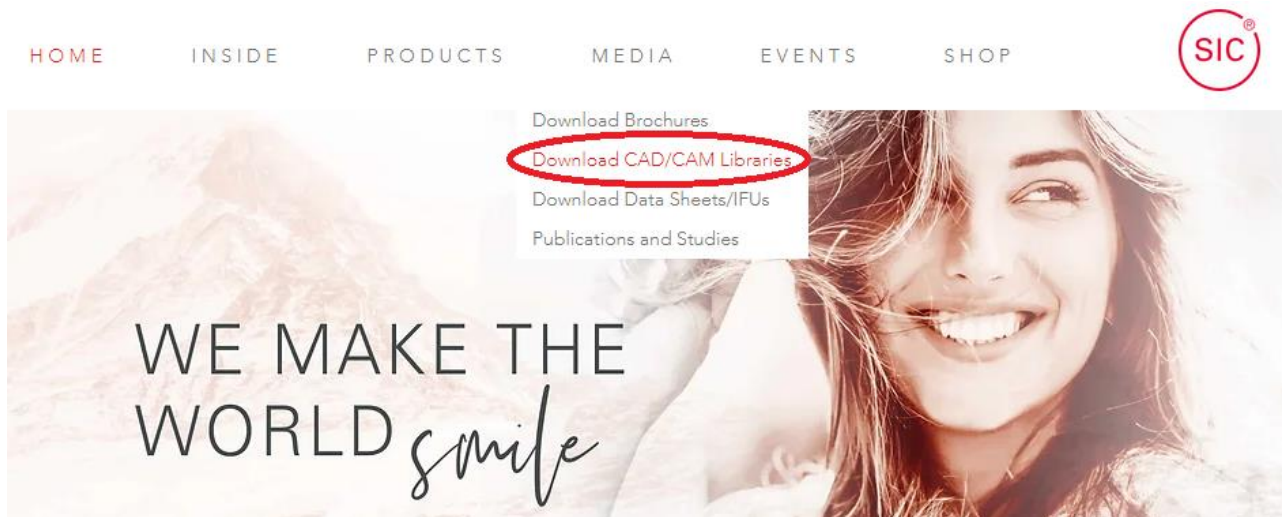Implants from Implantologists

Installation Guide
for CAD/CAM-Libraries for 3Shape

In this document, you find a short overview over the current CAD/CAM products and a guide on installing the SIC invent CAD/CAM-Libraries for 3Shape.

The respective libraries are available for download on the SIC invent Homepage under the "Media" tab:

www.sic-invent.com

There you will find all current CAD/CAM-Libraries divided into the respective software providers.

Basically, the libraries for Exocad and 3Shape are divided into the following categories:
- Bonding Bases – Hexagonal (for "SICace", "SICmax" and "SICtapered" implants)
- Bonding Bases – SICvantage (for "SICvantage max" and "SICvantage tapered" implants)
- Multi-Unit (for all SIC Multi Unit Crown Bases)
- Preface (for Milling Blanks of all interfaces)

Hints:
Optimed scanner: The libraries need to be created by Optimed.
Zirkon Zahn, Schütz CAD, Arman Girrbach are using the Exocad-Software, some with their own adjustments.

If you have any questions, please contact the respective software manufacturer or your respective SIC invent distributor.

Content

1 CAD/CAM Product Overview

Please always inform yourself in advance about which implant needs to be treated. Depending on the implant and the required application, a different library has to be used.

1.1 Hexagonal System

(Compatible with "SICace", "SICmax" and "SICtapered" implants)

SIC invent offers the following CAD/CAM products for the hexagonal system:

SIC Bonding Base CAD/CAM, straight
(incl. SIC Standard Fixation Screw)

Prosthetic connection	Hex 2.3 mm	Cone 2.3 mm for bridgework
3.3 mm	936190	936191
4.2 mm	936196	936197

SIC Bonding Base CAD/CAM, 15° angle
(incl. SIC Standard Fixation Screw, short)

Prosthetic connection	
3.3 mm	936192
4.2 mm	936198

SIC Bonding Base CAD/CAM straight, CEREC
(incl. SIC Standard Fixation Screw)

Prosthetic connection	GH 0.3 mm	GH 3.0 mm
3.3 mm	936188	936228
4.2 mm	936189	936229

Milling Blank CAD/CAM, M-Line
(incl. SIC Standard Fixation Screw)

Prosthetic connection	
3.3 mm	936226
4.2 mm	936227

Precondition: MEDENTIKA® PreFace® Abutment holder.

Milling Blank CAD/CAM, A-Line
(incl. SIC Standard Fixation Screw)

Prosthetic connection	
3.3 mm	936224
4.2 mm	936225

Precondition: Arum Pre-milled holder

The Scanbody for the hexagonal system is universal and can be used for both hexagonal interface sizes.

Installation Guide

for CAD/CAM-Libraries for 3Shape

SIC Scan Adapter (incl. SIC Standard Fixation Screw) for digital modelling of CAD/CAM Customized Milled Abutments	Precondition: Open CAD/CAM system SimedaCAD, 3Shape, ExoCAD (Fraunhofer), DentalWings or LaserDenta with output of unencrypted STL data Manufacturing of Abutments: simeda medical, Luxemburg
936237	

With **angulated Bonding Bases**, the angulation is aligned in the direction of the point on the scanbody!
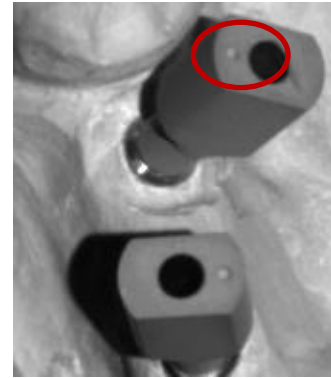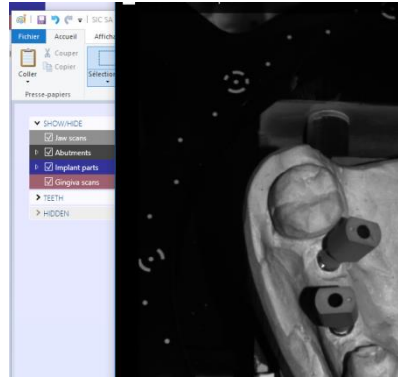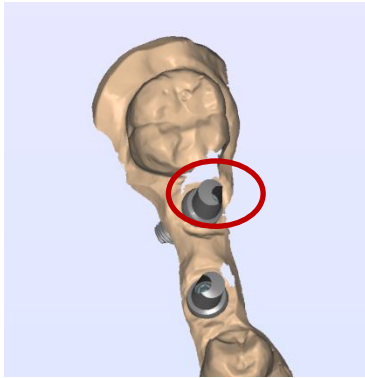
1.2 SICvantage System

(Compatible with "SICvantage max" and "SICvantage tapered" implants)

SIC invent offers the following CAD/CAM products for the SICvantage system:

SICvantage Bonding Base CAD/CAM, straight

Prosthetic connection	GH 1.0 mm
2.2 mm	950741
2.5 mm	950761
2.9 mm	950771

SICvantage Bonding Base CAD/CAM, straight for bridgework,

GH 0.35 mm
950742
950762
950772

SICvantage Bonding Base CAD/CAM, 15° angle

Prosthetic connection	GH 1.0 mm
2.2 mm	950743
2.5 mm	950763
2.9 mm	950773

SICvantage Bonding Base CAD/CAM, straight, CEREC

Prosthetic connection	GH 1.0 mm	GH 3.0 mm
2.2 mm	950744	-
2.5 mm	950764	950765
2.9 mm	950774	950775

Installation Guide
for CAD/CAM-Libraries for 3Shape

SICvantage® Milling Blanks CAD/CAM, A-Line

◎ incl. SICvantage® Fixation Screw M1.4 and Impression Cap   ◎◎ incl. SIC Standard Fixation Screw M1.6 and Impression Cap

Prosthetic connection	2.2 mm ◎	2.5 mm ◎	2.9 mm ◎
	950784	950785	950786

Precondition: Arum Pre-milled holder

SICvantage® Milling Blanks CAD/CAM, M-Line

◎ incl. SICvantage® Fixation Screw M1.4 and Impression Cap   ◎◎ incl. SIC Standard Fixation Screw M1.6 and Impression Cap

Prosthetic connection	2.2 mm ◎	2.5 mm ◎	2.9 mm ◎
	950781	950782	950783

Precondition: MEDENTIKA® PreFace® Abutment-Holder

For each the interface sizes (**grey**, **blue** and **red)** you need a different Scanbody.

Important Note: Please make sure that you select the correct size, as the interfaces are not compatible with each other!

SICvantage Scan Adapter
for digital modelling of CAD/CAM Customized Milled Abutments

Prosthetic connection	2.2 mm ◎	2.5 mm ◎	2.9 mm ◎
	950801	950802	950803

With **angulated Bonding Bases**, the angulation is aligned in the direction of the point on the scanbody!
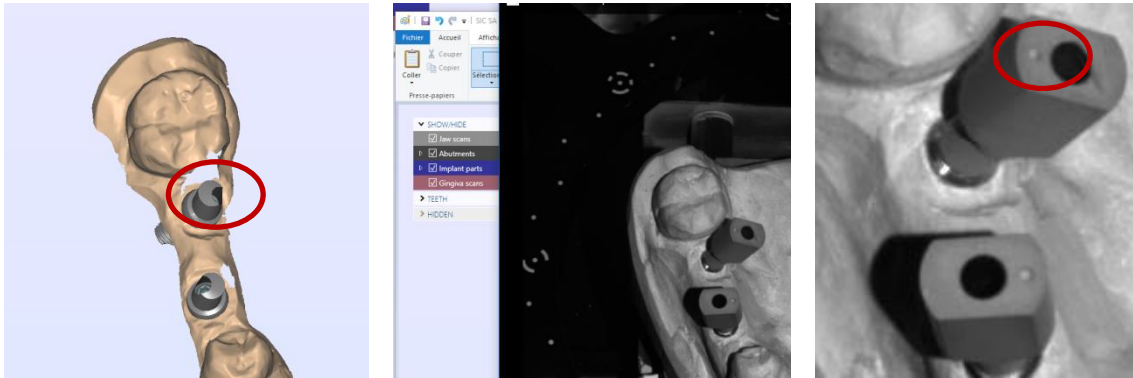
1.3 Multi-Unit-Systems

For cases with Multi-Unit abutments and their respective libraries, you need to work with the SIC Crown Bases which need to be mounted on top of the abutments.

Safe on Four:

Crown Base "Safe on Four" (incl. SIC Fixation Screw "Safe on Four")

Total height [mm]	9.0	6.2
Material	Titanium Grade 5	Titanium Grade 5
	Titanium	CAD/CAM
	936270	936278

Associated Abutments:

Bar and Bridge Abutment "Safe on Four" (incl. SIC Fixation Post "Safe on Four")

Prosthetic connection	GH 1.5 mm	GH 3.0 mm
3.3 mm ⬡	936253	936254
4.2 mm ⬡	936255	936256

Standard Abutment "Safe on Four", 16° angle (incl. SIC Fixation Screw, short)

Prosthetic connection	GH 1.5 mm	GH 3.0 mm
3.3 mm ⬡	936259	936261
4.2 mm ⬡	936263	936262

Standard Abutment "Safe on Four", 30° angle (incl. SIC Fixation Screw, short)

Prosthetic connection	GH 1.5 mm	GH 3.0 mm
3.3 mm ⬡	936260	-
4.2 mm ⬡	936264	936265

Installation Guide
for CAD/CAM-Libraries for 3Shape

Independent of the implant interface, the SIC Scan Adapter for SIC "Safe on Four" is required for the workflow, which must be mounted on a "Safe on Four" abutment during the scan.

SIC Scan Adapter for SIC "Safe on Four"

936271

Mini Multi-Unit:

SIC Mini Multi-Unit Crown Base, Titanium (incl. SIC Fixation Screw for Mini Multi-Unit)

936289

SIC Mini Multi-Unit Crown Base, residue-free burn-out (incl. SIC Fixation Screw for Mini Multi-Unit)

936290

Associated Abutments

SIC Mini Multi-Unit Abutment System

SIC Mini Mulit-Unit Abutment, straight

Prosthetic connection		GH 1.5 mm	GH 3.0 mm
3.3 mm	⬢	936285	936286
4.2 mm	⬢	936287	936288

Independent of the implant interface, the SIC Scan Adapter for SIC "Mini Multi-Unit" is required for the workflow, which must be mounted on a "Mini Multi-Unit" abutment during the scan.

SIC Scan Adapter for Mini Multi-Unit

936296

2   Contact to the Customer Service

All items shown in Chapter 1 are available from the Customer Service of SIC invent or your respective distributor.

For Germany:
Mail: contact.germany@sic-invent.com
Tel.: +49 551 504 294 0

For Switzerland:
Mail: contact.switzerland@sic-invent.com
Tel.: +41 61 260 24 60

For Austria:
Mail: contact.austria@sic-invent.com
Tel.: +43 1 533 70 60

For outside Germany, Switzerland and Austria:
Please look for the distributor responsible for your region at www.sic-invent.com.

Installation Guide
for CAD/CAM-Libraries for 3Shape

3 Selection of the correct library

SIC

Hexagonal
SICace | SICmax | SICtapered

blue 3.3	red 4.2
SICace 3.4 and 4.0	SICace 4.5 and 5.0
SICmax 3.7 and 4.2	SICmax 4.7 and 5.2
SICtapered 3.7 and 4.2	SICtapered 4.7 and 5.2

SIC Bonding Bases

blue		red	
Scanbody: 936237		Scanbody: 936237	
936190 Bonding Base CAD/CAM, straight	936191 Bonding Base CAD/CAM, straight, bridges	936196 Bonding Base CAD/CAM, straight	936197 Bonding Base CAD/CAM, straight, bridges
936192 Bonding Base CAD/CAM, 15°	936188 Bonding Base CAD/CAM, CEREC	936198 Bonding Base CAD/CAM, 15°	936189 Bonding Base CAD/CAM, CEREC
	936228 Bonding Base CAD/CAM, CEREC, GH 3		936229 Bonding Base CAD/CAM, CEREC, GH 3

▶▶ resp. library: **SIC Bondingbases Crownbases**

SIC Milling Blanks

blue	red
Scanbody: 936237	Scanbody: 936237
936226 Milling Blank, M-Line	936227 Milling Blank, M-Line
936224 Milling Blank, A-Line	936225 Milling Blank, A-Line

▶▶ resp. library: **SIC PreFace – Hexagonal & SICvantage**

SICvantage
SICvantage max | SICvantage tapered

grey 2.2	blue 2.5	red 2.9
SICvantage max 3.0	SICvantage max 3.7	SICvantage max 4.2, 4.7, 5.2
SICvantage tapered 3.0	SICvantage tapered 3.7	SICvantage tapered 4.2, 4.7, 5.2

SICvantage Bonding Bases

grey		blue		red	
Scanbody: 950801		Scanbody: 950802		Scanbody: 950803	
950741 Bonding Base CAD/CAM, straight	950742 Bonding Base CAD/CAM, straight, bridges	950761 Bonding Base CAD/CAM, straight	950762 Bonding Base CAD/CAM, straight, bridges	950771 Bonding Base CAD/CAM, straight	950772 Bonding Base CAD/CAM, straight, bridges
950743 Bonding Base CAD/CAM, 15°	950744 Bonding Base CAD/CAM, CEREC	950763 Bonding Base CAD/CAM, 15°	950764 Bonding Base CAD/CAM, CEREC	950773 Bonding Base CAD/CAM, 15°	950774 Bonding Base CAD/CAM, CEREC
			950765 Bonding Base CAD/CAM, CEREC, GH 3		950775 Bonding Base CAD/CAM, CEREC, GH 3

▶▶ resp. library: **SIC Bondingbases Crownbases**

SICvantage Milling Blanks

grey	blue	red
Scanbody: 950801	Scanbody: 950802	Scanbody: 950803
950781 Milling Blank, M-Line	950782 Milling Blank, M-Line	950783 Milling Blank, M-Line
950784 Milling Blank, A-Line	950785 Milling Blank, A-Line	950786 Milling Blank, A-Line

▶▶ resp. library: **SIC PreFace – Hexagonal & SICvantage**

Multi-Unit Systems
(only on Crownbases)
independent from implants

Safe on Four	Mini-Multi-Unit

Scanbody: 936271		Scanbody: 936296
936270 Crown Base, Titanium	936278 Crown Base, CAD/CAM	936289 Crown Base, Titanium

▶▶ resp. library: **SIC Bondingbases Crownbases**

4 Installation of the libraries

You find the current **version** the libraries always at the end of the file name.

As soon as a new version is available, the done changes are documented in the **Changelog**. This way you can see at a glance in the changelog if you need the new version.

As a precaution, delete all previous versions before installing a new one. Depending on the software, there may be overlaps in some places which can cause major problems.

4.1 Import of the 3Shape library:

3shape▷

- Go to www.sic-invent.com and click in the tab "Media" on "CAD CAM Libraries"

- Select 3Shape

CAD / CAM technology is the future in the dental market.
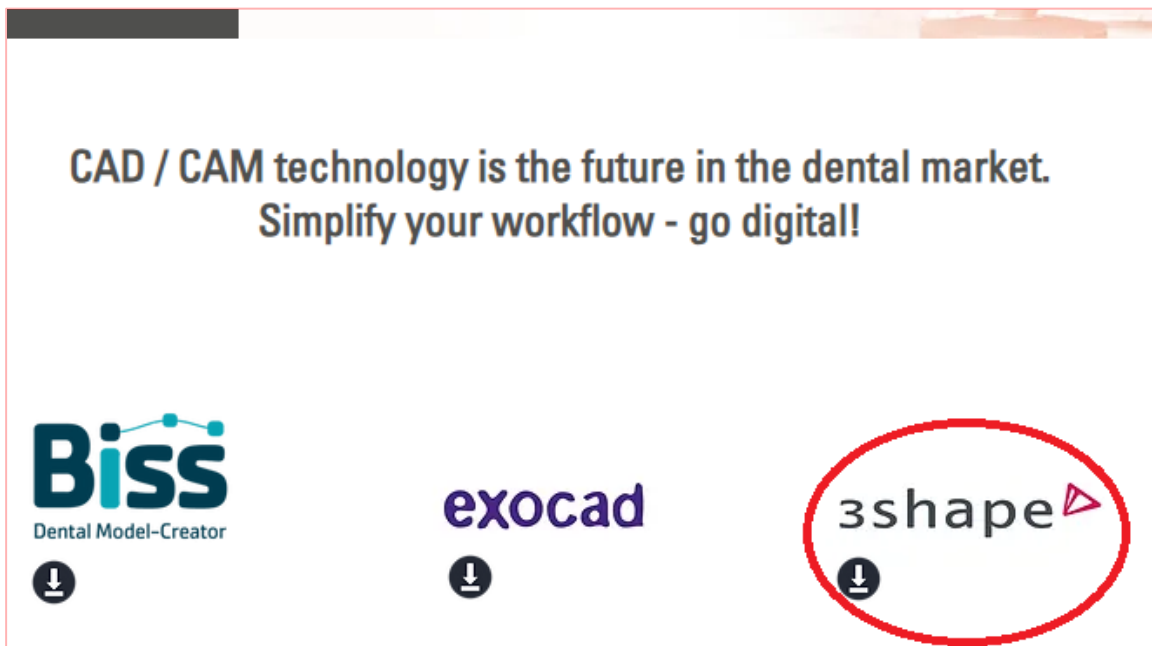Simplify your workflow - go digital!
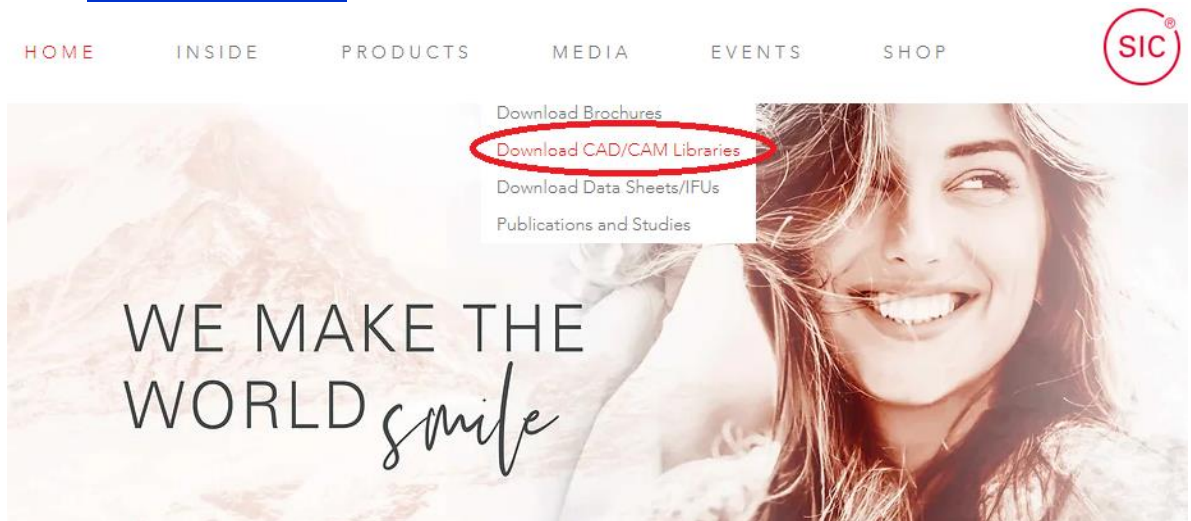
- Download the required library

Download - SIC 3Shape
Bondingbases Crownbases 1.6.1

Download - SIC 3Shape
Labanalogs 1.6

Download - SIC 3Shape
PreFace- Hexagonal & SICvantage v1.6_2

Download - SIC 3Shape
SICwhite v1.6_2

INFO changelog

- Unpack the downloaded .zip file
  (If you have not installed a tool for unpacking .zip files, you can download and install "7-Zip" or "WinRAR" for free from the Internet.)

- Open *3Shape Dental Manager* (alternatively you can also open it directly from the Explorer.)
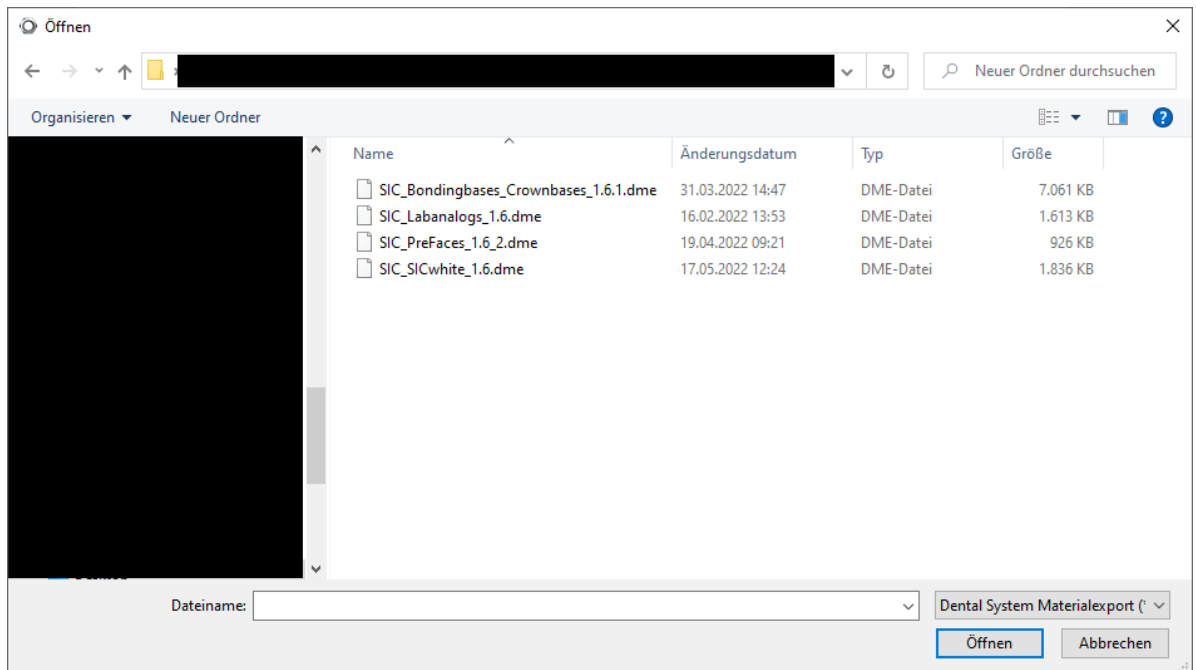
- Open *3Shape Dental System Control Panel*

- Click on „Import/Export"

- Click on "Import materials"
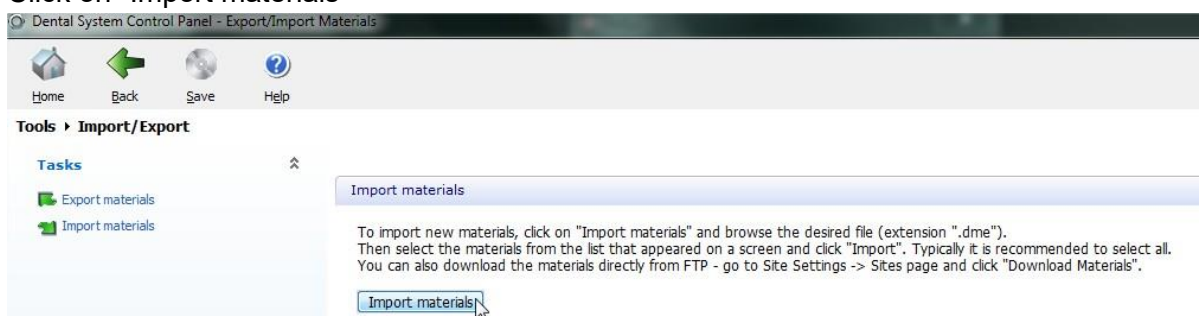
- Select the downloaded .dme file and open it

4.1.1 3D Printer Presets

If you need more setting options for the openings for analogs in 3D-printed jaw models (e.g. due to better environmental conditions or better print quality using high-quality printers), you will find these in the "SIC_Labanalogs" library. There are considerably more diameter offsets listed here than in the libraries for Bonding Bases, Crownbases and Milling Blanks.

This allows you to test which offset fits best for your specific conditions.

4.1.2 Structure of the 3Shape library

The libraries are build according to to the following principles:

- System
  SIC Safe on Four, SIC Mini Multi-Unit, SIChex, SICvantage in their respective sizes
    - Bonding Base / Crownbase
      Listed by item number
        - Glue Gap Presets
          Depending on the local conditions and environmental influences, other presets must be selected if necessary.
            - +/- 0 mm is the standard value for Bonding Bases and Crownbases
            - -0.02 mm is an adjustment where the glue gap is almost 0. This option is usually selected only when the milled contour is larger than specified in the CAD.
            - +0.08 mm is the loosest possible fit. This option is usually only selected if the milled contour is significantly smaller than specified in the CAD.
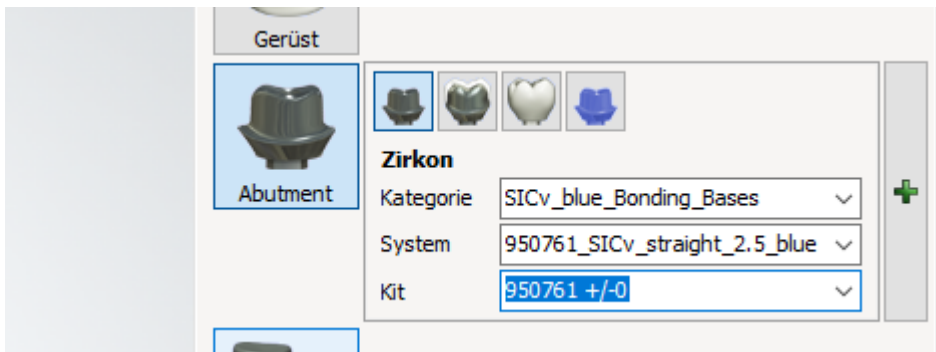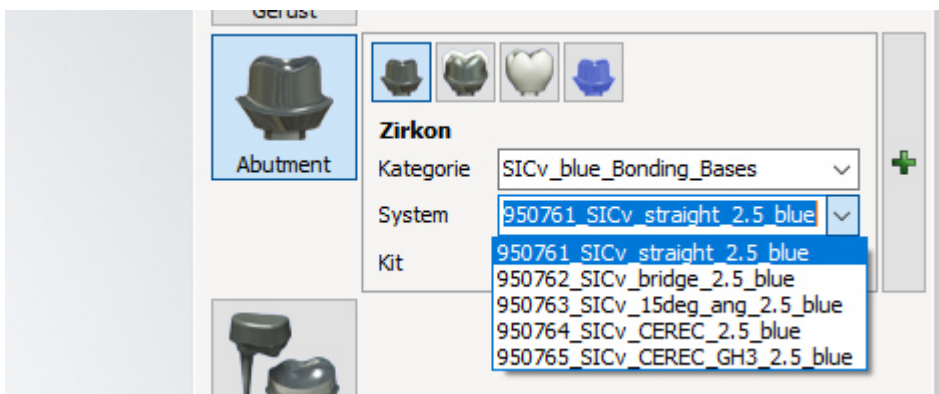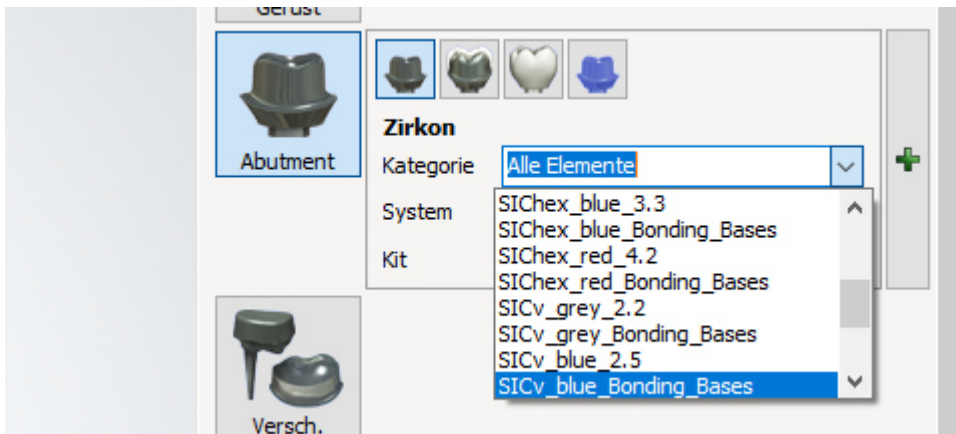
Note: The libraries are designed so that you can refer to the item numbers. The numbers in front of the items (red, picture below) are the item numbers (REF numbers) of the parts with which you can order the respective items from Customer Service.
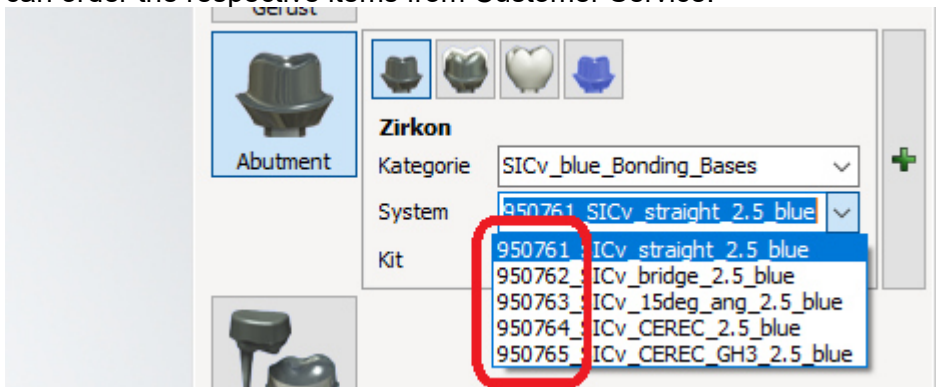
You find the information on how to contact the Customer Service in Chapter 2.

5 FAQ

Here you find the answers to the most frequently asked questions.

Q: The libraries I downloaded and installed don't appear in the software for selection. What should I do?
A: Restart the software. Most software does not update in real time. Instead they almost always need a restart to update all the new data.

Q: The restart didn't help, what else can I do?
A: Make sure that the required libraries were correctly installed (→ Chapter 0).

Q: I'm done constructing a case, which item do I need to order now?
A: The libraries of SIC invent are designed in such a way that you can see the item number in the software in front of the item description (→ Chapter 4.1.2).
If you selected a Bonding Base in the software, you can simply order this exact item number from the Customer Service.

Q: I have an article here, what should I choose in the software now?
A: The libraries of SIC invent are designed in such a way that you can see the item number in the software in front of the item description (→ Chapter 4.1.2).
If you already have an item, just look for the item number (REF) in the library.