resin-bonded

# Conex<sup>®</sup> screw-retained

Female part C = Ceramicor® Fitting: Cast-on Male part C = Ceramicor® Fitting: Cast-on Occlusal screw O (050255) = OSV

# Auxiliary instrument:

Thomas spanner key (070221) = XExtractor for cone (070204) = XBlade inset as screwdriver for occlusal screw (070293) = X

# Mini-Conex®

Female part C = Ceramicor<sup>®</sup> Fitting: Cast-on Patrize C = Ceramicor<sup>®</sup> Fitting: Cast-on, soldered, laser, polymerized or resin-bonded

## Procedure / Handling / Processing Instructions

## 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.

#### **Tooth preparation for extracoronal attachments** No special requirements.

# Tooth preparation for intracoronal attachments

In order to prevent overcontours on the artificial crown, a box must be prepared in the abutment into which the female part of the slide attachment can be placed. For omega-shaped stabilizers a groove is sufficient, the position and axis of which must be matched to the position of the attachment. For good casting-on and diffusion the diameter of the groove must be 0.6 mm larger than that of the stabilizer and the width and depth of the box 0.6 x 0.2 mm larger than the female part of the attachment.

#### Important note

In-depth information on subjects such as soldering, casting, laser welding and much more can be accessed at our website www.cmsa.ch/dental under the heading Interesting Facts.

#### 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 components.
- 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<sup>®</sup> OPA Solution. Strictly follow manufacturer's instructions.

## Size

If an attachment is available in different sizes, the largest possible one should be chosen.

#### **Transversal blocking**

Rigid unilateral dentures must be blocked transversally, generally with Cendres+Métaux attachments, see website www.cmsa.ch/dental or the dental documentation from Cendres+ Métaux (available free of charge from all subsidiaries, branch offices and agencies of Cendres+Métaux).

# Brace support (Fig. 2)

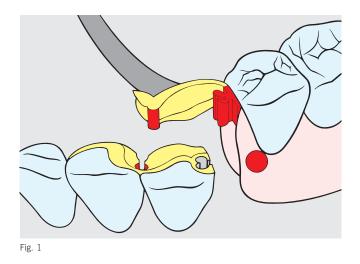
Most slide attachments used for partial dentures and prospectively planned bridgework must be protected against overload caused by leverage. This is achieved by constructing a brace support (milled lingual section of primary crown with cast secondary part) including stabilizer. To stabilize the brace support, see website www.cmsa.ch/dental or the dental documentation from Cendres+ Métaux (available free of charge from all subsidiaries, branch offices and agencies of Cendres+Métaux).

#### **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).

The following slide attachments can be shortened occlusally up to a maximum of:

- Cylindrical Slide Attachment 3.5 mm
- Plasta 3.5 mm
- Beyeler 0.3 mm
- McCollum 1.5 mm
- Pt-Snap 2.0 mm
- Biloc<sup>®</sup> 1.0 mm
- CM-Box® 2.0 mm



#### Pickling

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

#### Fit-in

After thermal treatment the parts may have a too strong friction and need to be re-adjusted. This is done by applying colloidal graphite to one of the degreased parts- here the male part- and drying with compressed air. The adjustment is done by repeated insertion and removal of the attachment parts. Then clean ultrasonically.

# Auxiliary instruments

The auxiliary instruments to be used are listed in the main catalogue of Cendres+Métaux under the heading for the particular attachment. See website www.cmsa.ch/dental or the dental documentation from Cendres+Métaux (available free of charge from all subsidiaries, branch offices and agencies of Cendres+Métaux).

## **Duplicating aids**

These red parts are slightly overdimensioned compared to the original parts. The result is an optimal gap for the resin-bonding technique.

Note: The duplication aid must not be used instead of the female part as a temporary replacement and also must not be placed in the mouth for impression-taking.

#### 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.

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

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
LOT	Batch code
QTY	Quantity
ī	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 the CE mark fulfill the requirements of the Medical Device Directive 93/42/EEC.
$\otimes$	Do not re-use
NON	Non-sterile
鯊	Keep away from sunlight
$\overline{\mathbb{A}}$	Caution, consult accompanying documents