



Dental Group

3Shape Library

USER GUIDE





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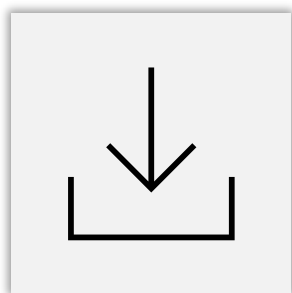
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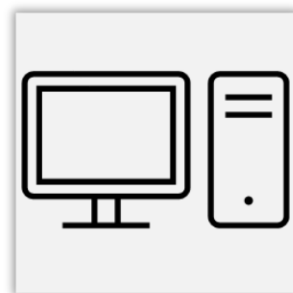




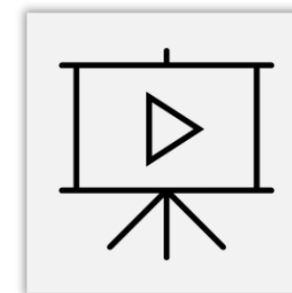
Interactive
show



Install



Library types and use



3D Analog side screw



Request libraries from the website

<https://ipd2004.com/en/cad-libraries>

A computer monitor with a black bezel and a silver base. The screen displays the IPD website's 'Request our free libraries' form. The form includes fields for Company*, VAT Number*, City*, Country*, E-mail address*, Contact person*, Address*, ZIP code*, Contact phone*, and a dropdown for Select CAD system. There is also a large text area for Comments and a checkbox for accepting legal conditions and privacy policy. A 'SEND' button is at the bottom of the form. The website header shows the IPD logo and navigation links: IPD Group, Products, Downloads, Training, Digital Support, News, and a Shop Online button.

ipd
Dental Group

IPD Group Products Downloads Training Digital Support News Shop Online

Request our free libraries

Company*	Contact person*
VAT Number*	Address*
City*	ZIP code*
Country*	Contact phone*
E-mail address*	Select CAD system

Select the system you want to receive

Comments

☐ I accept the [legal conditions](#) and [Privacy policy](#)

SEND

For internal use only. Do not distribute





3Shape Dental Manager

Orders 3Shape Communicate Inbox

Orders

By date

Today

Last two days

Last week

Last two weeks

By status

Created

Scanned (unprepared)

Scanned

Designed

Sent

Closed

Other filters

Checked out

All open

My recent

Search

Number	Creation date	External Lab	Delivery date	Customer	Items	Material	Status	Height	Expected delivery	Contact Person	Last modified	Manu...
2116146052_2...	14/09/2023 15:19:23	-	14/09/2023	1980192040	Crown 25, Scre...	Wax,Zirkon	Scanned (unprepared)	-/-/-	-		14/09/2023 15:27:24	1980...

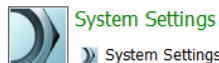
Open 3Shape Dental System Control Panel to import libraries



General System Control Panel



Home Page



System Settings

- System Settings
- Design options
- Services
- Auto workflow



DentalManager

- General
- Manufacturing Inbox
- ERP and processing time
- Order import
- Working days
- 3rd party applications
- Milling machines



Site Settings

- This site
- Dentists
- Labs
- Manufacturers
- Operators
- Countries
- Manufacturing processes



Tools

- Subscription Management (Dongle)
- Import/Export
- Download center
- Training Center
- 3Shape Communicate



Basic elements

- Materials
- Colors
- Margin line
- Attachments
- 2D Design overlays
- CAD blocks
- Press Multi sprues



Anatomy elements

- ScanIt library
- Anatomy and Pontic libraries
- Smile libraries
- Artificial teeth
- Crowns
- Crown Pontics
- Inlays
- Onlays/Veneers
- Temporary Crowns
- Temporary Pontics
- Temporaries on prepared model
- Tabletops



Frame elements

- Copings
- Frame Pontics
- Waxups
- Primary telescopes



Abutments

- Top cap libraries
- Implant systems



Post and Core

- Post and Core systems
- Post and Cores



Bridge elements

- Bars
- Connectors



Full dentures

- Design settings
- Gingivae
- Smile Libraries Chart



Removables

- Frames
- Connectors and Rests
- Wax profile strips
- Retentions
- Stippled waxes



Digital model

- Digital model design
- Articulator interfaces



Appliances

- Orthodontics Control Panel
- Positioning Guide

Select "Import/Export"



Tools ▸ Import/Export

Tasks

- Export materials
- Import materials

Import materials

To import new materials, click on "Import materials" and browse the desired file (extension ".dme"). Then select the materials from the list that appeared on a screen and click "Import". Typically it is recommended to select all. You can also download the materials directly from FTP - go to Site Settings -> Sites page and click "Download Materials".

Import materials

History Of Import Materials

Export materials

Clone system

Select "Import materials"



Import the relevant DME file previously downloaded and unzipped

Import materials

To import new materials, click on "Import materials" and browse the desired file (extension ".dme"). Then select the materials from the list that appeared on a screen and click "Import". Typically it is recommended to select all. You can also download the materials directly from FTP - go to Site Settings -> Sites page and click "Download Materials".

Import materials

History Of Import Materials

Export materials

Clone system

Open

Documents > 3Shape > Custom Interface

Organize New folder

Name	Date modified	Type	Size
(OFF=00) 3Sh Zimmer TSV Custom Interface System Library 22-09-2022	1/16/2024 1:37 PM	DME File	16,834 KB
(OFF=25) 3Sh Straumann Bone Level Custom Interface System Library 21-09-2022	11/21/2022 1:41 PM	DME File	19,117 KB
(OFF=00) 3Sh Multi-unit Custom Interface System Library 04-02-2022	11/2/2022 2:59 PM	DME File	1,929 KB
(OFF=00) 3Sh Biomet 3i Externa Custom Interface System Library 04-02-2022	10/20/2022 12:59 PM	DME File	18,140 KB
(OFF=00) 3Sh Nobel Active Custom Interface System Library 04-02-2022	10/17/2022 2:49 PM	DME File	30,040 KB
(OFF=00) 3Sh Straumann Bone Level Custom Interface System Library 21-09-2022	9/26/2022 12:19 PM	DME File	19,116 KB

File name: (OFF=00) 3Sh Zimmer TSV Custom Interface System Library 22-09-2022

Dental System Materials Export

Open Cancel

Click "Open"



Import materials

To import new materials, click on "Import materials" and browse the desired file (extension ".dme"). Then select the materials from the list that appeared on a screen and click "Import". Typically it is recommended to select all. You can also download the materials directly from FTP - go to Site Settings -> Sites page and click "Download Materials".

Import materials

History Of Import Materials

Export materials

Clone system

Import and update materials

Please select materials to import

Available materials

Implant systems

(IPD C.Interface) ZIM TSV Ø3.5 Tol3

(IPD C.Interface) ZIM TSV Ø3.5 Tol5

(IPD C.Interface) ZIM TSV Ø4.5 Tol3

(IPD C.Interface) ZIM TSV Ø4.5 Tol5

(IPD C.Interface) ZIM TSV Ø5.7 Tol3

(IPD C.Interface) ZIM TSV Ø5.7 Tol5

Library name

(OFF=00) 3Sh Zimmer TSV Custom Ir

Provider

IPD

Library type

Implant library

Version

Library creation date

9/22/2022

Description

Libreria de IPD2004 para el diseño de protesis y analogo digital

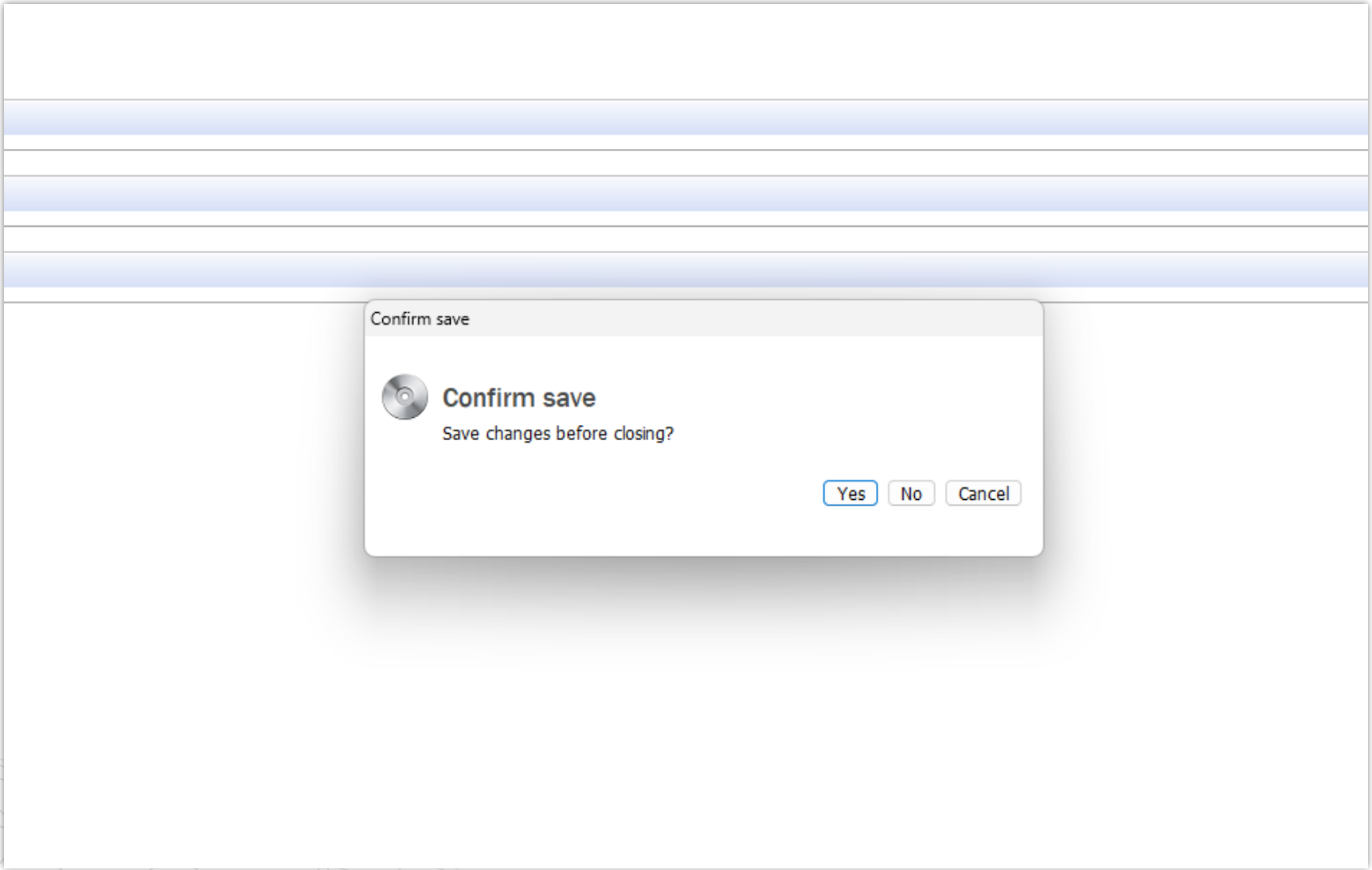
Import

Cancel

Click "Import"



Save changes before close 3Shape Dental System Control Panel





Library types

Scan Abutment



Scan Transfer





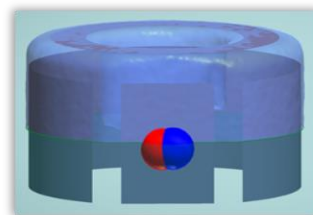
Back to Library types

Scan Abutment Libraries

Ti-Base level



Implant Level



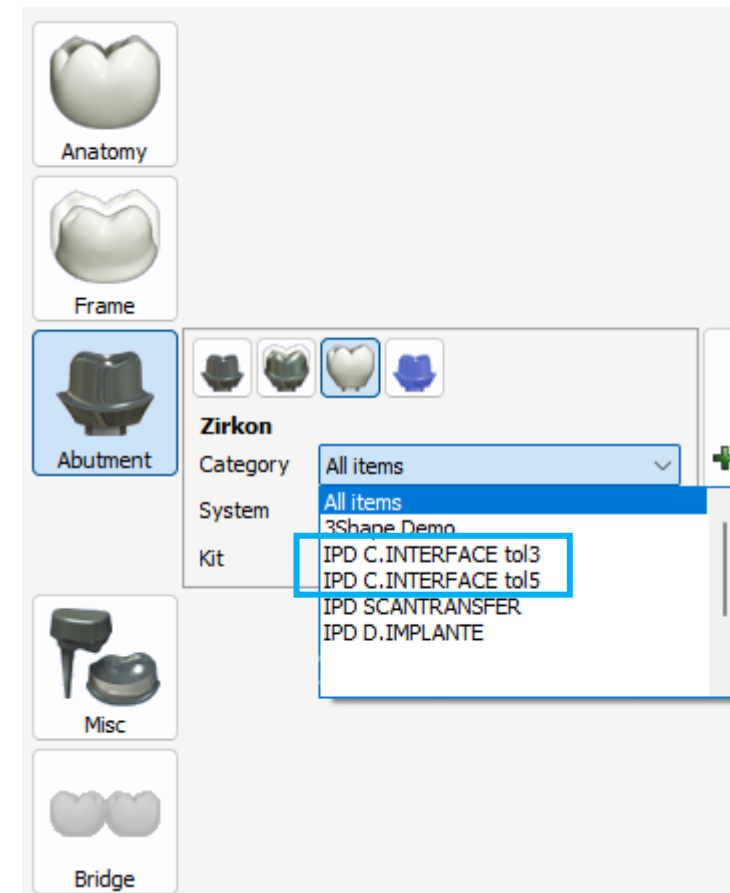
CAD alignment, ASC & design





Category

- **IPD C.INTERFACE tol3:**
Ti-base level libraries supporting a 30 microns cement gap (usually recommended for single crowns)
- **IPD C.INTERFACE tol5:**
Ti-base level libraries supporting a 50 microns cement gap (usually recommended for multiple frameworks)



Custom
Ti-Base

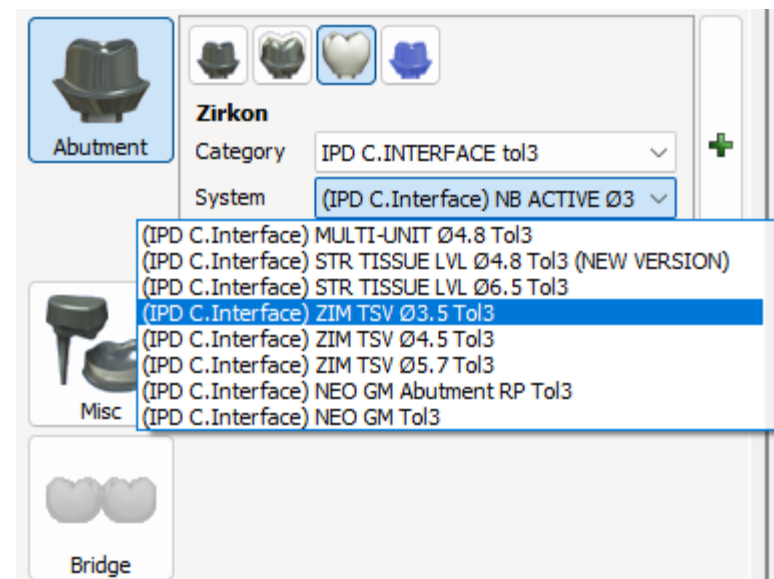


System

- **Ti-Base Level**

Each of the supported implant systems is shown through a coding System

- Brand code (ie.: ZIM = Zimmer)
- Implant System code (ie.: TSV = Tapered Screw Vent)
- Implant platform (ie.: 3,5 , NP ...)
- Tol__ (already selected through "Category")



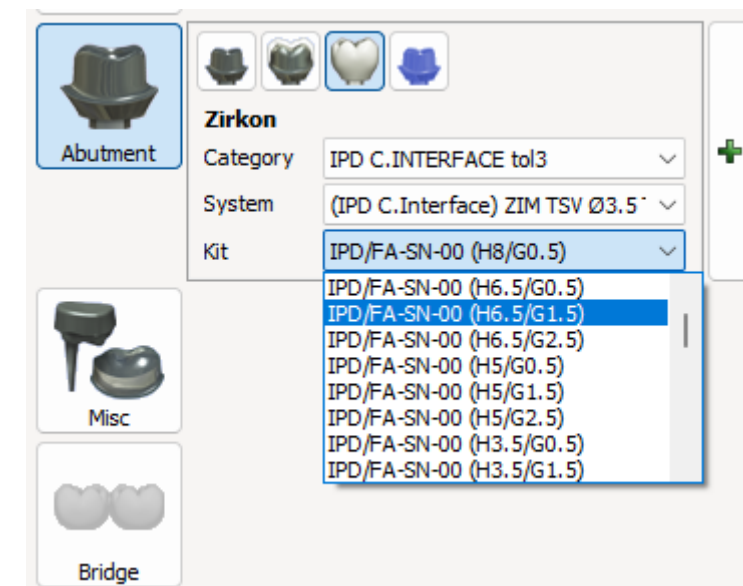
Custom
Ti-Base



Kit

All IPD library files are using Scan abutment reference code to drive the whole selection.

When using Custom Interface Ti-base library, after the Scan Abutment code will be finding additional values as per Ti-base features



IPD/FA – SN – 0* (H6.5/G1.5)

Brand Platform

Eng/Non Eng

- 00 → Engaging 10mm Scan Body
- 02 → Engaging 15mm Scan Body
- 01 → Non-Engaging Scan Body

Ti-Base wall Height

ENG: 8 – 6,5 – 5 – 3,5
NON-ENG: 6,5* – 5* – 3,5
*Availibility to be confirmed

Gingival height*

Low – Mid – High – Extra
* Available hights may differ depending on implant system

Custom
Ti-Base



Kit

For those cases needing from ASC design, select the relevant "ANG Library".
These can be find when scroling down onto the wizard

IPD/FA – SN – 0* (ANG/H6.5/G1.5)

Brand

Platform

ASC design

Eng/Non Eng

Ti-Base wall Height

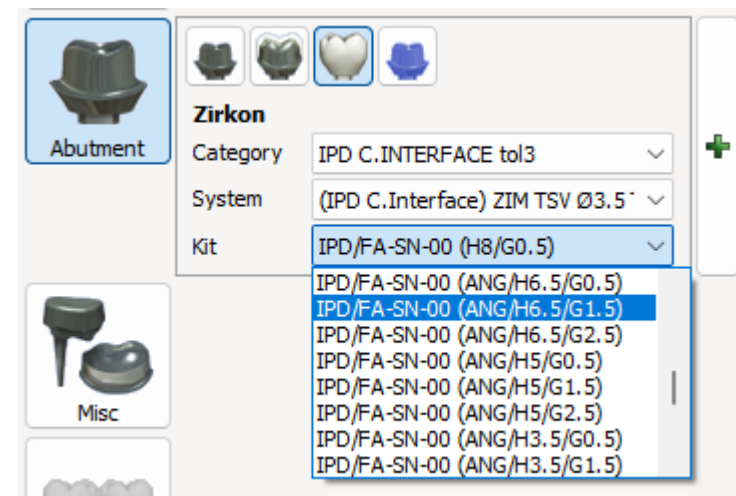
Gingival height*

Custom
ASC
Ti-Base

- 00 → Engaging 10mm Scan Body
- 02 → Engaging 15mm Scan Body
- 01 → Non-Engaging Scan Body

ENG: 8 – 6,5 – 5 – 3,5
NON-ENG: 6,5* – 5* – 3,5
*Avialibility to be confirmed

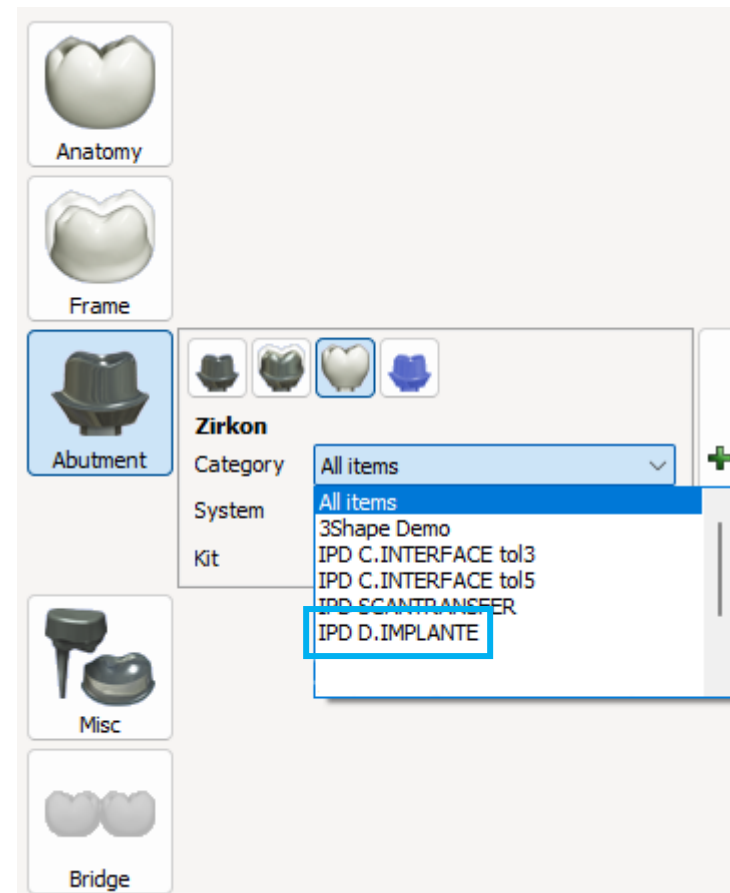
Low - Mid – High – Extra
* Available highs may differ
depending on implant system





Category

IPD D.IMPLANTE: Implant level libraries (at implant connection without abutment)



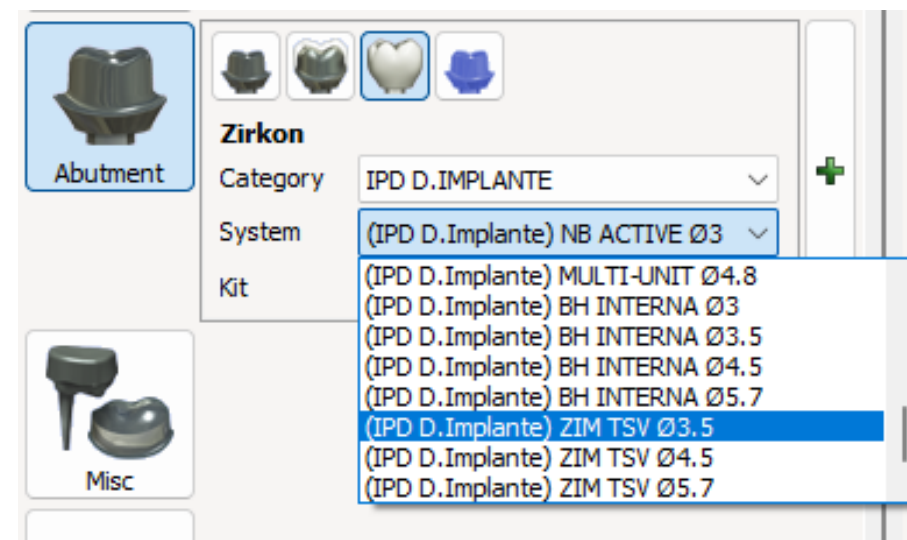
Implant
Level



System

Each of the supported implant systems is shown through a coding System

- Brand code (ie.: ZIM = TSV)
- Implant System code (ie.: TSV = Tapped Screw Vent)
- Implant platform (ie.: 3,5 , NP ...)



Implant
Level



Kit

All IPD library files are using Scan Abutment reference code to drive the whole selection.

IPD/FA – SN – 0*

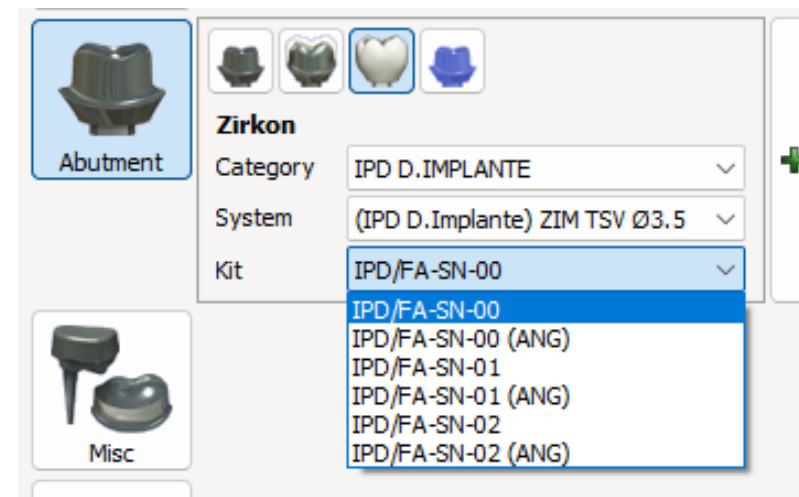
Brand Platform



Eng/Non Eng

- 00 → Engaging 10mm Scan Body
- 02 → Engaging 15mm Scan Body
- 01 → Non-Engaging Scan Body

Implant
Level

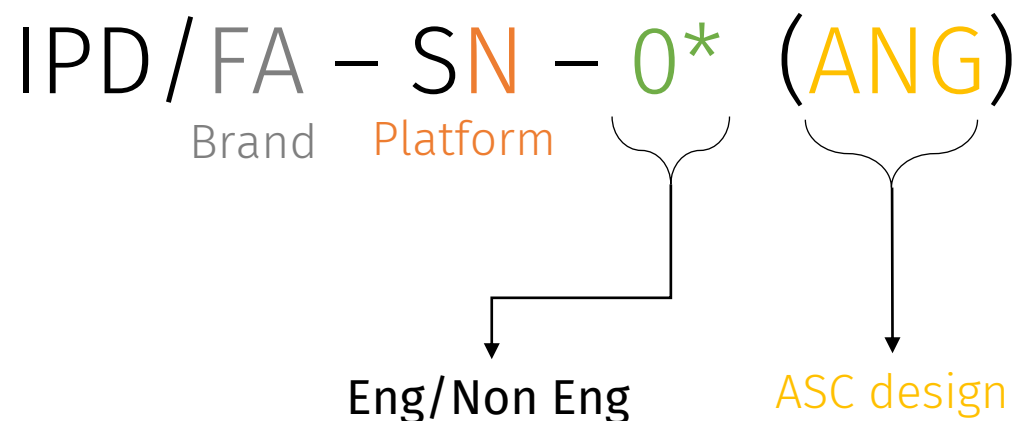




Kit

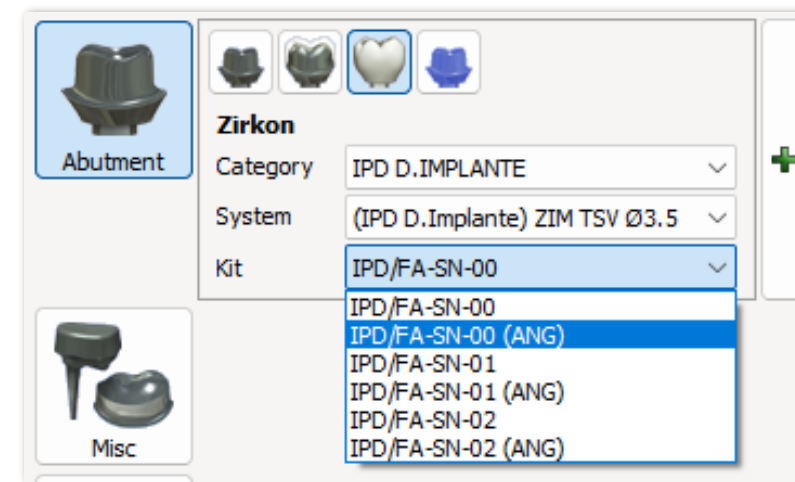
For those cases needing from ASC design, select the relevant “ANG Library”.

These can be find when scroling down onto the wizard



- 00 → Engaging 10mm Scan Body
- 02 → Engaging 15mm Scan Body
- 01 → Non-Engaging Scan Body

Implant
Level





Library alignment

Make sure Implant System and kit are matching with the Order Form selection.

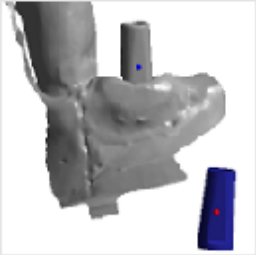
* Important Advice:

Even modifying selection, changes won't be applied by 3shape to the actual design. Any required change into library selection needs to be mandatorily driven through the Order Form.

The Scan Flag selection is where to select the Scan Tolerance to improve CAD alignment.

(T0,T1,T2.... Up to T6)

Alignment info



Select two corresponding points (one on each model)

Scan Flag ▼

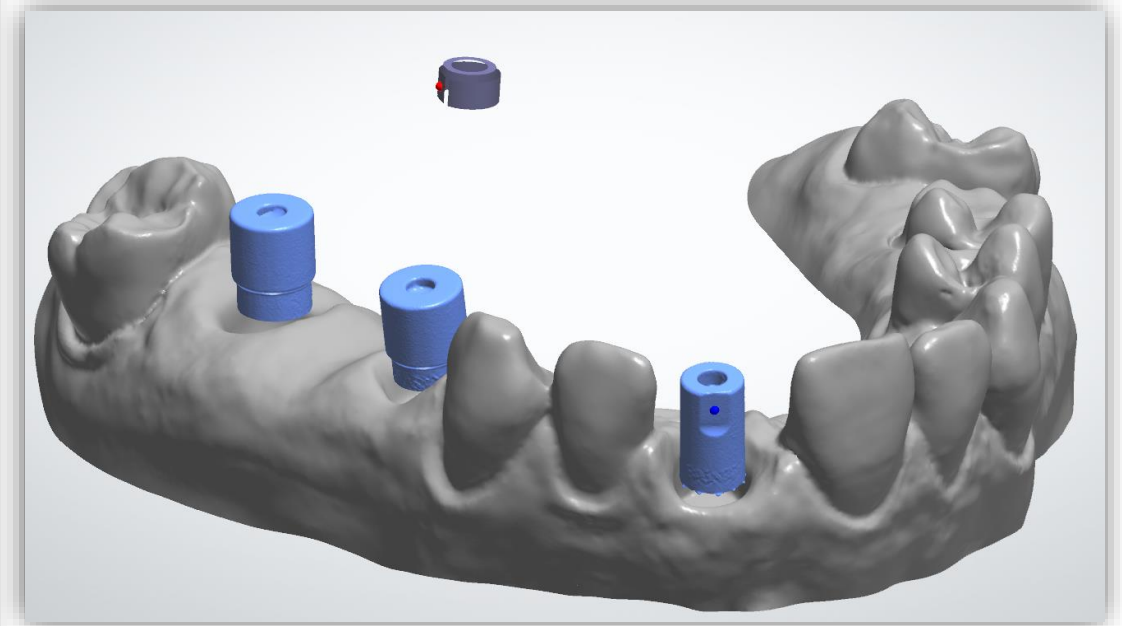
Implant category
All items ▼

Implant system
(IPD D.Implante) ZIM TSV Ø3.5 ▼

Implant kit
IPD/FA-SN-00 ▼

Scan Flag
OT0 SP ▼

☒ Global Coordinate system





Library alignment

- **Scan Abutment Tolerance tool**

This tool is dedicated to improve the accuracy of CAD alignment. The industry standard is to provide the STL of each Scan Abutment found in a CAD library under its physical measurement, while each scanning device, for different reasons, is leading to a certain degree of oversizing by default.

- **Tolerance assignment protocol during alignment**

The following protocol is used to determine which of the 7 different STL files available for each IPD Scan Abutment is showing the best performance when merging the scanning file with the IPD library kit, improving the CAD alignment accuracy no matter the device used.

When performing the STL alignment, the library file showing the largest merging area with the digital file shall be chosen.

The screenshot shows a software interface for selecting a Scan Flag. It includes dropdown menus for 'Scan Flag', 'Implant category' (set to 'All items'), 'Implant system' (set to '(IPD D.Implante) ZIM TSV Ø3.5'), and 'Implant kit' (set to 'IPD/FA-SN-00'). Below these, a list of Scan Flags is displayed: OT0 SP, OT0 SP, OT1 SP, OT2 SP, OT3 SP, OT4 SP, OT5 SP, and OT6 SP. The first 'OT0 SP' is highlighted with a blue background, and the second 'OT0 SP' is highlighted with a darker blue background.

- T0 - Std STL (= physical dimension)
- T1 - Std STL + 10 microns
- T2 - Std STL + 20 microns
- T3 - Std STL + 30 microns
- T4 - Std STL + 40 microns
- T5 - Std STL + 50 microns
- T6 - Std STL + 60 microns



Library alignment

Alignment using "T0" Tolerance

Scan Flag ▼

Implant category

All items ▼

Implant system

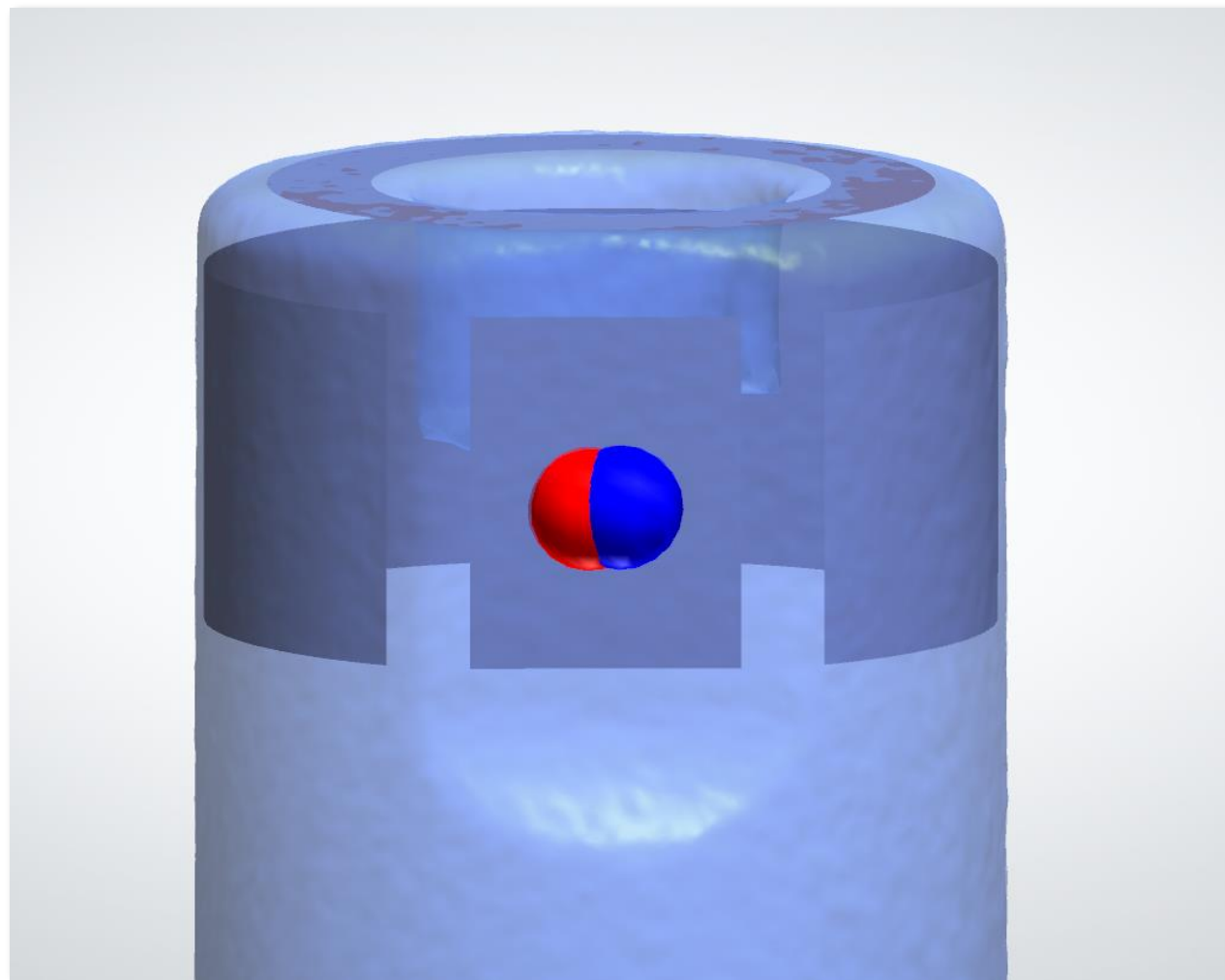
(IPD D.Implante) ZIM TSV Ø3.5 ▼

Implant kit

IPD/FA-SN-00 ▼

Scan Flag

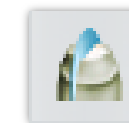
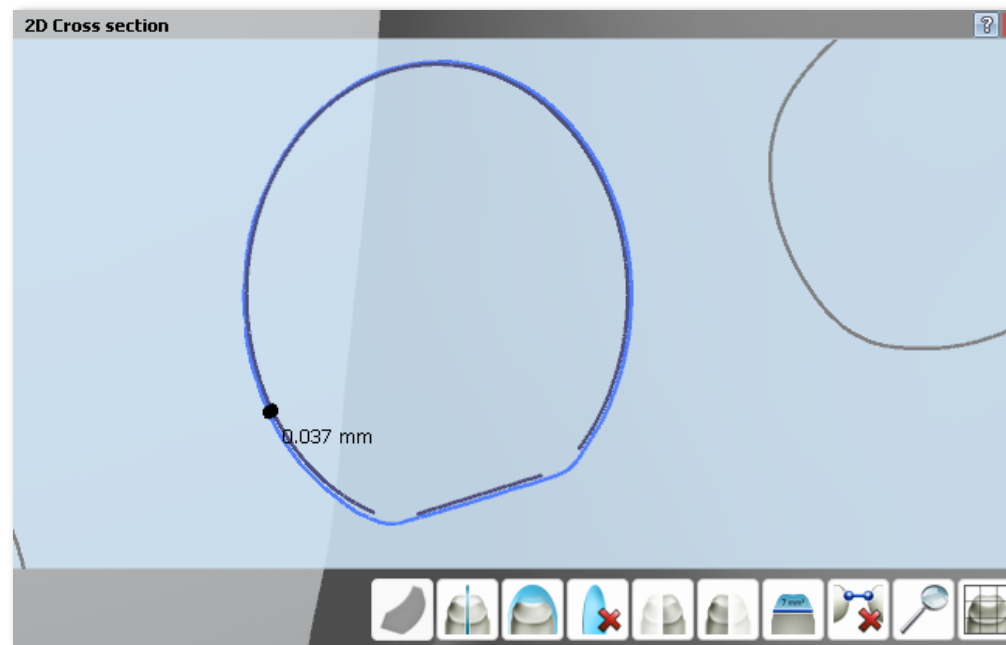
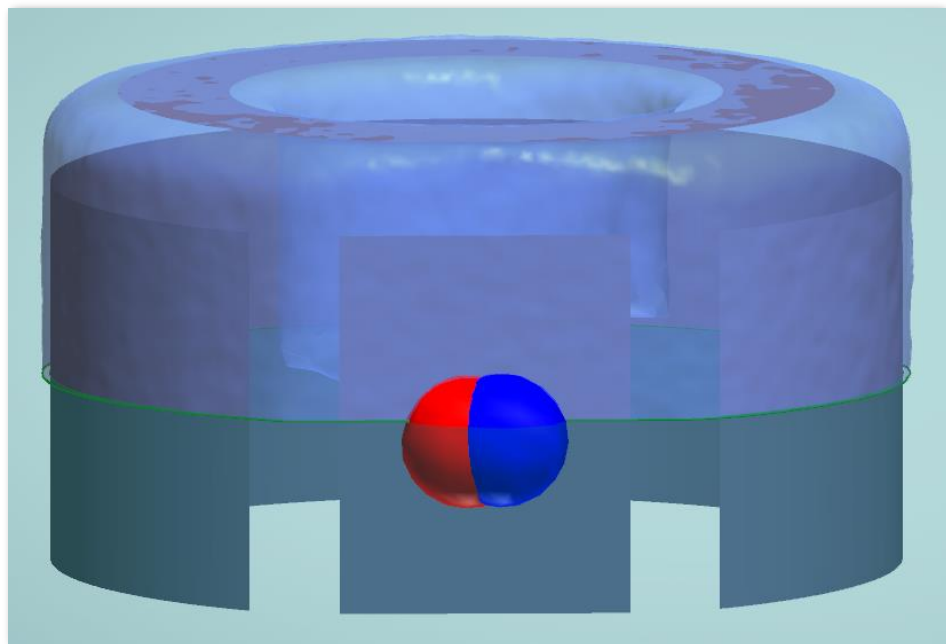
0T0 SP ▼





Library alignment

Using the “2D Cut” to evaluate dimensional discrepancy

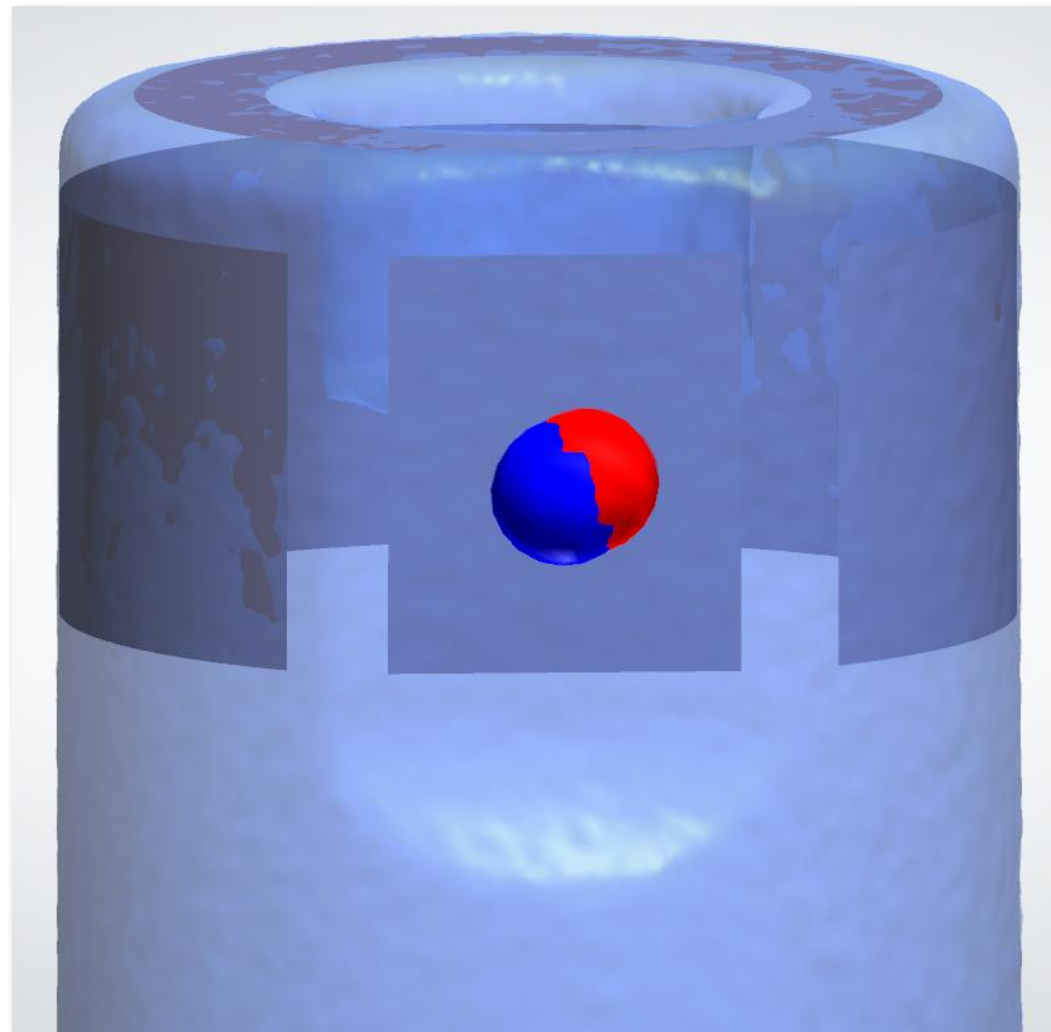




Library alignment

Alignment using "T6" Tolerance

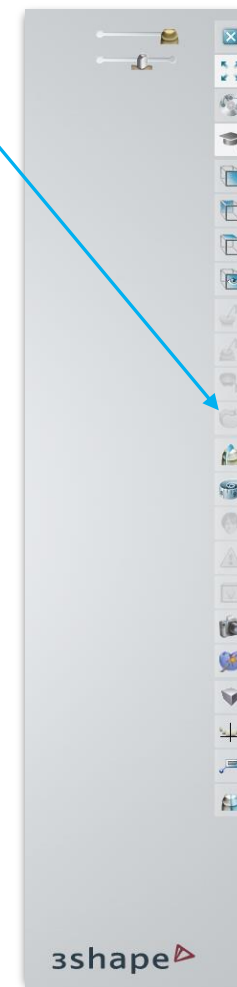
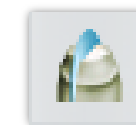
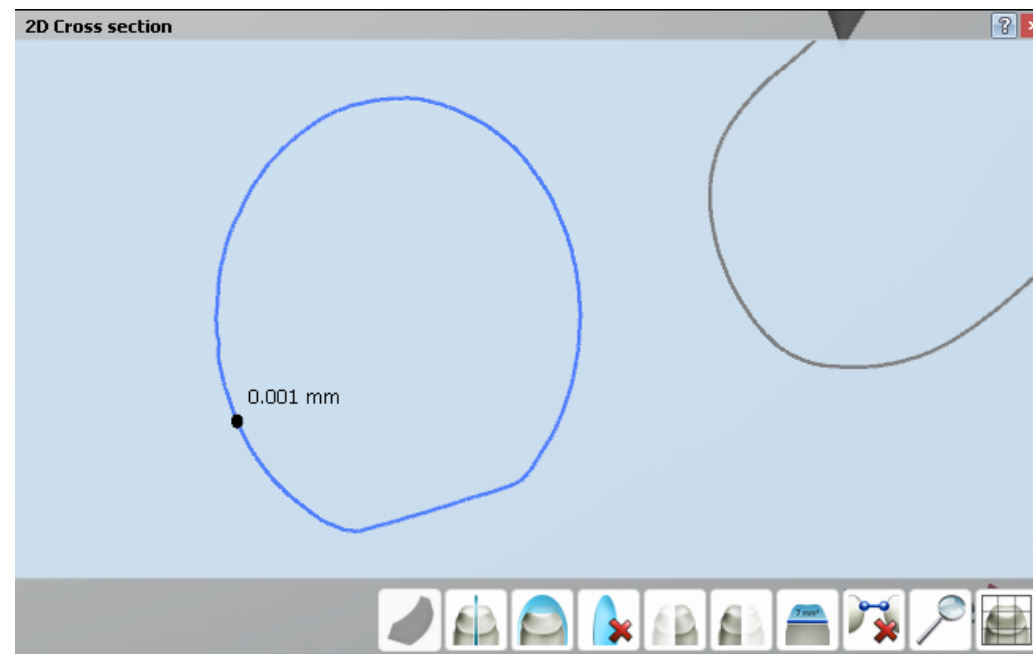
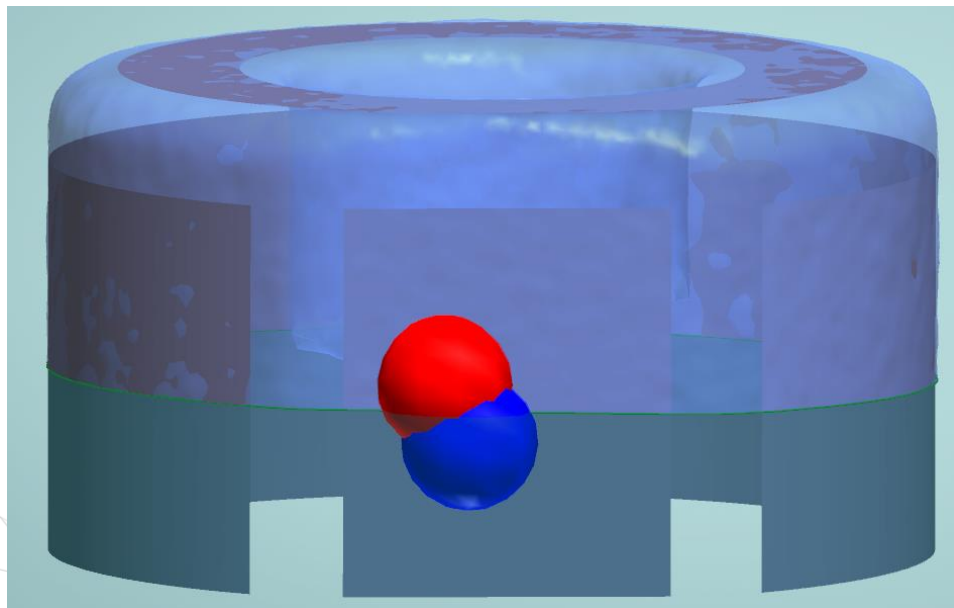
Scan Flag	▼
Implant category	
All items	▼
Implant system	
(IPD D.Implante) ZIM TSV Ø3.5	▼
Implant kit	
IPD/FA-SN-00	▼
Scan Flag	
OT6 SP	▼





Library alignment

Using the “2D Cut” to evaluate dimensional discrepancy



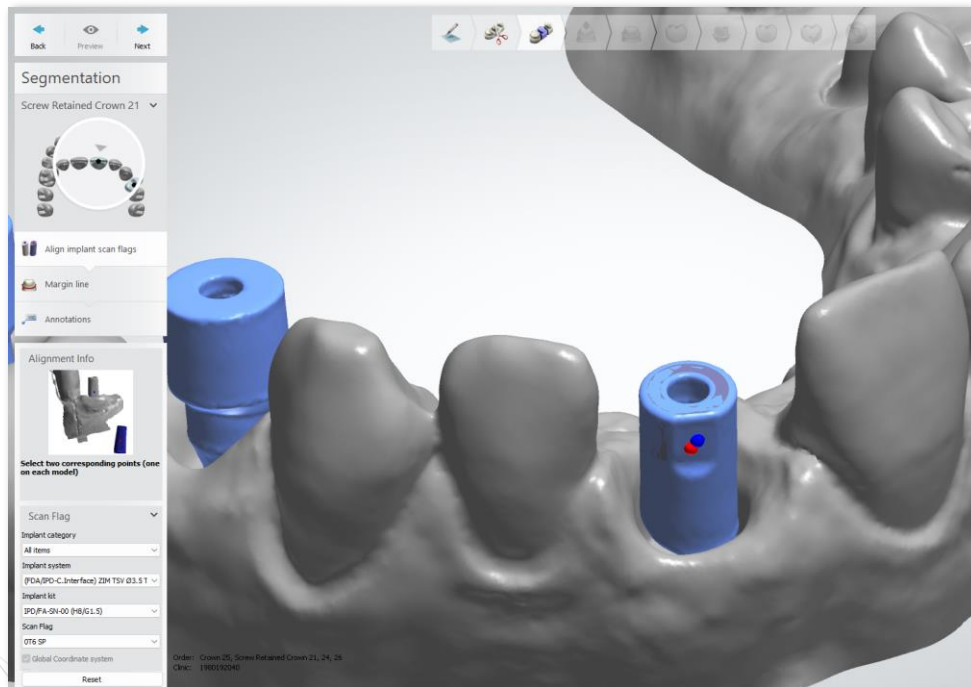
3shape



ASC Guidance

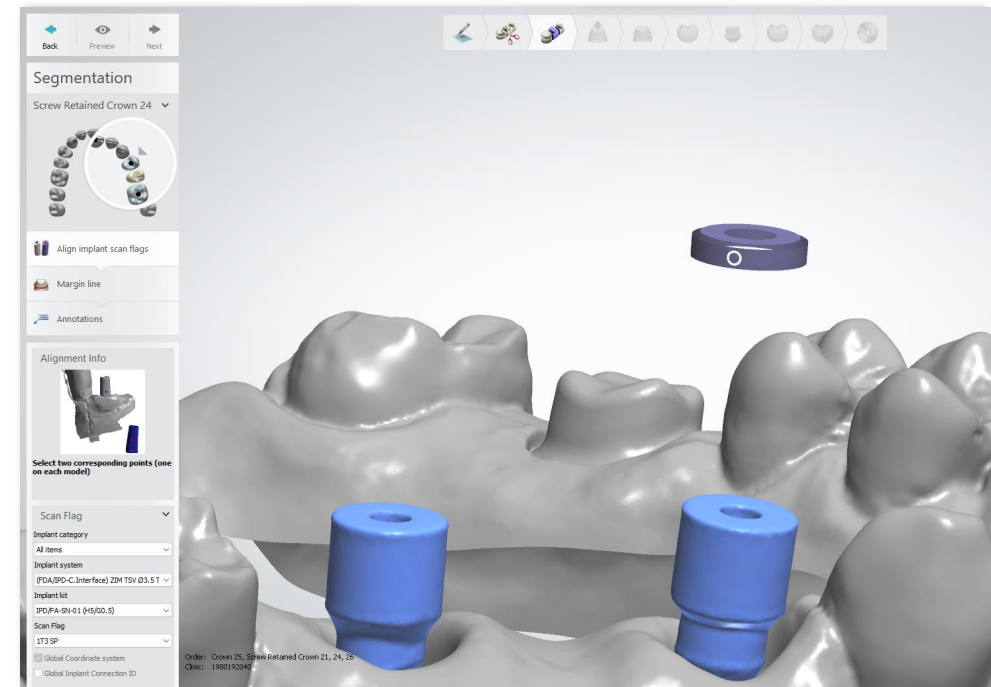
- ASC Design – Guiding the screw channel**

When using ASC library, 3Shape will drive the angulation differently for Engaging and Non-Engaging abutments



Engaging

On single crowns the ASC feature will be related to the Scan Abutment head geometry (flat facet)



Non-Engaging

On multiple frameworks the ASC feature will be free enabling a 360 degrees choose.



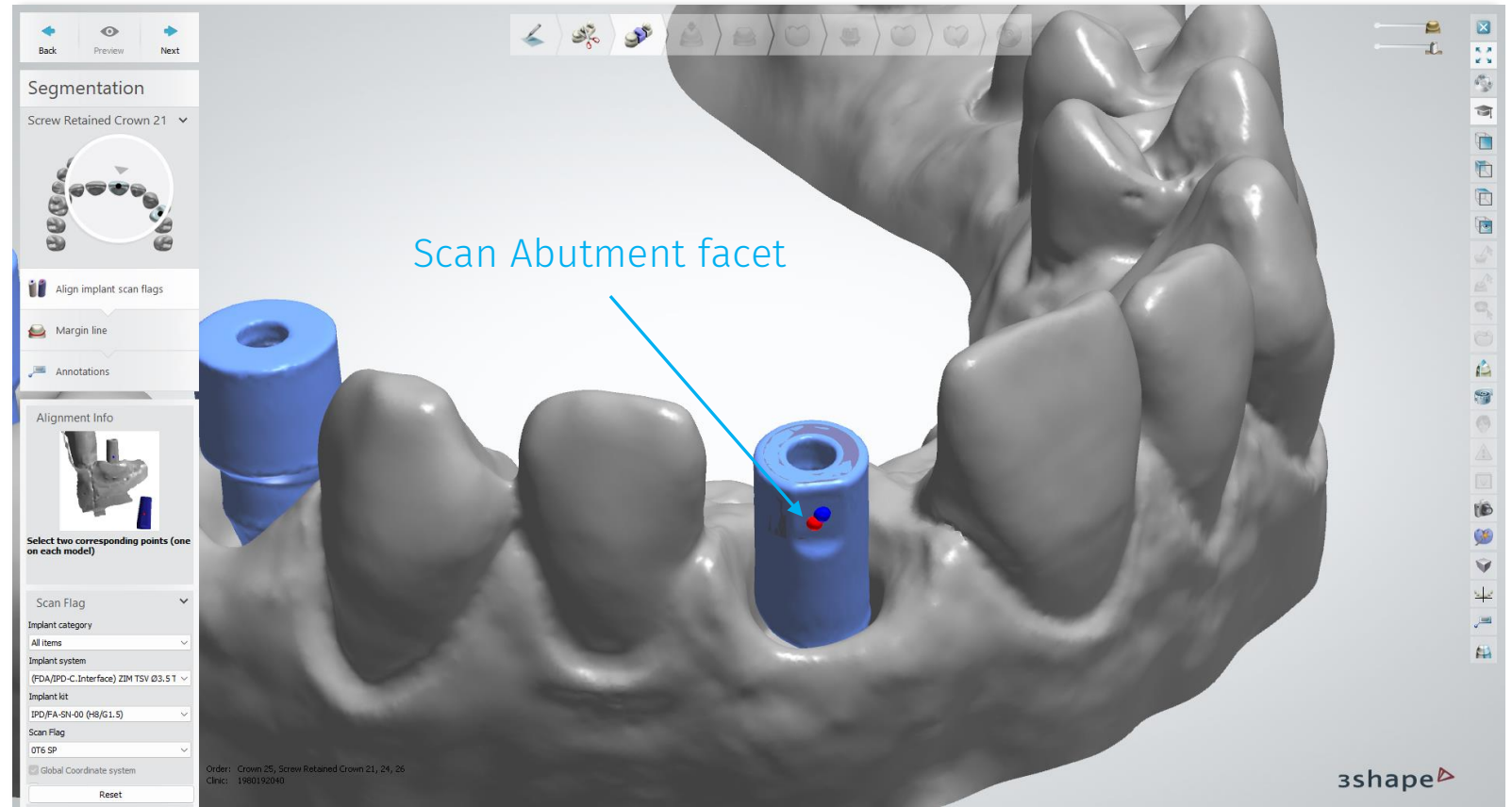
ASC Guidance

- **Engaging**

When using Engaging ASC library, 3Shape will drive the angulation in the opposite direction to Scan Abutment facet.

- *** Advice:**

Despite 3Shape enables to virtually twist the Ti-base according to the implant connection, we do recommend to always place the Scan Abutment flat facet into its more vestibular facing as will also be driving the facing of the 3D analogue side screw.

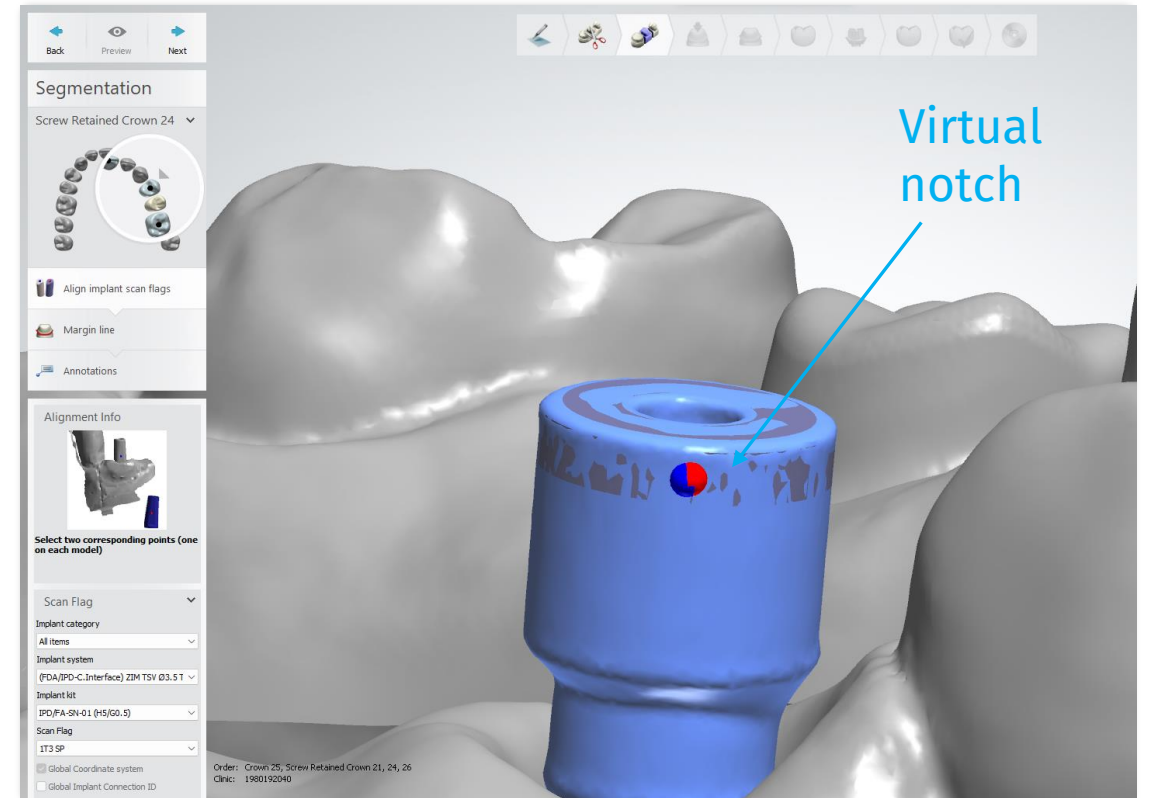
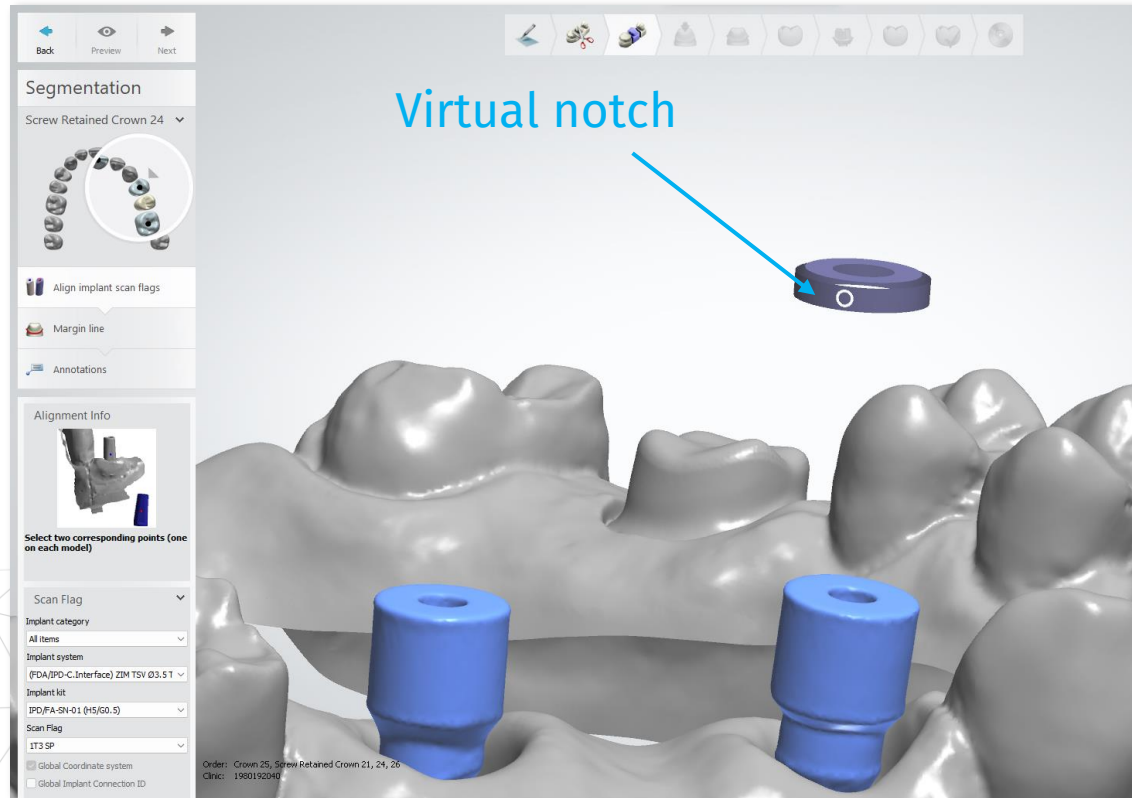




ASC Guidance

- **Non-Engaging**

When using Non-Engaging ASC library, 3Shape will drive the ASC to the opposite were clicking on into the scanning file when aligning.

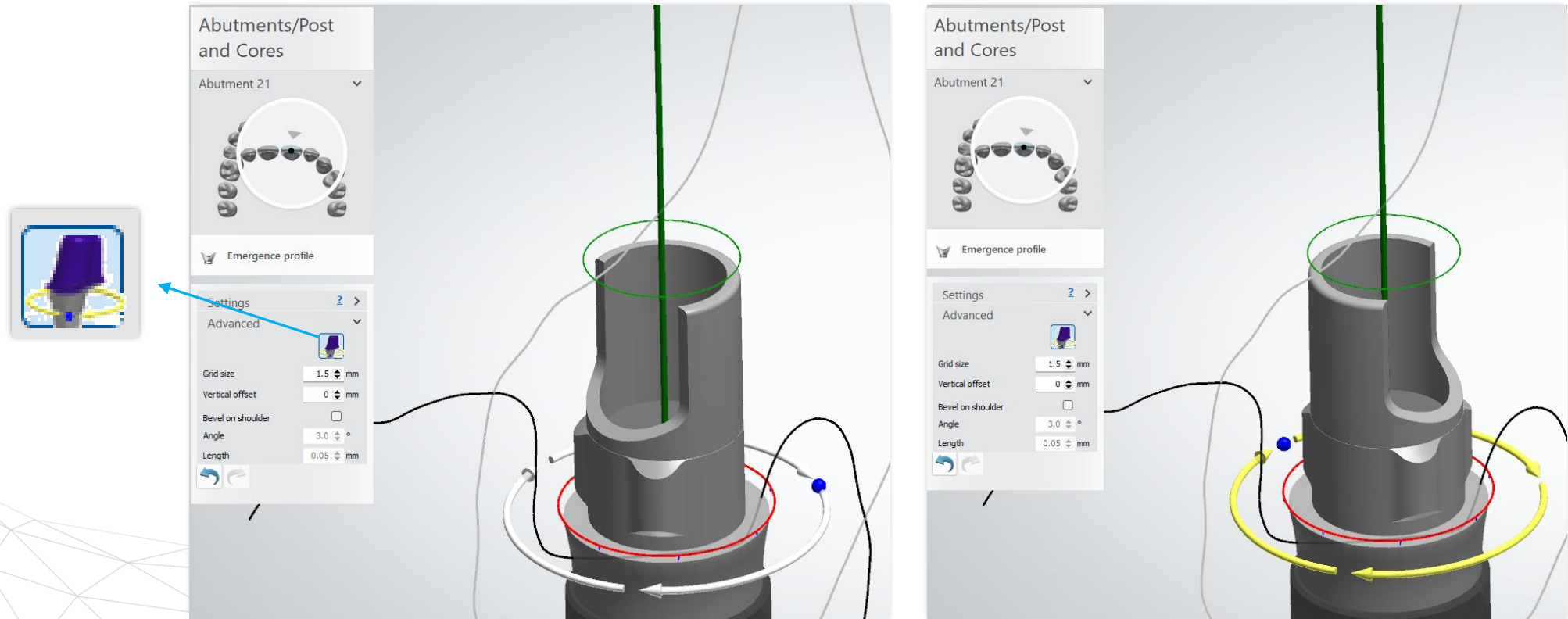




ASC Ti-base Guidance

- ASC Ti-base guidance for engaging abutments**

During the design step “Abutments/Post and Cores”, it is possible to rotate the ASC Ti-base window to the desire position to ensure matching with a suitable ASC channel.
The available positions will be related to the corresponding implant System geometry.

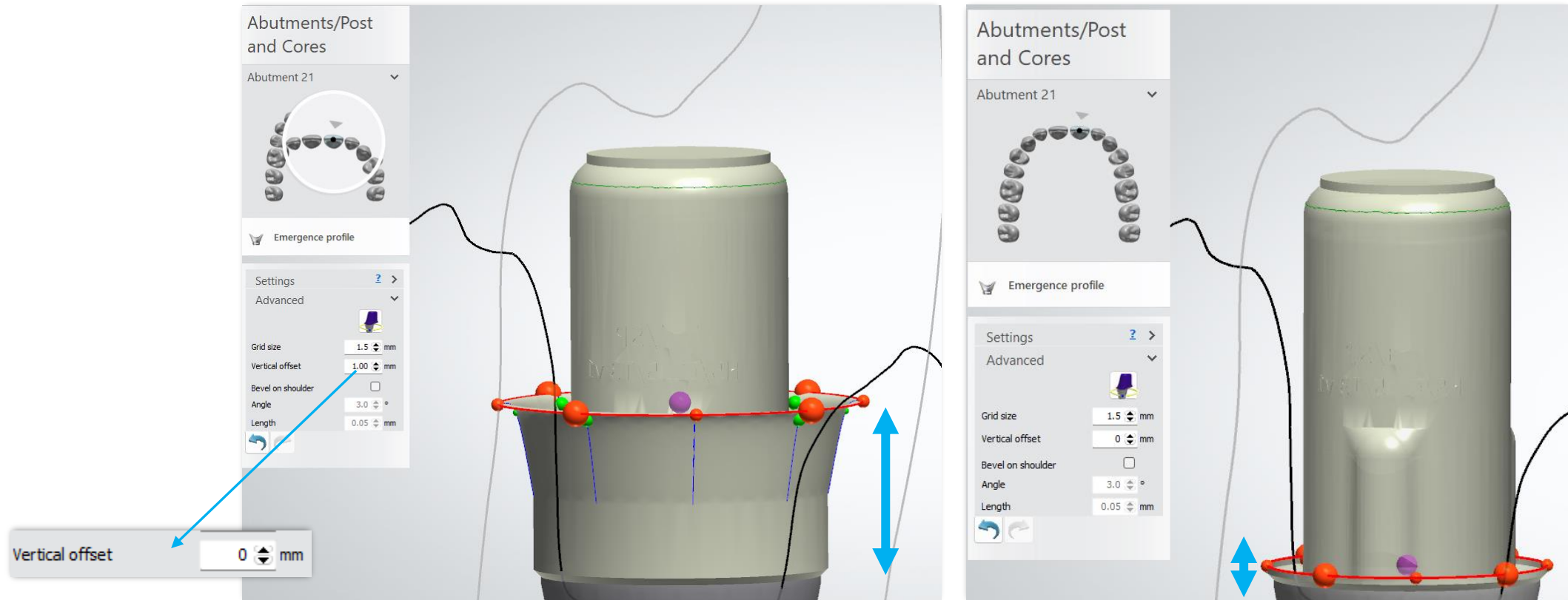




Emergence profile design

- **Changing emergence profile limits**

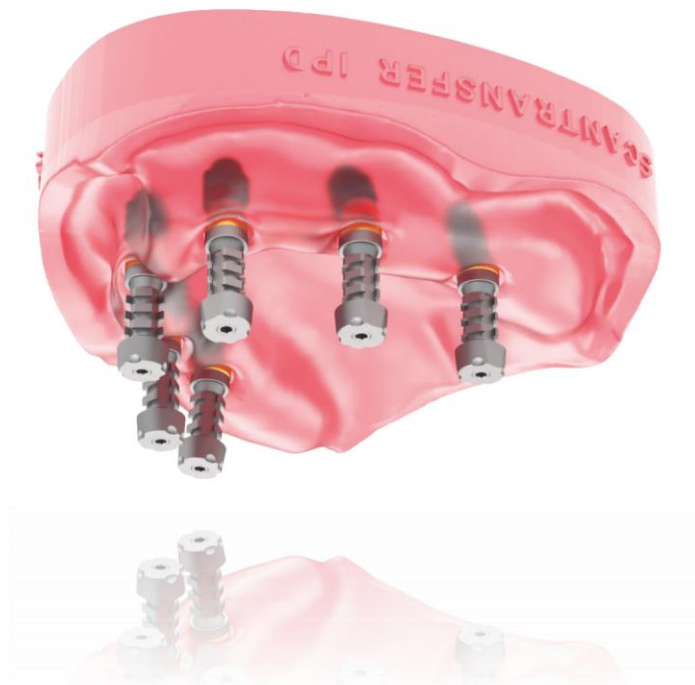
During the design step “Abutments/Post and Cores”, it is possible to modify the default software parameters to enable designing the emergence profile from the lowest point. Change “Vertical offset” setting value to 0.





[Back to Library types](#)

Scan Transfer

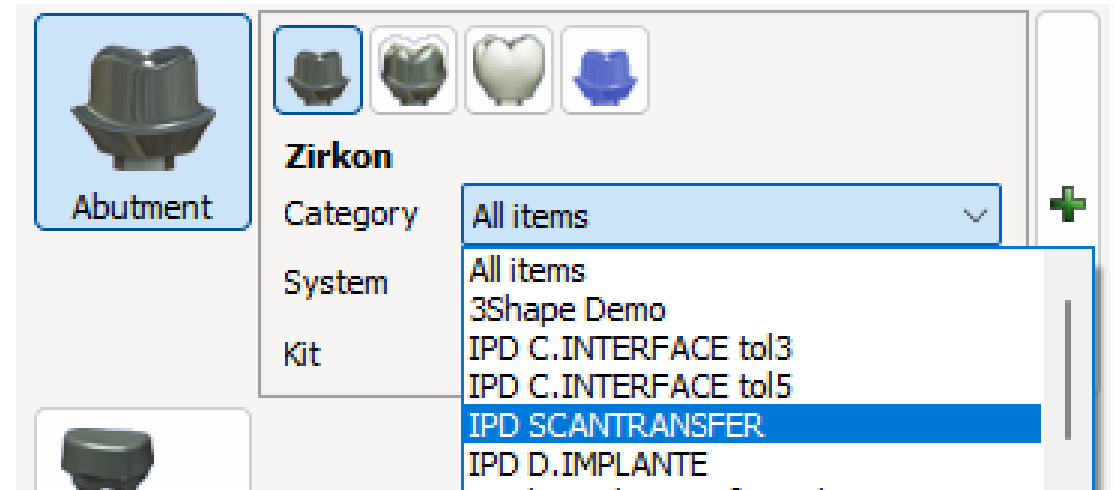




Back to Library types

Category

IPD ScanTransfer:
Dedicated Scan Transfer Libraries



Scan
Transfer



Back to Library types

System

After selecting “IPD/FDA-ScanTransfer” category, choose the only option available in “System” dropdown menu.

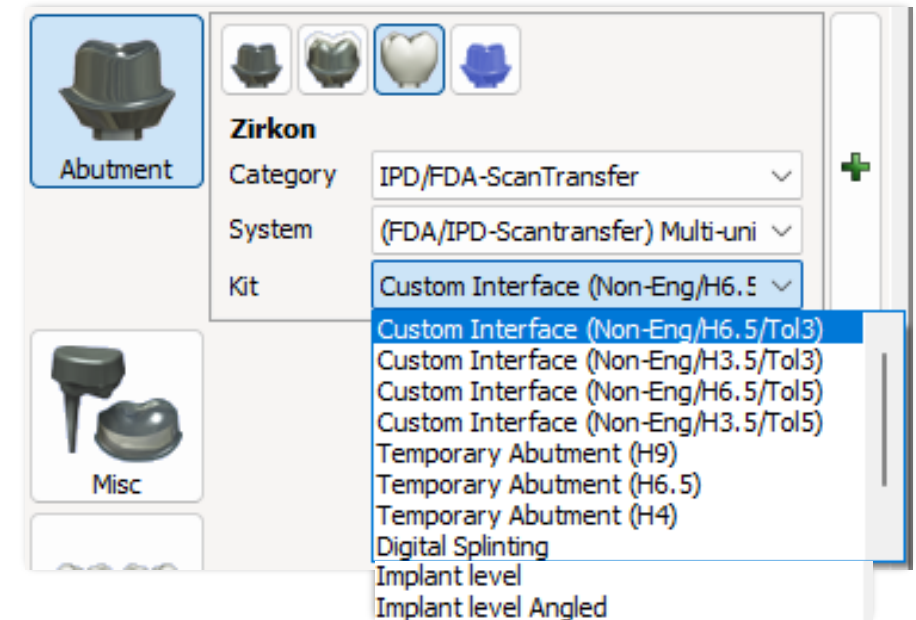
The screenshot shows a software interface for selecting dental components. On the left, a large icon of a dark grey abutment is labeled 'Abutment'. To its right, a row of four smaller icons shows different abutment styles. Below these icons, the text 'Zirkon' is displayed. Further down, there are three dropdown menus. The first is labeled 'Category' and has 'IPD SCANTRANSFER' selected. The second is labeled 'System' and has 'IPD ScanTransfer (Only Top)' selected. The third is labeled 'Kit' and has 'IPD ScanTransfer (Only Top)' selected. A green plus sign is visible on the right side of the interface.

Scan
Transfer



Each of the supported options will be shown as follows:

- **Custom Interface** (ENG/Non-ENG, H6.5-H3.5, Tol3-Tol5)
- **Implant level** (At Mua level without abutment)
- **Temporary abutment** (Supporting different heights H9-H6.5-H4)
- **Digital splinting** (when designing splinting guides)



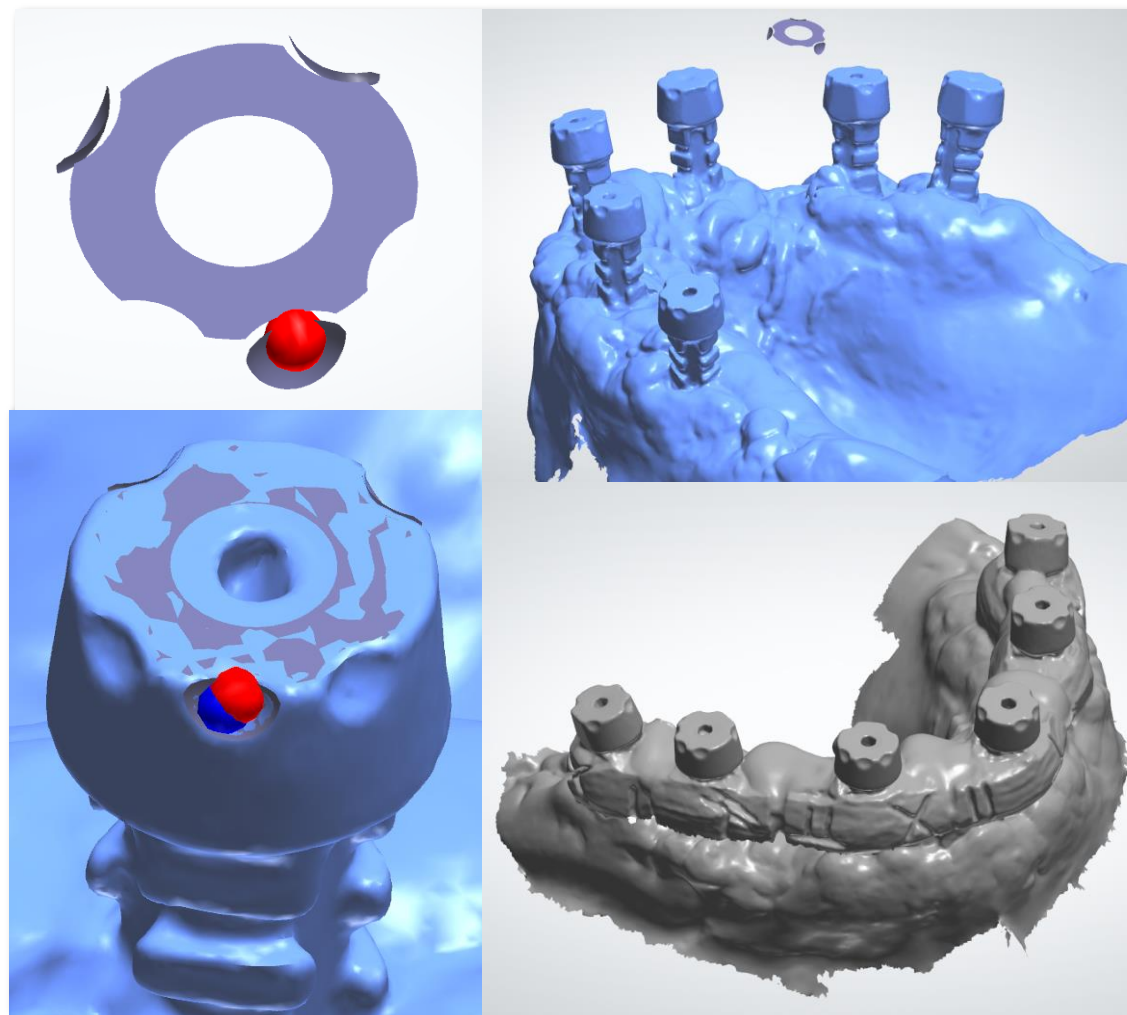
Scan
Transfer



Library alignment

Thanks to the IPD Only Top technology, the alignment of Scan Transfer is offering a simple and highly accurate alignment protocol.

Use the middle front asymmetrical cut.out to for the alignment.



Scan
Transfer



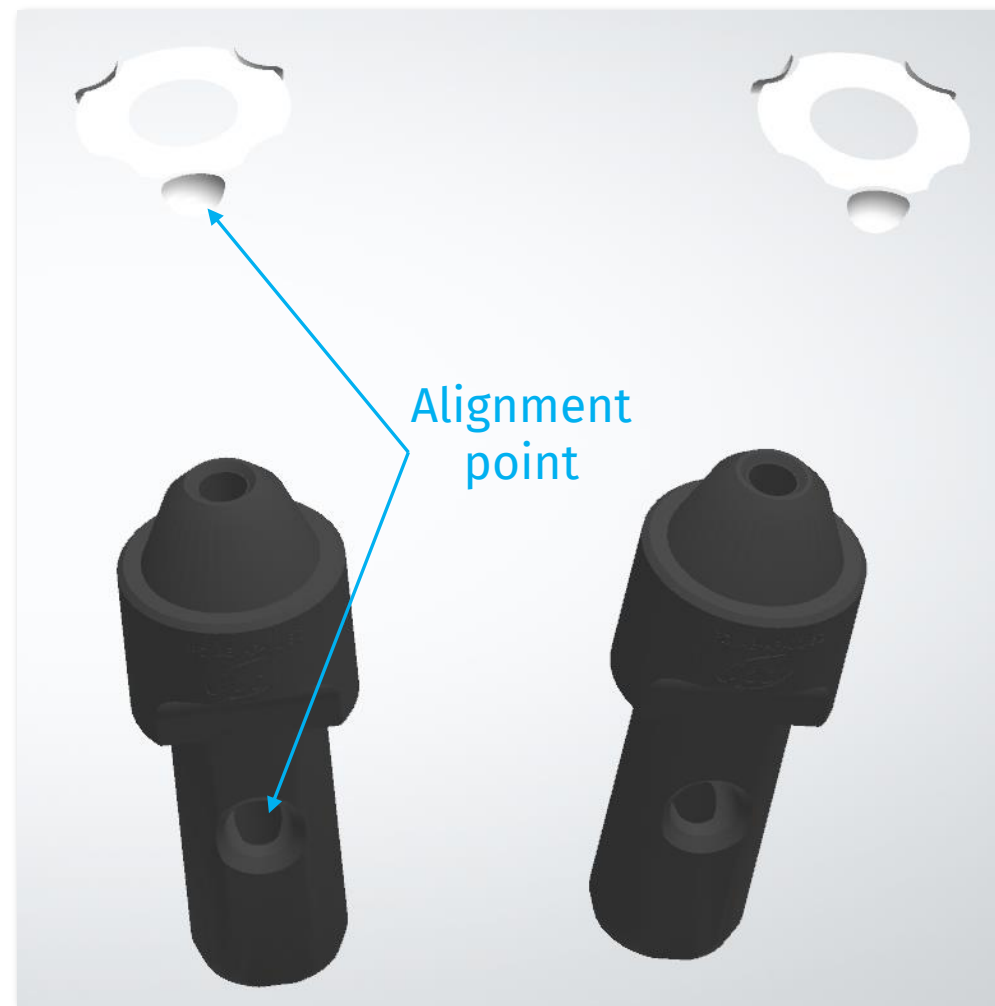
Library alignment

On the Scan Transfer library, guidance of the side screw channel facing matches with the alignment point.

*** Important advice:**

Please notice that this position cannot be changed in case.

We do strongly advice to ensure always placing the front middle asymmetrical cut-out of Scan Transfer head at the vestibular side.



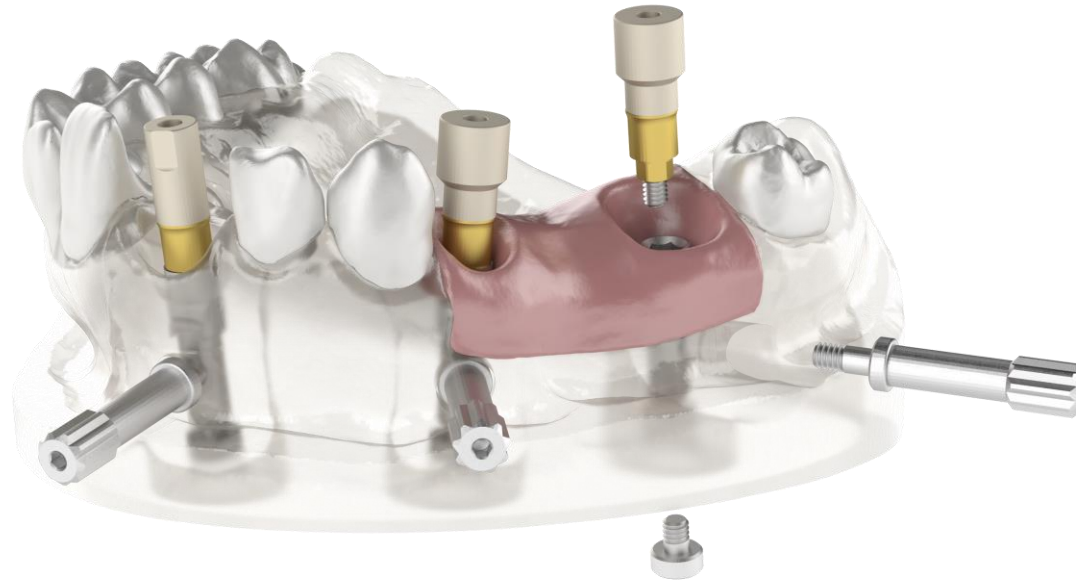
Scan
Transfer



3D Analog

- **Side screw channel design**

The software does not automatically generate the side screw channel, but there is a way to generate it by adding an attachment during the model design in Model Builder. Click the image below for the video tutorial:





Dental Group

