

Instructions for use No. 2

Precision since 1968



CENTRALOCK II EXTRACORONAL ATTACHMENT

The CENTRALOCK II is a rigid, extracoronal attachment for free-end and bounded saddle partial dentures. The matrix 1 incorporates a plastic insert 3, which can be precisely activated using the activation screw 2, ensuring smooth insertion of the denture over the patrix 4. The patrix is made from Pt/Ir or burnout plastic and can be cast on with all dental alloys. The pure titanium matrix is designed for use with the adhesive and laser-welding techniques.



NOTES ON INDICATION

A stress-breaker with a milled interlock must be incorporated when using the CENTRALOCK II attachment with free-end restorations. As a precaution, a stress-breaker should also be included with bounded saddles. This allows the primary situation of the denture to be integrated in the new design without any alteration after loss of the distal abutment tooth.

When working with ZL attachments, it is essential to note and adhere to the sections marked in red in the instructions for use.

Before each try-in or final cementation the whole restoration should be cleaned in accordance with current hygiene regulations.

CENTRALOCK II Attachment No. 4312

Patrix (Pt/Ir)

made from a highly abrasion-resistant platinum iridium alloy and can be cast on with precious, Pd-based and non-precious metal alloys.

Matrix (Ti)

made from resilient pure titanium and can be connected with the denture using the adhesive technique.

CENTRALOCK II Geschiebe Nr. 4313

Patrix (plastic)

made from burnout plastic and can be cast with all types alloy.

Matrix (Ti)

made from resilient pure titanium and can be connected with the denture using the adhesive technique.

Technical data

Patrix (Pt/Ir) Melting range: 1830-1850°C

Matrix (Ti) Melting point: 1610°C

DIMENSIONS FOR PLANNING

The compact dimensions of the CENTRA-LOCK II allow it to be used with virtually any free-end or bounded saddle restoration. The CENTRALOCK II attachment can be reduced to its minimum dimensions without any loss of function. This makes it ideal for use with extremely difficult occlusal relationships.



CENTRALOCK II DIMENSIONS

- A Overall height as supplied: 4.0 mm
- B Overall height after max. reduction: 2.9 mm
- C Length: 4.3 mm (matrix)
- D Width: 2.9 mm

INSTRUMENTS AND ACCESSORIES

Eine erfolgreiche Verarbeitung der präzisen ZAlways use original ZL instruments and accessories to ensure a successful technique with ZL precision attachments. The following are required for fitting the CENTRALOCK II attachment:

1 Paralleling mandrel	No. 750
1 Screwdriver	No. 572
2 Activation screws	No. 726
2 Friction inserts	No. 729

These instruments and accessories are contained in the Starter Kit No. 4380

A RELIABLE TECHNIQUE FOR PRECISE CASTING WITH THE PLATINUM-IRIDIUM PATRIX VERSION OF THE CENTRALOCK II ATTACHMENT

Successful casting results and an accurate fit depend on precise preparation Before investing, decide which dental alloy is

to be cast onto the patrices. When using investment with expansion control (phosphate-bonded), adhere strictly to the recommended mixing ratio of powder, liquid and concentrate.

CAUTION!

To ensure the metal casts perfectly onto the Pt/Ir patrix, allow the mould to heat soak at the final temperature for a minimum of 45 minutes during preheating. The mould temperature with Pd-based and non-precious metal alloys should be approx. 920°C to prevent any temperature loss during casting. Adhere to the manufacturer's subsequent heating times following the initial preheat of the metal ingots, particularly with Pd-based alloys.



1 Place the primary unit onto the crown wall using the paralleling mandrel No. 750. If the attachment has to be shortened, it should be reduced from the basal surface to avoid damaging the occlusal bevel.



2 Never sandblast or roughen the back of the patrix, as this could affect the quality of the casting. Ensure that no part of the attachment extends into the areas to be faced with porcelain, as porcelains do not bond to the Pt/Pr patrix (cracks).



3 To ensure an optimum casting, place a 3 mm Ø sprue as close as possible to the patrix so that loss of heat during casting is kept to a minimum. Allow the mould to heat soak at the final temperature for a minimum of 45 minutes. When using Pd-based alloys, use as little old metal as possible.

Fabricating a duplicate model with reusable duplicating material.

Soak the model in water at 40-50°C for 10 minutes. Then dab the model with a soft cloth and duplicate it immediately. Ensure that the temperature of the reusable duplicating material and water are the same.



4 Place the duplicating matrix analogue on the patrix in preparation for the duplicate model.



5 Wax out under the duplicating matrix.



6 Duplicate according to the instructions. The duplicating matrix analogue can be clearly seen on the investment model.



7 Surround the matrix with a layer of wax 0.5 mm thick. Wax up the CrCo framework, invest and cast in the usual way.



8 Prepare the CrCo framework in the usual way. Avoid enlarging the adhesive gap if possible.



9 Wax out the inside and underside of the matrix and sandblast the adhesive surface of the matrix and CrCo framework with aluminium oxide (250 μ m).



10 When cleaning the sandblasted matrix, ensure that the plastic insert is not subjected to extended or too high thermal loading (boiling off/ steam cleaning).



11 Place the matrix on the model. The basal surface of the matrix should be waxed out to protect the activation screw and friction insert during adhesion.



12 Mix the DuroBond as instructed in the pack leaflet. Apply a little adhesive to the matrix and matrix recess in the CrCo framework.



13 Place the CrCo framework on the crowns and check the accuracy of the fit. To polymerise the adhesive, place the model in a light-curing unit for 3 minutes.



14 Remove any excess adhesive after the DuroBond has hardened.



15 To remove the plastic insert, unscrew the activation screw and remove the friction insert basally with a suitable instrument. Thread adhesive No. 391 can be used to prevent spontaneous loosening of the activation screw. The attachment can be precisely adjusted with the screwdriver No. 572.



16 Finished CENTRALOCK II restoration.

TECHNICAL DATA OF THE ALLOYS

Alloy	Palladium- Silver (Pd/Ag)	Platinum- Gold (Pt/Au)	Gold- Platinum (Au/Pt)	Platinum- Iridium (Pt/Ir)	MainBond EH (Au/Pt)	Titanium (Ti)
Colour	white	white	yellow	white	yellow	white
Melting range (°C)	1170 - 1240	1360 - 1460	900 - 930	1830 - 1855	895 - 1010	1610
Vickers hardness VH tempered	245	250	250	225	295	270
0.2% Proof stress (daN/mm2) tempered	60	78	67	55	60	25
Tensile strength (daN/mm2) tempered	80	82	82	72	76	54
Elongation at rupture (%) temperedt	18	15	20	18	21	22
Tempering	0-500°C, allow to cool slowly for 10 min.	0-700°C, allow to cool slowly for 30 min.	0-350°C, allow to cool slowly for 15 min.	0-700°C, allow to cool slowly for 30 min.	0-450°C, allow to cool slowly for 15 min.	

Titanium retentive units must not be subjected to procedures involving heat, e.g. soldering.

Plastic components burn out without residue.

Information on our products and techniques is based on ongoing technical development and monitoring.

This does not release the user from the obligation of checking our instructions and recommendations before use to ensure their fitness for the intended purpose.

If modifications are made to our products in the course of ongoing technical development, we reserve the right to supply the modified version. If modifications are made to our products in the course of ongoing technical development, we reserve the right to supply the modified version.

Claims for compensation are limited to claims under guarantee and to the contractual terms of our general conditions of sale and delivery.

We reserve the right to make technical changes.

Reproduction of this publication, including extracts, is only permitted with our express written approval.

Precision since 1968





ZL MICRODENT Attachment GmbH & Co. KG Schützenstraße 6 - 8 D 58339 Breckerfeld

Tel. +49 2338 801-0 Fax. +49 2338 801-40 info@zl-microdent.de www.zl-microdent.de