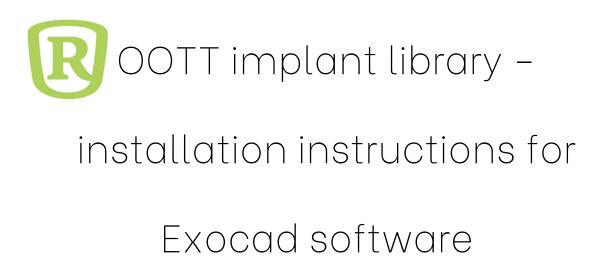


Exocad software



Content

ROOTT implant library - installation instruction for Exocad software	
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Instruction for Exocad using ROOT M ROOTT P	
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ROOTT C ROOT CS ROOTT B ROOTT BS Scan post and Transfer	
Abutments	
Instruction for Exocad using ROOTT C ROOT CS ROOTT B ROOTT BS	
Model Creator	



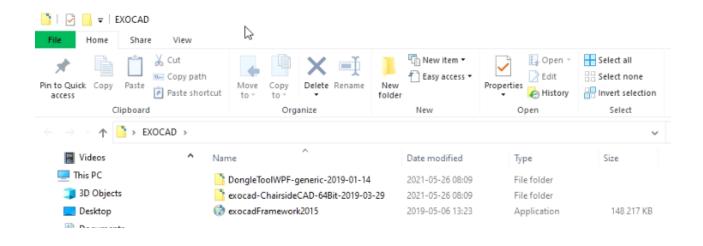
Instructions will help you to locate suitable ROOTT library folders with implants for Exocad libraries

Instructions are available in video format at www.youtube.com

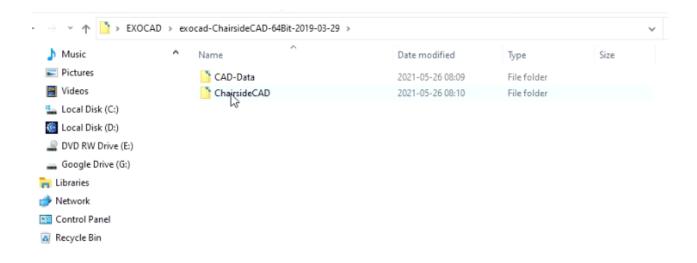




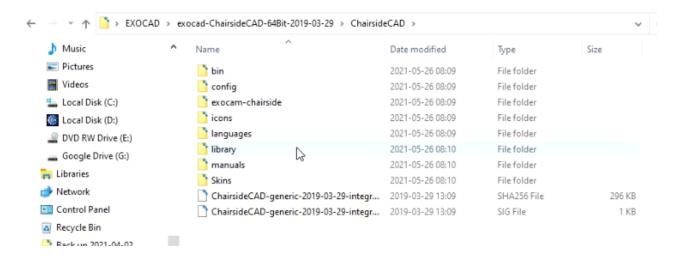
Step 1. Find and open **EXOCAD** folder. Inside the folder locate and open **exocad- ChairsideCAD-64Bit**



Step 2. Open ChairsideCAD folder

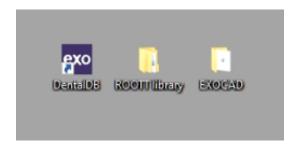


Step 3. Open library folder

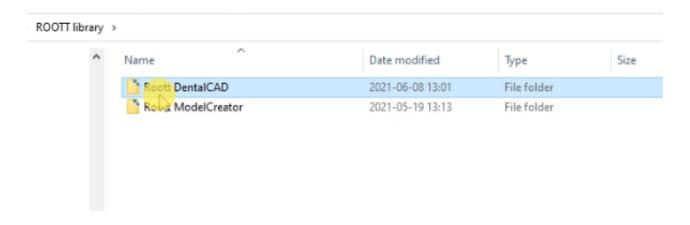




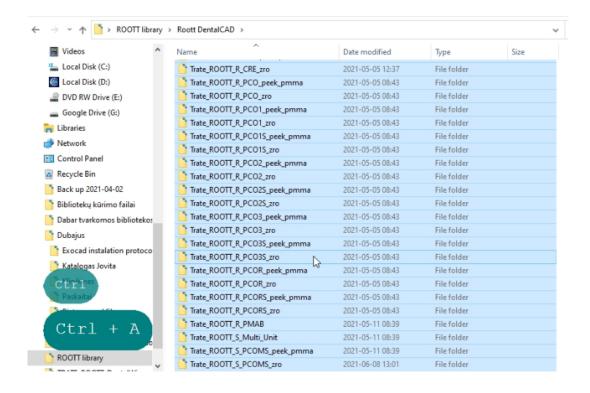
Step 4. Open Downloads folder (where ROOTT Library folder was downloaded) in new window



Step 5. Open **ROOTT Library** and open **Roott DentalCAD** folder

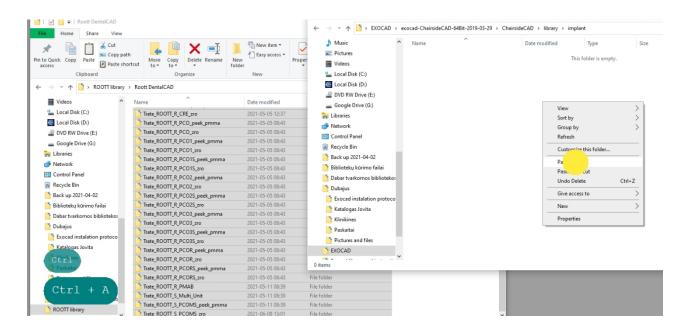


Step 6. Copy all files from Roott DentalCAD files

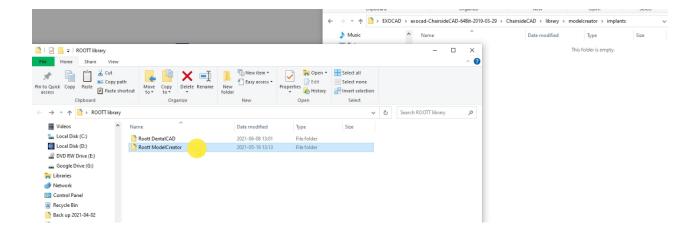




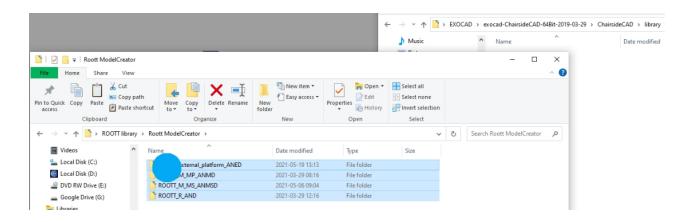
Step 7. Paste in **implant** folder (EXOCAD > exocad-ChairsideCAD-64Bit > ChairsideCAD > library > implant)



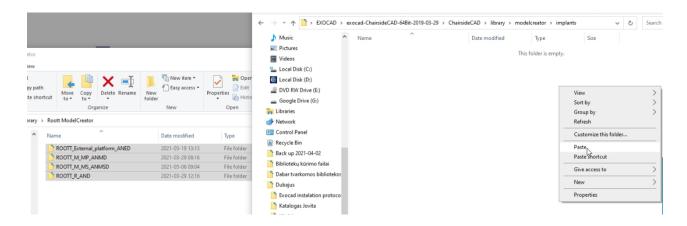
Step 8. Go back to **library** folder, choose **modelcreator** folder and then **implants** folder (implant < library > modelcreator > implants)



Step 9. In the second window go back to **ROOTT Library**, open **Roott ModelCreator** folder and copy 4 located folders (Roott DentalCAD > ROOTT Library > Roott ModelCreator)



Step 10. Paste the copied folders in implant folder opened in the other window





For question please contact: dalia.petkeviciute@trate.com

Digital ROOTT details

and intruction of use



We recommend to follow these rules:

- Do not mix different product between implant categories. The only exeption is ROOTT R library in which ROOTT S and ROOTT M detail assemblies are integrated.
- ROOTT R, ROOTT M, ROOTT S, ROOTT P implant systems intended for two-piece implants, ROOTT C, ROOTT CS, ROOTT B, ROOTT BS - for one piece.
- Two piece implants works in principle following implant + together with abutment, one piece implants are based by telescopic abutment.
- Library name are created from terms: Manufacturer+ Implant + abutment, material.

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Scan posts indicate the exact position of the implant in the jaw. During the scanning process, the information about the position is transferred into digital format.

ROOTT library has intraoral and extraoral scan posts. The difference between them is size and shape which provide better performance for a particular workflow. The scheme below shows suitable scan posts for a particular implant type. Working on with ROOTT R implants, scan posts (SPCOM, SPCOMIO, SPCOMIOS) can be used by assembling them with abutments M1 or MS1. Another advantage of digital ROOTT library is that transfer and telescopic abutments of ROOTT C, CS, B, BS implants also can be used as scan posts. These mentioned possibilities create wider applicability of the products.





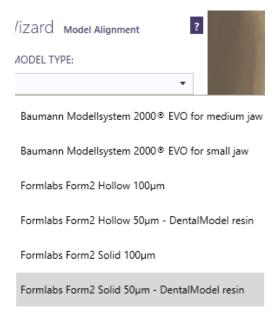


Cement gap

An empty gap between a titanium base and an inner crown surface is called a cement gap. A dimension in microns (μ m) indicates an offset from the titanium base.

Cement gap size results depends on the equipment. To get the best results, it is recommended:

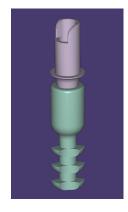
- to find the most suitable cement gap option for your equipment;
- to check regularly the mill in the machine;
- to comply with the requirements of the equipment manufacturers;
- to check if the setting of prosthesis and manufacturing equipment match (see picture below).

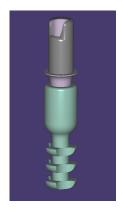


ROOTT digital library is created for 6 cement gap varieties:

- Zirconia 0.025, 0.035, 0.050 μm;
- Plastic PEEK or PMMA 0. 075, 0.090, 0.110 μm.

If there is a need to create from PEEK PMMA with a wider cement gap, choose Zro section. Metal is adapted only for ROOTT M and S Multi Unit.





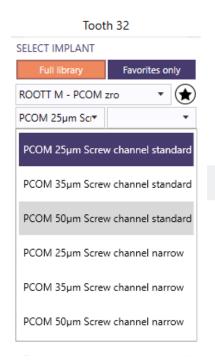


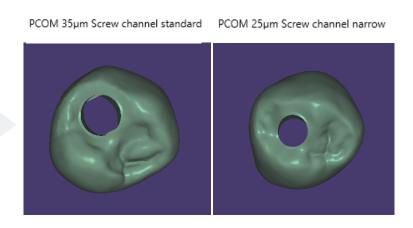
Screw channel

There are two options to create an aesthetical prosthesis:

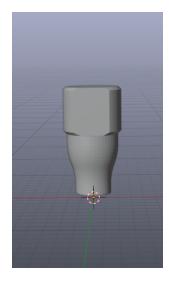
- Standard screw channel that matches the diameters of the screw and the screwdriver.
- Narrow screw channel that matches only the screwdriver. Choose this option if there is less occlusal surface or a more aesthetical result is desired.

Screw channel sizes are available for ROOTT R, ROOTT M, ROOTT P, and ROOTT S.

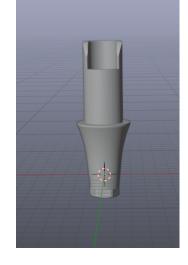




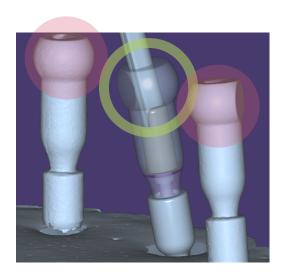
Angled screw channel position can be determined by scan post. The front plane of the scan post corresponds to the angle direction of the screw channel. Therefore, we recommend turning the scan post to lingual surface or patal surface direction before scanning in order to achieve the best results.

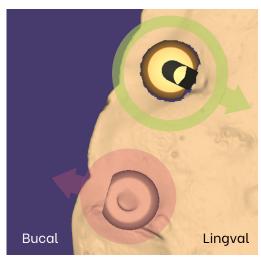






The front plane of scan posts





 ${\it Correct scan post direction highlighted green, incorrect-red}$



Digital analogs indicate the exact position of the implant in the jaw. Therefore, if the scan post is not screwed properly, it could lead to inaccurate position of digital analog. Digital analogs could be used only with printed models.













ANMSD

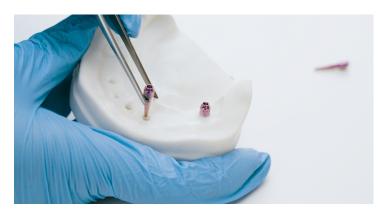


ANED

















Scan posts indicate the exact position of the implant in the jaw. During the scanning process, the information about the position is transferred into digital format. According to scan post position, height and direction, scan post is converted to abutment and sets the precise location of analog. Get yourself acquainted with all types of ROOTT R scan posts, which are developed for the effective and precise workflow of implantologists (intraoral) and dental technicians (extraoral).

SPCO Scan post characteristic

- Extraoral scanning
- Long body allows comfortable usage and precise results of laboratory workflow
- Easily scannable
- Reusable



SCPOIO Scan post characteristic

- Intraoral scanning
- · Short body allows comfortable usage and precise results of implantologists' workflow
- Easily scannable
- Reusable



SPCOM+M1/SCPOMS+MS Scan post characteristic

- Extraoral scanning
- Long body allows comfortable usage and precise results of laboratory workflow
- Wider applicability of SPCOM/SPCOMS (Scan post for ROOTT M, ROOTT P, ROOTT S implants)
- Easily scannable
- Reusable



SPCOMIO+M1/SPCOMIOS+MS1 Scan post characteristic

- Intraoral scanning
- Short body allows comfortable usage and precise results of implantologists' workflow
- Wider applicability of SPCOMIO, SPCOMIOS (Scan post for ROOTT M, ROOTT P, ROOTT S implants)
- Easily scannable
- Reusable





Abutments

ROOTT R digital abutments are suitable for ordinary and complicated clinical situations. There is a wide range of options for multi-unit and single crown cases.

CRE is a multi-functional part that is made of the same material as an implant and abutment. It is applicable as an abutment for immediate loading, transfer for open/close tray, carrier for implant insertion, or healing abutment.

For multi-unit cases use M1+PCOM or M1 Multi-Unit and for a single crown choose from PCO titanium base.

Pre-milled abutment PMAB is a customizable one-piece abutment for a single crown metal or plastic PEEK framework.

ROOTT R abutment characteristics

- Angled access for tunnel from 0° to 20°;
- For bridges (PCOR, MS1, M1, CRE,) and single crowns (PCO1-PCO3, PMAB);
- Variety of gingiva part height PCO1-PCO3S;
- Variety of titanium bases height PCO and PCOS.

PMAB abutment characteristics

- Approved for use with a MEDENTIKA PreFace® Abutment Blank Holders;
- Provides unlimited possibilities to create high precision one-piece customized titanium abutment with an in house milling machine;
- Ideal adjustment for shape, emergence profile, esthetic properties are available for frequently situation.





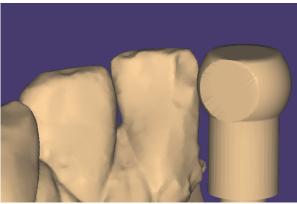


Instruction for Exocad using ROOTT R

Extraoral scan using PCO, PCOS

Step 1. Upload .slt file to Exocad software. Extraoral scan posts shall be visible.

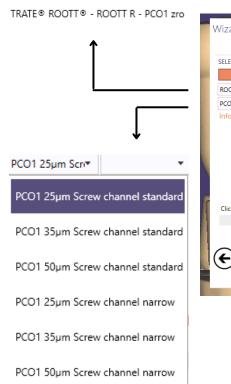


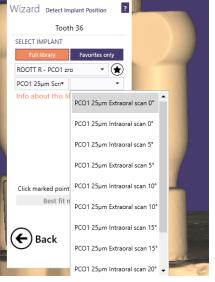


Step 2. Choose abutment that will replace scan post.

Implant + abutment, material

e.g. ROOTT R + PCO1 zro





Intraoral or extraoral scan, screw channel angle e.g. PCO1 25µm Extraoral scan 0°

PCO1 25µm Extraoral scan 0°

PCO1 25µm Intraoral scan 0°

PCO1 25µm Intraoral scan 5°

PCO1 25µm Extraoral scan 5°

PCO1 25µm Extraoral scan 10°

PCO1 25µm Extraoral scan 10°

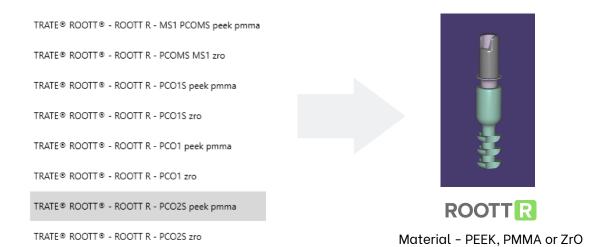
PCO1 25µm Extraoral scan 15°

PCO1 25µm Extraoral scan 15°

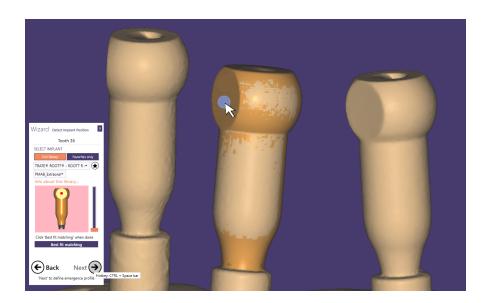
PCO1 25µm Extraoral scan 15°

Cement gap size in microns, screw channel e.g. PCO1 25µm screw channel standard.

Step 3. Mark an area to detect Scan post position. Detected scan post shall change a color.





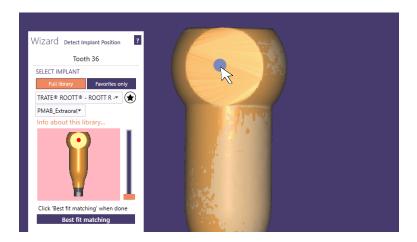


Necessary products to make a prosthesis

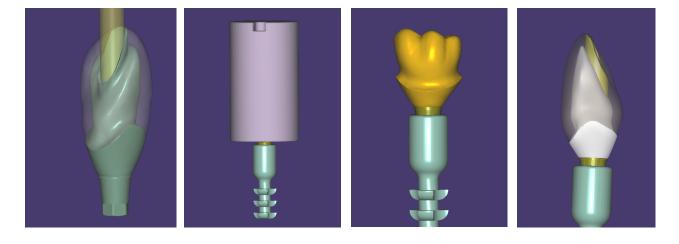


Extraoral scan using PMAB

- Step 1. Upload .stl file to Exocad software. Extraoral scan post SPCO shall be visible (p. 14, Step 1.)
- **Step 2.** Choose Pre-milled abutment PMAB that will replace scan post SPCO.



Step 3. Create a framework and mill the abutment.

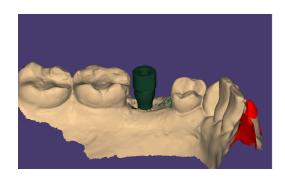


Necessary products to make a prosthesis



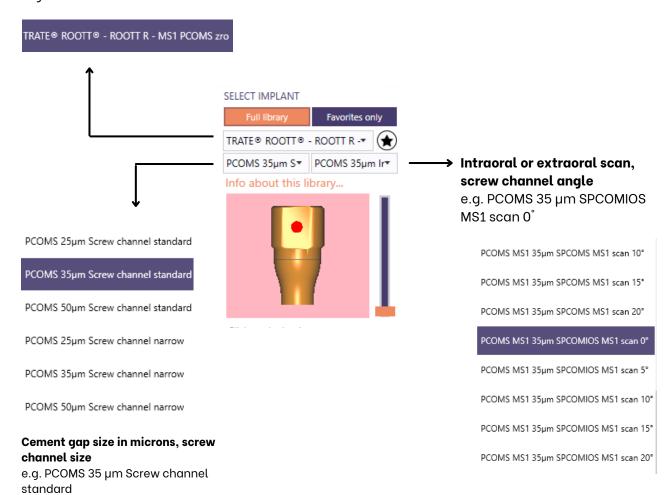
Intraoral scan

Step 1. Upload scanned model to Exocad software. Intraoral scan post shall be visible.



Step 2. Choose abutment that will replace scan post (see p. 11, Step 2.).

Implant + abutment, material e.g. ROOTT R + MS+ PCOMS zro



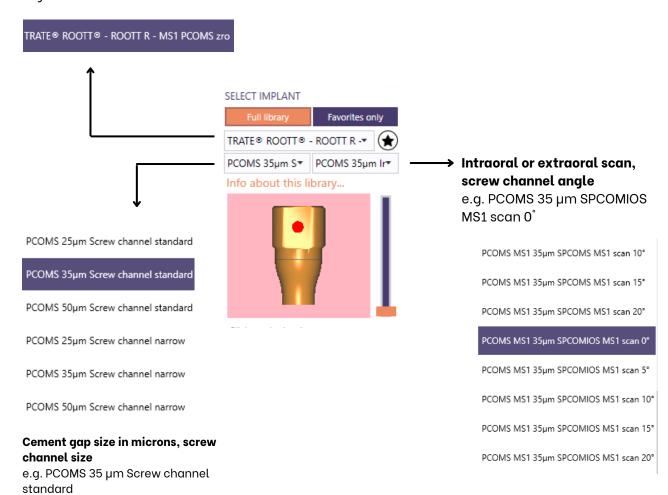
Intraoral scan

Step 1. Upload scanned model to Exocad software. Intraoral scan post shall be visible.

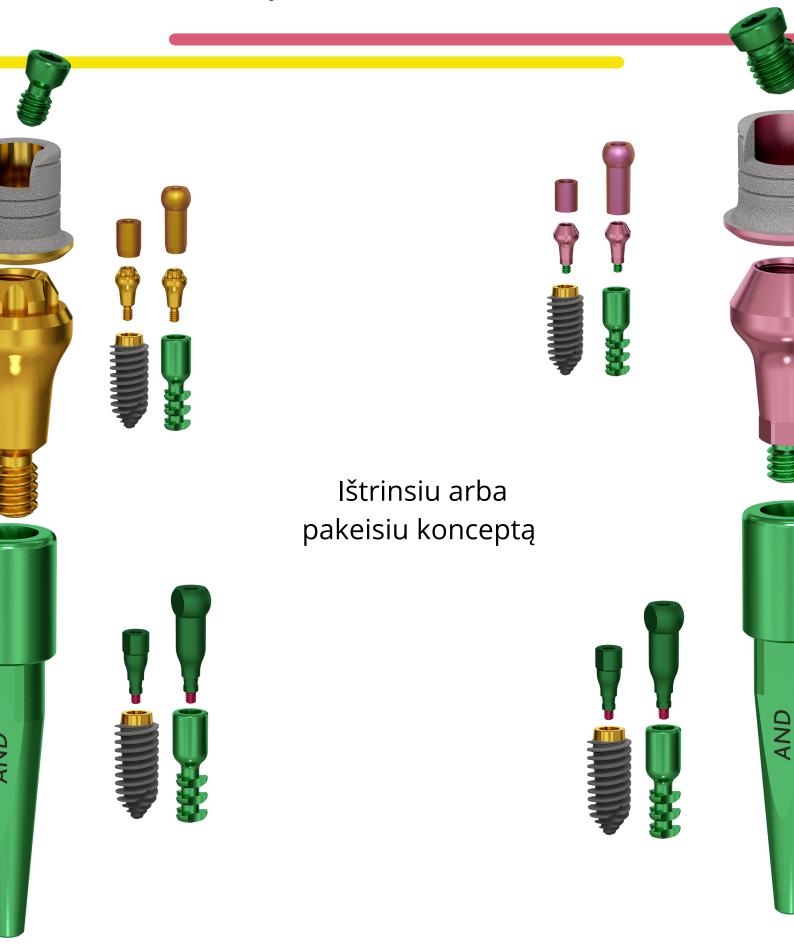


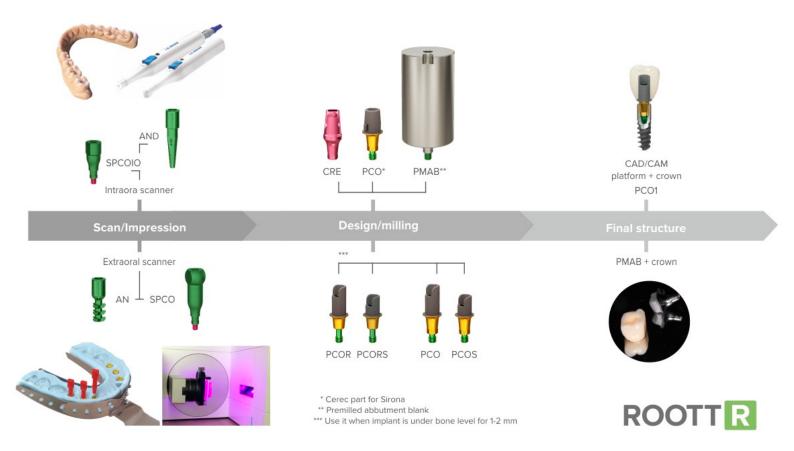
Step 2. Choose abutment that will replace scan post (see p. 11, Step 2.).

Implant + abutment, material e.g. ROOTT R + MS+ PCOMS zro



New digital Multi Unit solution with ROOTT R







ROOTT M Scan posts corresponds with multiunit platform connection. Scan posts indicate the exact position of the implant in the jaw. During the scanning process, the information about the position is transferred into digital format. According to Scan post position, height and direction, Scan-post is converted to abutment and sets the precise location of analog. Get yourself acquainted with all types of ROOTT M Scan posts, which are developed for the precise manufacturing of bridge prosthesis.



SPCOM scan post characteristic

- Extraoral scanning
- Long body allows comfortable usage and precise results of laboratory workflow
- Easily scannable
- Reusable



SPCOMIO scan post characteristic

- Intraoral scanning
- Short body allows comfortable usage and precise results of implantologists' workflow
- Easily scannable
- Reusable

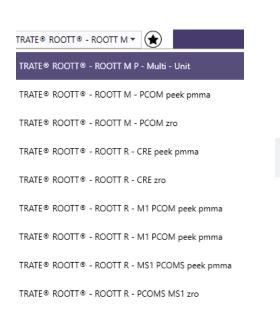


Abutments

ROOTT M and ROOTT P digital library have two options for abutments. There are an abutment PCOM and a digital abutment that can be used directly without a physical one.

ROOTT M ROOTT P abutment characteristics

- Angled access for tunnel from 0° to 20°;
- · Only for bridges.









TRATE® ROOTT® - ROOTT M - PCOM zro

TRATE® ROOTT® - ROOTT R - CRE peek pmma

TRATE® ROOTT® - ROOTT R - CRE zro

TRATE® ROOTT® - ROOTT R - M1 Multi - Unit

TRATE® ROOTT® - ROOTT R - M1 PCOM peek pmma

TRATE® ROOTT® - ROOTT R - M1 PCOM zro

TRATE® ROOTT® - ROOTT R - MS1 Multi - Unit

TRATE® ROOTT® - ROOTT R - MS1 PCOMS peek pmma

TRATE® ROOTT® - ROOTT R - MS1 PCOMS zro

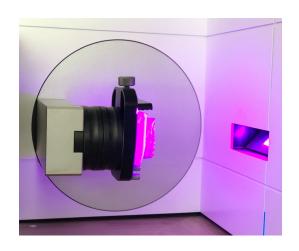


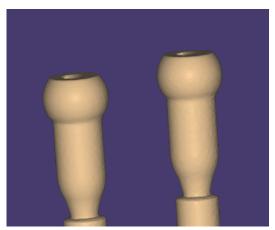


Instruction for Exocad using ROOTT M ROOTT P

Extraoral scan

Step 1. Scanned model upload to Exocad software. Extraoral scan posts shall be visible.

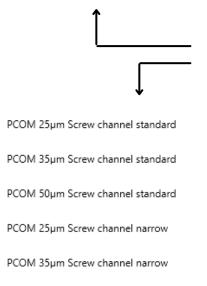




Step 2. Choose abutment that will replace scan post.

Implant + abutment, material e.g. ROOTT M + PCOM zro

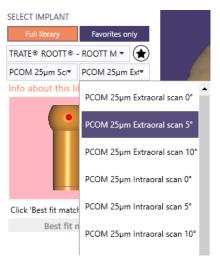
TRATE® ROOTT® - ROOTT M - PCOM zro



Cement gap size in microns, screw channel size e.g. PCOM 25 µm screw

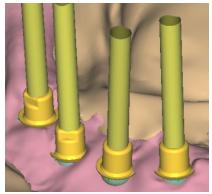
PCOM 50µm Screw channel narrow

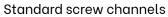
e.g. PCOM 25 µm screw channel standard (Suitable for screw driver and screw)

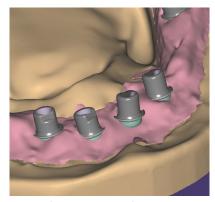


Intraoral or extraoral scan, screw channel angle e.g. PCOM 25 µm Extraoral scan 10°

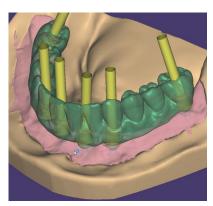
PCOM 25µm Extraoral scan 0°
PCOM 25µm Extraoral scan 5°
PCOM 25µm Extraoral scan 10°
PCOM 25µm Intraoral scan 0°
PCOM 25µm Intraoral scan 5°
PCOM 25µm Intraoral scan 10°
PCOM 25µm Intraoral scan 15°
PCOM 25µm Intraoral scan 20°
PCOM 25µm Extraoral scan 15°



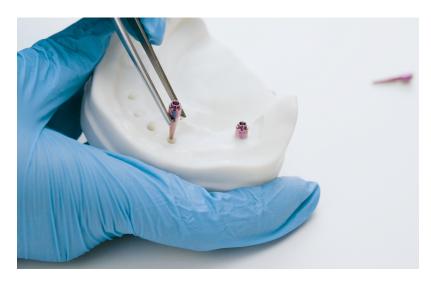




Cement gap 25µm

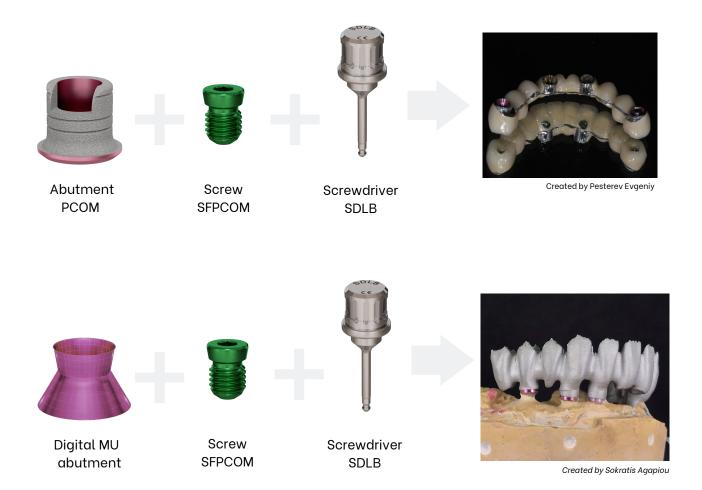


Prosthesis in Exocad



Digital model with analog ANMD

Necessary products to make a prosthesis





ROOTT S Scan-posts corresponds with small multiunit platform connection. Scan-posts indicate the exact position of the implant in the jaw. During the scanning process, the information about the position is transferred into digital format. According to Scan-post position, height and direction, Scan-post is converted to abutment and sets the precise location of analog. Get yourself acquainted with all types of ROOTT S Scan-posts, which are developed for the precise manufacturing of bridge prosthesis.

*screw-retained restrations with a wide and secure fixation screw



SPCOMS scan post characteristic

- Extraoral scanning
- Long body allows comfortable usage and precise results of laboratory workflow
- Easily scannable
- Reusable



SPCOMIOS scan post characteristic

- Intraoral scanning
- Short body allows comfortable usage and precise results of implantologists' workflow
- Easily scannable
- Reusable

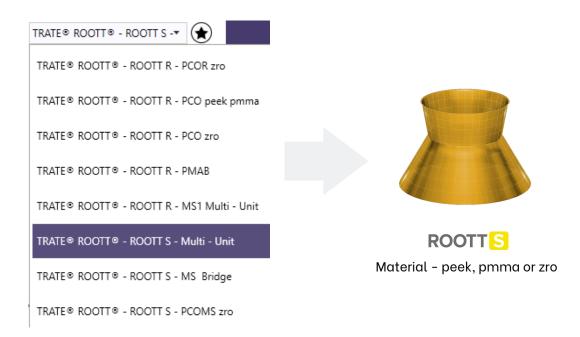


Abutments

ROOTT S digital library has two option for abutments. There are an abutment PCOMS and a digital abutment that can be used directly without a physical one.

ROOTT S abutments characteristics

- Angled access for tunnel from 0° to 20°;
- Only for bridges.







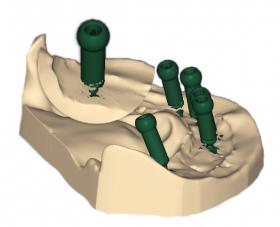
ROOTT S

Material - peek, pmma or zro

Instruction for Exocad using ROOTT S

Extraoral scan

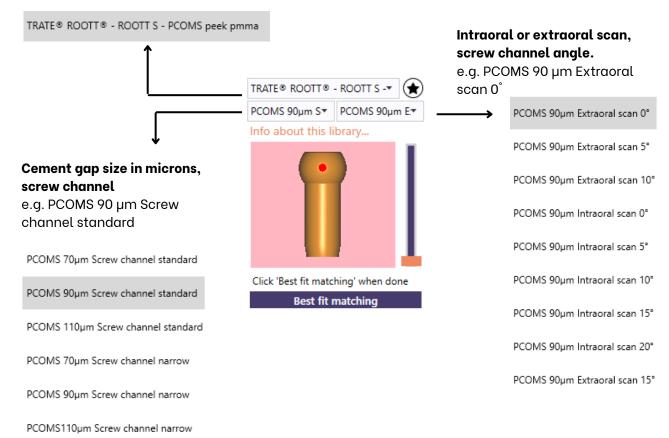
Step 1. Scanned model upload to Exocad software. Extraoral scan posts shall be visible.



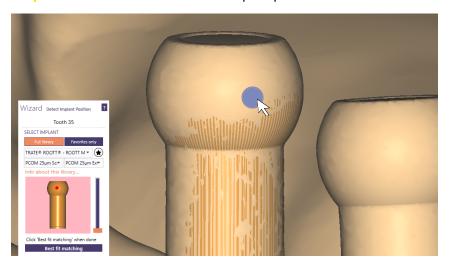
Step 2. Choose abutment that will replace scan post.

Implant + abutment, material

e.g. ROOTT S + PCOMS peek pmma

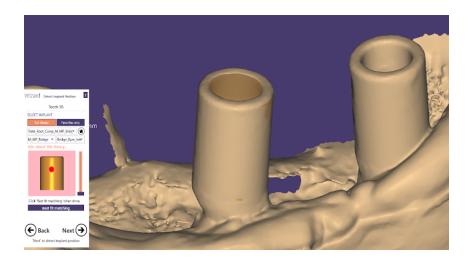


Step 4. Mark an area to detect Scan post position.



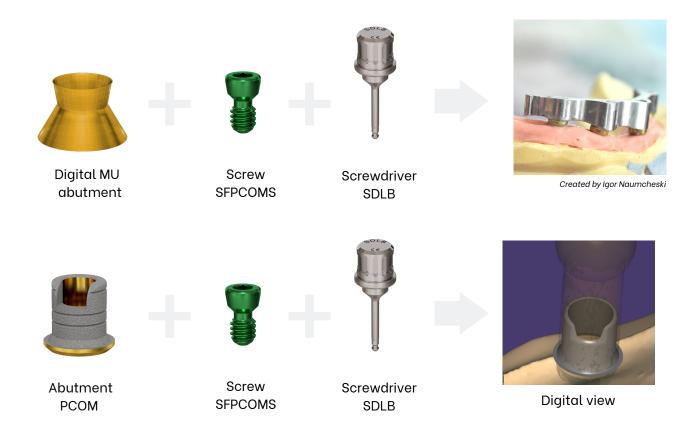
Intraoral scan

Step 1. Upload scanned model to Exocad software. Intraoral scan post shall be visible.

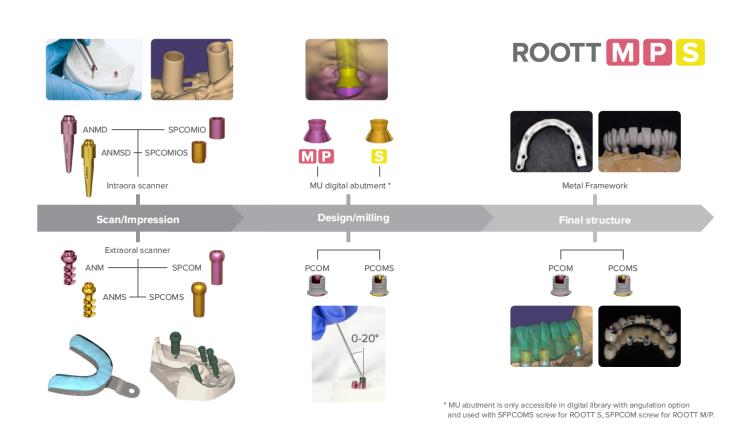


Step 2. Choose abutment that will replace scan post (see p. 7, Step 2.).

Necessary products to make a prosthesis



ROOTT M P S digital product scheme







Scanable superstructures

ROOTT C, CS, B, BS Scan-post give a wide range of options. There are 45 different ways to scan with intraoral and extraoral scanners – choose from TRA, HE TOEA, TOE, TOES, telescopic abutments or External platform varieties. Scan-posts have a few height options that open possibilities for different clinical cases and patients mouth

Transfers can be used as scan-posts that make workflow more precise and effective. Scan-posts indicate the exact position and the depth of the screwed implant in the jaw. During the scanning process, the information about the position is transferred into digital format. According to Scan-post position, Scan-post is converted to telescopic abutment and sets the precise location of analog. Get yourself acquainted with one-piece abutments which are suitable even for complex clinical cases.









Abutments

ROOTT C, CS, B, BS abutments are metal and plastic connectors between an implant and a crown. They do not require a screw making it the best solution for time-saving and comfort. Both TCE and PCE are the same size, however, the material is different - titanium or peek. Plastic peek gives more amortization, cushioning in the tooth, which makes the bite more comfortable and reduces the risk of fracture.





Instruction for Exocad using ROOTT C CS B BS

Extraoral scan

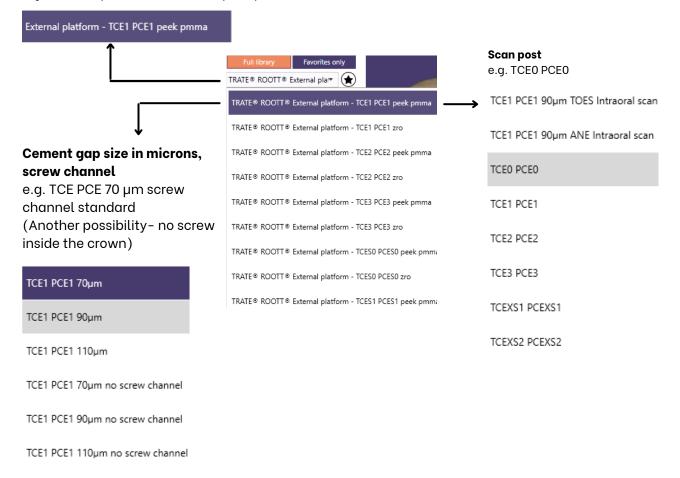
Step 1. Scanned model upload to Exocad software. Extraoral scan posts shall be visible.



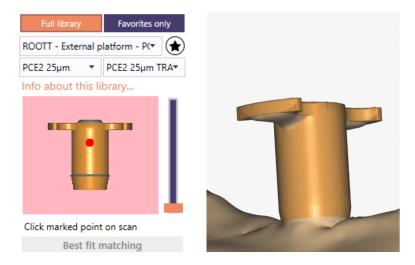
Step 2. Choose abutment that will replace scan post.

Abutment, material

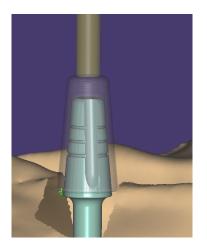
e.g. External platform TCE1 PCE1 peek pmma

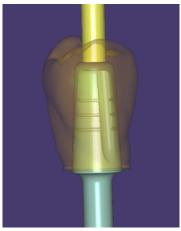


Step 3. Mark an area to detect Scan post position. Detected scan post shall change a color.



Step 4. Create a crown's anatomy, print a model and insert a digital analog in a digital model.







ROOTT R



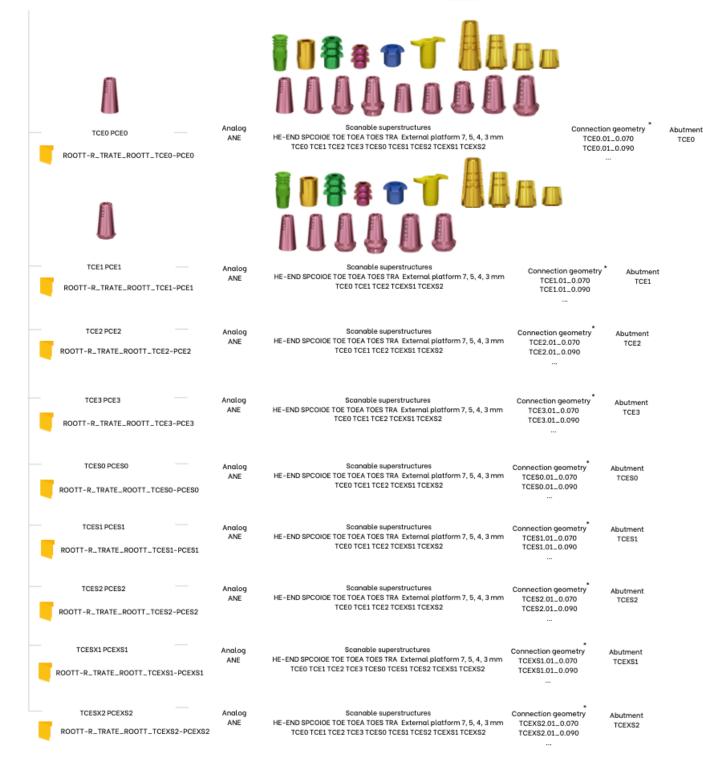
ROOTTM ROOTTP



ROOTT S



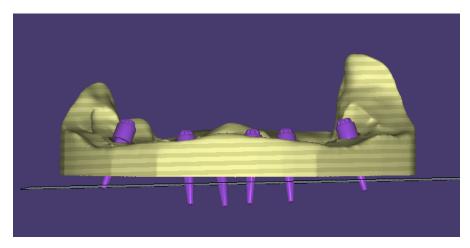
ROOTT ROOTT



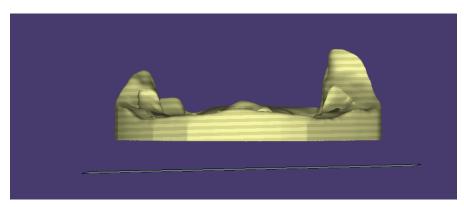
Model Creator

An accurate printed model is needed to make a precise prosthesis. Therefore, it is crucial to know Model Creator software.

Note 1. Lift up a model in a way that analog fits in it. If analogs are visible, jaw model should be higher. If analogs are invisible, model is in the right position.



Incorrect- model is too low



Correct- good model position