

OVERDENTURE RESTORATION

TRAINING MANUAL

04



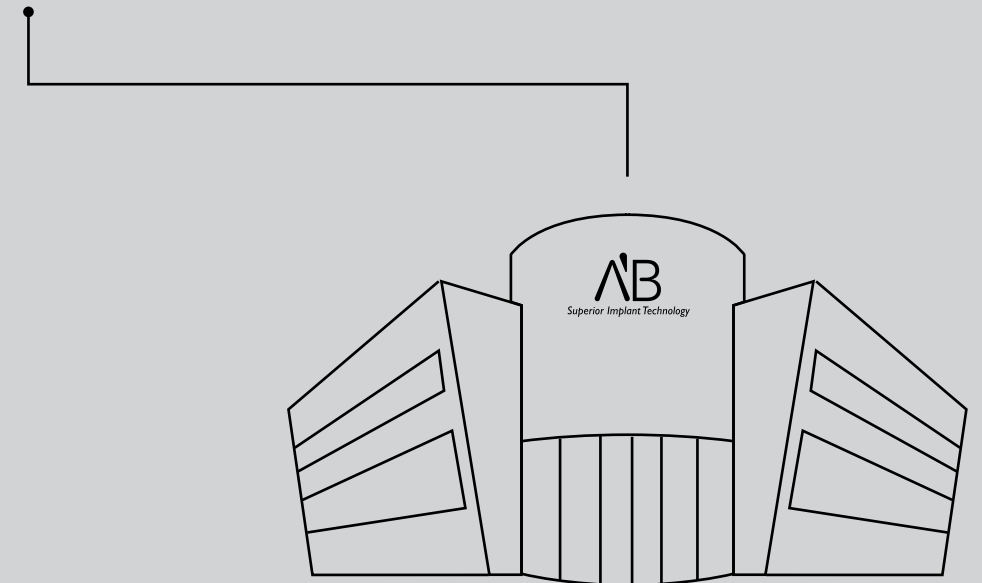
A.B. DENTAL

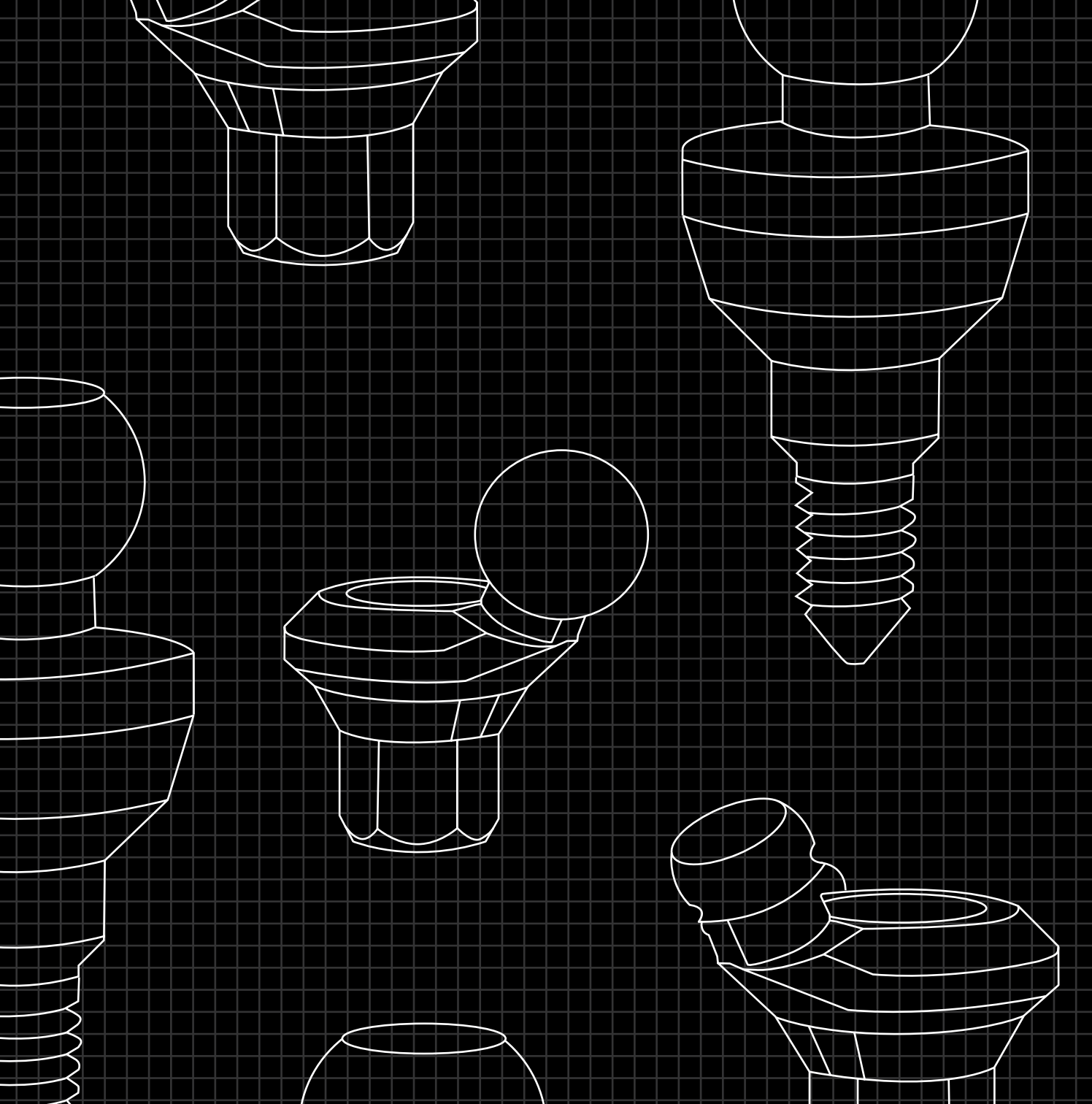
A.B. Dental is proud to present this full or partial removable denture supported by retained roots or implants, teeth and/or mucosa reconstruction procedures.

This manual explains, step by step, the procedure while using A.B. Dental components.

A.B. Dental scientists and R&D department are committed to the continued innovative approach in both products and advanced technologies.

Our commitment extends beyond providing safe and high precision dental products & services to passing on procedural information through training and instruction.





OVERDENTURE RESTORATION

An overdenture can provide the patient an esthetic and functional solution for a lack of part or all of the natural dentition. A bar, low connectors or ball attachments are used to connect between the overdenture and the implants.

For the purpose of this manual, Internal Hex implants will be used.

The attachment system selection for an overdenture is best made before the surgical placement of the dental implants in accordance with medical and technical consideration. For an overdenture, implant placement should be carried out using a surgical guide made according to the overdenture teeth set-up and the attachment system selected. This way an appropriate space for the attachment system selected is afforded.

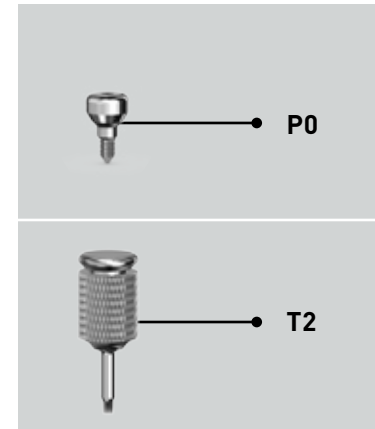


BALL & LOW CONNECTOR RETAINED OVERDENTURE

STEP 01

EXPOSURE

COMPONENTS:

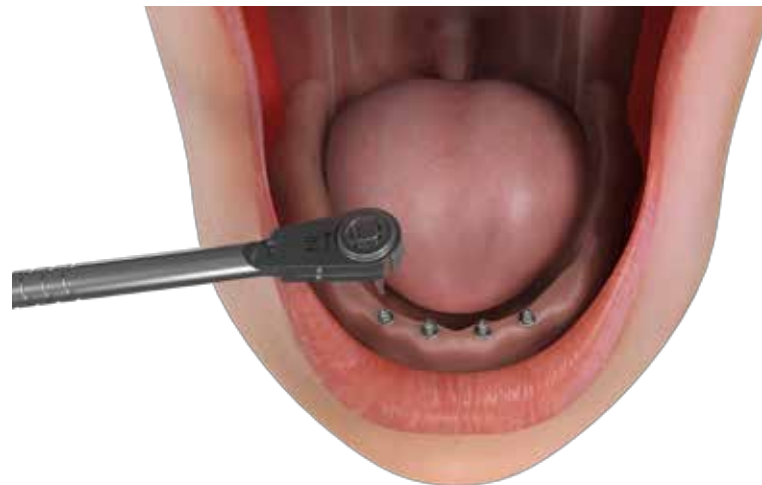
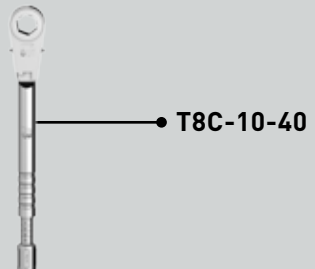
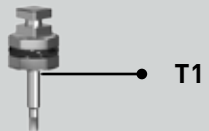
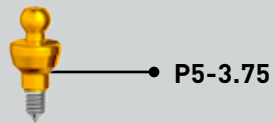


Remove the healing cap.

STEP 02

SELECTION OF THE ABUTMENT

COMPONENTS:



Select the ball attachments. The collar height of the attachment should extend 1-2mm above the gingival height.
Screw the ball attachment onto the implant using 30Ncm.

OPTIONAL ABUTMENTS



P5
Ball attachment
abutment



P55
Low connector



P5-20
angular ball
attachment 20°

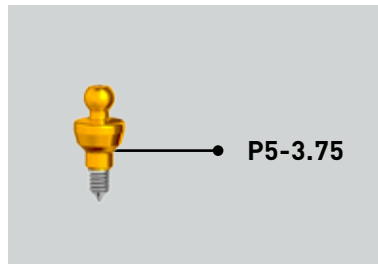


P55-20
angular low
connector 20°

STEP 03

IMPRESSION PROCEDURE

COMPONENTS:



A.



B.



C.



Implant supported overdenture impression is best made using a custom made impression tray. For solitary implants attachment system (ball and low connector attachments) use the close tray impression technique.

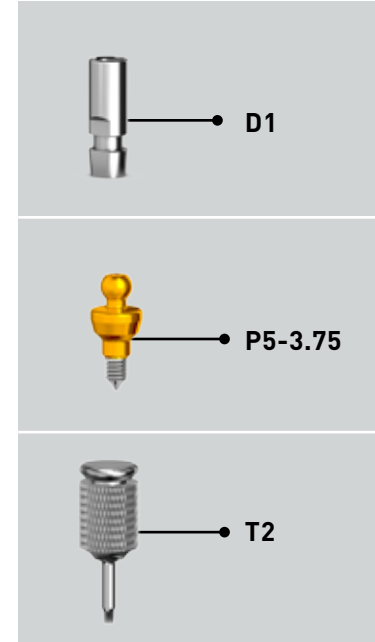
The ball attachments can be used as transfers for the impression procedure or use any other transfer of choice.

After the impression material has settled, remove the tray from the patient's mouth and check its accuracy.

STEP 04

INSERTION OF IMPRESSION COPING AND ABUTMENT ANALOG INTO THE IMPRESSION

COMPONENTS:



A.



B.



Remove ball attachment or low connector from the patient's mouth connect to an analog and place correctly inside the impression. Send to the lab.

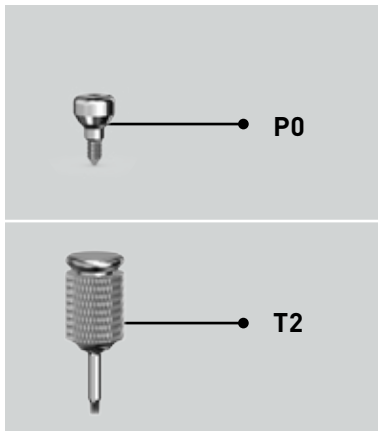
LABORATORY STEPS:

Stone model and fabricating of an overdenture.

STEP 05

AFTER RECEIVING OVERDENTURE FROM THE LAB

COMPONENTS:

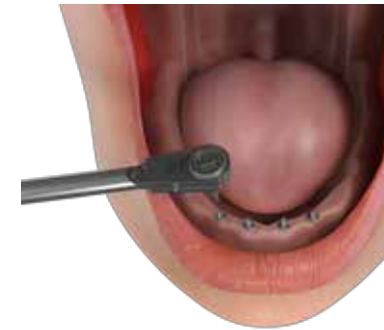
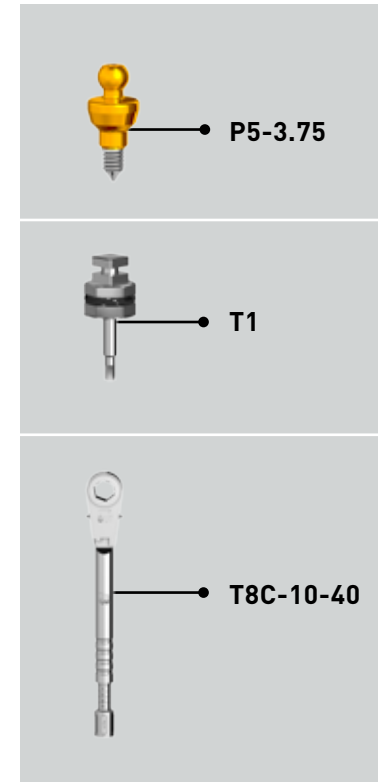


Remove the healing cap.

STEP 06

ATTACHING THE BALL ATTACHMENT

COMPONENTS:



Screw the ball attachment (P5) onto the implant using 30Ncm of torque. Attaching the female part of the attachment (metal housing and silicon cap – P5a & P5b) to the overdenture can be made by the dental laboratory or by the dentist's chairside. If attached by the dentist please continue to step 7.

USEFUL TIP:

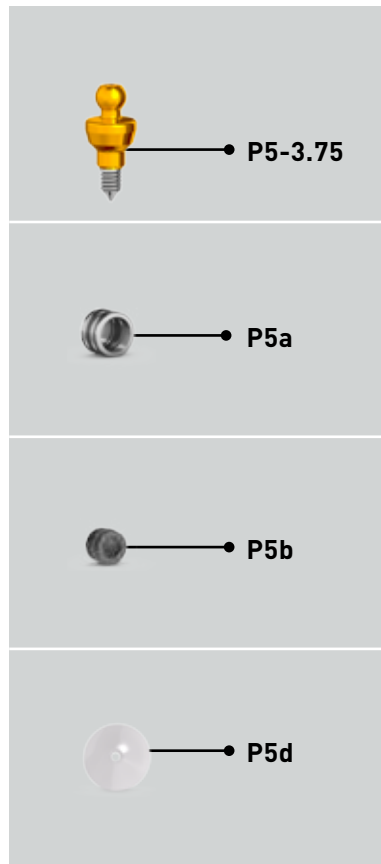


Do not extend the acrylic base to the bottom of the coping. Keep clearance between 2-3mm from the bottom of the coping.

STEP 07

PLACING PROTECTIVE DISK AND SILICON CAPS

COMPONENTS:



A.



Place the protective disk (P5d) on the ball attachment

B.



The disk will make sure no acrylic will flow to the base of the ball attachment and into the implant.

C.

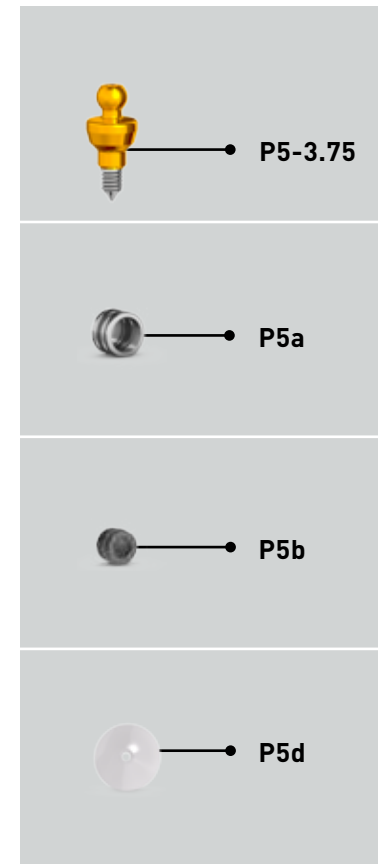


Place a silicon cap (P5b) and the metal cap (P5a) on the ball attachment.

STEP 08

PLACING THE METAL CAP

COMPONENTS:



A.



Place metal cap (P5a) over the silicon cap (P5b).

B.



The metal cap along with the silicon cap will eventually be part of the overdenture.

STEP 09

DENTURE FABRICATION

A.



If spaces for the metal caps were not prefabricated in the lab, using a burr, drill a space in the denture where the metal cap (P5a) will fit.

B.



C.



Mix acrylic (according to manufacturer's specifications); fill the space made in the denture for the metal cap with the acrylic material.

STEP 10

PLACING THE DENTURE

A.



Place the denture intraorally using occlusal force and guidance.

B.



After the acrylic has settled, take out the denture from the patient's mouth, remove the protective disk and any excess acrylic material. Instruct the patient for proper placement and removal of the overdenture.

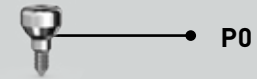
BAR RETAINED OVERDENTURE



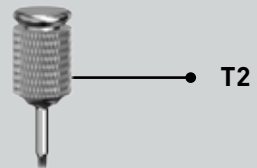
STEP 01

EXPOSURE & IMPRESSION PROCEDURE

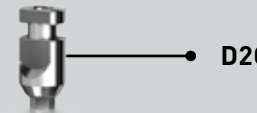
COMPONENTS:



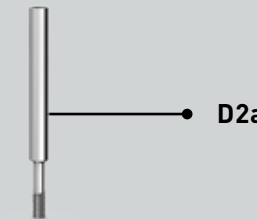
P0



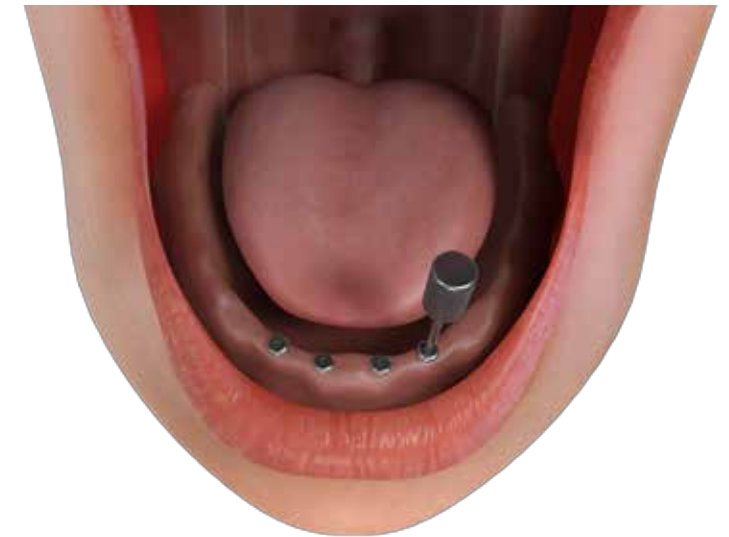
T2



D20



D2al

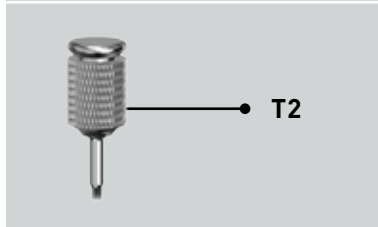
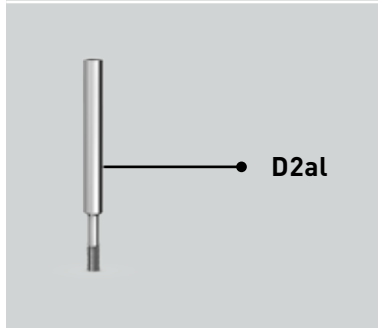
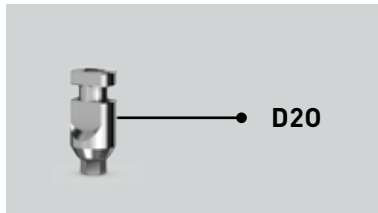


Remove the healing cap.

STEP 02

IMPRESSION PROCEDURE

COMPONENTS:



A.



Make an individual impression tray with border molding and use the open (preferred) or closed impression technique. Use the transfer system of choice.

B.



If using the D2 impression transfer, use the D2al retaining screw. Fill out the access in the retaining screw using wax.

C.

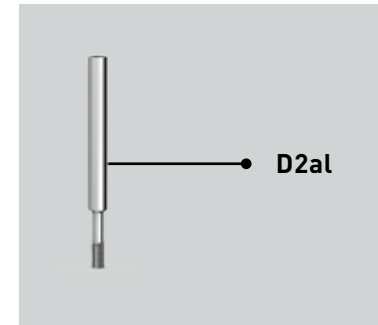


Check the fit of the individual tray over the transfers and a free access to the transfer's retaining screws through the impression tray.

STEP 03

IMPRESSION MATERIAL

COMPONENTS:



A.



Put impression material (light body) around the transfer, making sure to leave the top of the screw exposed.

B.

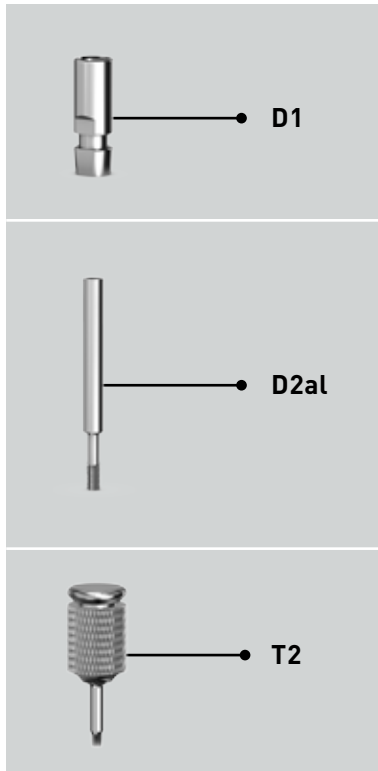


Fill impression tray with impression material and place it in the patient's mouth, making sure that the top of the transfer is completely exposed and clean from any impression material.

STEP 04

FINAL IMPRESSION

COMPONENTS:



A.



Wait for the impression material to settle, loosen the long screw and remove the tray from the patient's mouth.

B.

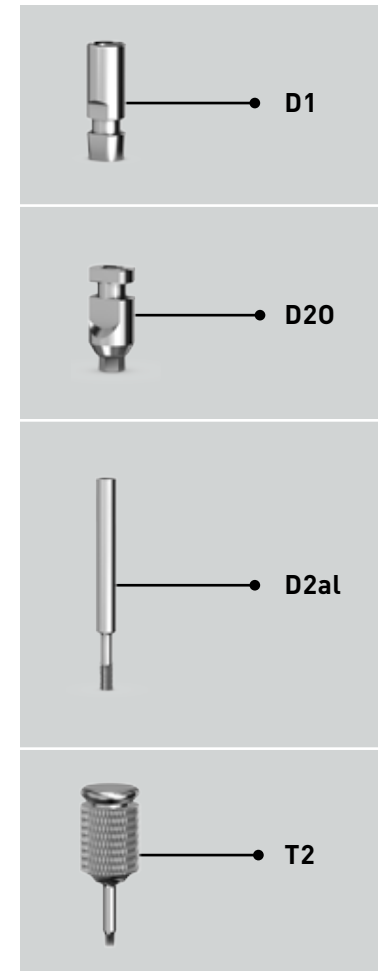


Make sure that the transfer stays firmly inside the impression.

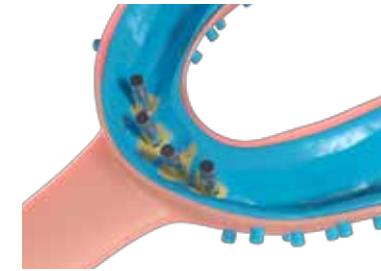
STEP 05

INSERTION OF THE ANALOG AND TRANSFER INTO THE IMPRESSION

COMPONENTS:



A.



Place analog (D1) on the transfer and tighten the screw while holding the analog to avoid any movement of the transfer within the impression. During the process the transfer is within the impression.

LABORATORY STEPS:

Stone model and preparation of a metal framework

B.

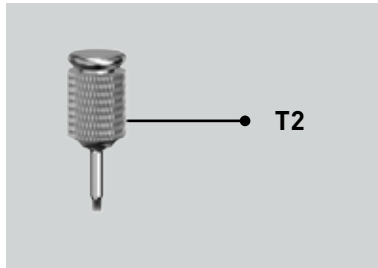


Replace Healing Caps. Send impression to the lab.

STEP 06

FRAMEWORK TRY-IN

COMPONENTS:

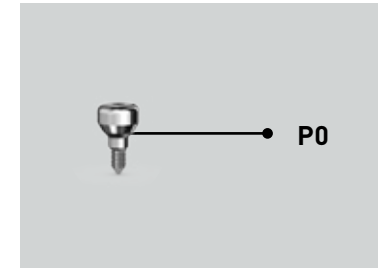


Remove temporary denture and healing caps from the patient's mouth and try the metallic bar in the patient's mouth. Check that the bar fits passively onto the abutments by screwing it to a different abutment at a time. If the bar touches every abutment it is ready (When passive fit is not achieved, cut and solder the metal bar or make a new impression and send to the lab in order to cast a new bar).

STEP 07

OCCLUSAL RIM

COMPONENTS:

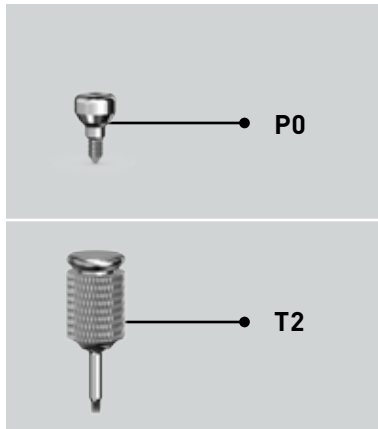


Make an occlusal rim over the metal bar, Place it into the mouth and make the interocclusal record. Contour the occlusal rim, mark the midline and smile line. Record the vertical dimension of the occlusion with a bite registration and send to lab together with tooth color.

STEP 08

DENTURE TRY-IN

COMPONENTS:

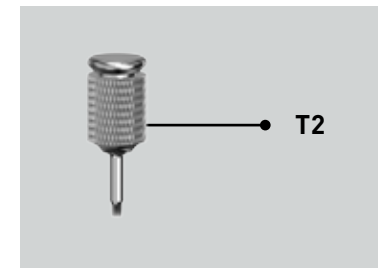


Remove the healing caps and temporary denture. Sit the denture try-in. Verify occlusion, esthetics and phonetics. Make necessary adjustments. Remove the denture wax try-in, set it on the lab model and send back to the lab.

STEP 09

FINAL RESULT

COMPONENTS:

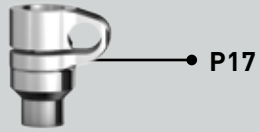


Place the bar onto the abutments and ascertain the passivity of fit. Screw the bar in one posterior-most abutment and finger tighten. Visually verify that the bar is seated passively on all abutments. Repeat after removing the screw and placing it into the opposite posterior-most abutments. (If fit discrepancy is found, cut and index the bar intraorally for soldering. Replace the healing caps and temporary denture. Send the bar back to the lab).

Use the torque wrench to apply 30 Ncm. Insert the finished denture in the patient's mouth, engaging the attachments. Make occlusal or tissue adjustments as necessary. Instruct the patient on insertion and removal of the prosthesis and oral hygiene maintenance.



COMPONENTS:



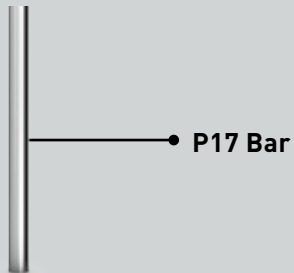
P17



P17b



P17bT



P17 Bar

A.B. DENTAL'S UNIQUE SOLUTION

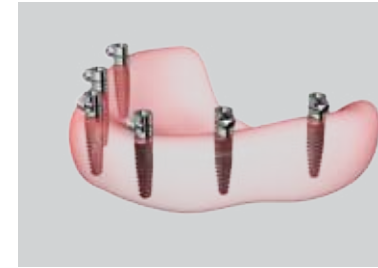
P17 – UNIVERSAL HOLDER BAR

For rehabilitation by a removable prosthesis and immediate loading implants.

The Universal Holder Bar is a simple and stable device, using a small number of parts. The implants are connected together to give stability for immediate loading. It can be used for two or more implants.

The forces are distributed equally on the implants, especially in the early stages of osseointegration. The rehabilitation can be temporary or permanent.

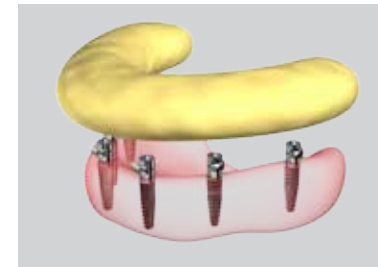
The system consists of specially designed adaptors for assembly on the implants, and a bar which is easily adapted to the position of the adaptors. The bar can be connected to the implants and the restoration without the help of a dental laboratory.



APPLICATION METHOD #1:

STEP 1

Install the adaptors on the implants



STEP 2

Take an impression with putty



STEP 3

Bend the bar according to the impression

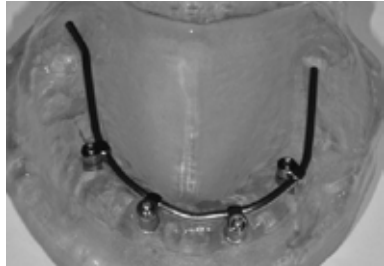


STEP 4

Assemble the bar onto the adaptors and tighten the screws into the implants. Connect the holders to the restoration with acrylic

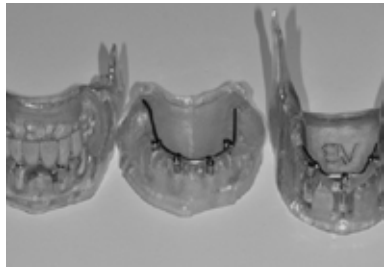
APPLICATION METHOD #2: ABGUIDEDSERVICE

ABGuidedService provides 3D planning for implants and a digitally manufactured surgical guide for implant placement.



STEP 1

ABGuidedService can assemble the adaptors and bar on the model



STEP 2

Preparing a removable prosthesis using the holder adaptors



STEP 3

The adaptors can be connected to the restoration for a screw retained solution



Superior Implant Technology

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