



User manual

Implant Libraries v9.1.0

Everything you need to know about the
Avinent libraries update

Contents

| | |
|--|----|
| 1. Introduction | 3 |
| 2. General parameters | 3 |
| 2.1. Avinent CAD-CAM - Materials and Production Processes | 3 |
| 2.2. Avinent CAD-CAM - Implant Systems and Categories | 3 |
| 3. Improvements to Implant Systems | 5 |
| 3.1. Bridge and Full Arch | 5 |
| 3.1.1. Connector/Centring device to implant | |
| 3.1.2. Designation of Abutment Kits of the Bridge and Full Arch Implant System | |
| 3.1.3. Angle of the screw channel | |
| 3.2. Ti Base Multiples and Ti Base Single | 7 |
| 4. New Implant Systems | 8 |
| 4.1. CoCr Sintering | 8 |
| 4.2. CoCr Sintering Abutment | 8 |
| 4.3. Connical Connection Iceberg | 9 |
| 5. News | 10 |
| 5.1. Connections direct to implant | 10 |

1. Introduction

This document provides information about the new developments in the **Avinent CAD-CAM Implant Library for 3Shape**.

2. General parameters

In the new **Avinent CAD-CAM** Implant Library, the names and descriptions of the following have been updated: Materials, Production Processes, Implant System Categories, Implant Systems and Abutment Kits.










2.1. Avinent CAD CAM - Materials and Production Processes

- ✓ Description for all materials and production processes - with the Avinent name.
- ✓ Links between Implant Systems, Materials and Production Processes - optimising the specific production parameters for the machining of each material.

2.2. Avinent CAD CAM - Implant System and Categories

- ✓ Identification of the Abutment Kits, depending on the Implant System and Category

✓ Description for the Implant Systems and Categories - with the Avinent name.

| NEW Avinent CAD CAM descriptions | | |
|----------------------------------|--|---|
| Category | Avinent Bridge and Full Arch | |
| Systems | Ex: Avinent Bridge and Full Arch (Avinent) |  |
| Category | Avinent Multiple Titanium Sintered | Sintered Titanium |
| Systems | Ex: Avinent Ti Sint. Multiple (Avinent) |  |
| Category | Avinent Multiple CrCo Sintered | Sintered Cobalt Chrome |
| Systems | Ex: Avinent CoCr Sint. Multiple (Avinent) |  |
| Category | Avinent Single Abutment | |
| Systems | Ex: Avinent Single Abut (Avinent) |  |
| Category | Avinent CoCr Sintered Single Abutment | Sintered Cobalt Chrome |
| Systems | Ex: AvinentCoCr Sint Single (Avinent) |  |
| Category | Avinent Cuttable Ti Base Multiple | |
| Systems | Ex: Avinent Cuttable Ti Base Multiple (Avinent) |  |
| Category | Avinent Cuttable Ti Base Single Abutment | |
| Systems | Ex: Avinent Cuttable Ti Base Single (Avinent) |  |
| Category | Avinent Angulation Correccion Ti Base Multiple | |
| Systems | Ex: Avinent Ang. Correc. Ti Base Multiple (Avinent) |  |
| Category | Avinent Angulation Correccion Ti Base Single | |
| Systems | Ex: Avinent Ang. Correc. Ti Base Single (Avinent) |  |

| Category | System | Kit |
|---|---|---------------------|
| <ul style="list-style-type: none"> · Avinent - Avinent · Avinent - Straumann · Avinent - Biomet (...) | Bridge and Full Arch (Avinent) | Con + Bridge |
| | | Con + Full Arch |
| | | Con |
| | Single Abutment (Avinent) | Con |
| | Sint. Ti Multiples (Avinent) | Con |
| | Sint. CoCr Multiples (Avinent) | Con + Bridge |
| | | Con + Full Arch |
| | | Con |
| | Sint. CoCr Single (Avinent) | Con |
| | Ti Base Multiples (Avinent) | Con + GH + H + Mult |
| | Ti Base Single (Avinent) | Con + GH + H + Unit |
| | Cuttable Ti Base Multiples (Avinent) | Con + GH + H + Mult |
| | Cuttable Ti Base Single (Avinent) | Con + GH + H + Unit |
| | Correc. Ang. Ti Base Multiple (Avinent) | Con + GH + H + Mult |
| | Correc. Ang. Base Ti Single (Avinent) | Con + GH + H + Unit |

*Con: Connection

3. Improvements to Implant Systems

3.1. Bridge and Full Arch

3.1.1 Connector/Centring device to implant:

Two design options added for the connector of the customised prosthesis to the implant, **Bridge** and **Full Arch**, with the aim of improving the fit of the restoration. The type of connector can be selected for each implant position in the configuration of the order, Abutment Kit (Fig. 1), during the design phase.

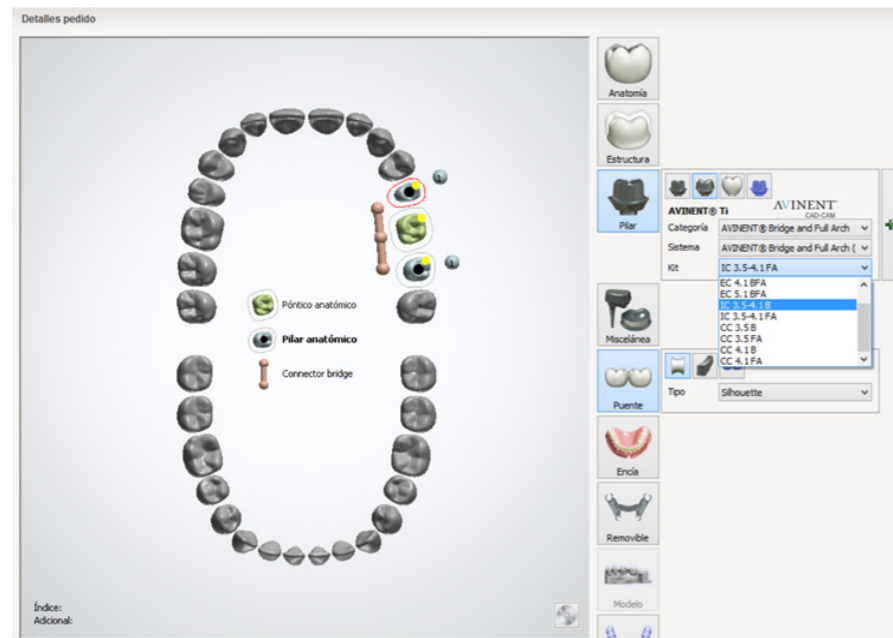
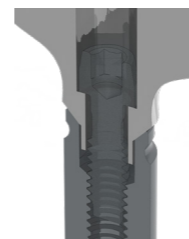


Fig. 1 Abutment Kit drop-down menu

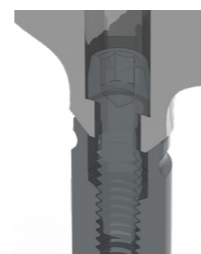
Bridge – Long Connector; Bridges

- For restorations with up to 3 implants.
- Insertion axis, divergences between implants of up to 15°.
- Provides good stability for both prosthesis and screw.
- Available for internal and conical connections.



Full Arch / Bridge and Full Arch - Short Connector; Full Arches

- For restorations with more than 3 implants to full arches.
- Gives the restoration passivity and ensures its insertion, even in cases with large divergences between the insertion axes of the implants.
- Available for all connections.



3.1.2. Designation of Abutment Kits of the Bridge and Full Arch Implant System:

| Connection | Type of connector | |
|--------------|-------------------|----------------------|
| EC 3.5 | BFA | Bridge and Full Arch |
| IC 3.5 - 4.1 | B | Bridge |
| IC 3.5 - 4.1 | FA | Full Arch |

3.1.3. Angle of the screw channel:

Possibility of designing the screw channel with angle correction added (*). This can be selected in the assembly phase of the design, enabling the verification checkboxes **Use screw hole** and **Angled screw hole** (Fig. 2)

- Correction of the screw channel angle, which depending on the connection goes from 0 to 20° or from 0 to 30° to the implant insertion axis, design in accordance with the customer's criteria.
- Saves time in the customer design validation process.
- Reduces the time for delivering the work to the customer.

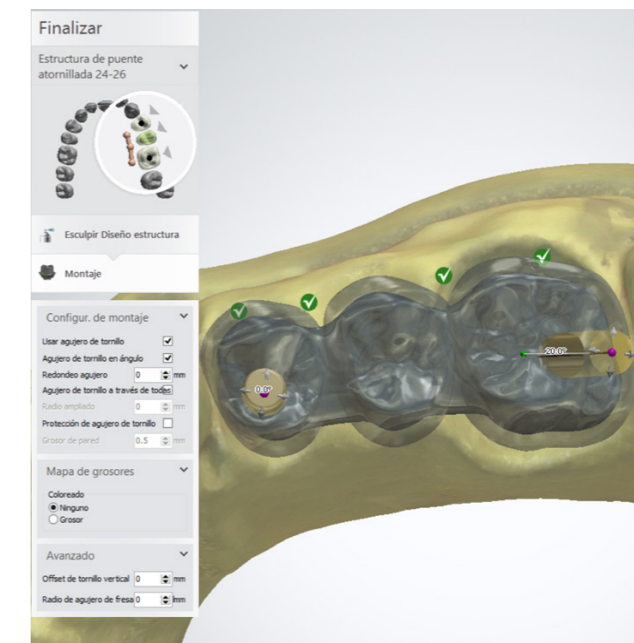


Fig. 2 Fitting Phase

* It is very important to include the pertinent angle corrections in the design, in accordance with the customer's criteria.

3.2. Ti Base Multiple and Ti Base Unitary

The gingival height of the Multiple and Unitary Ti Bases have been added in the description of the Abutment Kits (Fig. 3).

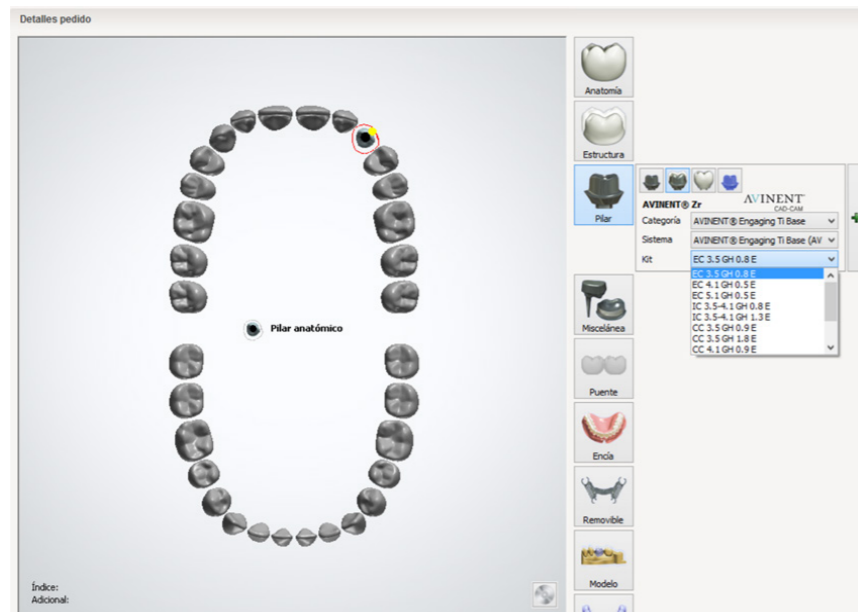


Fig. 3 Description of the Base Abutment Kits

4. New implant systems

4.1. CoCr Sintered Multiples

New implant system for multiple restorations, using sintered cobalt chrome.

4.1.1 Conector/Centring device to implant:

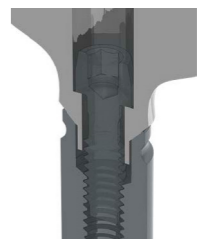
Like for the Bridge and Full Arch implant system, the **CoCr Sintered Multiples** considers two design options for the connector between the customised prosthesis and the implant, **CoCr Sintered Bridge** and **CoCr Sintered Full Arch**, to improve the fit of the restoration. The type of connector can be selected for each implant position in the configuration of the order, Abutment Kit (Fig. 4), during the design phase.



Fig. 4 Description of the Lunar System Abutment Kits

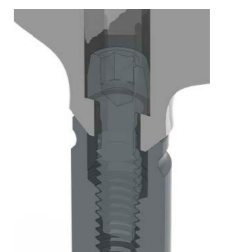
Bridge – Connector Long; Bridge

- For restorations of up to 3 implants.
- Insertion axis, divergence between implants up to 15°.
- Provides good stability to the prosthesis and the screw.
- Available for Internal and Conical connections.



Full Arch - Connector Short; Full Arch

- For restorations of more than 3 Implants up to Arches complete.
- Confers passivity to the restoration, ensuring insertion of this, even in cases with great divergence between the axes of implant insertion.
- Available for all connections.



Bridge and Full Arch - If only the name of the connection appears.

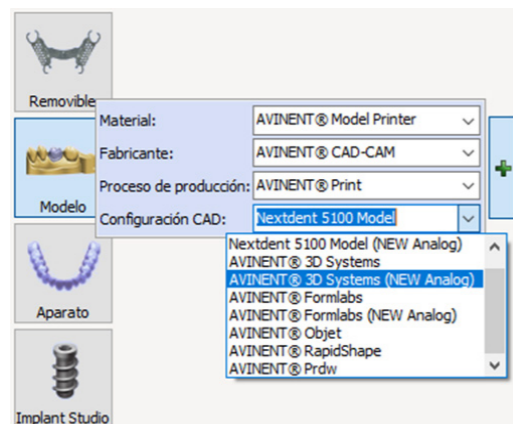
4.2. CoCr Sintered Single Abutment

New implant system for single restorations, using sintered cobalt chrome.

- ✓ Enables the correction of the screw channel angle with respect to the implant insertion axis.
- ✓ Ideal for the design of single abutments that exceed the maximum dimensions for the milling based on grinding

4.3. Conical Connection Iceberg (CC.I)

New analog for the ICEBERG implant system. For a **Model Builder** with this implant system, select the printers designated as NEW Analog.



5. News

5.1. Direct to Implant

(CoCr Sintering, Titanium Sintering)

- ✓ BEGO Semados® (S 3,25-3,75-4,1 / RI 3,75-4,1 | RI 4,5 | S 5,5 / RI 5,5)
Thommen Medical SPI® PF (3,5 | 4,0 | 4,5 | 5,0 | 6,0)
CAMLOG™ Root-Line (3,3 | 3,4 | 3,8 | 4,5 | 5,5)
CAMLOG™ Bar Abutment (4,3 | 6,0)
Dentsply Sirona® XiVE® (D3.0 | D3.4 | D3.8 | D4.5 | D5.5)

(CoCr Sintering Single Abutment)

- ✓ BEGO Semados® (S 3,25-3,75-4,1 / RI 3,75-4,1 | RI 4,5 | S 5,5 / RI 5,5)
Thommen Medical SPI® PF (3,5 | 4,0 | 4,5 | 5,0 | 6,0)