

3Shape FDA Library USER GUIDE



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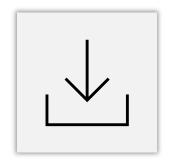
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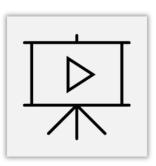




Install



Library types and use



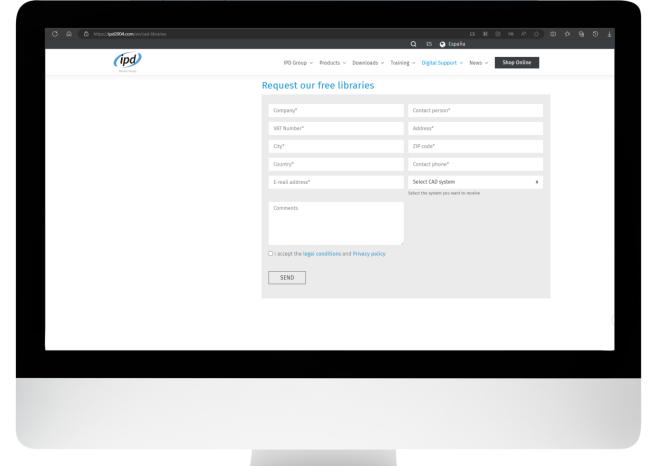
3D Analog side screw



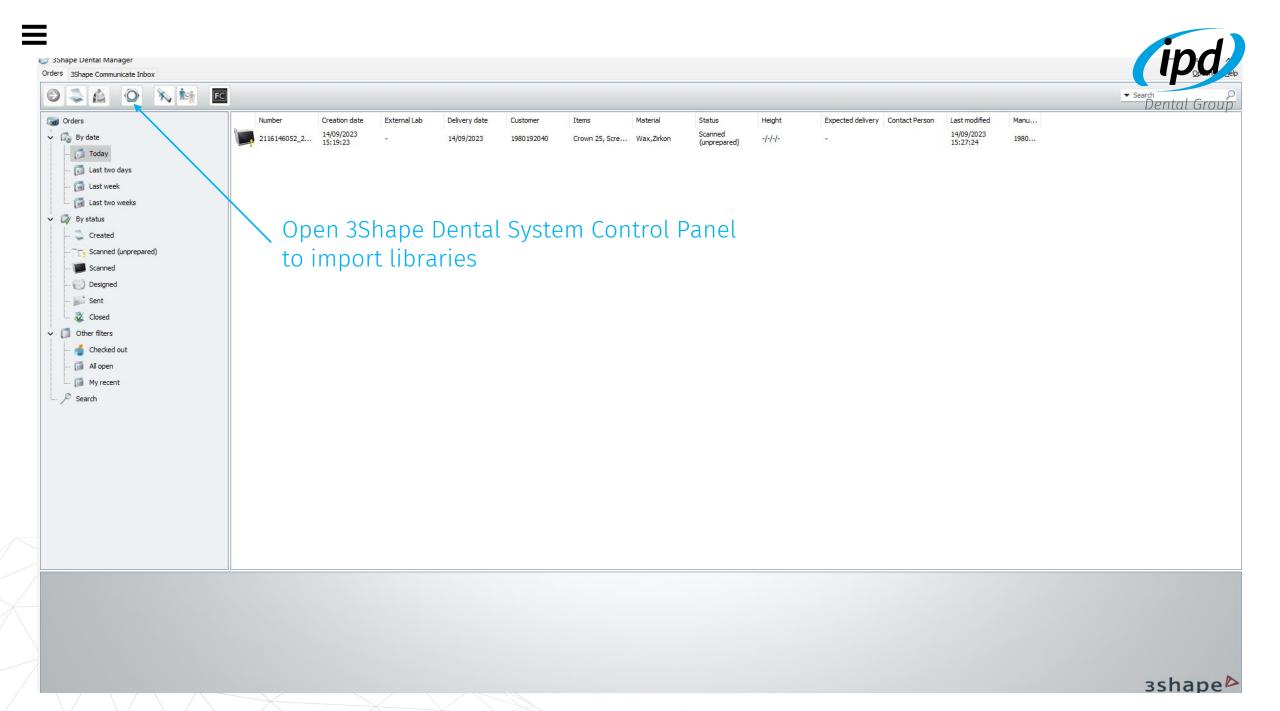
Request libraries from the website



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















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
- Training Center
- 154 3Shape Communicate



Basic elements

- 🚵 Materials
- Colors
- Margin line
- Attachments
- 1 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

Select "Import/Export"



Post and Core

Post and Core systems

Dental Group

Post and Cores





Connectors



Full dentures

- Design settings
- Gingivae
- Smile Libraries Chart



Removables

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



Digital model

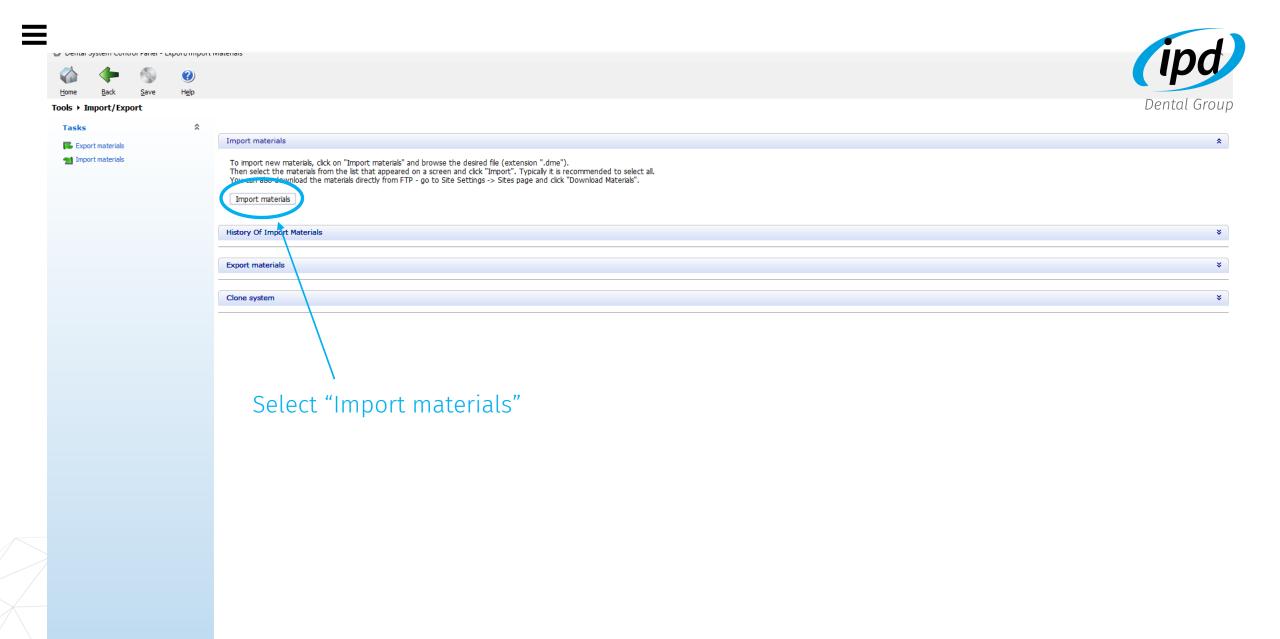
- Digital model design
- Articulator interfaces



Appliances

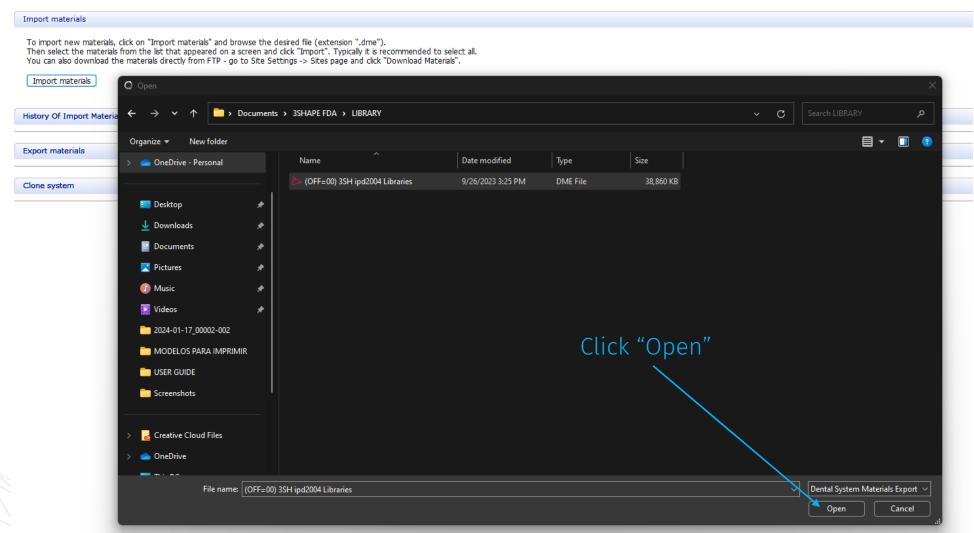
) Orthodontics Control Panel

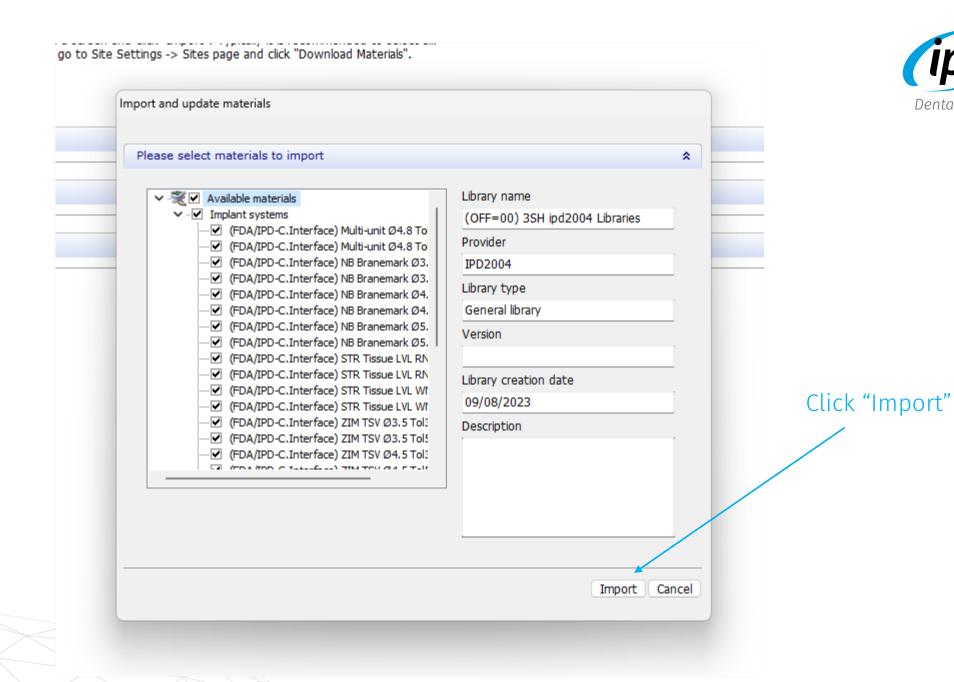
₩ Positioning Guide



Import the relevant DME file previously downloaded and unzipped





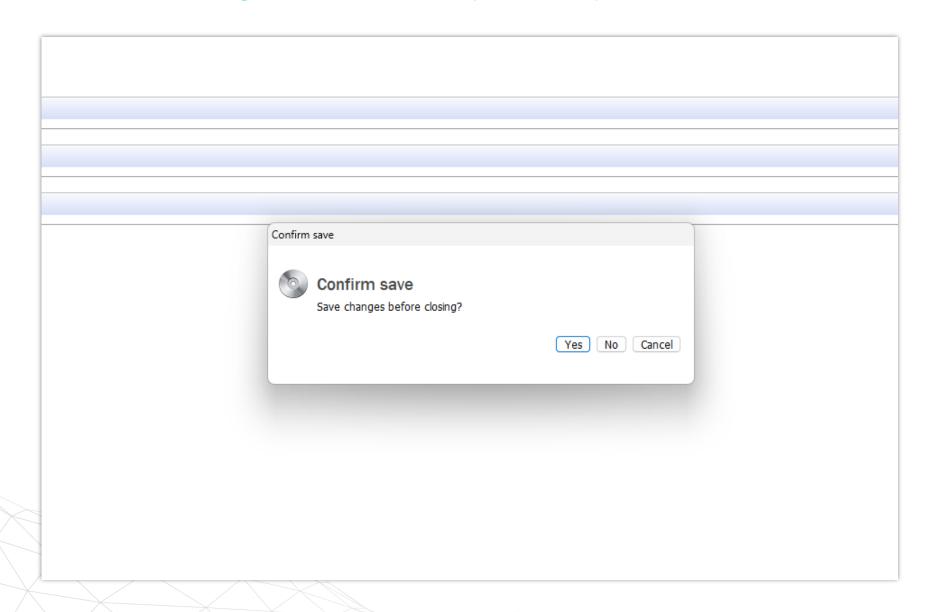


Dental Group





Save changes before close 3Shape Dental System Control Panel





Library types



Scan Abutment



Scan Transfer





ipdDental Group

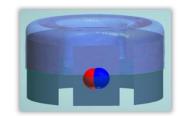
Scan Abutment Libraries





Implant Level





CAD alignment, ASC & design

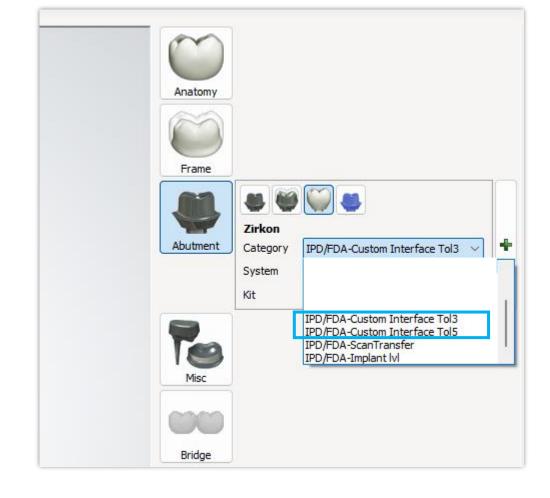




Category

ipdDental Group

- IPD/FDA Custom Interface Tol3:
 Ti-base level libraries supporting a 30 microns cement gap (usually recommended for single crowns)
- IPD/FDA Custom Interface Tol5: Ti-base level libraries supporting a 50 microns cement gap (usually recommended for multiple frameworks)







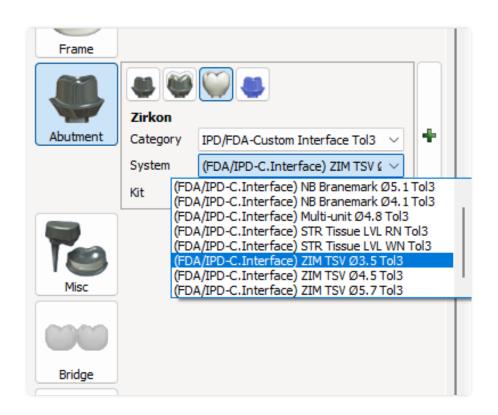
System



Ti-Base Level

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

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

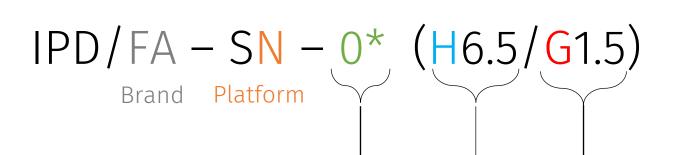


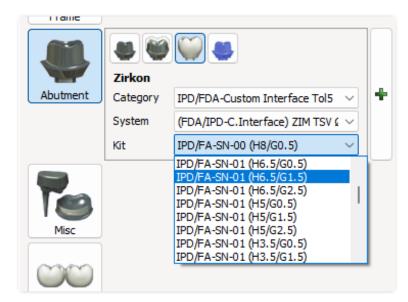




All IPD library files are using Scan abutment reference code to drive the whole selection.

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





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 *Avialibility to be confirmed Gingival height*

Low - Mid – High - Extra

* Available hights may differ depending on implant system

Custom Ti-Base





Zirkon

Category

ENG: 8 - 6,5 - 5 - 3,5

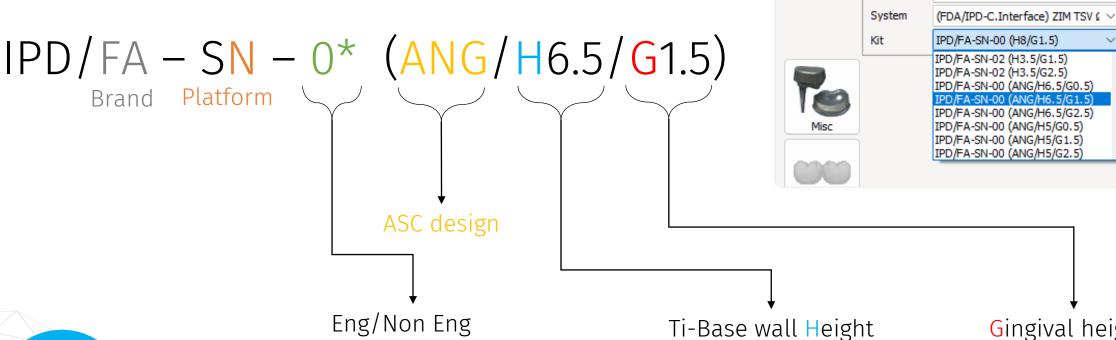
NON-ENG: 6.5* - 5* - 3.5

*Avialibility to be confirmed

IPD/FDA-Custom Interface Tol3

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

These can be find when scroling down onto the wizard



Custom **ASC** Ti-Base

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

01 → Non-Engaging Scan Body

Gingival height*

Low - Mid - High - Extra

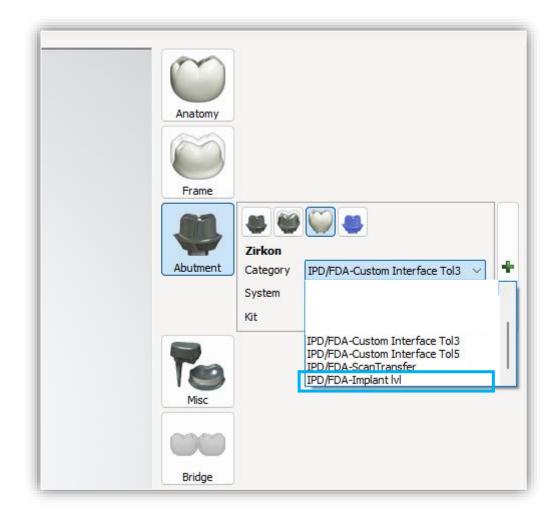
* Available hights may differ depending on implant system



Category

(ipd)Dental Group

IPD/FDA - Implant lvl: Implant level libraries
(at implant connection without abutment)



Implant Level

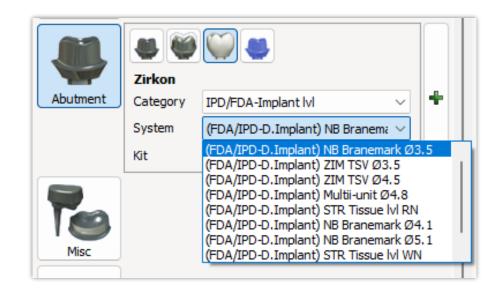


System



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

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







Kit



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

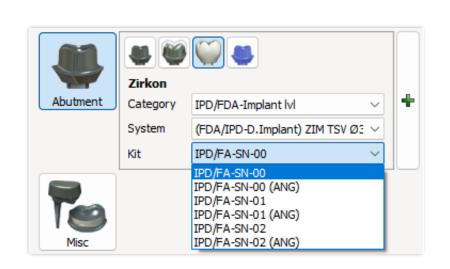
When using Implant Direct library, after the Scan Abutment code will be finding additional values as per Ti-base features



Eng/Non Eng

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



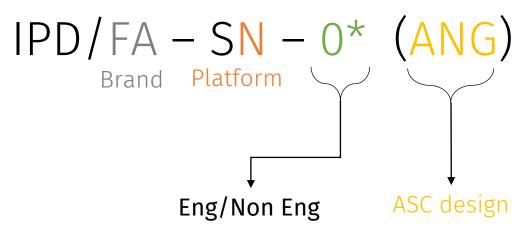






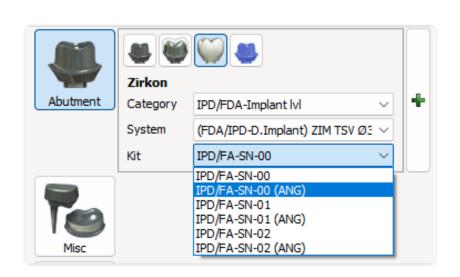
For those cases needing from ASC design, select the relevant "ANG Library".

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





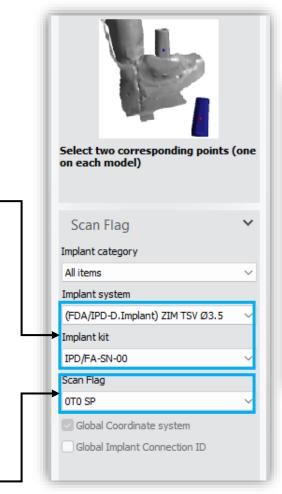
Make sure Implant System and kit are matching with the Order Form selection.

* Important Advice:

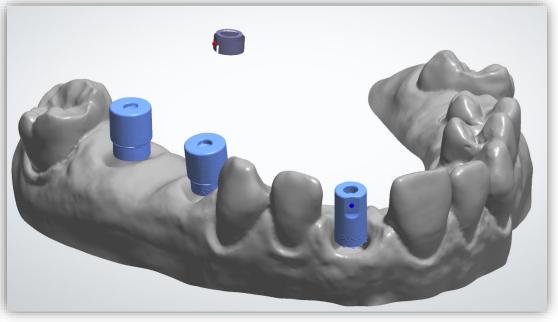
Even modifying selection, changes won't be applied by 3shape to the actual design. Any required change into library selection needs to be mandatorily driven through the Order Form.

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

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







Back

Library alignment

Scan Abutment Tolerance tool

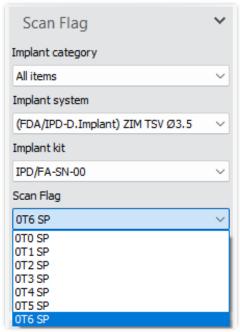
This tool is dedicated to improve the accuracy of CAD alignment. The industry standard is to provide the STL of each Scan Abutment found in a CAD library under its physical measurement, while each scanning device, for different reasons, is leading to a certain degree of oversizing by default.

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.



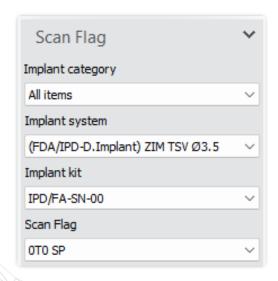


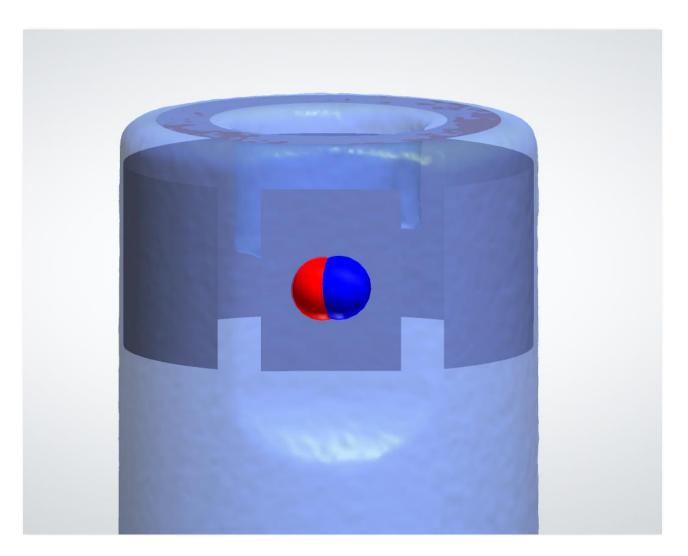
- T0 Std STL (= physical dimension)
- T1 Std STL + 10 microns
- T2 Std STL + 20 microns
- T3 Std STL + 30 microns
- T4 Std STL + 40 microns
- T5 Std STL + 50 microns
- ▶ **T6** Std STL + 60 microns





Alingment using "T0" Tolerance

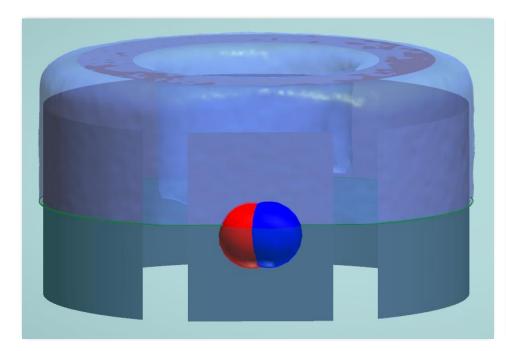


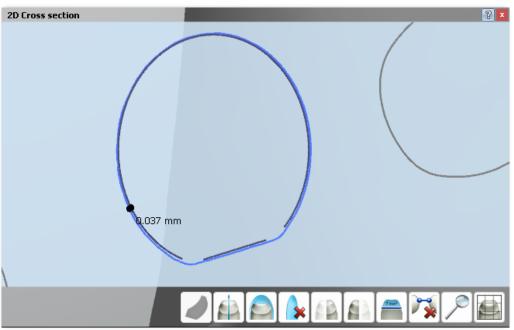






Using the "2D Cut" to evaluate dimensional discrepancy



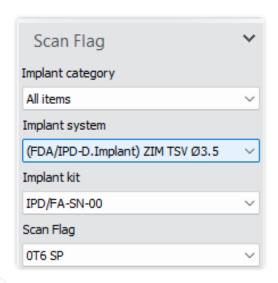


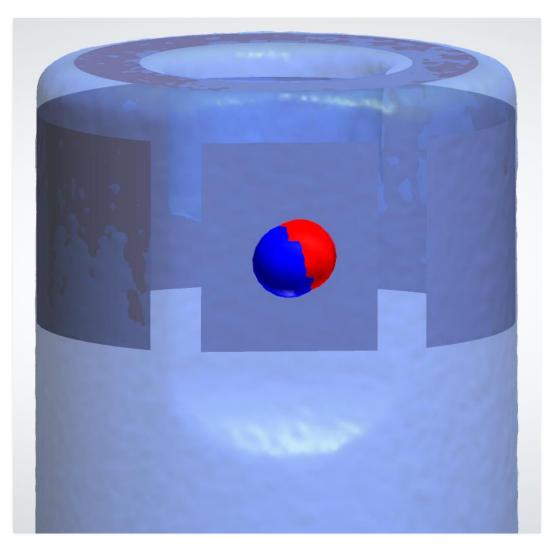






Alingment using "T6" Tolerance

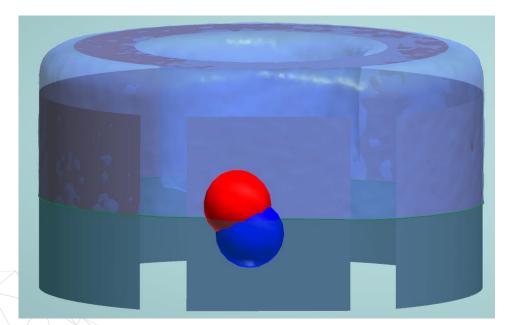


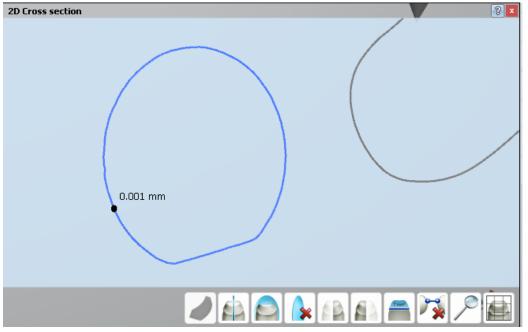






Using the "2D Cut" to evaluate dimensional discrepancy





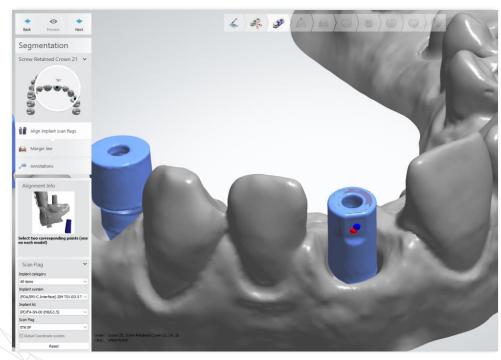


ASC Guidance



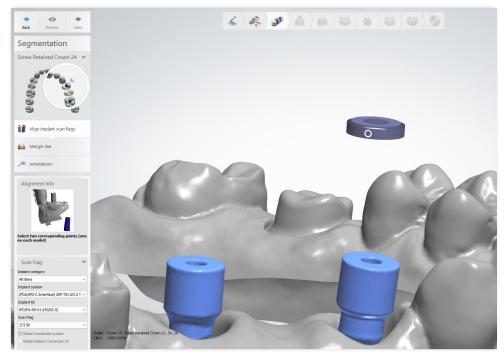
ASC Design – Guiding the screw channel

When usign 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.



(ipd) Dental Group

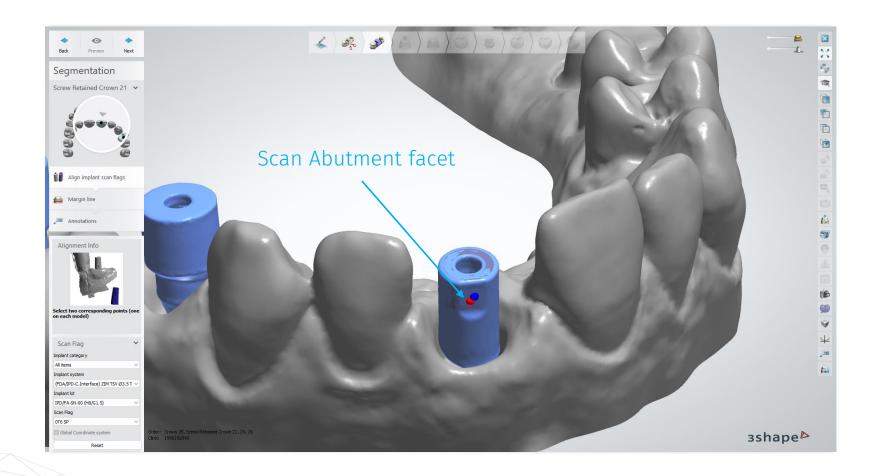
ASC Guidance

Engaging

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

* Advice:

Despite 3Shape enables to virtualy 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.

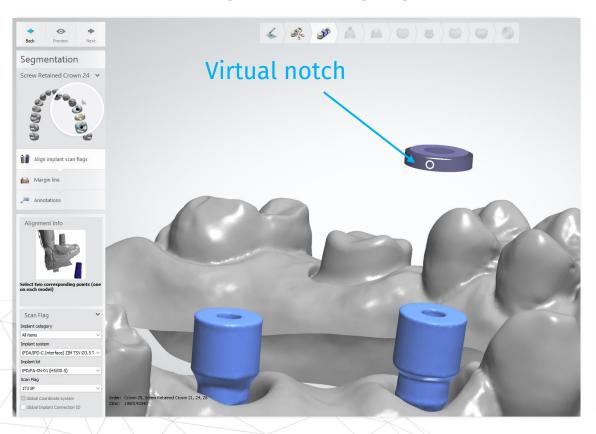


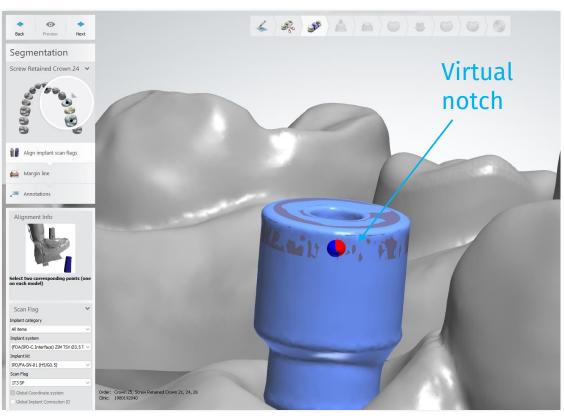
(ipd) Dental Group

ASC Guidance

Non-Enagaging

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





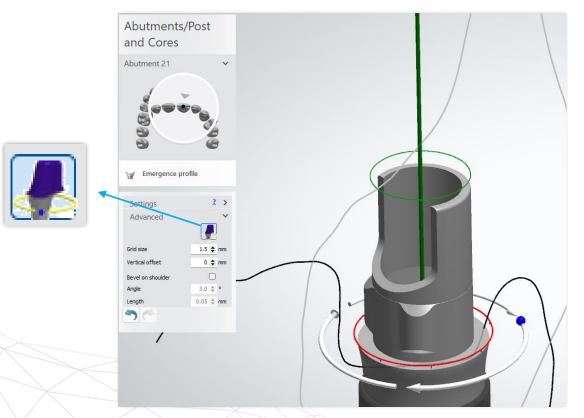


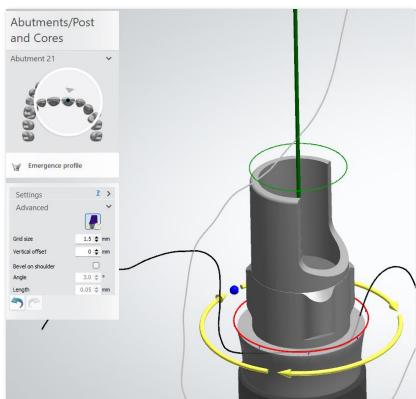


ASC Ti-base Guidance

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.







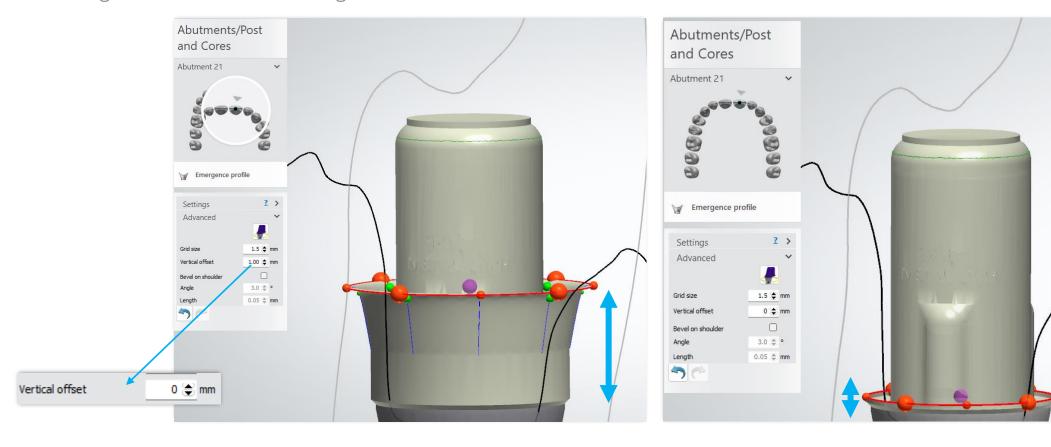


Emergence profile design

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.



Scan Transfer













Category



IPD/FDA - ScanTransfer:

Dedicated Scan Transfer Libraries

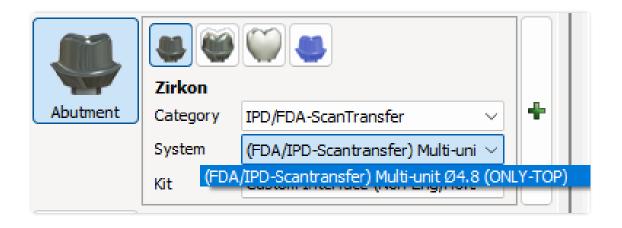








After selecting "IPD/FDA-ScanTransfer" category, choose the only option available in "System" dropdown menu.



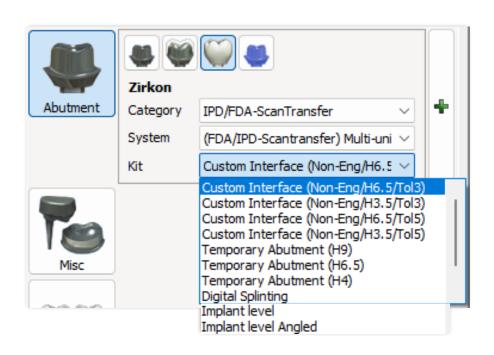






Each of the supported options will be shown as follows:

- 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)





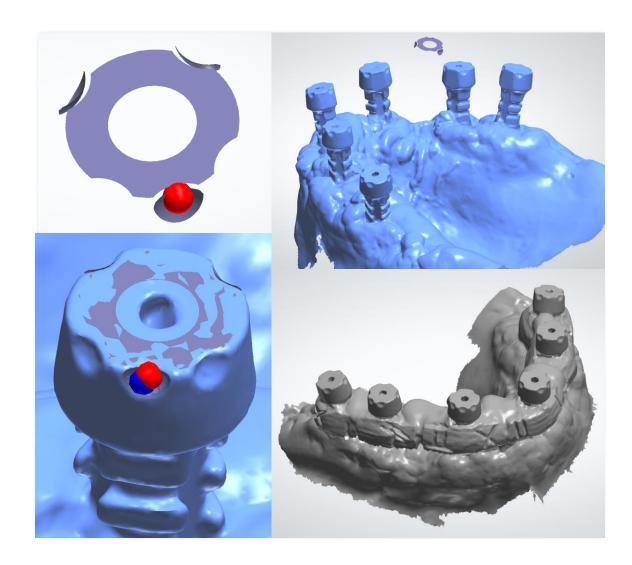
Back to Library types

Dental Group

Library alignment

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

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



Scan **Transfer**

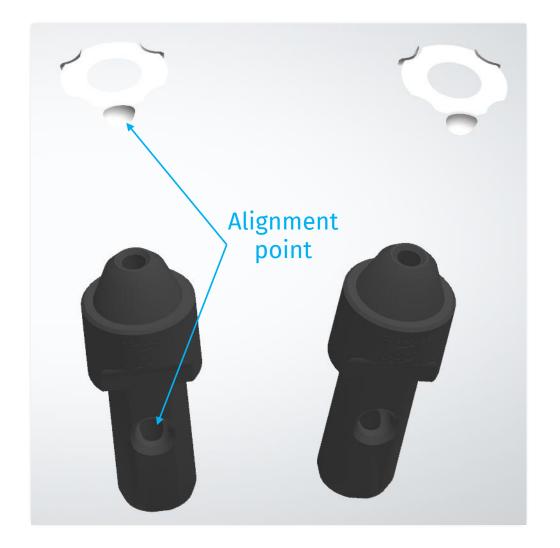


On the Scan Transfer library, guidance of the side screw channel facing matches with the alignment point.

* 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:





