

**OSSTEM**<sup>®</sup>  
IMPLANT

# Osstem Digital Library



Online Dealer Seminar  
April 2023

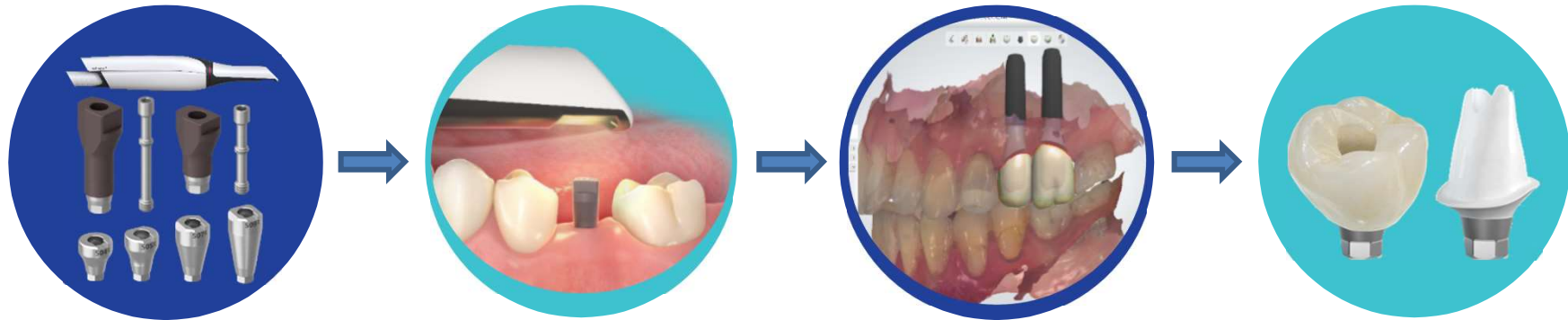
# Library Availability

Scan Target  
Design Target

TS	KS	SS	US
Scan Body (2 <sup>nd</sup> gen.)	Scan Body (2 <sup>nd</sup> gen.)	Scan Body (2 <sup>nd</sup> gen.)	Scan Body (2 <sup>nd</sup> gen.)
Transfer, Angled Premilled, Link	Transfer Premilled, Link	ComOcta/Plus Premilled, Link	Cement Premilled
Scan Body (3 <sup>rd</sup> gen.)	Scan Body (3 <sup>rd</sup> gen.)	Stock Abt.	Stock Abt.
Transfer, Angled Premilled, Link	Transfer, Angled Premilled, Link	ComOcta ComOcta Plus	Cement
Scan Healing Premilled	Stock Abt. Transfer		
Link & Multi Scan Link, MU, MU-Ti			
Stock Abt. Transfer			

3shape   
exocad

## General Digital Workflow



### Digital Components

Scan body is connected to the implant

Scan body is connected to a stone model

### Scan

Intraoral scan

Model scan

### CAD Design

Scan data is merged with library data  
→ final restoration is designed

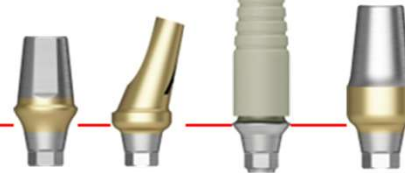
### Fabrication

Final restoration is milled

# Digital vs. Analog Crown Design

## Analog Crown Design

Stock abutment

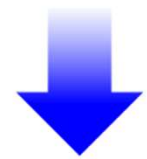


Based on the technician's experience,  
Abutments are selected on a stone model

**: Large selection/relying on stone model → Very difficult to select the optimal abt.**



Labside  
Digital



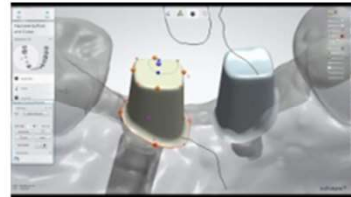
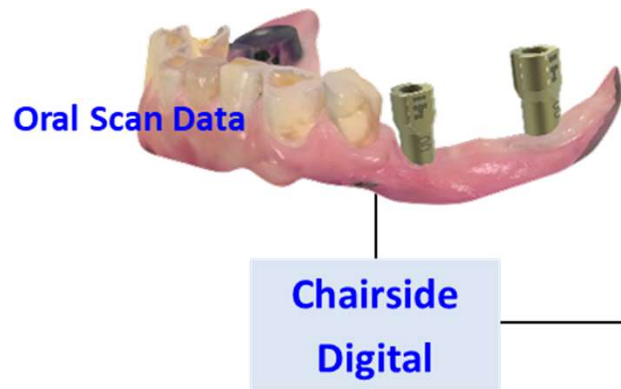
Custom abutment



**Scan a stone model → Optimal Abt. is selection & crown design in CAD SW**

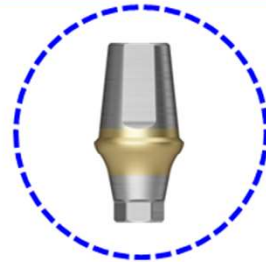
# Model-less Prosthesis

## \*Model-less Crown Fabrication



Scan Data; no stone model (Model-less)

Stock abutment



Custom Abut

Abt. selection & Crown design

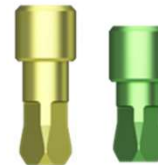
\*Digital Working Model



→ \*Digital Working Model is needed to check accuracy

→ \*Digital Lab Analog is used

\*Digital Lab Analog



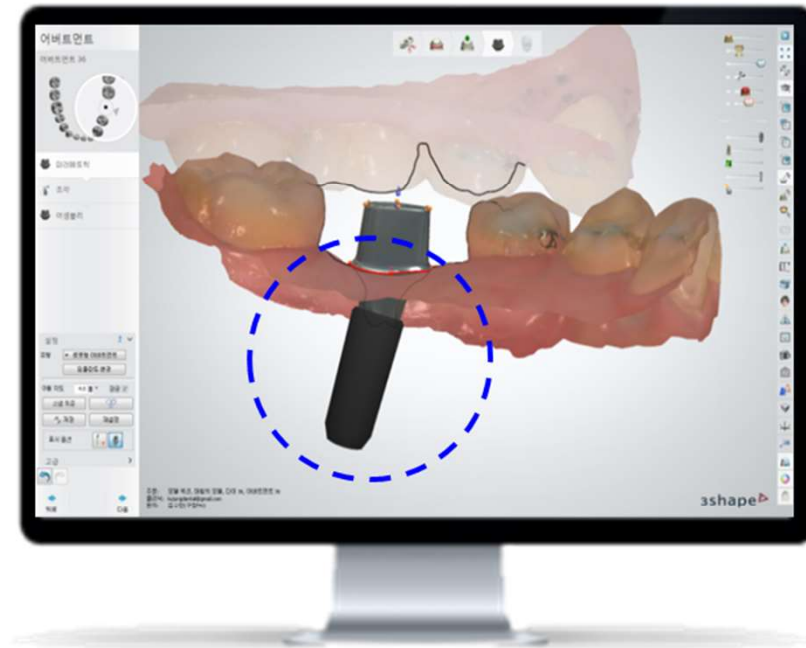
# Scan Body

Information need for Crown design on CAD S/W → **Implant Position (depth, angle, etc.)**



Intraoral scanner scans surface

→ Can't scan implant



Designed required scan data

→ Implant position info required

# Scan Body

**Scan Body is connected to Implant,  
Provide Implant Path, Angle, Depth for Scanning**

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Impression Coping



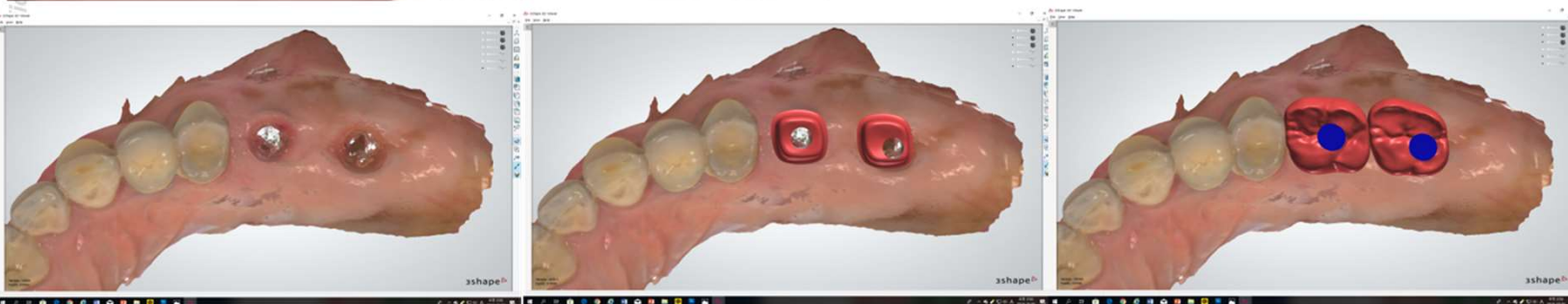
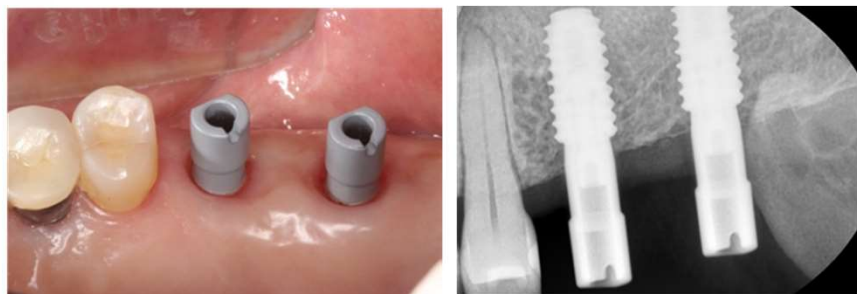
Scan Body



✓ Oral Scanning → Digital Impression

✓ Scan body → Digital Impression Coping

# Example

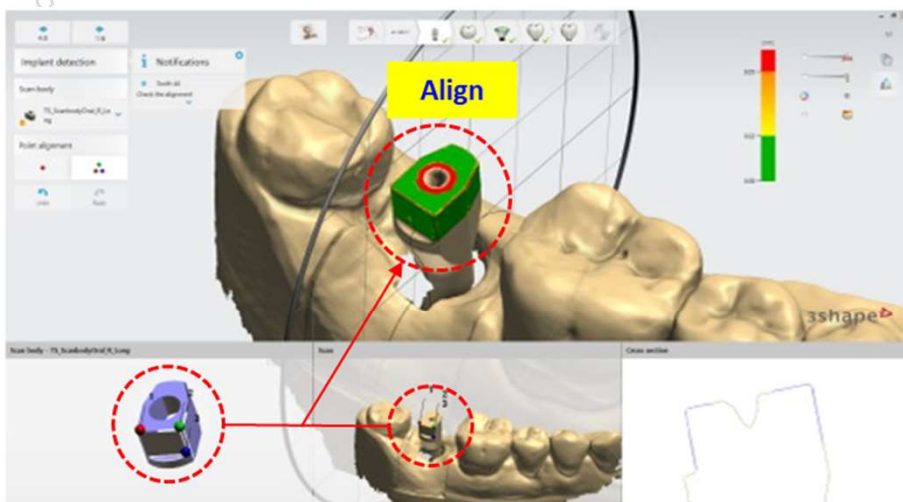


Zirconia (Final) Crown  
PMMA (Provisional) Crown

# What Is Library?

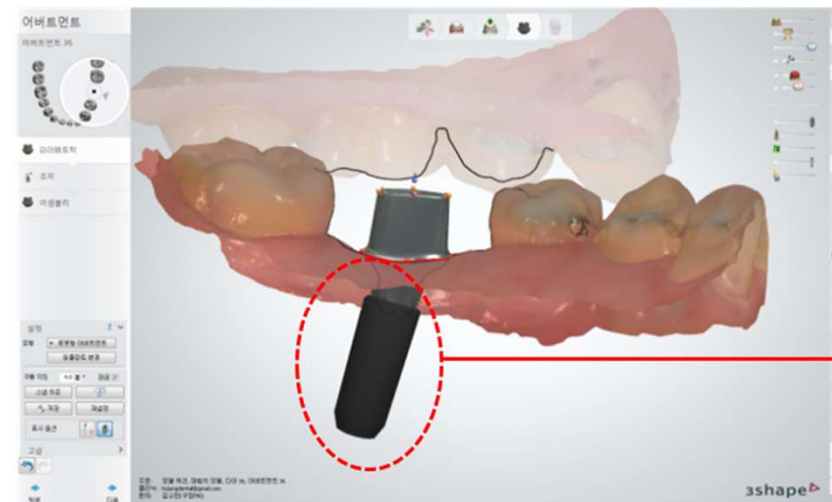
**"3D Modeling File"** that reproduces Implant position(coordinate) in CAD S/W, together with the scan data acquired by using Scan Body, Scan Healing

**\*Accurate aligning of Scan body and Library data is important!**

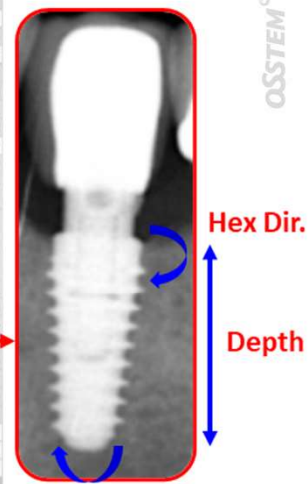


**Library**  
(=actual product)

**Scan data**



**Reproduce Implant Position**



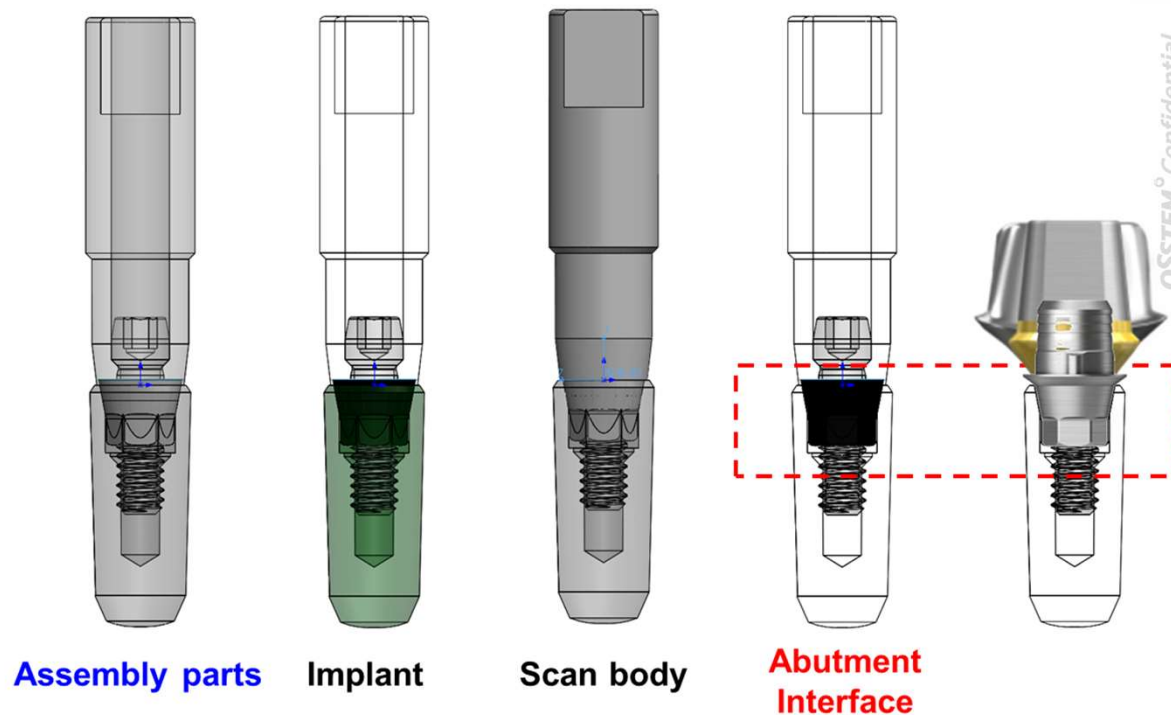
**Angle**

## What Is Library?

**\*Library = 3D Modeling File (Scan Body + Implant + Abutment interface)**

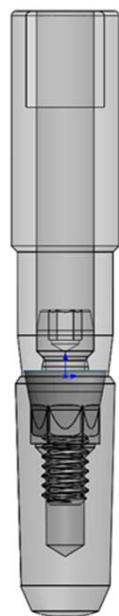
- Scan Body & Implant are connected as one
- Scanning Scan Body provides Implant Position
- Implant positioning dictates Abt. position
- An identical structure for all Abt. is Abutment interface

→ Using a scan data of Scan Body to retrieve Implant position!

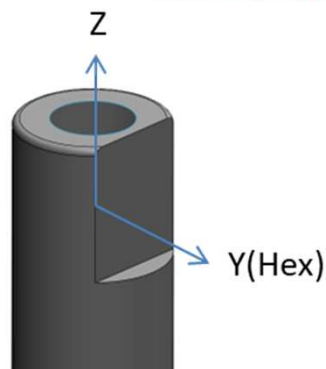


## What Is Library?

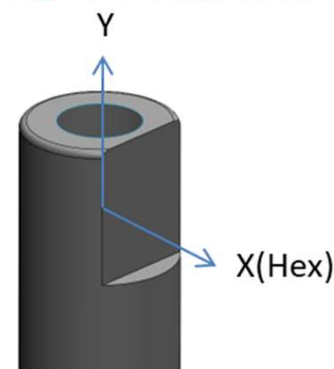
- ✓ Library is a 3D combination of - (1) Scan Body, (2) Implant, and (3) Abutment Interface.”  
→ Individual Abutment Library is needed
- ✓ Different CAD SW file extensions → Different CAD SWs require different library files



Library file



File format : **dme**



File format : **config**



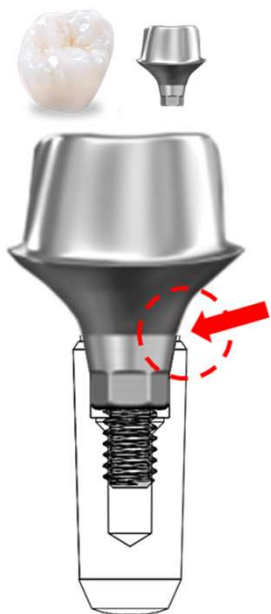
Confidential



# What Is Library?

Library dictates Crown fabrication starting point. Different Abt. have different starting point

→ Different Libraries are needed



Custom abutment  
→ Abutment body +  
Crown design



Link abutment  
→ Abutment body +  
Crown design



Transfer abutment  
→ Crown design



Ti Base for Multi  
abutment  
→ Crown design

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## Osstem Library by S/W

	3Shape	EXOCAD	Dental Wings
<b>Import Method</b>	Control Panel Tools→Import/Export	EXOCAD/DentalCADApp/library/ Implant/ & modelcreator/	Implant Kits → Import Implant Kits
<b>File Extension</b>	DME (compressed)	Folder (including Config file)	ipflib, Zip
<b>DLA Library</b>	Included	Included	Included
<b>Important Notes</b>	Library <b>CAN'T BE IMPORTED</b> to the S/W version older than <b>2018</b>	<b>Folder name should NEVER be changed</b>	-

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## Library Name Structure

Company	System	Source (Scanned product)		Target (Abutment used)		Version	
<b>Osstem</b>	<b>System</b>	<b>Scan body</b>		<b>Custom Abt.</b>		<b>Version</b>	
OST/OSSTEM	TS	SB	(Old) Scan body	CU	Customized Abt.	V1	Product Version 1
		SBO	New Scan Body	<b>Link Abt.</b>		V2	Product Version 2
	SS	LinkSB	Link Scan body (Link Abt. S.B)	LI	Link Abt		
	US	MultiSB	Multi Scan body (Multi Abt. S.B)	<b>Stock Abt.</b>			
	KS	<b>Scan Healing</b>		TR	Transfer Abt.	<b>Revision</b>	
		SH	Scan Healing	AN	Angled Abt.	R0	Initial Library File
		<b>Stock Abt.</b>		Mu-Ti	Multi Ti-Base	R1	Library Revision 1 <sup>st</sup>
		TR	Transfer Abt.	RI	Rigid Abt.	R2	Library Revision 2 <sup>nd</sup>
		RI	Rigid Abt	SO	Solid Abt.		
		SO	Solid Abt	CO	ComOcta Abt.		
		CO	ComOcta Abt.	CP	ComOcta Plus Abt.		
		CP	ComOcta Plus Abt.	CE	Cement Abt.		
		CE	Cement Abt.				
OST	TS/SS/US/KS	SB/SH/TR/...		CU/LI/TR/...		V1/V2..., R0/R1...	

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Importing Osstem Library

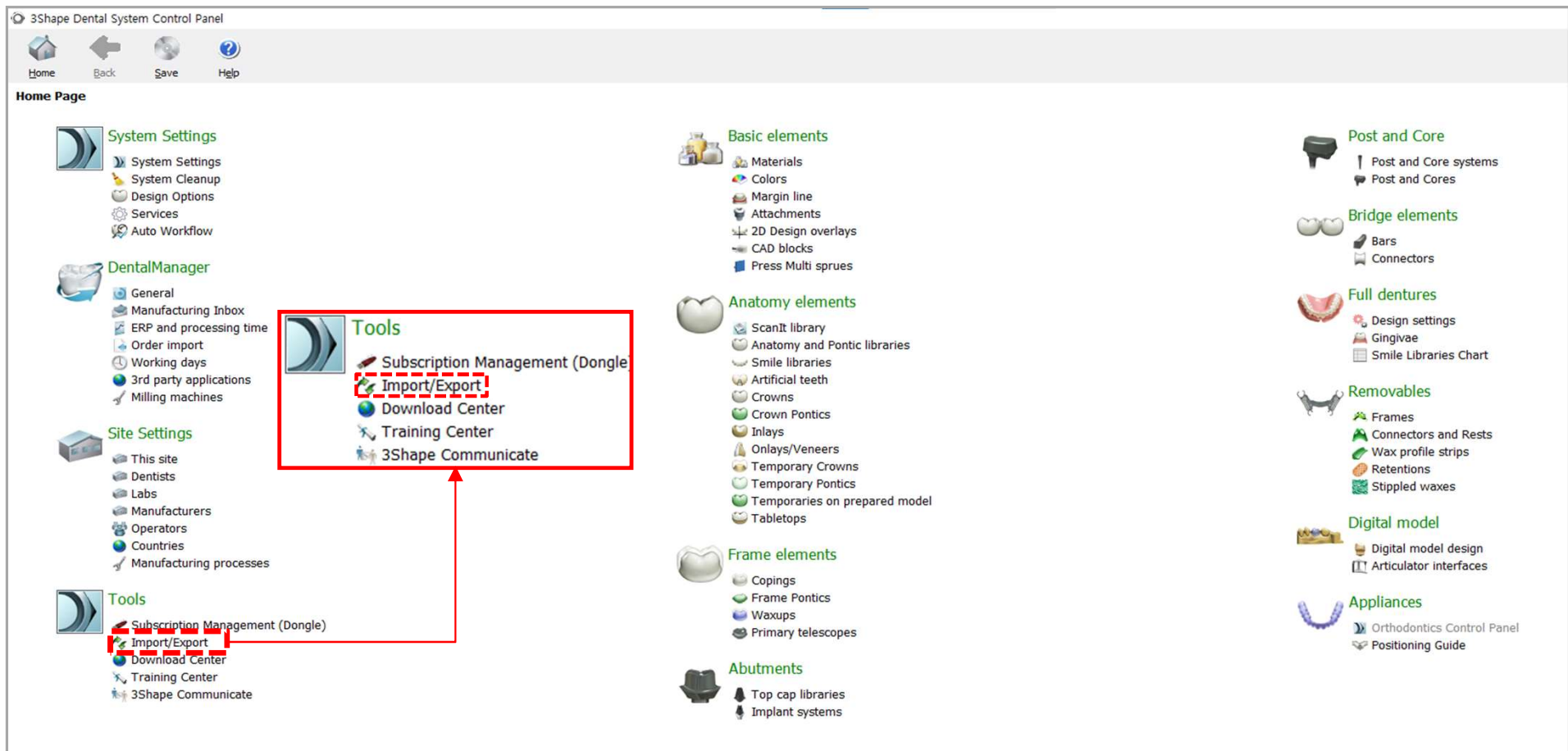
3shape 

exocad

 dental wings

## 3Shape

① Click  , Launch "3Shape Control Panel" → In "Control Panel", click **Import/Export**



3Shape Dental System Control Panel

Home Back Save Help

Home Page

- System Settings**
  - System Settings
  - System Cleanup
  - 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**

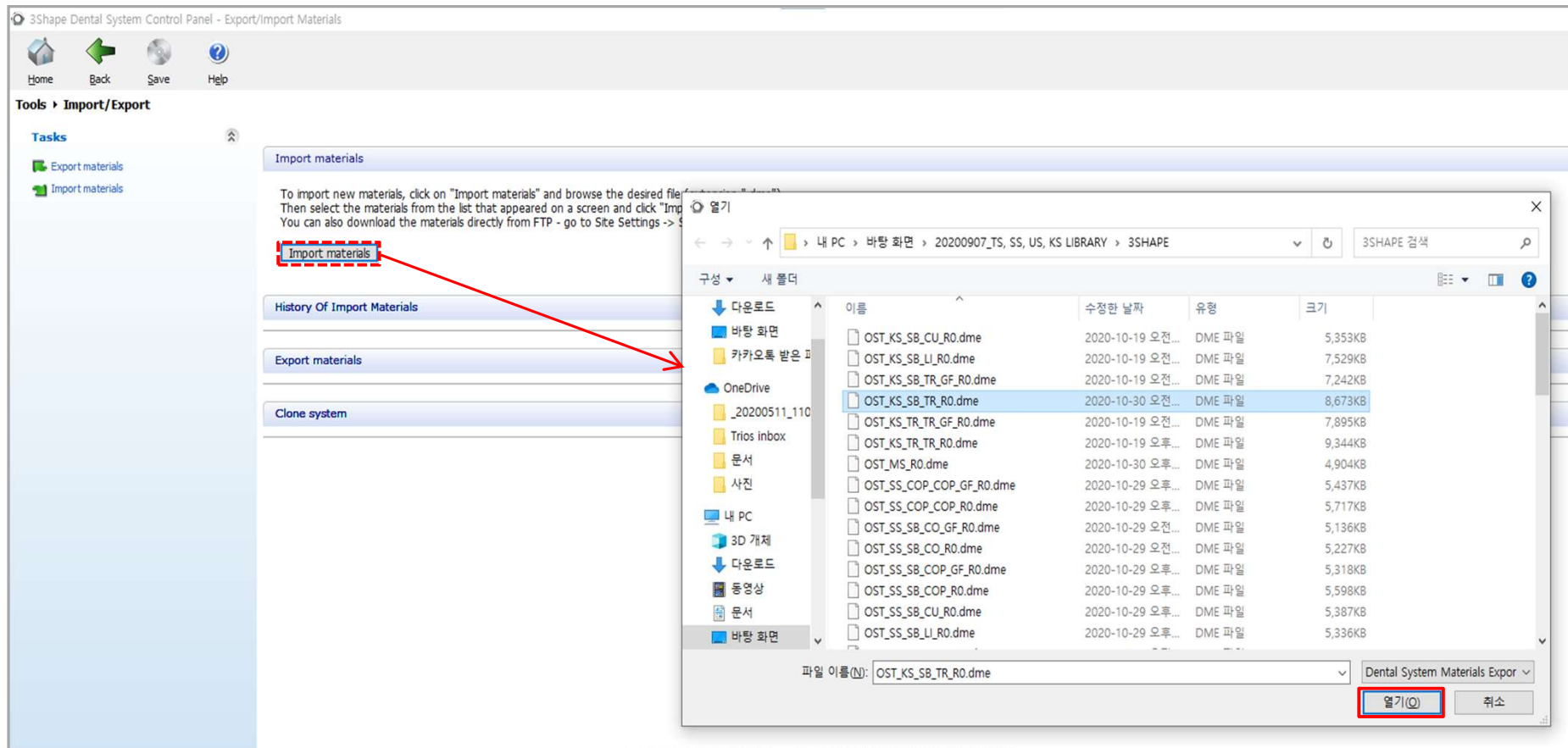
- Digital model design
- Articulator interfaces

**Appliances**

- Orthodontics Control Panel
- Positioning Guide

## 3Shape

② Click **Import materials** → Choose the library you want to add, Click **Open**



## 3Shape

### ③ Click **Import**

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
  - Articulator interfaces
  - Colors
  - Digital model design
  - Implant systems
  - Materials
  - Sites

Library name  
OST\_KS\_SB\_TR

Provider  
OSSTEM Implant

Library type  
Implant library

Version  
R0

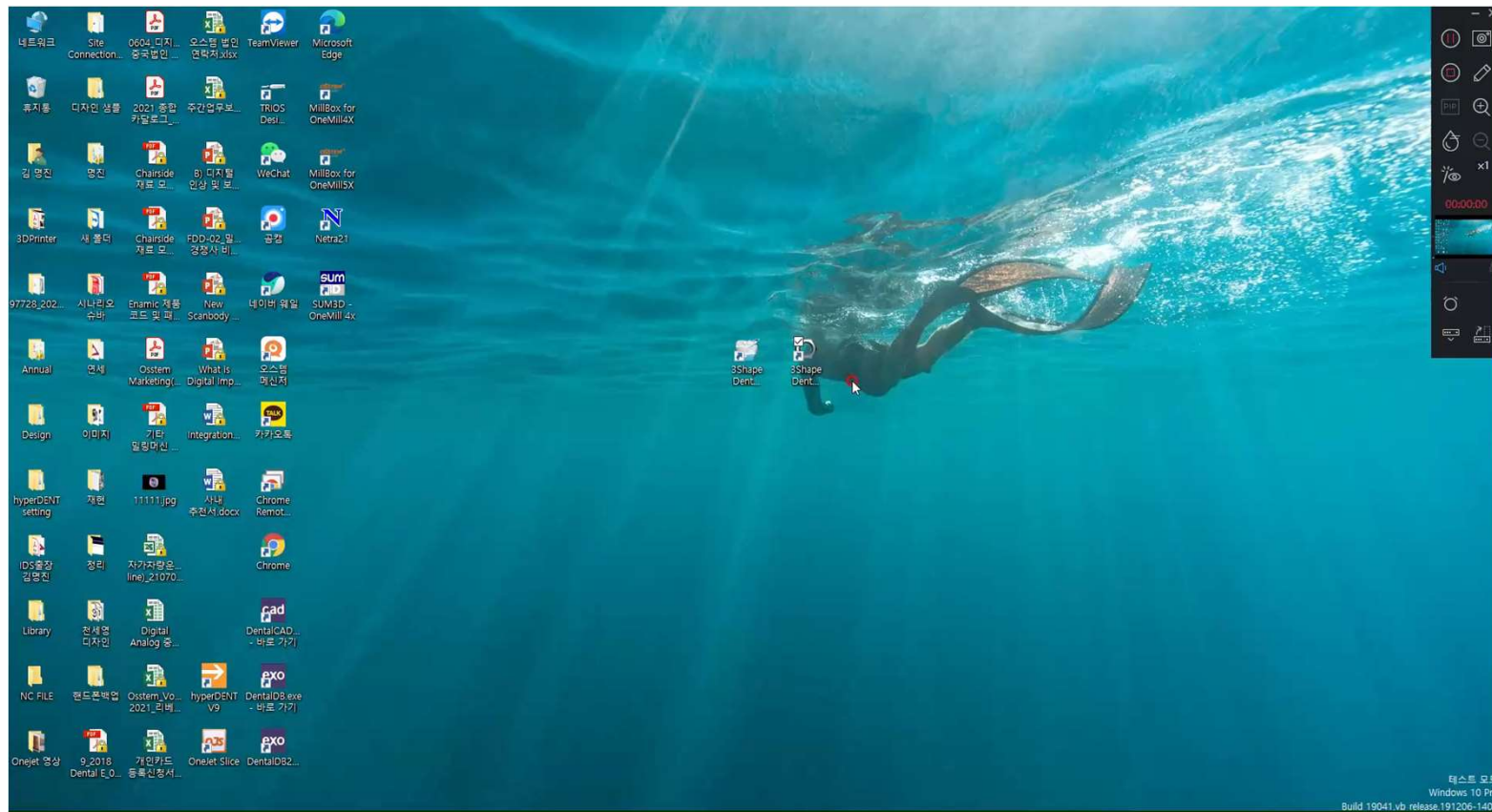
Library creation date  
2020-10-30

Description  
OST\_KS\_SB\_TR\_20201030

**Import** Cancel

## 3Shape

### ➤ Import Library(Video)



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## Exocad

① EXOCAD Library Import → Adding **Osstem library folder** under a specific Exocad folder

✓ Library Default Location: `exocad-DentalCAD-64Bit-2018-03-21_korea_2 > DentalCADApp > library > implant >`  
**EXOCAD/DentalCADApp/library/implant**

Osstem Library

이름	수정된 날짜	유형
OST_COMPANY_TS(SYSTEM)_SB(INP...	2021-05-24 오전 9:57	파일 폴더
OST_KS_SB_CU	2021-02-26 오후 5:07	파일 폴더
<input checked="" type="checkbox"/> OST_KS_SB_LI	2021-02-26 오후 5:07	파일 폴더
OST_KS_SB_TR	2021-02-26 오후 5:07	파일 폴더
OST_KS_TR_TR	2021-02-26 오후 5:08	파일 폴더
OST_MS	2021-02-26 오후 5:08	파일 폴더
OST_SS_CO_CO	2021-02-26 오후 5:08	파일 폴더
OST_SS_COP_COP	2021-02-26 오후 5:08	파일 폴더
OST_SS_SB_CO	2021-02-26 오후 5:08	파일 폴더
OST_SS_SB_COP	2021-02-26 오후 5:08	파일 폴더
OST_SS_SB_CU	2021-02-26 오후 5:08	파일 폴더
OST_SS_SB_LI	2021-02-26 오후 5:08	파일 폴더
OST_TS_LinkSB_LI_V1	2021-02-26 오후 5:08	파일 폴더
OST_TS_MultiSB_MU	2021-03-24 오후 3:57	파일 폴더
OST_TS_MultiSB_Mu-Ti	2021-06-23 오전 10:37	파일 폴더
OST_TS_SB_AN	2021-02-26 오후 5:08	파일 폴더
OST_TS_SB_CU	2021-02-26 오후 5:08	파일 폴더
OST_TS_SB_LI_V1	2021-02-26 오후 5:08	파일 폴더
OST_TS_SB_LI_V2	2021-02-26 오후 5:08	파일 폴더
OST_TS_SB_MU	2021-02-26 오후 5:08	파일 폴더

Copy/Paste



EXOCAD Library(folder)

이름	수정된 날짜	유형	크기
OSSTEM_TS_SB to Custom_R0	2020-05-19 오전...	파일 폴더	
OST_TS_LinkSB_LI_V1	2020-09-21 오후...	파일 폴더	
새 폴더	2020-05-19 오전...	파일 폴더	

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## Exocad

② EXOCAD library requires separate import(folder) for Implant Library & Model Library(DLA)

★ Warning : Do Not Change Folder or File Name ★

Implant Library

이름	수정된 날짜	유형
OST(COMPANY)_TS(SYSTEM)_SB(INP...	2021-05-24 오전 9:57	파일 폴더
OST_KS_SB_CU	2021-02-26 오후 5:07	파일 폴더
<input checked="" type="checkbox"/> OST_KS_SB_LI	2021-02-26 오후 5:07	파일 폴더
OST_KS_SB_TR	2021-02-26 오후 5:07	파일 폴더
OST_KS_TR_TR	2021-02-26 오후 5:08	파일 폴더
OST_MS	2021-02-26 오후 5:08	파일 폴더
OST_SS_CO_CO	2021-02-26 오후 5:08	파일 폴더
OST_SS_COP_COP	2021-02-26 오후 5:08	파일 폴더
OST_SS_SB_CO	2021-02-26 오후 5:08	파일 폴더
OST_SS_SB_COP	2021-02-26 오후 5:08	파일 폴더
OST_SS_SB_CU	2021-02-26 오후 5:08	파일 폴더
OST_SS_SB_LI	2021-02-26 오후 5:08	파일 폴더
OST_TS_LinkSB_LL_V1	2021-02-26 오후 5:08	파일 폴더
OST_TS_MultiSB_MU	2021-03-24 오전 3:57	파일 폴더
OST_TS_MultiSB_Mu-Ti	2021-06-23 오전 10:37	파일 폴더
OST_TS_SB_AN	2021-02-26 오후 5:08	파일 폴더
OST_TS_SB_CU	2021-02-26 오후 5:08	파일 폴더
OST_TS_SB_LL_V1	2021-02-26 오후 5:08	파일 폴더
OST_TS_SB_LL_V2	2021-02-26 오후 5:08	파일 폴더
OST_TS_SB_MU	2021-02-26 오후 5:08	파일 폴더

✓ Import Location :  
EXOCAD/DentalCADApp/library/implant

Model Library (Digital Lab Analog)

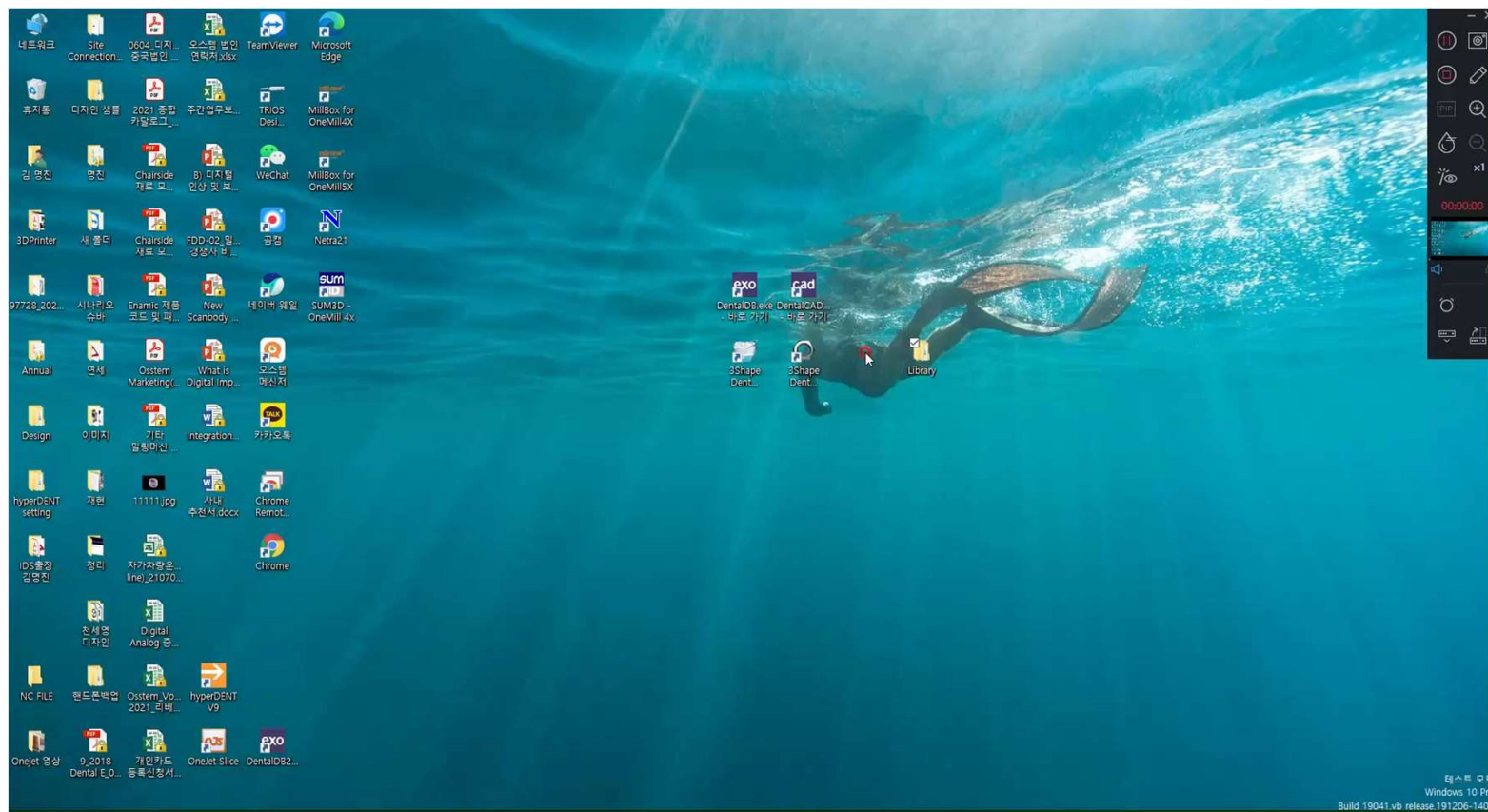
OST_KS_DLA_V1
OST_SS_DLA_V1
OST_TS_DLA_V1
OST_TS_Multi_DLA_V1
OST_US_DLA_V1

✓ Import Location:  
EXOCAD/DentalCADApp/library/modelcreator/implant

\*Old/New Scan Body are included together,  
simply proceed to import

## Exocad

### ➤ Import Library(Video)

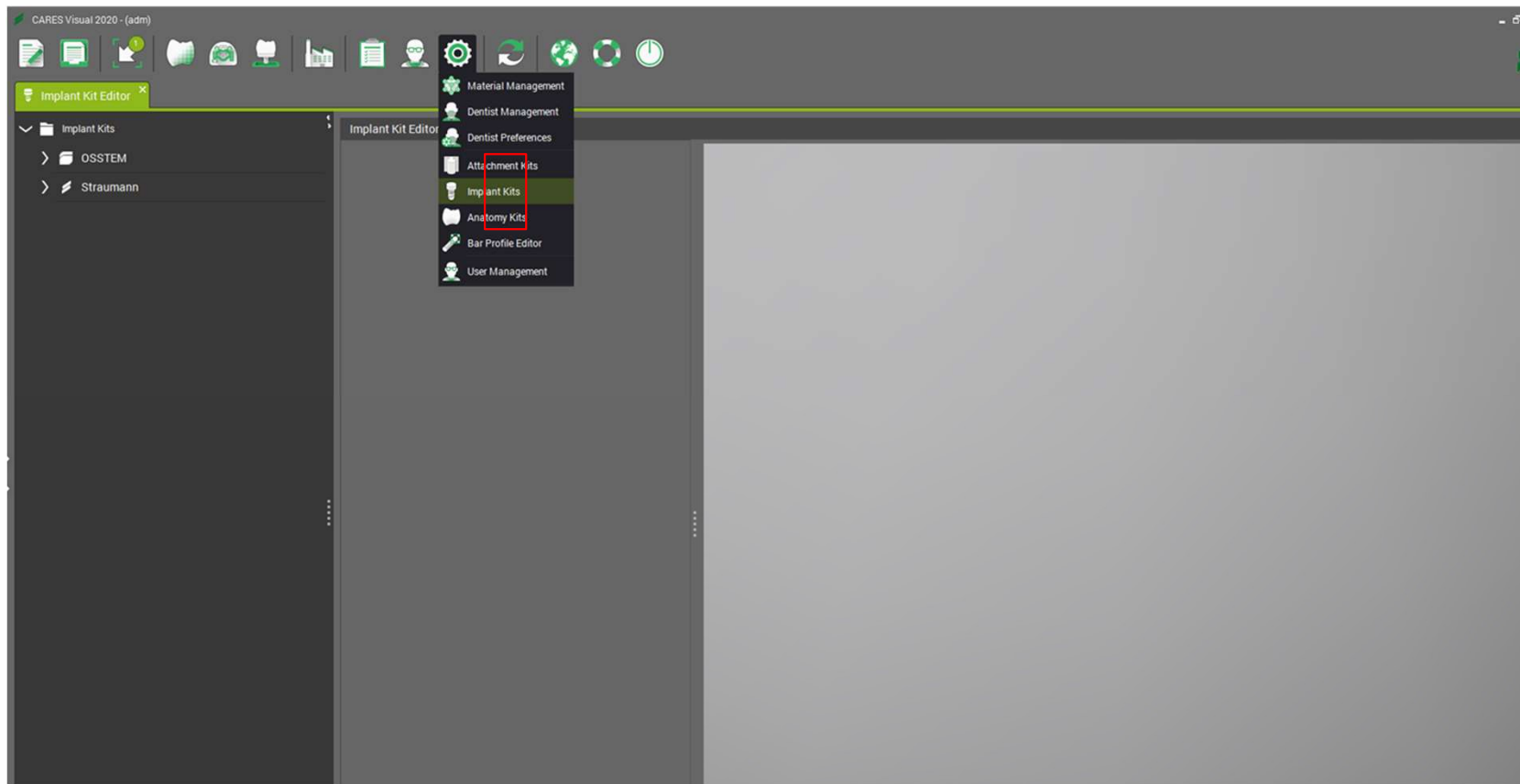


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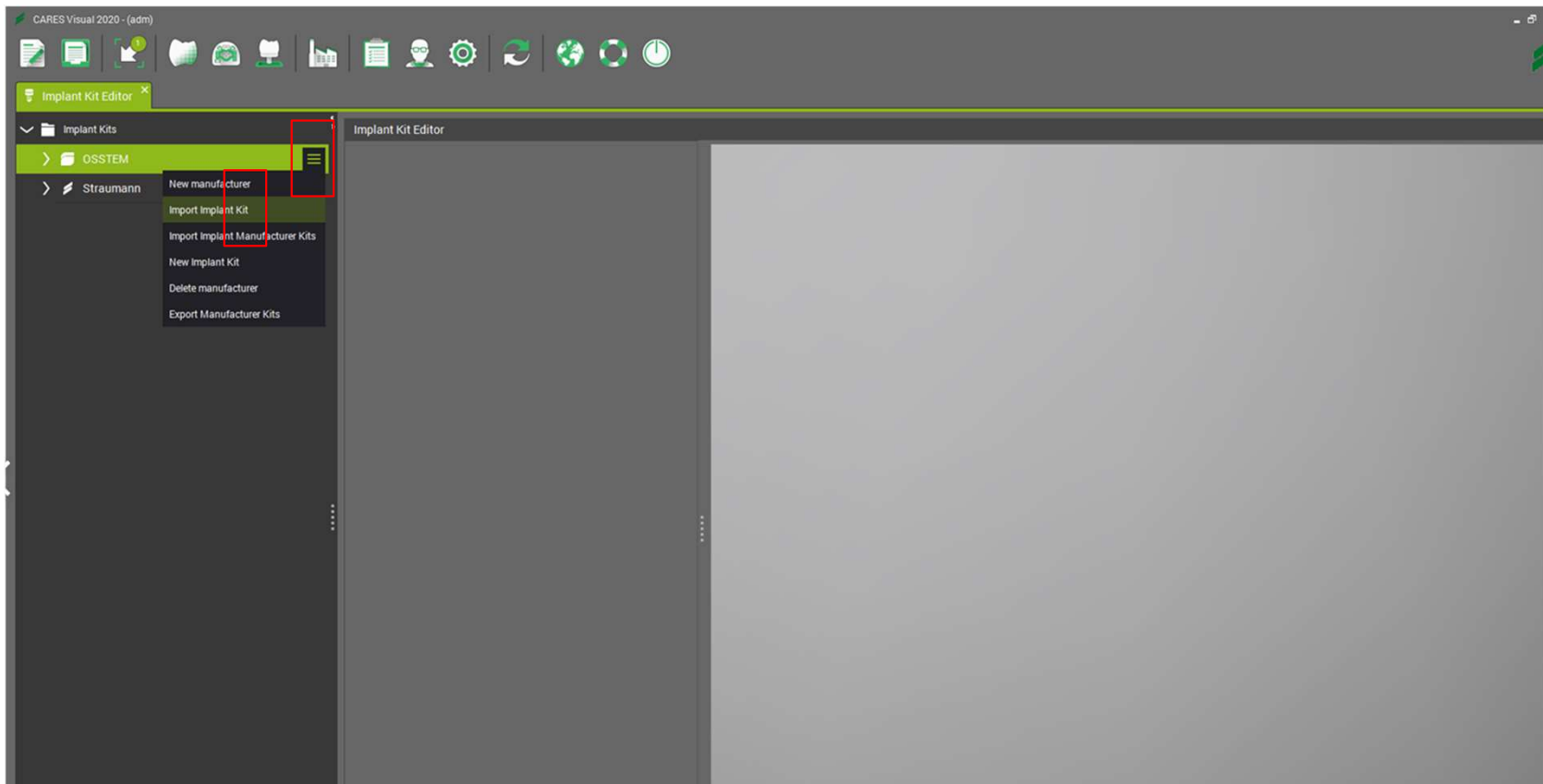
## Dental Wings

- ① Launch Dental wings Program, click **gear icon** → Click **"Implant Kits"**



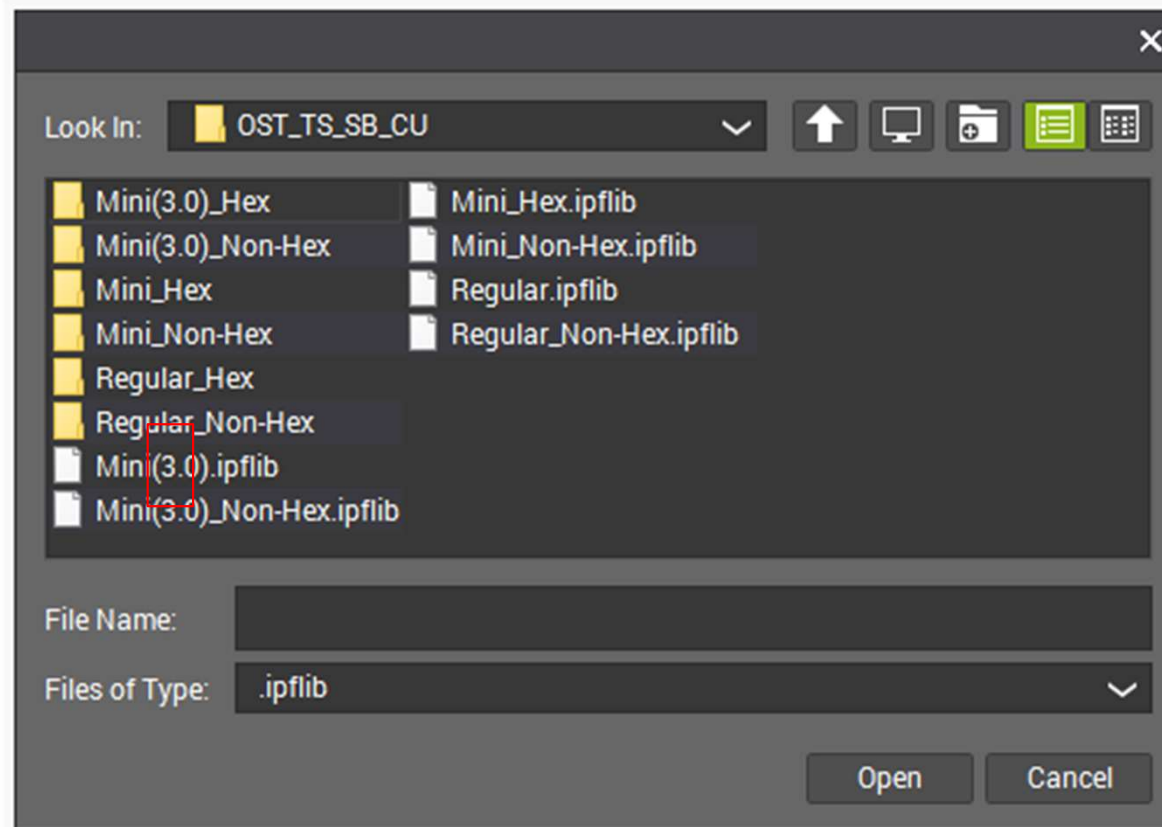
## Dental Wings

② Click  icon → Click **“Import Implant Kit”**



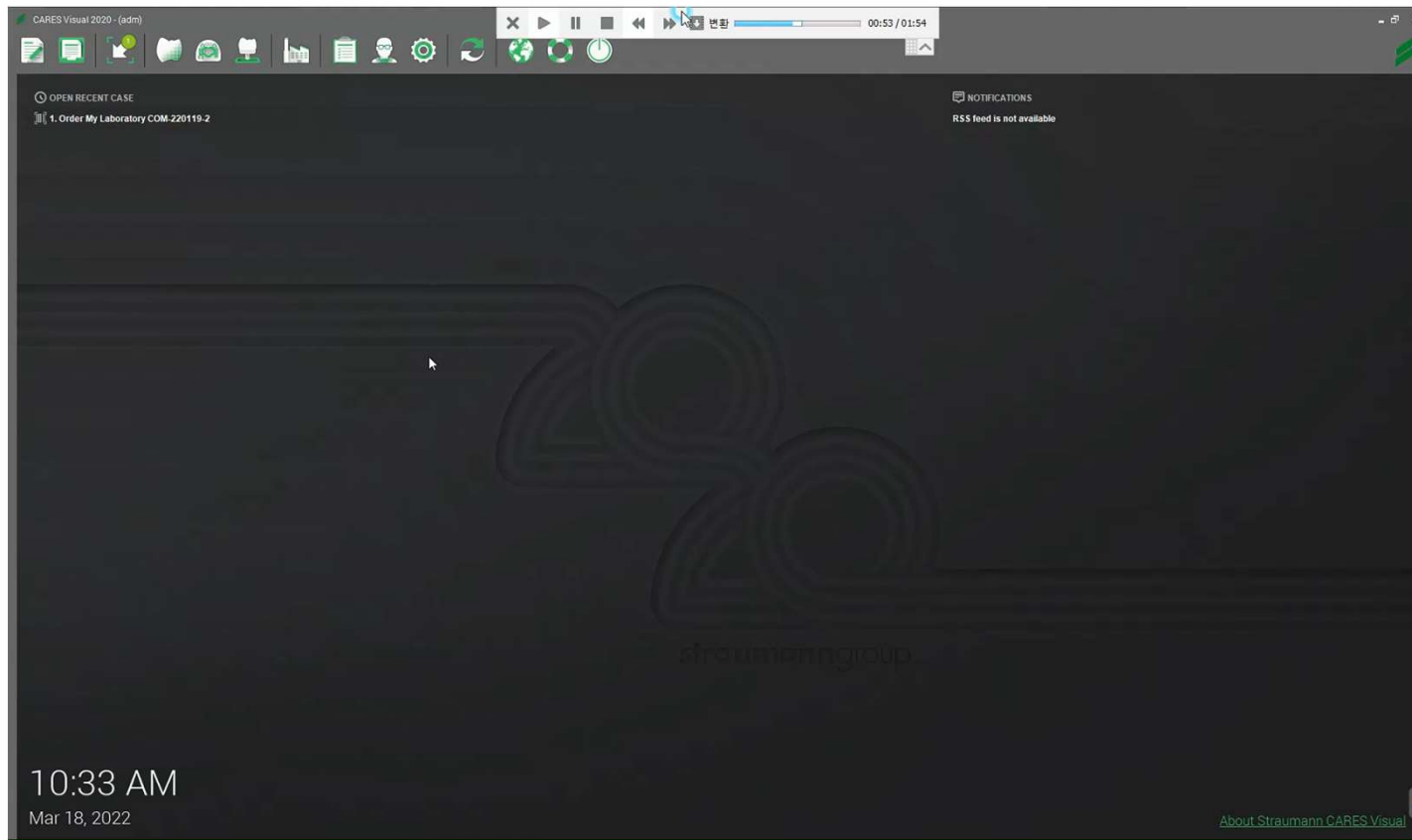
## Dental Wings

- ③ Choose **the library (.ipflib) file you want to add, click Open**



## Dental Wings

### ➤ Import Library(Video)

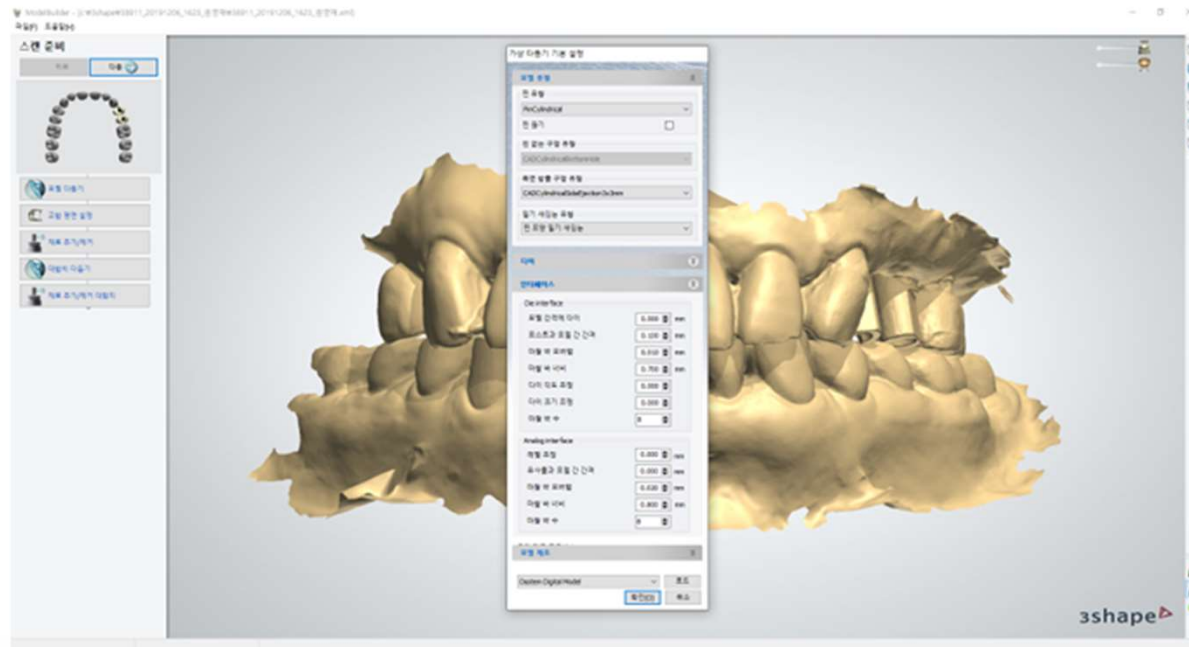


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# Digital Lab Analog Workflow (3shape)

3shape  : Model Bulider

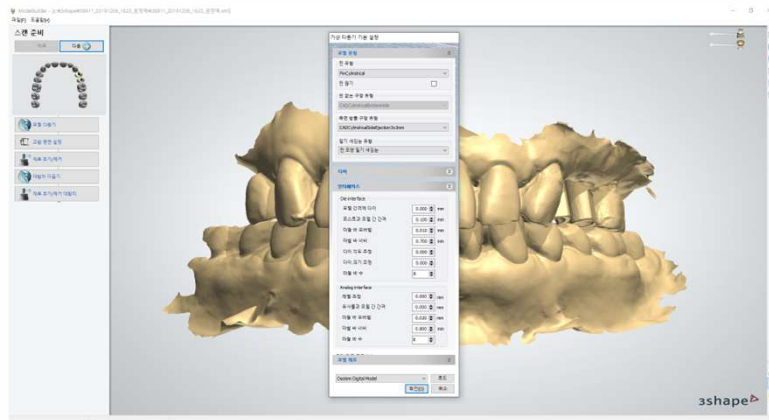


## 1. Digital Lab Analog Softwares

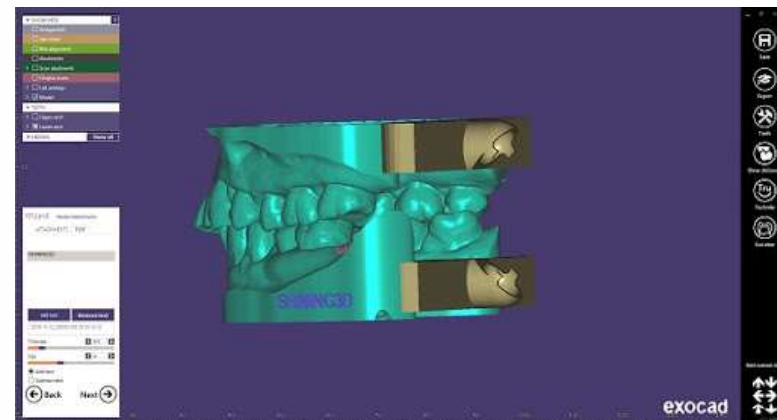
1) Check CAD SW → **3Shape / Exocad /**

2) Check CAD SW Digital Model Design Fuction

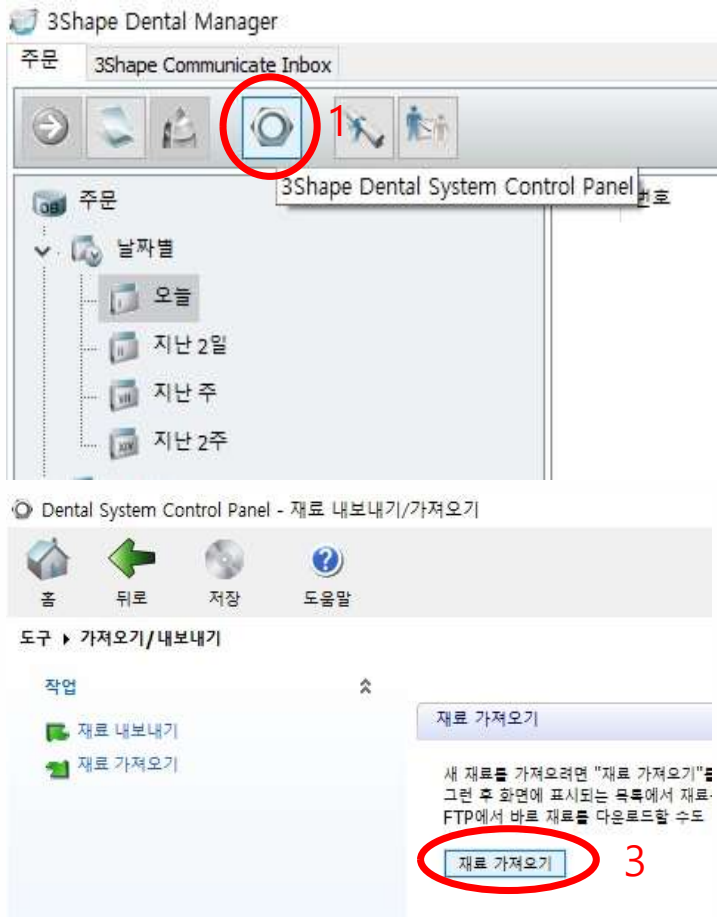
**3shape** : Model Bulider



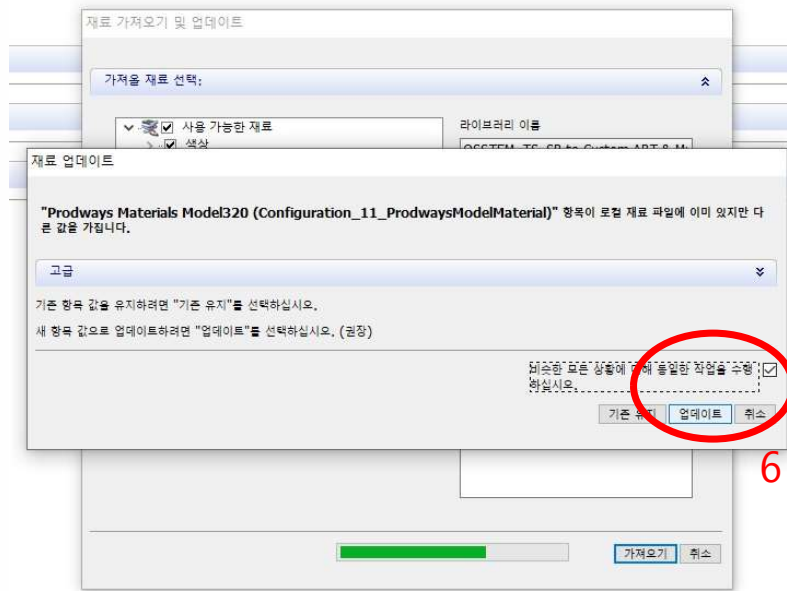
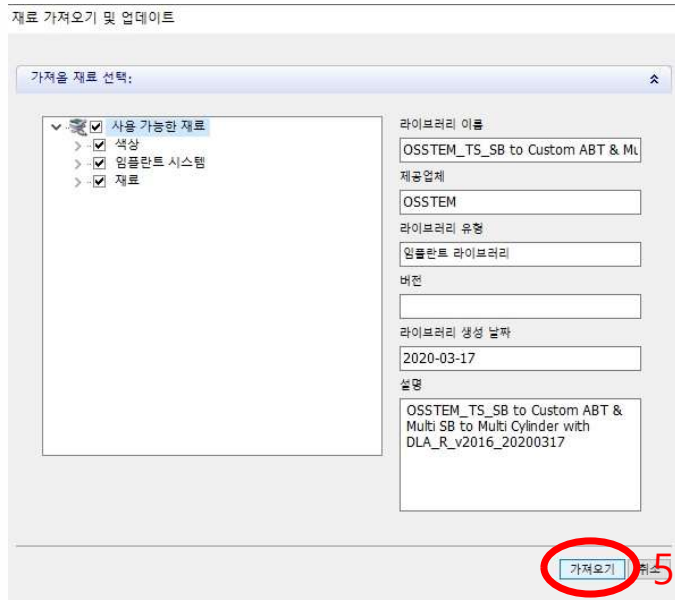
**exocad** : Model Creator



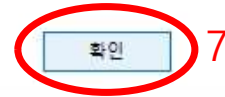
## 2. Import Library- 3Shape



## 2. Import Library- 3Shape

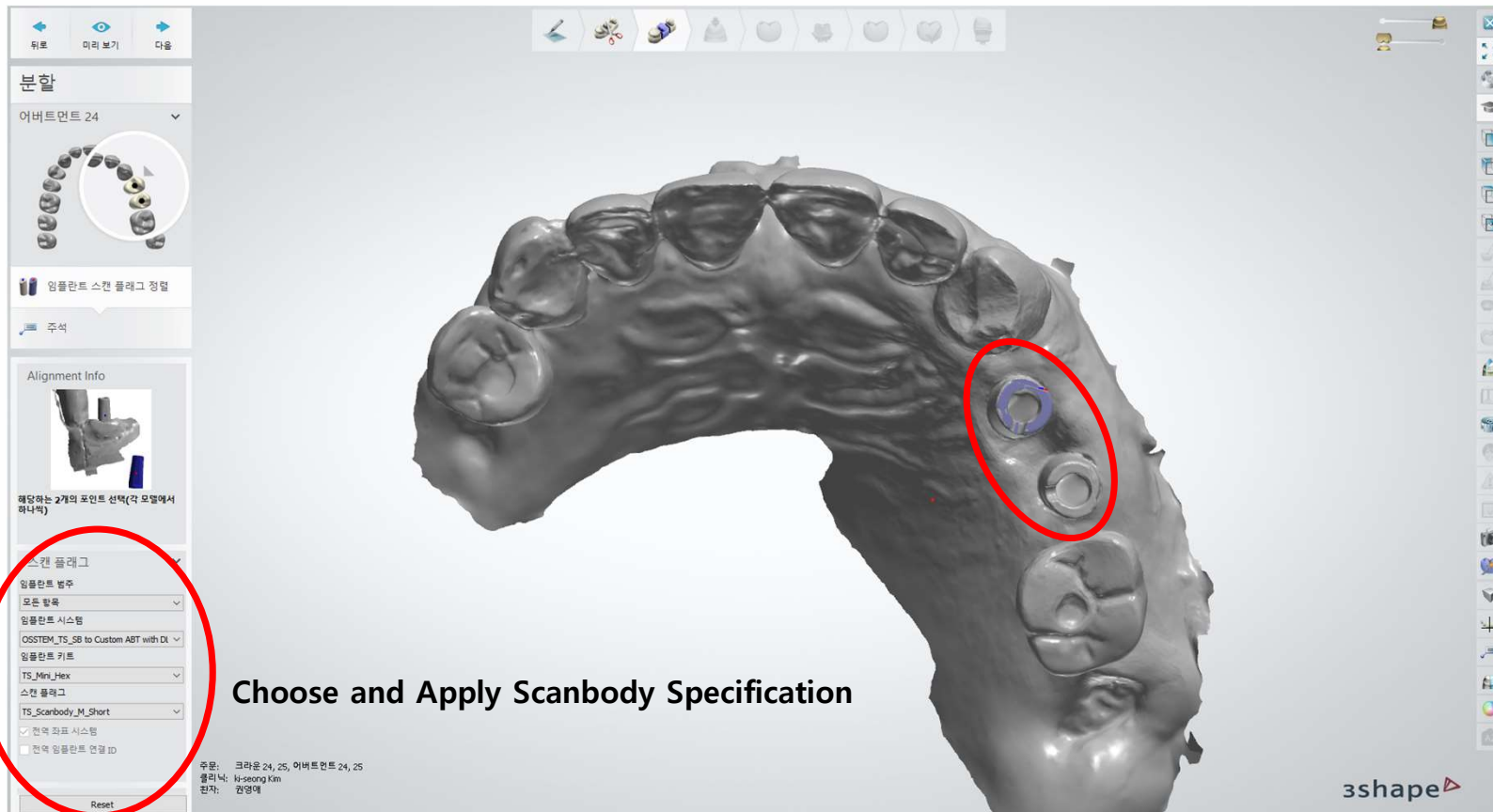


정보 재료를 성공적으로 가져왔습니다.



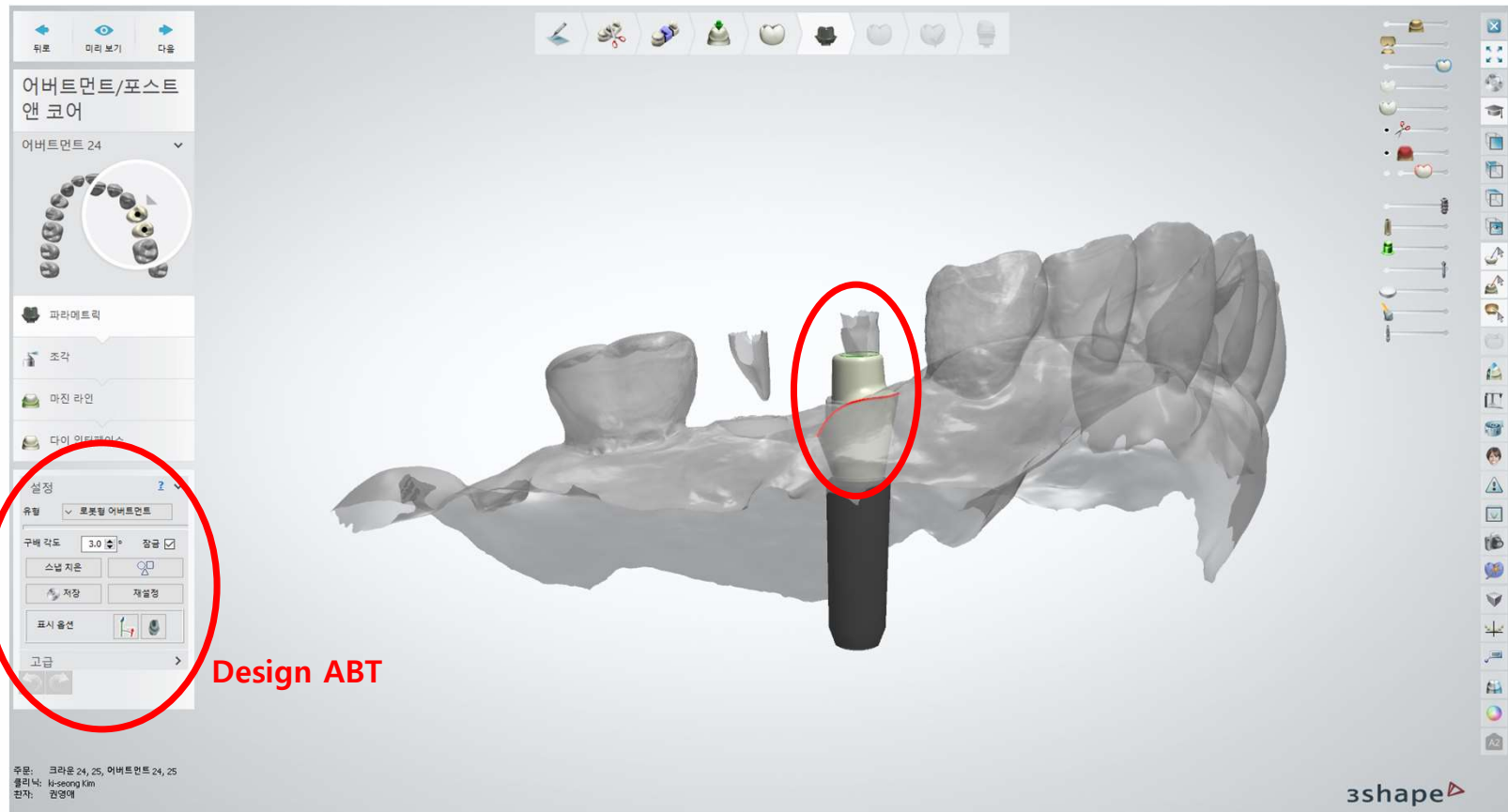
## 3. Prosthesis Design

### 1) Choose Scan Body



## 3. Prosthesis Design

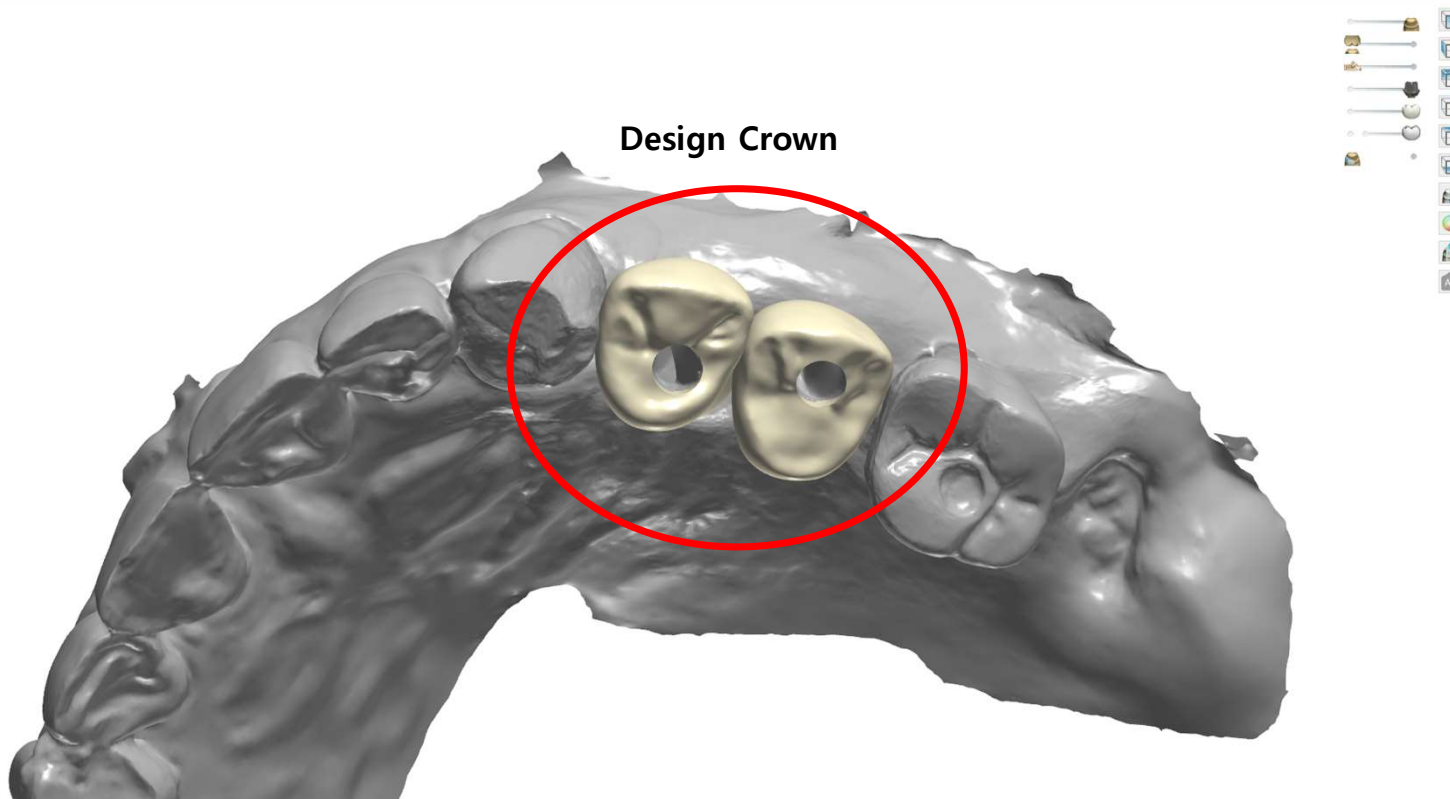
### 2) Abutment Design



Design ABT

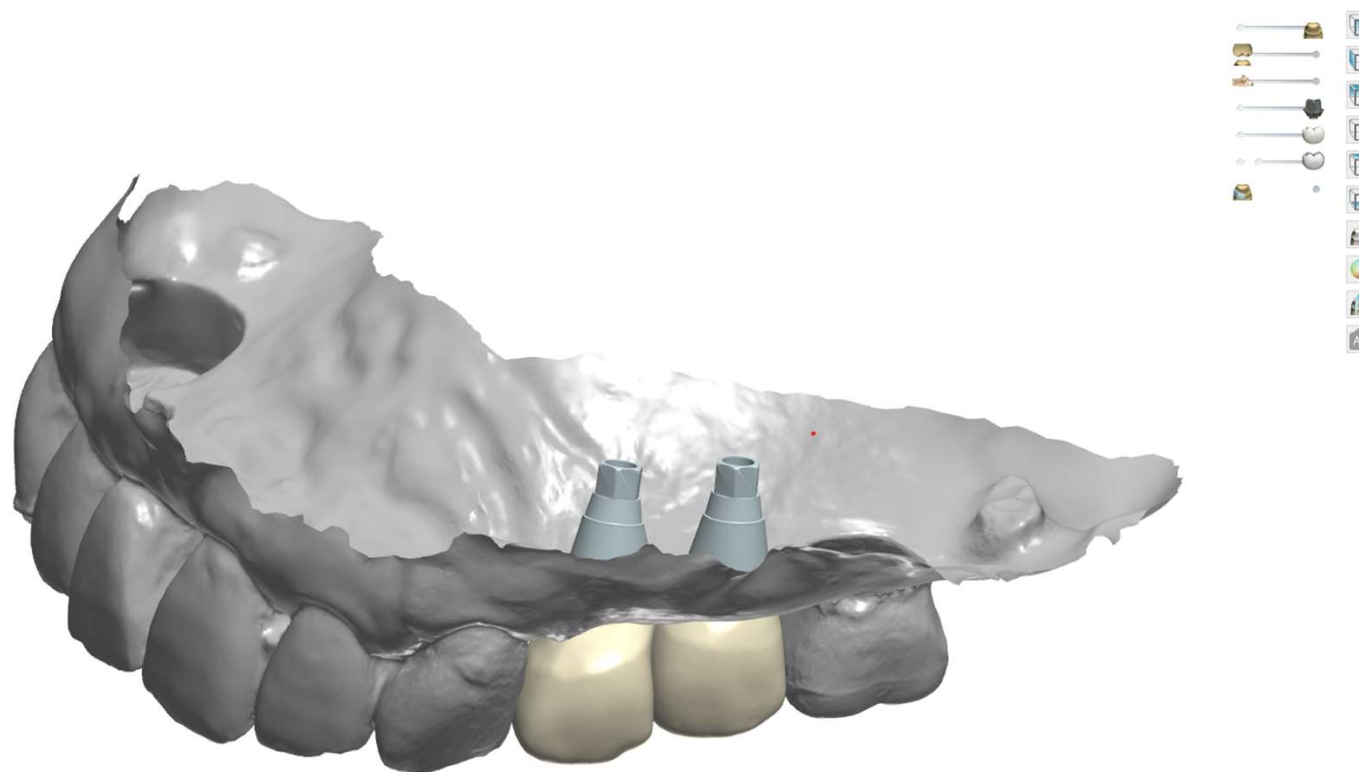
## 3. Prosthesis Design

### 3) Crown Design



## 3. Prosthesis Design

### 4) Prosthesis Design Is Finished

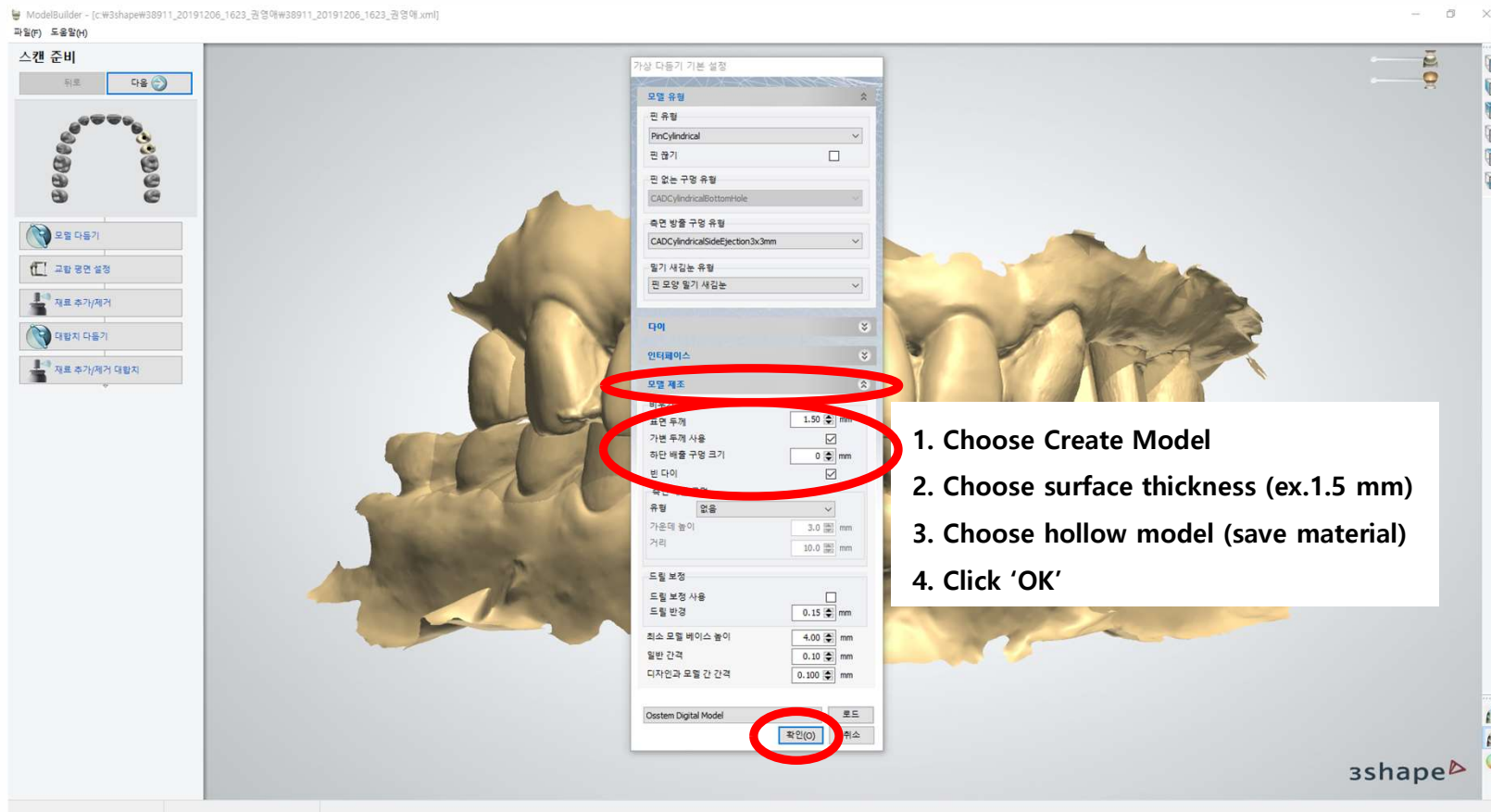


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## 4. Model builder

### 1) Model Builder Setting



1. Choose Create Model
2. Choose surface thickness (ex.1.5 mm)
3. Choose hollow model (save material)
4. Click 'OK'

## 4. Model builder

### 1) Model Builder Setting

**1. Click 'File'**  
**2. Click 'Virtual Trimming Preferences'**

Section	Parameter	Value	Unit
Die interface	모델 간격에 다이	0.000	mm
	포스트와 모델 간 간격	0.100	mm
	마찰 바 오버랩	0.010	mm
	마찰 바 너비	0.700	mm
	다이 각도 조정	0.000	
	다이 크기 조정	0.000	
Analog interface	원래 조정	0.000	mm
	유사물과 모델 간 간격	0.000	mm
	마찰 바 오버랩	0.020	mm
	마찰 바 너비	0.800	mm
	마찰 바 수	8	

**1. Click Interface**  
**2. Adjust Analog to model spacing to gain optimal connection between model and Lab analog.**

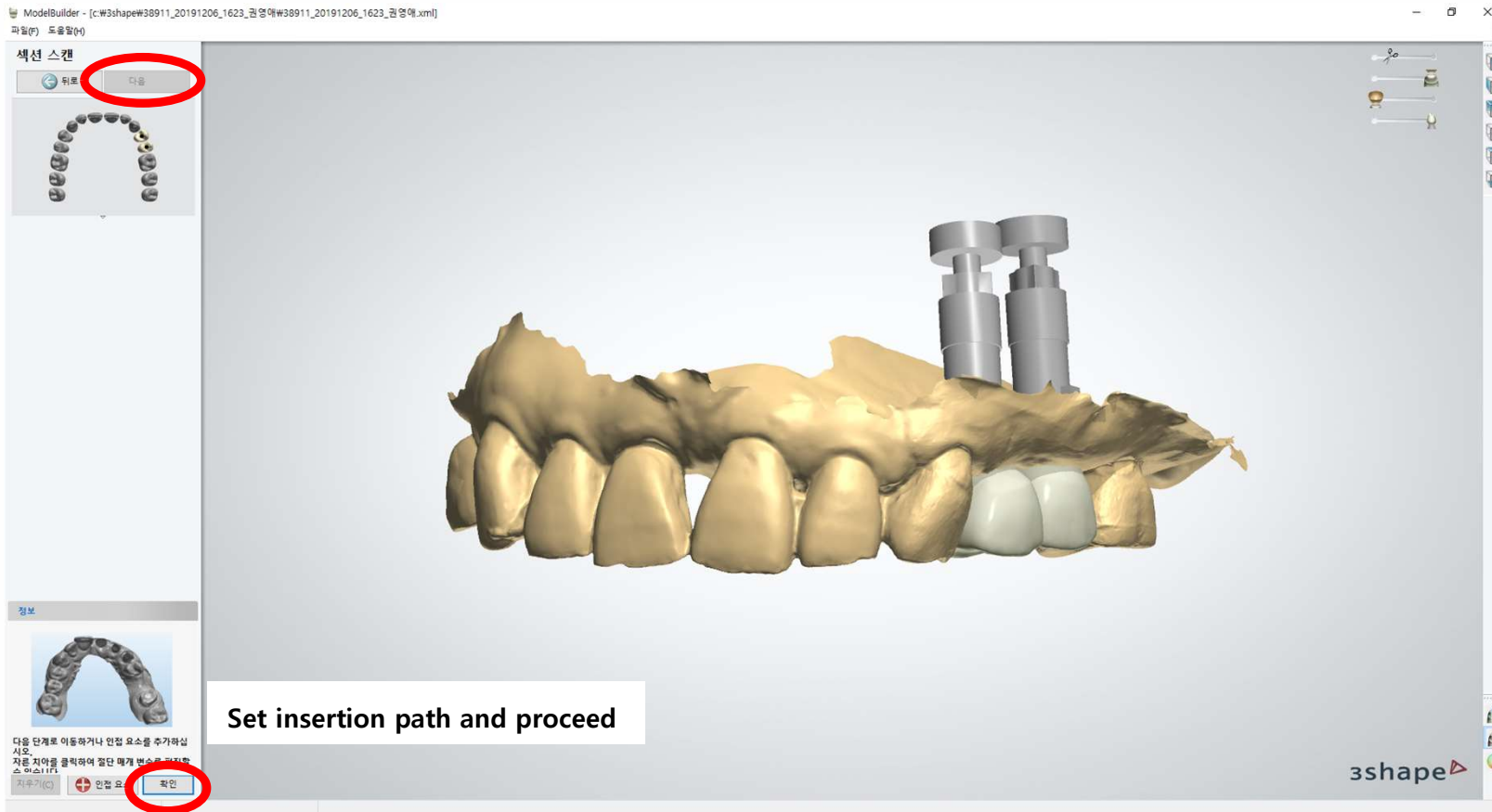
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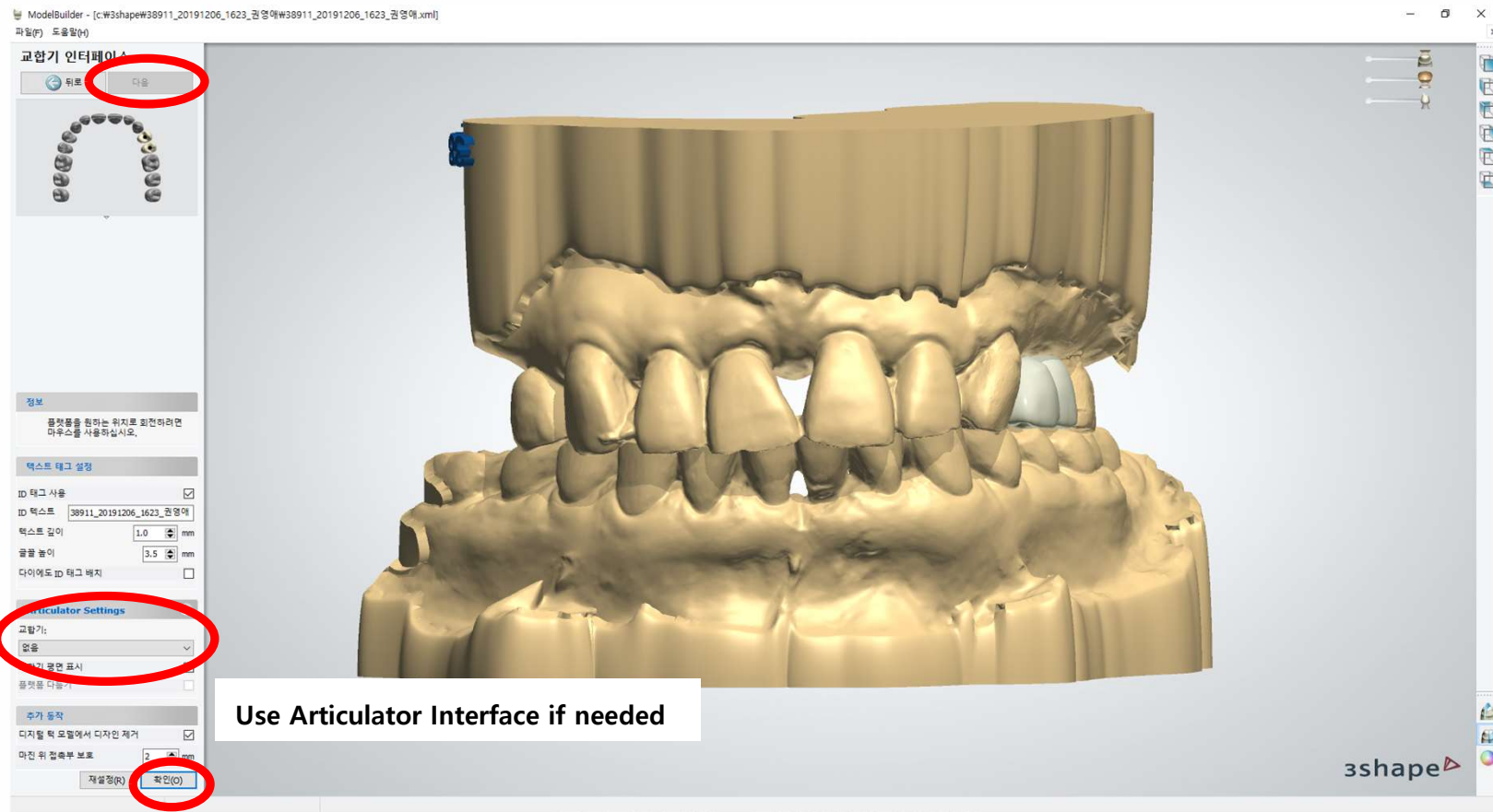
## 4. Model builder

### 3) Create Die



## 4. Model builder

### 4) Articulator Interface

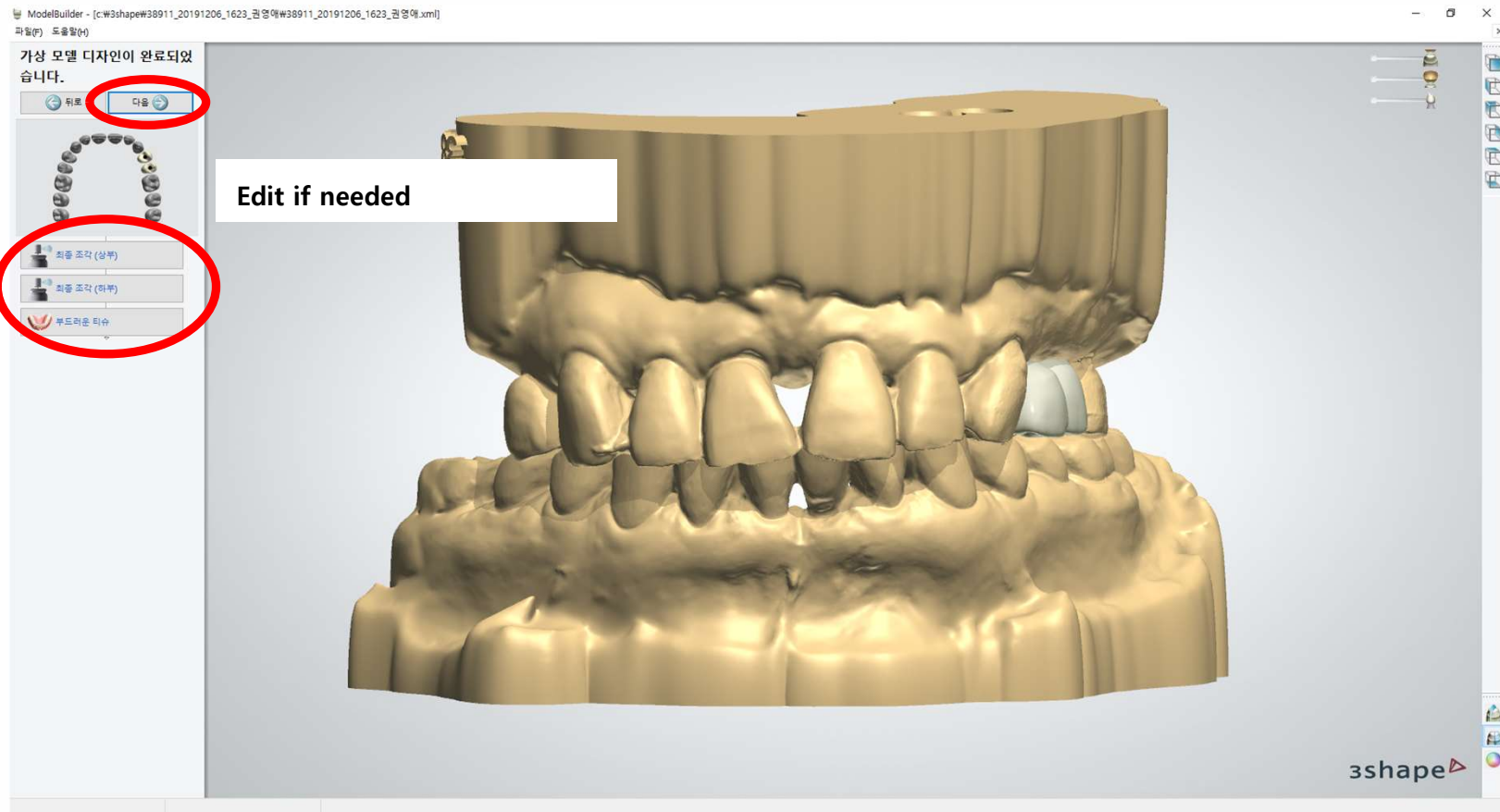


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## 4. Model builder

### 5) Finalize Model Design



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1. **Announcement**
2. **Library Workflow**
3. **Installation Instruction**
4. **Digital Lab Analog Workflow**
5. **Digital Library Demand In Europe**

Thank you

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