User manual

Implant Libraries v11.0

Everything you need to know about the
Avinent libraries update

3shape

AVINENT

Contents

1. Introduction

This document provides information about the new developments in the Avinent CAD-CAM Implant

2. General parameters

In the 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

	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 Correcion Ti Base Multiple**	
Systems	**Ex: Avinent Ang. Correc. Ti Base Multiple (Avinent)**	
Category	**Avinent Angulation Correcion Ti Base Single**	
Systems	**Ex: Avinent Ang. Correc. Ti Base Single (Avinent)**	

Category	System	Kit
· 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 Múltiples (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

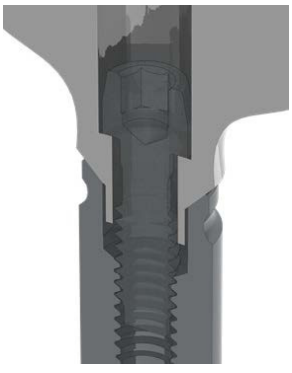
3.1.1 Connector/Centring device to implant:

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

ig. 1 Abutment Kit drop-down menu

Bridge – Long Connector; Bridgess

· 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.

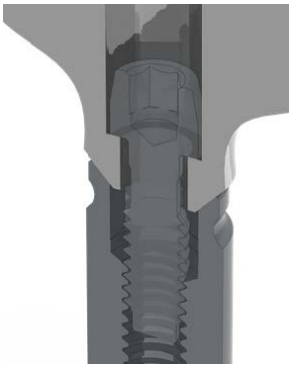


Full Arch / Bridge and Full Arch - Short Connector; Full Arches

· 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



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

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.

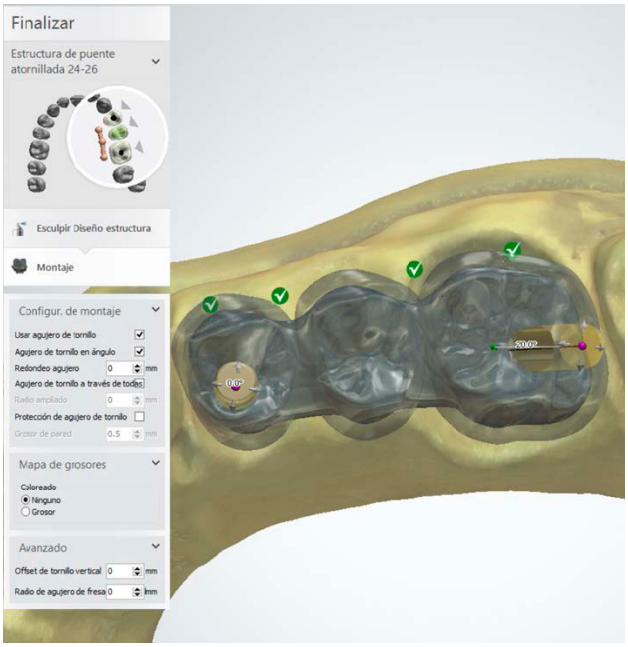


Fig. 2 Fitting Phase

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

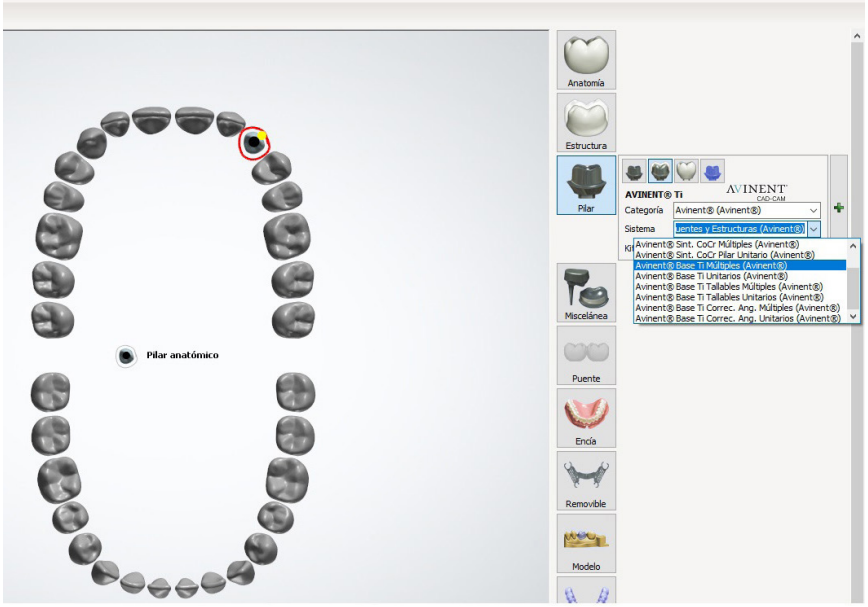


Fig. 3 Ti bases description kit

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

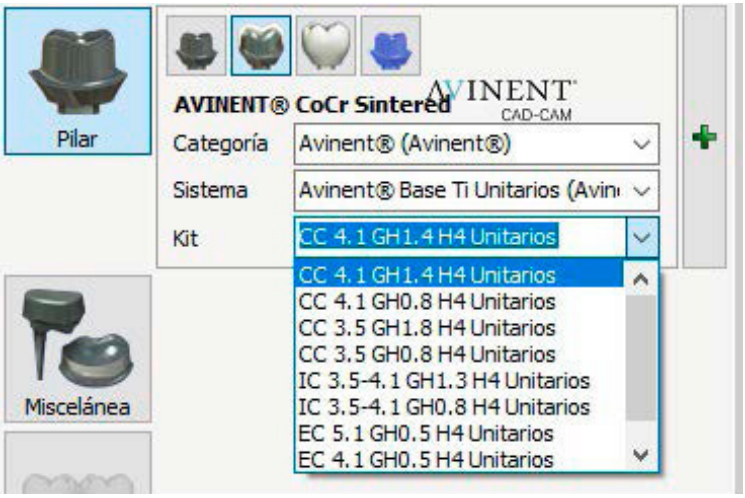


Fig. 4 Descriptions Ti Pillar Kits Bases

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

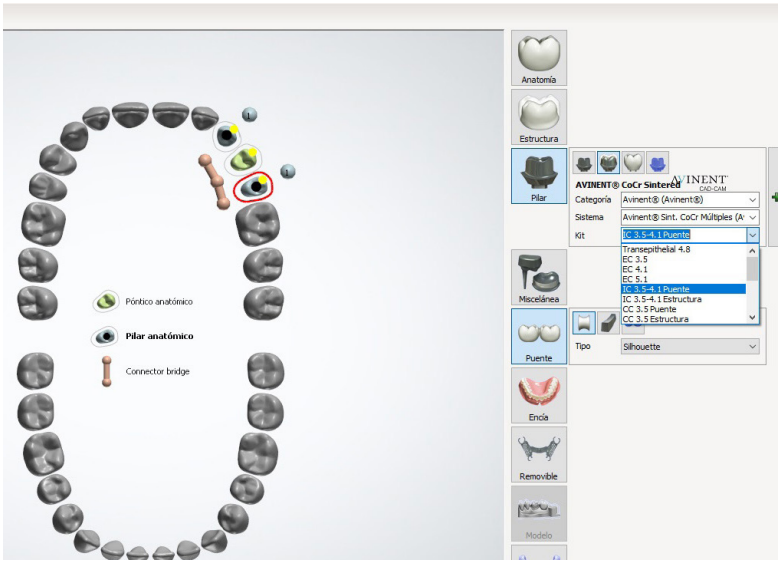


Fig. 4 Description of the Lunar System Abutment Kits

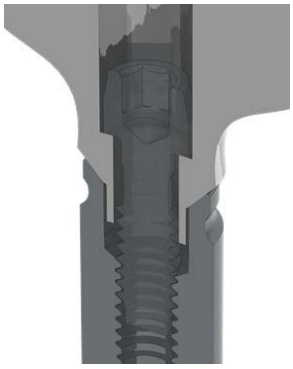
Bridge – Connector Long; Bridge

· 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

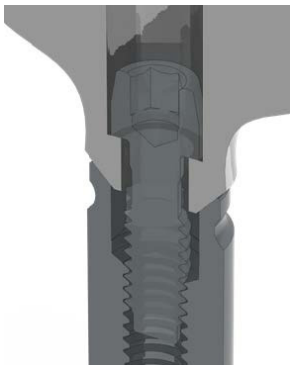


Full Arch - Connector Short; Full Arch

· 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 Sintering 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

5. Open Libraries

In this version, the library becomes open. This means that once the design is generated and exported to STL, the connection geometry is the real one.

In order to be able to generate a design with the real geometry of the connection, the following systems must be selected:

Bridge and full arch

Unitary abutment

If you want to send a job to the Milling Center to do the CoCr Sintero-milling, you should always use the library with the following systems:

Multiple CoCr Sintering

Unitary CoCr Sintering

This system generates the connection with a surplus of material for printing and subsequent milling.

6. New connections

6.1. Cuttable Ti Bases

· Ti Base - Nobel Biocare® Nobel Active™ 3.0 GH1.5 H8 Engaging
· Ti Base - Nobel Biocare® Nobel Active™ 3.0 GH3.0 H8 Engaging
· Ti Base - Dentsply Astra Tech® OsseoSpeed™ TX 3.0 (Yellow) GH1.5 H8 Engaging
· Ti Base - Dentsply Astra Tech® OsseoSpeed™ TX 3.0 (Yellow) GH3.0 H8 Engaging
· Ti Base - Dentsply Friadent® XiVE® 3.0 (Brown) GH1.5 H8 Engaging
· Ti Base - Dentsply Friadent® XiVE® 3.0 (Brown) GH3.0 H8 Engaging
· Ti Base - Dentsply Friadent® XiVE® 3.4 (Grey) GH1.5 H8 Engaging
· Ti Base - Dentsply Friadent® XiVE® 3.4 (Grey) GH3.0 H8 Engaging
· Ti Base - Dentsply Friadent® XiVE® 3.4 (Grey) GH1.5 H8 Non-Engaging
· Ti Base - Dentsply Friadent® XiVE® 3.4 (Grey) GH3.0 H8 Non-Engaging
· Ti Base - Dentsply Friadent® XiVE® 3.8 (Yellow) GH1.5 H8 Engaging
· Ti Base - Dentsply Friadent® XiVE® 3.8 (Yellow) GH3.0 H8 Engaging
· Ti Base - Dentsply Friadent® XiVE® 3.8 (Yellow) GH1.5 H8 Non-Engaging
· Ti Base - Dentsply Friadent® XiVE® 3.8 (Yellow) GH3.0 H8 Non-Engaging
· Ti Base - Dentsply Friadent® XiVE® 4.5 (Blue) GH1.5 H8 Engaging
· Ti Base - Dentsply Friadent® XiVE® 4.5 (Blue) GH3.0 H8 Engaging
· Ti Base - Dentsply Friadent® XiVE® 4.5 (Blue) GH1.5 H8 Non-Engaging
· Ti Base - Dentsply Friadent® XiVE® 4.5 (Blue) GH3.0 H8 Non-Engaging
· Ti Base - Neodent® GM (Grand Morse) GH0.8 H10 Engaging
· Ti Base - Neodent® GM (Grand Morse) GH1.5 H8 Engaging
· Ti Base - Neodent® GM (Grand Morse) GH3.0 H8 Engaging
· Ti Base - Neodent® GM (Grand Morse) GH0.8 H10 Non-Engaging
· Ti Base - Neodent® GM (Grand Morse) GH1.5 H8 Non-Engaging
· Ti Base - Neodent® GM (Grand Morse) GH3.0 H8 Non-Engaging

6.2. Angled Ti Bases

· Angled Ti Base - Dentsply Friadent® XiVE® 3.4 (Grey) GH1.5 H8 Engaging
· Angled Ti Base - Dentsply Friadent® XiVE® 3.4 (Grey) GH2.5 H8 Engaging
· Angled Ti Base - Dentsply Friadent® XiVE® 3.4 (Grey) GH1.5 H8 Non-Engaging
· Angled Ti Base - Dentsply Friadent® XiVE® 3.4 (Grey) GH2.5 H8 Non-Engaging
· Angled Ti Base - Dentsply Friadent® XiVE® 3.8 (Yellow) GH1.5 H8 Engaging
· Angled Ti Base - Dentsply Friadent® XiVE® 3.8 (Yellow) GH2.5 H8 Engaging
· Angled Ti Base - Dentsply Friadent® XiVE® 3.8 (Yellow) GH1.5 H8 Non-Engaging
· Angled Ti Base - Dentsply Friadent® XiVE® 3.8 (Yellow) GH2.5 H8 Non-Engaging
· Angled Ti Base - Dentsply Friadent® XiVE® 4.5 (Blue) GH1.5 H8 Engaging
· Angled Ti Base - Dentsply Friadent® XiVE® 4.5 (Blue) GH2.5 H8 Engaging
· Angled Ti Base - Dentsply Friadent® XiVE® 4.5 (Blue) GH1.5 H8 Non-Engaging
· Angled Ti Base - Dentsply Friadent® XiVE® 4.5 (Blue) GH2.5 H8 Non-Engaging
· Angled Ti Base - Neodent® GM® (Grand Morse) GH0.8 H8 Engaging
· Angled Ti Base - Neodent® GM® (Grand Morse) GH1.5 H8 Engaging
· Angled Ti Base - Neodent® GM® (Grand Morse) GH3.0 H8 Engaging
· Angled Ti Base - Neodent® GM® (Grand Morse) GH0.8 H8 Non-Engaging
· Angled Ti Base - Neodent® GM® (Grand Morse) GH1.5 H8 Non-Engaging
· Angled Ti Base - Neodent® GM® (Grand Morse) GH3.0 H8 Non-Engaging