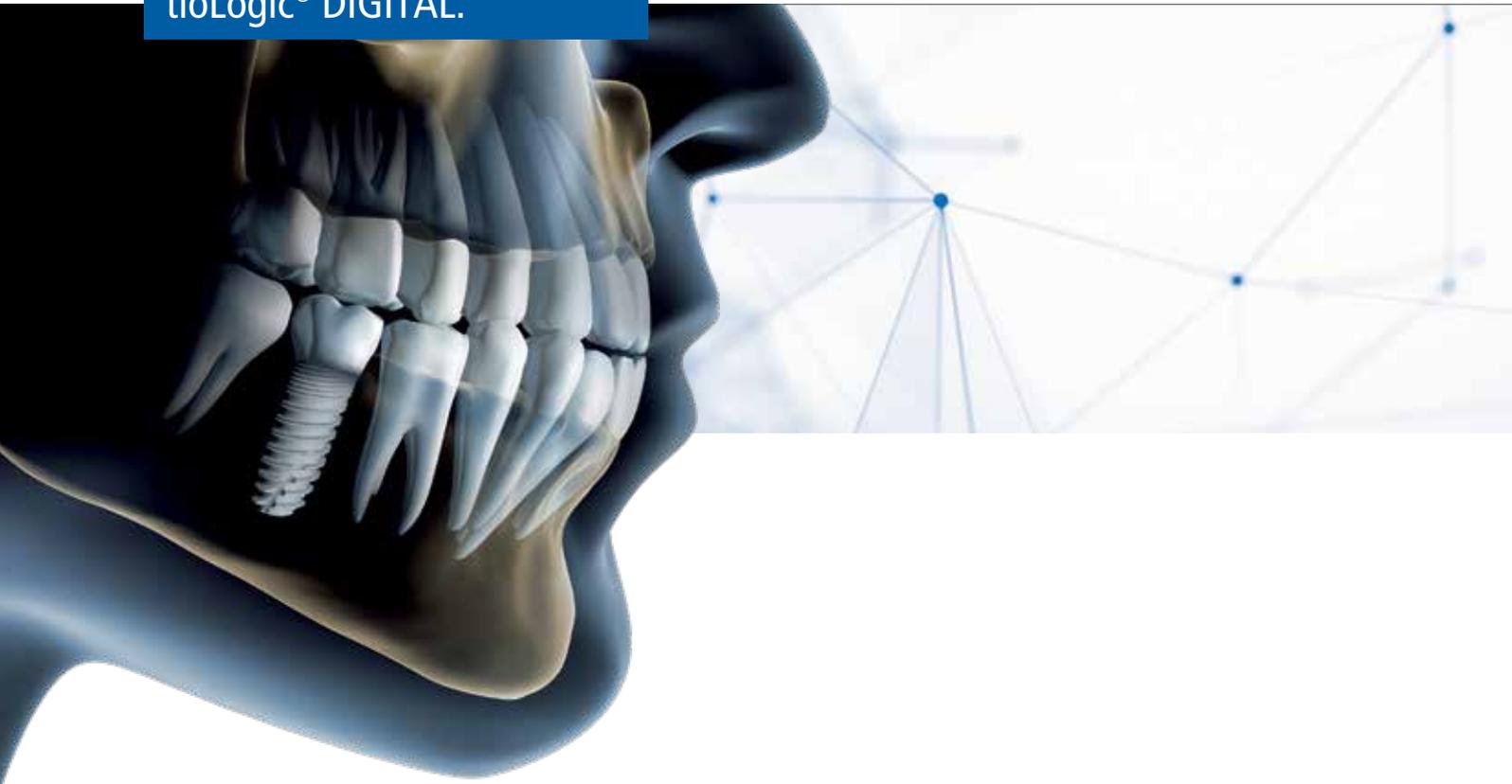




MANUAL DIGITAL.



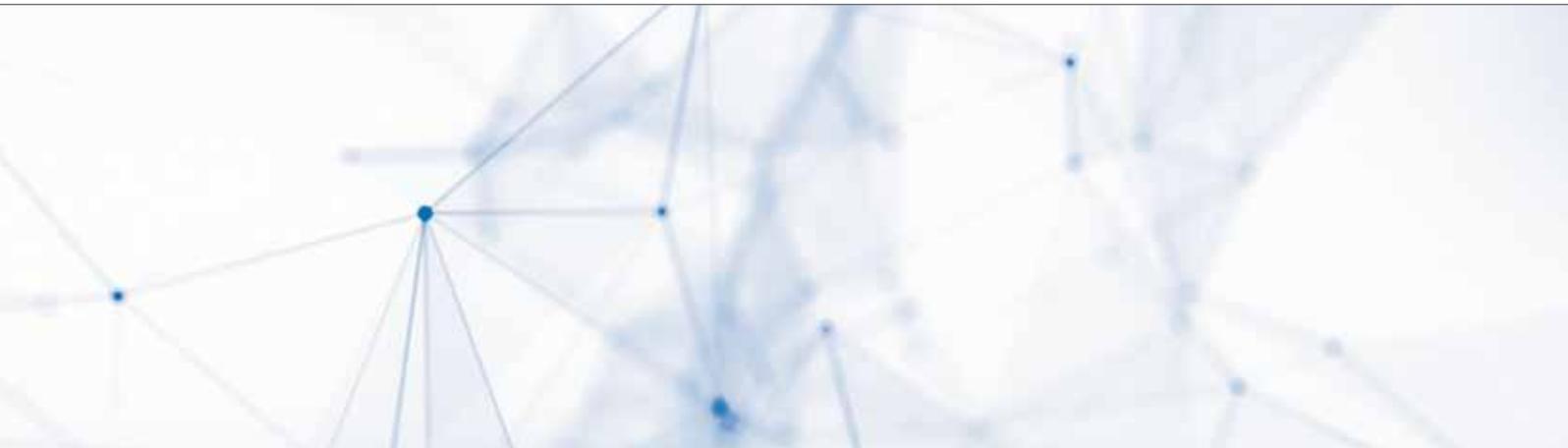
tiologic® DIGITAL.



3shape TRIOS

PLANNING.

SCAN.



tiologic[®] DIGITAL. fromDentaurum provides a coordinated complete solution for CAD/CAM processes on all tiologic[®] implant types.

The product range includes all data and original components for navigated implantology and the fabrication of customized, one-piece abutments, hybrid abutments as well as bar and bridge restorations with CAD/CAM technology using certified materials "MADE IN GERMANY – MADE BY DENTAURUM".



MATERIAL.

DESIGN.

MANUFACTURE.

SERVICE DEPARTMENT



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Guided Surgery.



Precise planning at the pre-prosthetic stage is the basis for successful implant treatment. The aim is to place the implants in a prosthetically optimal position so that it functions well and is highly aesthetic. This entails an implantological-related anamnesis, clinical and prosthetic planning and a final consultation with patients to ensure that the planned treatment meets their expectations.

Modern 3D imaging techniques such as CT and CBCT enable the implantologist to identify existing structures three-dimensionally in the jaw prior to surgery and to coordinate the course of treatment accordingly. Implants can be positioned virtually with this imaging technique using 3D implant planning software, so that reliable template-guided surgery as well as functional and aesthetic prosthetic treatment are then possible.

pOsition for tioLogic®.

pOposition for tioLogic® is a sleeve and drill system that ensures reliable, minimally invasive and precise template-guided implant insertion of all tioLogic® implant types using coordinated planning software for accurate diagnosis and 3D planning.



You already have planning software?

The implant systems from Dentaurem are stored with leading planning software manufacturers:
www.dentaurum.de/deu/3d-op-planung-32823.aspx

Guided Surgery.

Software	Planning	Planning and template
2ingis®	✓	✓
3dVision	✓	✓
3Shape Implant Studio	✓	✓
blenderfordental	✓	✓
Carestream	✓	✓
cefla	✓	✓
CeHa imPLANT (med 3D)	✓	✓
coDiagnostix®	✓	✓
Cybermed	✓	✓
Galileos (Dentsply Sirona)	✓	✓
KaVo	✓	✓
Materialise	✓	—
Mesantis	✓	✓
NemoScan	✓	✓
Orange Dental	✓	✓
Organical® Dental Implant	✓	✓
Planmeca Romexis	✓	✓
ProDigiDent ImplaStation	✓	✓
Schütz Denal	✓	✓
SICAT (Dentsply Sirona)	✓	✓
Soredex	✓	✓
SMOP (swissmeda)	✓	✓
ZIRKONZAHN Implant-Planner	✓	✓

For more information on diagnosis, planning, treatment procedure, cleaning and disinfection, please refer to the Surgery Manual pOosition for tioLogic® (REF 989-999-20).

Diagnosis and planning.

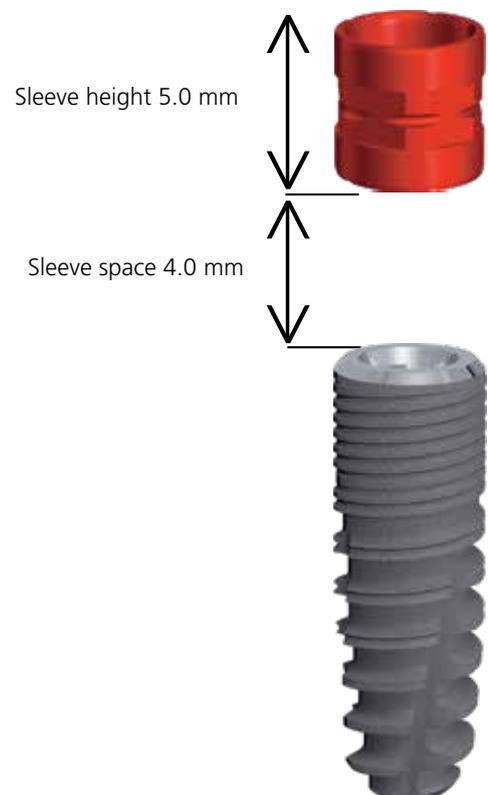
Precise fabrication of the surgical stent and exact transfer from the planning software to the surgical stent are basic requirements for the application of the pOstion for tioLogic® system.

During planning, the minimum distance to critical structures must be maintained and the corresponding instructions of the planning software used must be followed.

This applies, inter alia, to:

- Distance to the mandibular nerve and inferior alveolar nerve.
- Distance to an adjacent natural tooth.
- Distance to an adjacent implant.
- Implant diameter and length should be determined so that there is adequate bone availability around the implant.
- Sleeve height and space between the sleeve and implant shoulder.

Sleeve height and space between the sleeve and implant shoulder



Supported software systems.

You can find an overview of the supported software systems on Guided Surgery here:
www.dentaurum.de/deu/position-for-tiologic-33490.aspx

The overview shows the allocation of the implant diameters

to the corresponding sleeves (basic sleeves / inner sleeves):

	S		M		L	
Implant diameter	∅ 3.3 mm	∅ 3.7 mm	∅ 4.2 mm	∅ 4.8 mm	∅ 5.5 mm	
Basic sleeve						
Inner diameter	4.3 mm	4.3 mm	4.8 mm	5.4 mm	6.1 mm	
Outer diameter	5.1 mm	5.1 mm	5.6 mm	6.2 mm	6.9 mm	
Inner sleeve						
Depth drill						
Inner diameter	2.05 mm	2.05 mm	2.05 mm	2.05 mm	2.05 mm	
Outer diameter	4.3 mm	4.3 mm	4.8 mm	5.4 mm	6.1 mm	
Inner sleeve						
Stepped countersink						
Inner diameter	2.85 mm	3.15 mm	3.65 mm	4.25 mm	4.95 mm	
Outer diameter	4.3 mm	4.3 mm	4.8 mm	5.4 mm	6.1 mm	

CAD/CAM.



Data sets for all software providers.

At www.dentaurum.de/cadcam, Dentaurum provides a download service for the CAD/CAM data sets for 3shape, dental wings and exocad, and integrates them into the respective software. The data sets were created and verified in collaboration with these manufacturers. The download begins after selection of the relevant software provider. It contains all of the data for each kind of restoration in one complete package:

- Individual one-piece abutments.
- Hybrid abutments.
- Bar and bridge restorations.
- Printed implant models



You already have planning software?

Dentaurum provides a download service for CAD/CAM data sets for 3Shape, dental wings and exocad free of charge, and integrates them into the respective software:
www.dentaurum.de/deu/download-datensatze-32798.aspx

CAD.

Software	Hybrid resto- ration	Bars & bridges	Individual abutments	Lab implants for printed models
3Shape	✓	✓	✓	✓
dental wings	✓	✓	✓	
exocad	✓	✓	✓	✓

CAM.

Manufacturing centers	Hybrid resto- ration	Bars & bridges	Individual abutments	Lab implants for printed models
i-PRODENS	✓	✓		
induDent	✓	✓	✓	✓
Mack Dental	✓	✓	✓	
Prinoa	✓	✓	✓	✓
white digital dental	✓	✓	✓	✓

In-house manufacture

Amann Girrbach	✓			
Sirona CEREC	✓ (*)			

medentika blank holder

Datron D5			✓	
Dental Concept Systems DC1, DC5			✓	
imes icore 140i			✓	
imes icore 350i, 450i, 550i, 650i, 850i			✓	
imes icore 750i			✓	
MB Maschinen Cobra Mill 5A1, 5M			✓	
Primacon PFM 24 mediMill			✓	
R+K Organical Multi5X, 5XT-M, Desktop8			✓	
Röders RXD			✓	
Sirona inLab MC X _s			✓ (*)	
Universal			✓	
VHF N4			✓	
VHF S2			✓	
Wissner Gamma 202			✓	

* Only via workaround.

CAD/CAM data sets.



Download Datensätze
3shape, dental wings und exocad

Download Datensätze
3Shape, dental wings und exocad.

Die Datensätze wurden gemeinsam mit 3Shape, dental wings und exocad erstellt und verifiziert.

Nach Auswahl des entsprechenden Software-Anbieters wird der Download gestartet. Dieser beinhaltet alle Daten für sämtliche Versorgungsvarianten als Komplettpaket:

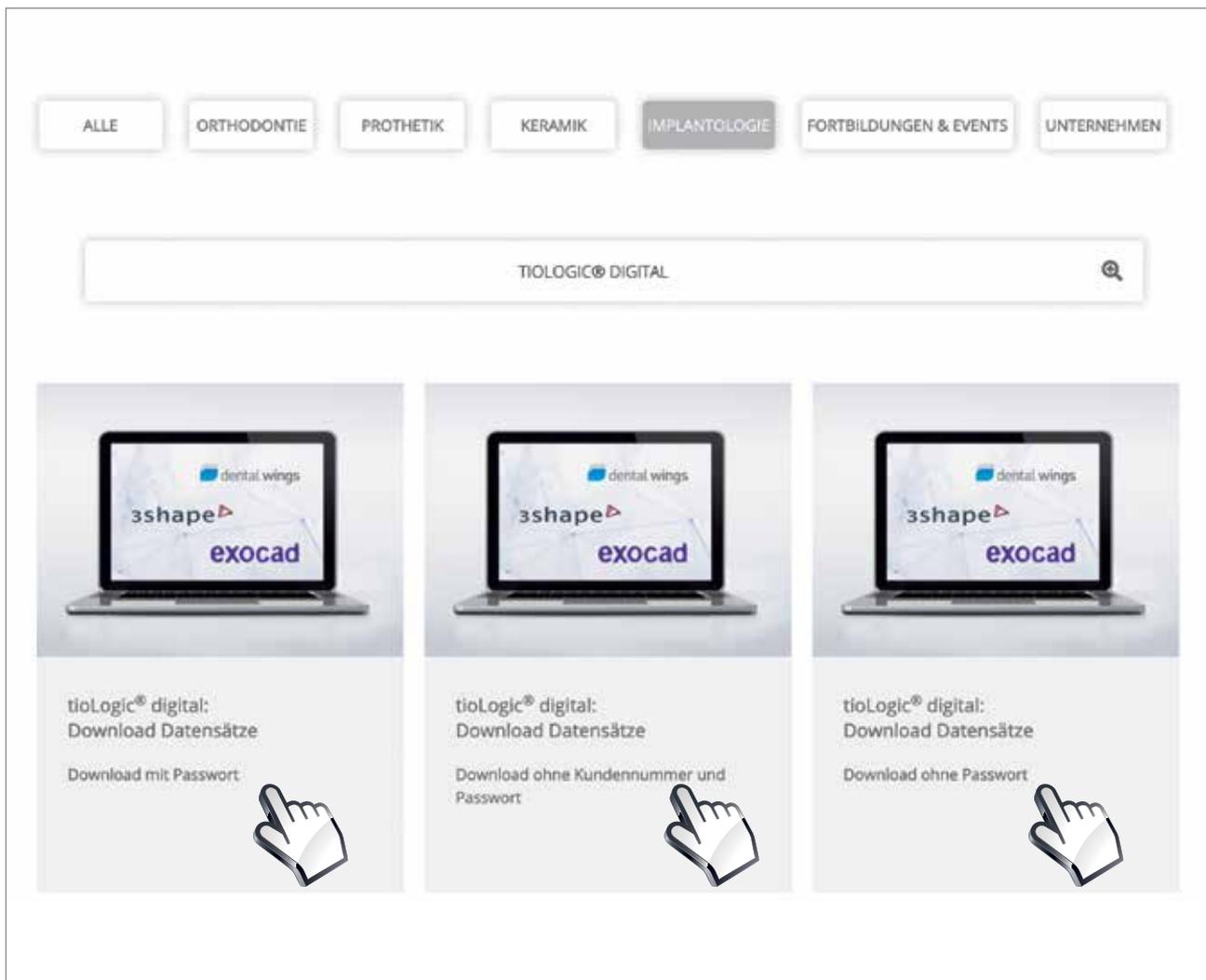
- Individuelle einteilige Aufbauten
- Hybridaufbauten
- Steg- und Brückenversorgungen
- gedruckte Modelle



CAD/CAM data sets

Dentaurum provides a download service for CAD/CAM data sets for 3Shape, dental wings and exocad free of charge, and integrates them into the respective software:

www.dentaurum.de/deu/download-datensätze-32798.aspx



Instructions Download Data

Here you will find instructions on how to download the data:
www.dentaurum.de/deu/videos-tutorials.aspx

Download CAD/CAM data sets.

The image shows a sequence of steps for downloading CAD/CAM data sets. It starts with a laptop displaying logos for dental wings, 3shape, and exocad. A 'Download-Login' dialog box is overlaid, prompting for an email or ID number and a password. Below this, there are sections for '3Shape Abutment Designer™' and 'dental wings - DWOS', each with a download button and a mouse cursor icon indicating the next step.

Download-Login

E-Mail oder ID-Nr. Passwort OK

Kein Login? Hier Registrieren >>
Passwort vergessen?

3Shape Abutment Designer™

Mit dem Abutment Designer™ wird die Individualität des Kiefers modelliert, die direkt in der Abutmentkonstruktion verwendet wird, um die Ergebnisse zu visualisieren und optimale Ästhetik zu erleben.

Laden Sie nun Ihren Datensatz herunter

3Shape Abutment Designer™ - Historisch TW

3Shape Abutment Designer™ - Historisch

3Shape Abutment Designer™ - Historisch für

Ich habe die Nutzungsrichtlinien gelesen und akzeptiert.

dental wings - DWOS

DWOS ermöglicht den Entwurf individueller Abutments in nur einem Schritt unter Berücksichtigung aller klinischen und ästhetischen Details.

Laden Sie nun Ihren Datensatz herunter

dental wings DWOS - Historisch TW



dental wings - DWOS

DWOS ermöglicht den Entwurf individueller Abutments in nur einem Schritt unter Berücksichtigung aller Knochen und ästhetischen Details.

Laden Sie nun Ihren Datensatz herunter:

dental wings DWOS - tiologic® TWiMFiT 

dental wings DWOS - tiologic® 



Ich habe die Nutzungsrichtlinie gelesen und akzeptiert.

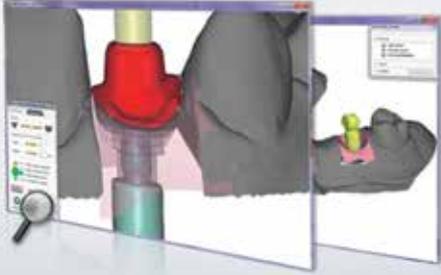


Ich habe die Nutzungsrichtlinie gelesen und akzeptiert.





dental wings



exocad

exocad® DentalCAD

Exocad® DentalCAD ist ein einfach anzuwendendes CAD-System für dentale Anwendungen. Mit dem exocad Implantat Modul wird das Design von verschraubten Brücken, Köhen, Kröpfchen eine leichte Aufgabe.

Laden Sie nun Ihren Datensatz herunter:

exocad® DentalCAD - tiologic® TWiMFiT 

exocad® DentalCAD - tiologic® TWiMFiT Anal 

exocad® DentalCAD - tiologic® 



Ich habe die Nutzungsrichtlinie gelesen und akzeptiert.



Haftungshinweise

DENTALURUM versichert, dass die zum Download zur Verfügung gestellten Datensätze hinsichtlich der technischen Daten und Konfiguration jeweils der mit dem genannten Softwarehersteller abgestimmten aktuellen Version entsprechen. Im Falle einer nach dem Download vorgenommenen individuellen Nachbearbeitung des Datensatzes besteht keine Haftung.

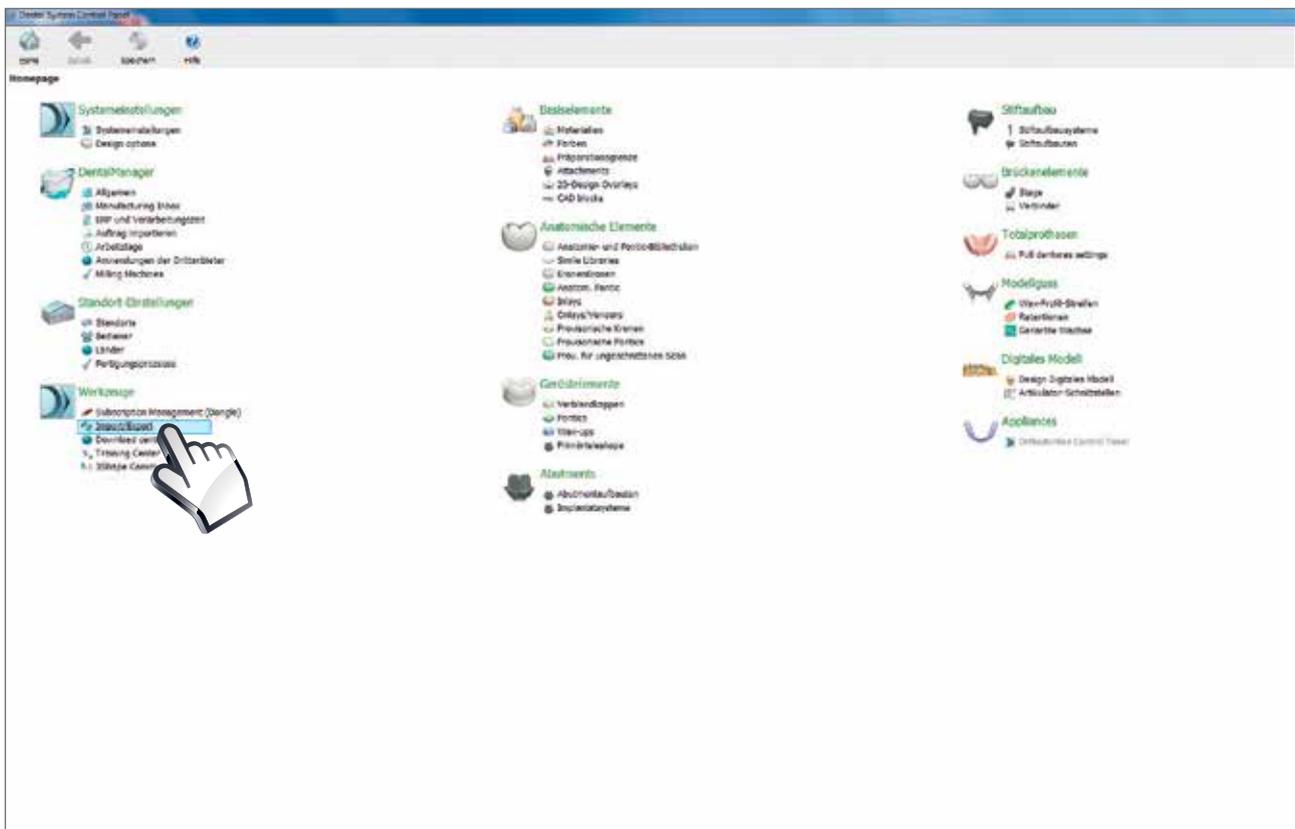
Ebenso ist eine Ersatzpflicht für Fehler aufgrund einer unangemessenen Anwendung ebenso ausgeschlossen wie eine Haftung für konstruktive Designfehler am Zahnersatz, Herstellungsfehler oder Mängel des dabei verwendeten Materials sowie alle sonstigen Umstände, auf die einen Einfluss von DENTALURUM entzogen sind.



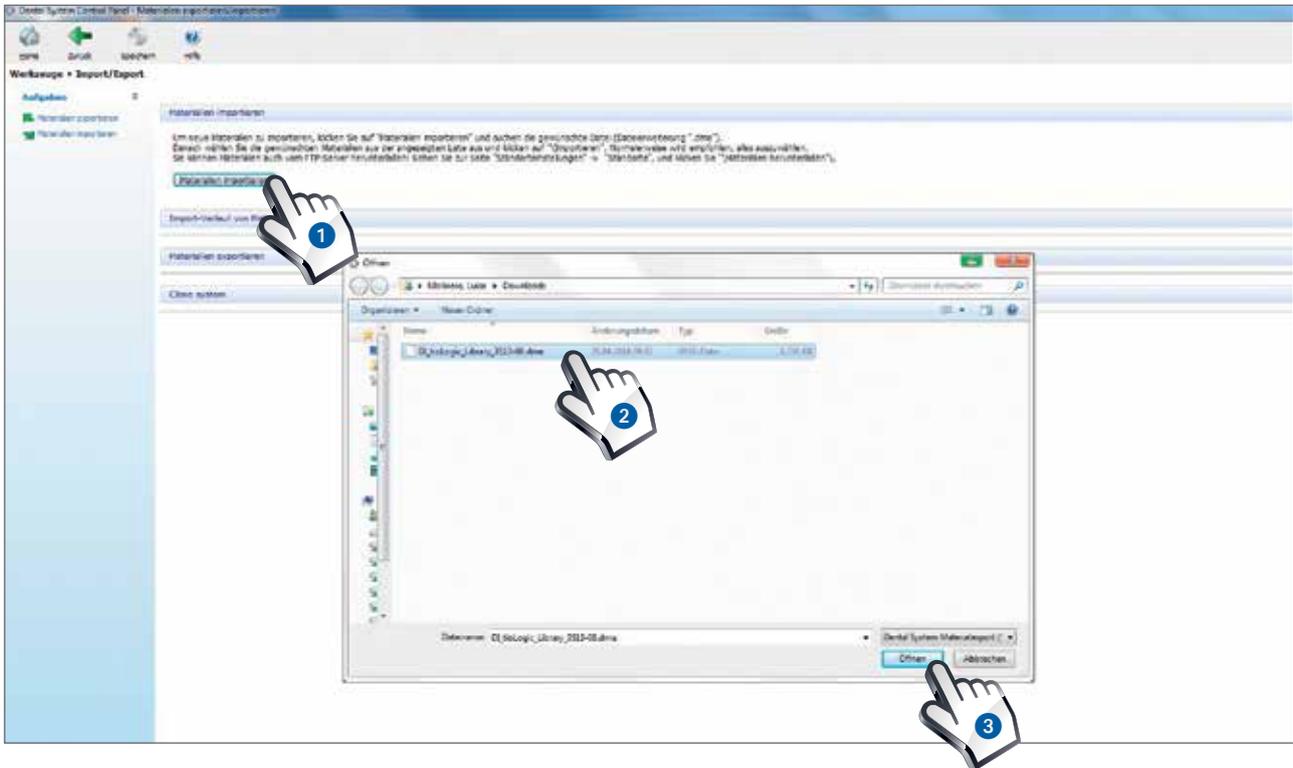
dental wings

3shape

Installing the 3Shape library.



Start the "3Shape Dental System Control Panel" and open the menu item "Import/Export" under "Tools".



Now click on the button "Import materials". ①. A dialog box opens in which you select the freshly saved file (e.g. desktop or download) e.g. "DI_tioLogic_Library_3Sxx-xx.dme" ②. Now click on the button "Open" ③.



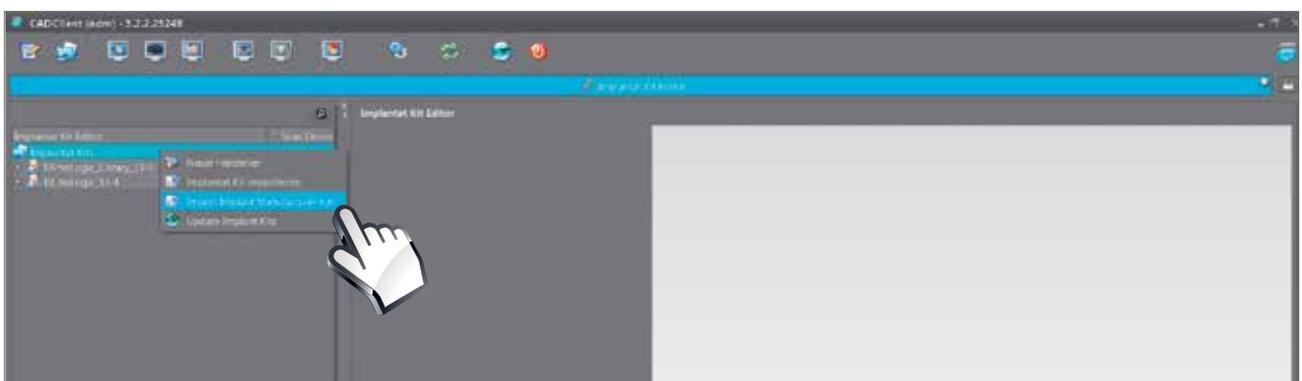
The "Import materials and update" dialog opens. Click here on the button "Import" 4.

Please check the import by creating a new order with the tioLogic® implant system in the Dental Manager.

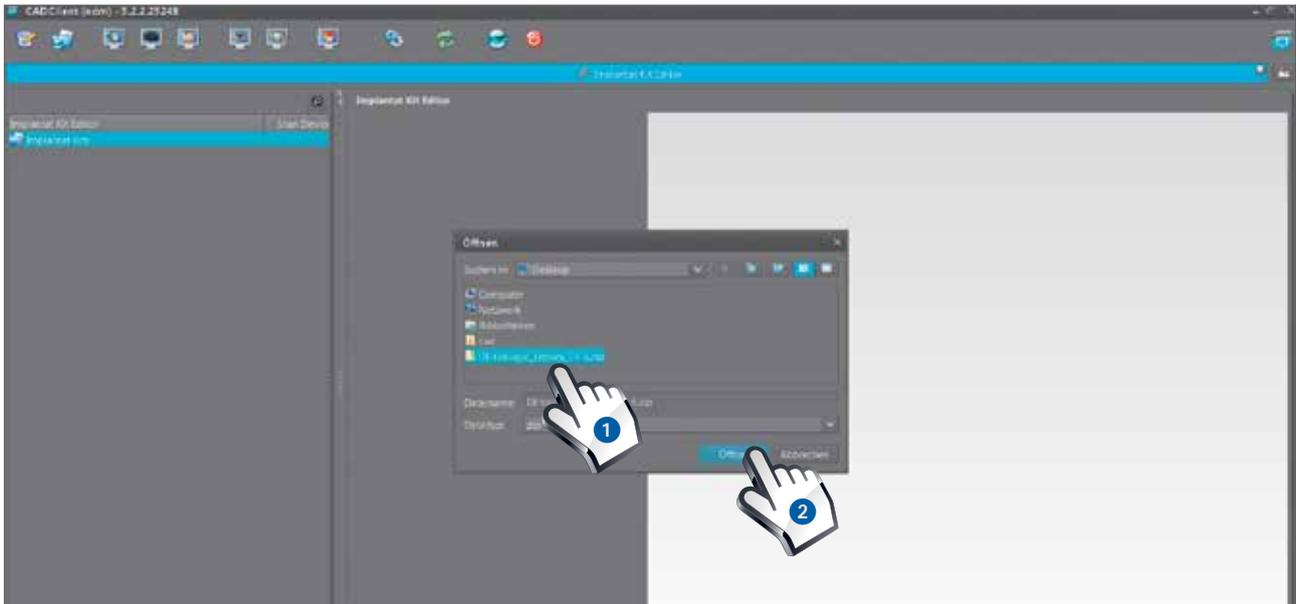
Installing the dental wings library.



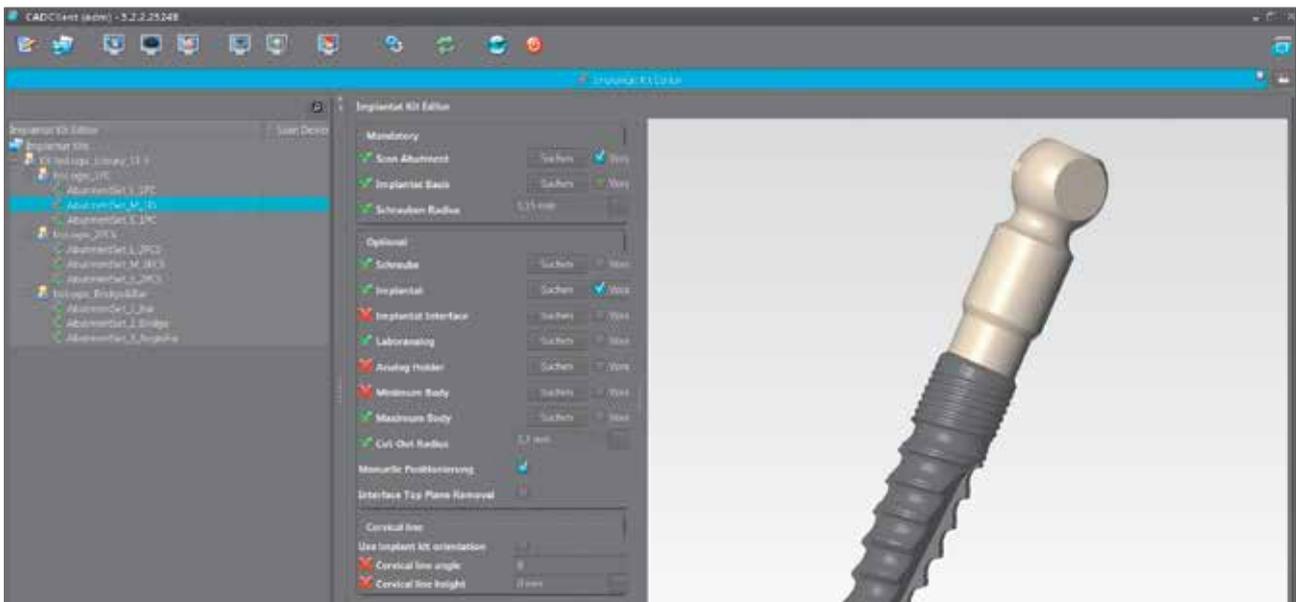
Start the "dental wings CADClient" and open the menu item "Implant Kit" under "Applications".



In the Implant Kit Editor, under "Implant Kits", right-click in the context menu on "Import Implant Manufacturer Kits".



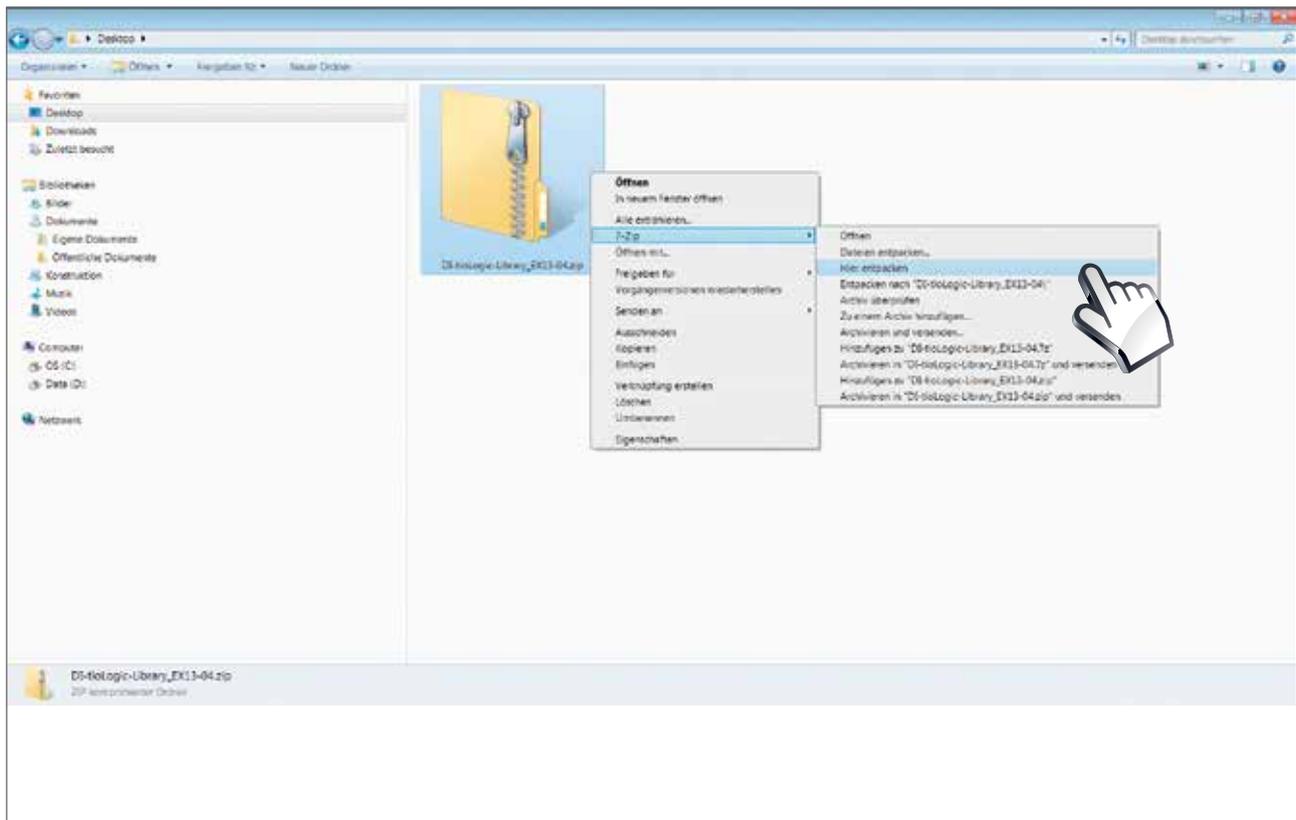
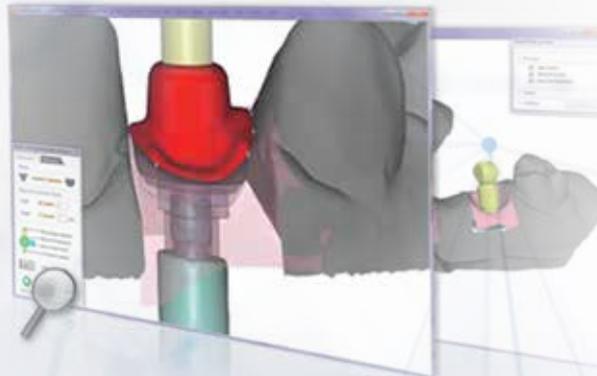
Now click on the button "Import materials". A dialog box opens, in which you select the freshly saved file (e.g. desktop or download) e.g. "DI-tioLogic Library_xx-x.zip" ① and confirm with "Open" ②.



The complete data package is automatically integrated under "Implant Kits".

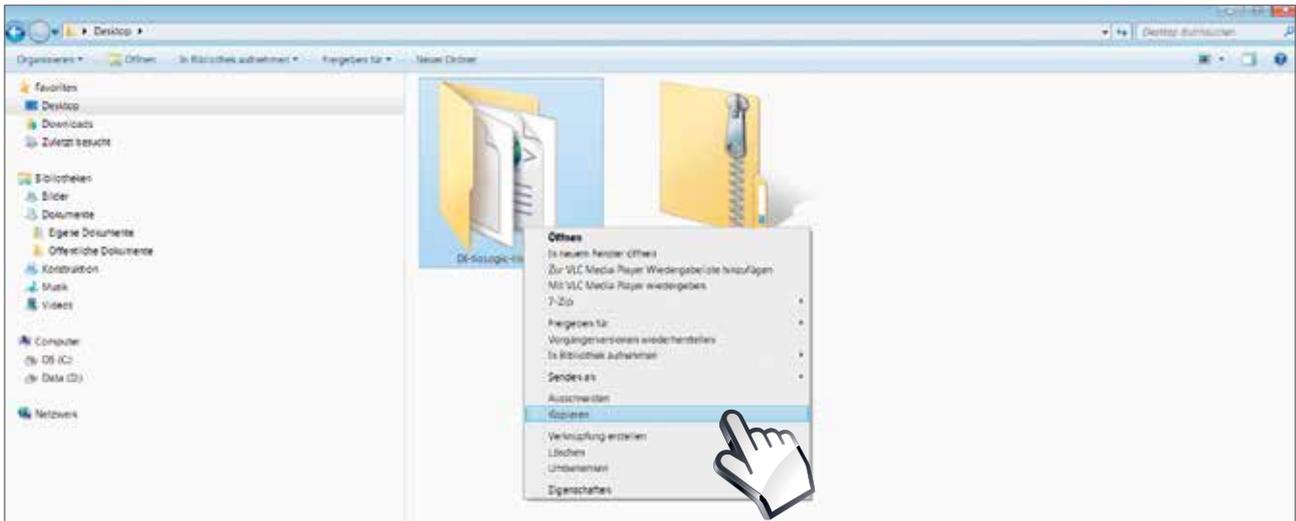
Please check the import by creating a new order with the tiologic® implant system in the DWCADClient.

Installing the exocad library.

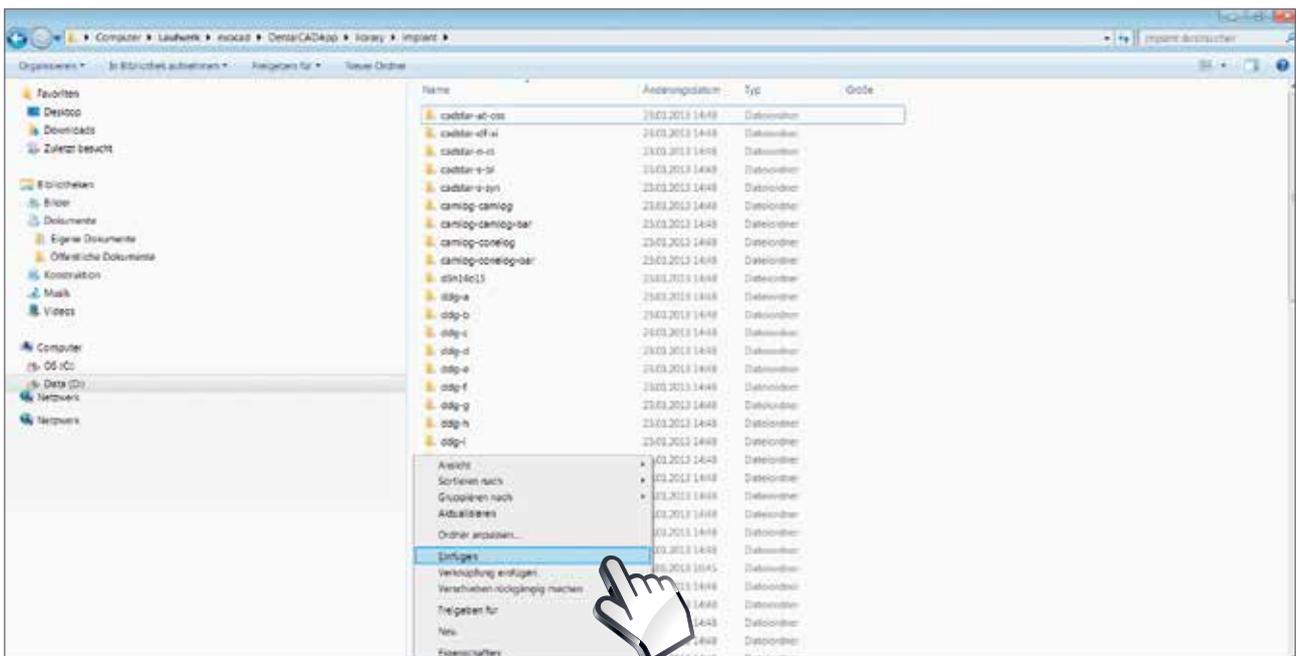


Please select the freshly saved file (e.g. desktop or download) "DI-tioLogic-Library_EX_xx-xx.zip". By means of a compression program (e.g. x-Zip), use a right-click to extract/unpack the file.

exocad



Select the extracted file DI-tioLogic-Library_EX_xx-xx.zip". Click on the right mouse button again in the context menu to copy the file.



Add the copied file to "exocad/DentalCADAPP/library/Implant".

Please check the import by creating a new order in the DentalCADAPP with the tioLogic® implant system.

Choice of material for the tioLogic® ST implant system.

Dentaurum is a materials specialist offering many different materials and components for every demand and for a variety of indications. There is a wide assortment of prosthetics products available to fabricate highly aesthetic restorations with the tioLogic® ST implant system.

Scan abutments.

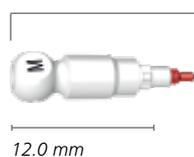
The scan abutments titanium tioLogic® ST are available in the S, M or L series of abutments. The scan abutment is placed on the tioLogic® ST or on the laboratory implant tioLogic® ST (pay attention to the rotational security) and fixed with the enclosed red retaining screws. This retaining screw has a shortened thread, which only grips in the (laboratory) implant when the scan abutment has been inserted into the connection point in the correct position. After selecting the indication (one piece abutments or hybrid abutments) in the data set of the respective software, the scan abutments can be scanned. The matching process and design are carried out according to the instructions of the software manufacturer and according to dental prosthetic rules.

One-piece abutments.

By using original Dentaurum CAD/CAM PreForm titanium blocks, it is possible to create highly precise abutments that are specific to each patient, have a precise fit and can be directly screw-retained – quickly and economically. The original PreForm titanium blocks are used with Medentika® abutment holders and ensure a perfect connection to the tioLogic® ST implant interface. tioLogic® ST CAD / CAM PreForm titanium blocks are available for all three series of abutments S, M and L for the tioLogic® ST implant system.

Occlusally screw-retained solutions.

Scan abutment titanium M



CAD/CAM titanium block M, PreForm



Hybrid abutments.

1. CAD/CAM titanium bases.

The geometry of the titanium bases is designed to ensure a reliable, aesthetic bond with the ceramic mesostructure. tiologic® ST CAD/CAM titanium bases are available in all three series of abutments S, M and L for the tiologic® ST implant systems. Before bonding, the head of the prosthetic screw, which fixes the CAD/CAM titanium base, is covered with wax. The bonding surfaces of the ceramic sleeve and of the CAD/CAM titanium base are blasted with aluminum oxide (50 µm/2 bar). It is also advisable to use the silanization method to condition this area on the CAD/CAM titanium base. Before bonding, ensure the surfaces are dry and free from grease. Adhesives must be used according to the manufacturer's instructions (e.g.: "PANAVIA™ F2.0" by Kuraray Noritake or "Multilink® Hybrid Abutment" by Ivoclar Vivadent AG). After bonding, excess material is removed and the ceramic abutment is put into position (observing the rotational security). The all-ceramic crown is completed according to the manufacturer's instructions.

Safety information.

- The wall thickness of the ceramic abutment must **NOT** be less than 0.5 mm.
- Preparation of a chamfer with angled inner edge and a minimum step of 0.5 mm.

CAD/CAM titanium base M



2. CAD/CAM titanium bases – Sirona CEREC.

The tiologic® ST titanium bases CEREC for use with the Sirona inLab system enable CAD/CAM manufacture of hybrid abutments for aesthetic prosthetic restorations. tiologic® ST titanium bases are available in all three prosthetic series of abutments S, M and L, and are coordinated with the tiologic® ST implant system. Sirona Dental System customers must order the scan body from their Sirona partner as usual. Before bonding, the head of the prosthetic screw, which fixes the CAD/CAM titanium base, is covered with wax. The bonding surfaces of the ceramic sleeve and of the CAD/CAM titanium base are blasted with aluminum oxide (50 µm/2 bar). It is also advisable to use the silanization method to condition this area on the CAD/CAM titanium base. Before bonding, ensure the surfaces are dry and free from grease. Adhesives must be used according to the manufacturer's instructions (e.g.: "PANAVIA™ F2.0" by Kuraray Noritake or "Multilink® Hybrid Abutment" by Ivoclar Vivadent AG). After bonding, excess material is removed and the ceramic abutment is put into position (observing the rotational security). The all-ceramic crown is completed according to the manufacturer's instructions.

Safety information.

- The wall thickness of the ceramic abutment must **NOT** be less than 0.5 mm.
- Preparation of a chamfer with angled inner edge and a minimum step of 0.5 mm.



CAD/CAM titanium base M – Sirona, CEREC



* Dentaurum GmbH & Co. KG gives no warranty for the stability of the meso/superstructure and the adhesive.

Choice of material for the tioLogic® ST implant system.

Bar, bridge, AngleFix abutments.

Bar, bridge and AngleFix abutments are available in different gingiva heights for solutions which can be screw-retained occlusally. These can compensate for implant divergences of different sizes and thereby ensure a passive fit of the prosthetic superstructure (see table on page 25). The CAD/CAM scan caps titanium are designed for precise three-dimensional detection of the geometries on the respective abutments. The special feature of these scan caps titanium is that digital capture is performed directly on the respective abutment type (bar, bridge or AngleFix), thereby ensuring results of very high precision. A laser marking clearly assigns the scan cap to the respective abutment type (see table on page 25). The seating surface for the scan caps titanium on the respective abutment types is identical for the S, M and L series of abutments (see table on page 25). The corresponding scan cap for bar, bridge and AngleFix abutments is fixed with the prosthetic screw L 6.0 mm onto the respective abutment.

After selecting the indication and the required abutment in the data set of the respective software, the scan caps can be scanned. Scan caps are made of titanium, allowing precise and safe digitization, both intra-orally and extra-orally. The matching process and design are carried out according to the instructions of the software manufacturer and dental prosthetic rules.



tioLogic® ST bar abutments



tioLogic® ST bridge abutments



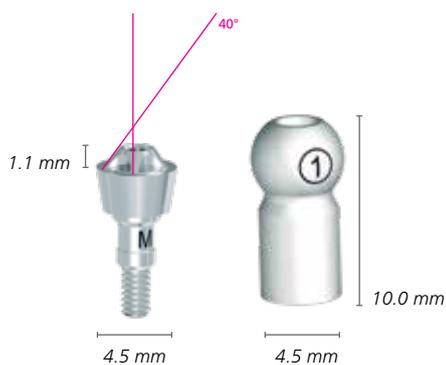
tioLogic® ST AngleFix abutments

Safety information.

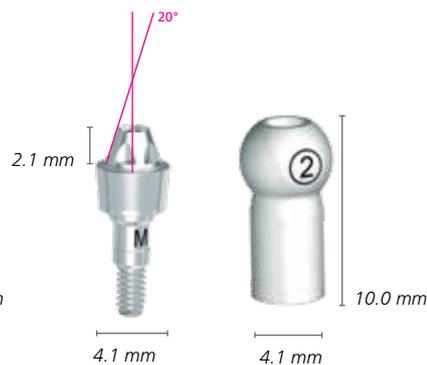
- In case of steep inclination of the implants, a splinted denture is absolutely essential.
- The product should NOT be used if there is a known allergic reaction to one or more of the material components.
- Different types of alloy in the oral cavity can lead to galvanic reactions.
- **NO** restorations with mixed retention (tooth/bar, bridge, AngleFix).
- **NO** grinding or shortening of the bar, bridge or AngleFix abutments.

Abutments	Laser marking scan cap	Seating surface superstructure	Angle of convergence per side / total	Cone height in mm	Angulation (of abutments to the implant axis)
Bar	①	ø 4.5 mm	40°/80°	1.1 mm	0°
Bridges	②	ø 4.1 mm	20°/40°	2.1 mm	0°
AngleFix	③	ø 5.3 mm	12°/24°	4.0 mm	0°, 18°, 32°

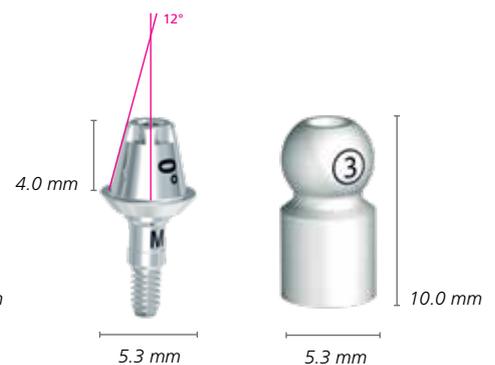
Bar abutment M with scan cap ①



Bridge abutment M with scan cap ②



AngleFix abutment M with scan cap ③



Choice of material for the tioLogic® TWINFIT implant system.

Dentaurum is a materials specialist offering many different materials and components for every demand and for a variety of indications. The revolutionary Abutment Switch allows for maximum flexibility with the tioLogic® TWINFIT implant system.

All abutment components for the tioLogic® TWINFIT implant system are available with conical and platform connector geometry. Scan caps are made of titanium, allowing precise and safe impression-taking, both intra-orally and extra-orally.

Scan abutments.

The surface of the scan abutment titanium is optimized for digital capture, both intra-orally and on the model without scanning spray. The long cylinder at the connection point of the scan abutment titanium serves for easy integration into the (laboratory) implant and for exact axial detection of the position. The enclosed red retaining screw has a shortened thread, which only grips in the (laboratory) implant when the scan abutment has been inserted into the connection point in the correct position. The matching process of the scan data with the STL data takes place according to the specifications of the respective software manufacturer.

Scan abutment titanium M

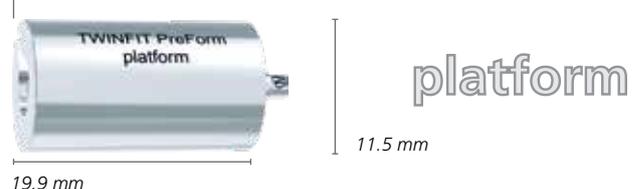


12.0 mm

One-piece abutments.

By using original Dentaurum CAD/CAM PreForm titanium blocks, it is possible to create highly precise abutments that are specific to each patient, have a precise fit and can be directly screw-retained. The original PreForm titanium blocks were designed for the Medentika® PreFace® abutment holders. These ensure a perfect connection to the tioLogic® TWINFIT implant interface, both for in-house production and for production in a manufacturing center. CAD/CAM PreForm titanium blocks are available for all three series of abutments S, M and L with conical and platform connector geometry.

CAD/CAM titanium block M, PreForm



Hybrid abutments.

1. CAD/CAM titanium bases.

The geometry of the titanium bases is designed to ensure a reliable, aesthetic bond with the ceramic mesostructure. tioLogic® TWINFIT CAD/CAM titanium bases are available in all three series of abutments S, M and L with conical and platform connector geometry for tioLogic® TWINFIT. Before bonding, the head of the prosthetic screw, which fixes the CAD/CAM titanium base, is covered with wax. The bonding surfaces of the ceramic sleeve and of the CAD/CAM titanium base are blasted with aluminum oxide (50 µm/2 bar). It is also advisable to use the silanization method to condition this area on the CAD/CAM titanium base. Before bonding, ensure the surfaces are dry and free from grease.

Adhesives must be used according to the manufacturer's instructions (e.g.: "PANAVIA™ F2.0" by Kuraray Noritake or "Multilink® Hybrid Abutment" by Ivoclar Vivadent AG). After bonding, excess material is removed and the ceramic abutment is put into position (observing the rotational security). The all-ceramic crown is completed according to the manufacturer's instructions.

Safety information.

- The wall thickness of the ceramic abutment must **NOT** be less than 0.5 mm.
- Preparation of a chamfer with angled inner edge and a minimum step of 0.5 mm.

Scan abutment titanium M

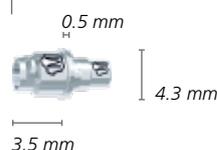


12.0 mm

CAD/CAM titanium base M



conical



platform

* Dentaurum GmbH & Co. KG gives no warranty for the stability of the meso/superstructure and the adhesive.

Choice of material for the tioLogic® TWINFIT implant system.



2. CAD/CAM titanium bases for angulated screw apertures.

The angulated screw aperture is the best solution for the entire segment that is occlusally screw-retained, both for 4Base and for hybrid constructions (in this case, hybrid abutments). This guarantees prosthetic results that are aesthetic and functional. The screw aperture can be inclined at an angle of 20° to the implant axis, allowing discreet emergence in the palatal area, particularly in the anterior region. The geometry of the titanium bases is designed to ensure a reliable, aesthetic bond with the ceramic mesostructure.

tioLogic® TWINFIT CAD/CAM titanium bases are available in all three series of abutments S, M and L with conical and platform connector geometry for tioLogic® TWINFIT.

Before bonding, the head of the prosthetic screw, which fixes the CAD/CAM titanium base, is covered with wax. The bonding surfaces of the ceramic sleeve and of the CAD/CAM titanium base are blasted with aluminum oxide (50 µm/2 bar). It is also advisable to use the silanization method to condition this area on the CAD/CAM titanium base. Before bonding, ensure the surfaces are dry and free from grease. Use the adhesive according to the manufacturer's instructions. After bonding, excess material is removed and the ceramic abutment is put into position (observing the rotational security). The all-ceramic crown is completed according to the manufacturer's instructions.

CAD/CAM titanium base M, for angulated screw channels



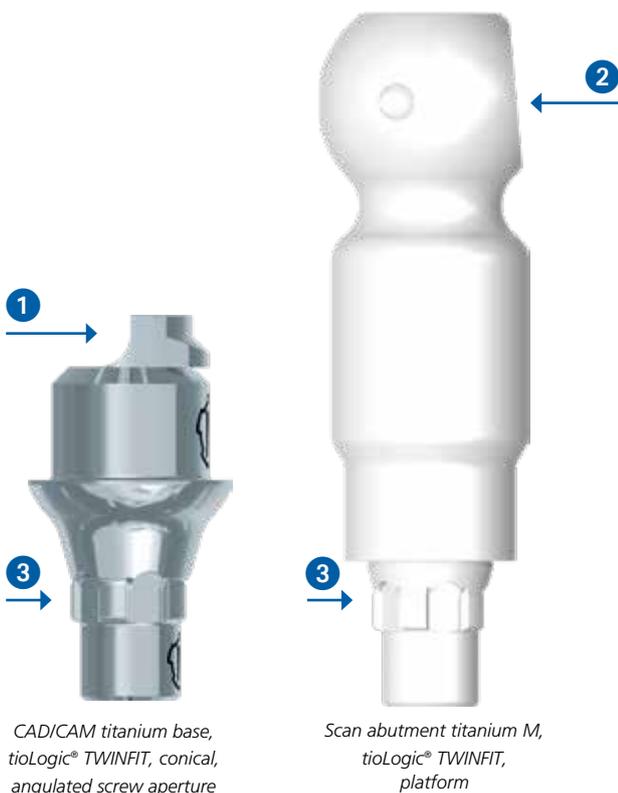


Safety information.

- The wall thickness of the ceramic abutment must **NOT** be less than 0.5 mm.
- Preparation of a chamfer with angled inner edge and a minimum step of 0.5 mm.

CAUTION:

Due to the higher gingival height in the conical design of the CAD/CAM titanium base, a recess in the area to be bonded was constructed for the angulated screw aperture. This creates free space for a maximum angulation of 20°. In order to achieve the correct angle when planning, the scanning surface on the scan abutment must be opposite the desired exit of the angled screw aperture. The recess in the CAD/CAM titanium base (angulation alignment) ① is flush with a cam from the inner connection ③. In the case of the scan abutment, the upper scanning surface ② is located opposite a cam from the inner connection ③. During scanning, care must be taken to determine where the exit of the screw aperture should be located. For angulated screw apertures, the Anotite screw for angulated screw apertures L 8.5 mm and the hex ball point key 1.3 are used.



3. Titanium bases VARIO with individual adhesive

Choice of material for the tioLogic® TWINFIT implant system.

cylinder.

The titanium base VARIO has been specially developed for demanding cases in prosthetics. In the case of an unfavorable implant position or in an aesthetically demanding area, there is both the possibility of laying the screw aperture towards oral and of customizing the shaft in various lengths according to the requirements.

tioLogic® TWINFIT CAD/CAM titanium bases are available in all three series of abutments S, M and L with conical and platform connector geometry for tioLogic® TWINFIT. In the respective data set, the height of the adhesive cylinder and the adhesive surface to be milled in the ceramic sleeve can be selected.

Before bonding, the head of the prosthetic screw, which fixes the CAD/CAM titanium base, is covered with wax. The bonding surfaces of the ceramic sleeve and of the CAD/CAM titanium base are blasted with aluminum oxide (50 µm/2 bar). It is also advisable to use the silanization method to condition this area on the CAD/CAM titanium base. Before bonding, ensure the surfaces are dry and free from grease. Adhesives must be used according to the manufacturer's instructions (e.g.: "PANAVIA™ F2.0" by Kuraray Noritake or "Multilink® Hybrid Abutment" by Ivoclar Vivadent AG). After bonding, excess material is removed and the ceramic abutment is put into position (observing the rotational security). The all-ceramic crown is completed according to the manufacturer's instructions.



* Dentaurum GmbH & Co. KG gives no warranty for the stability of the meso/superstructure and the adhesive.



Safety information.

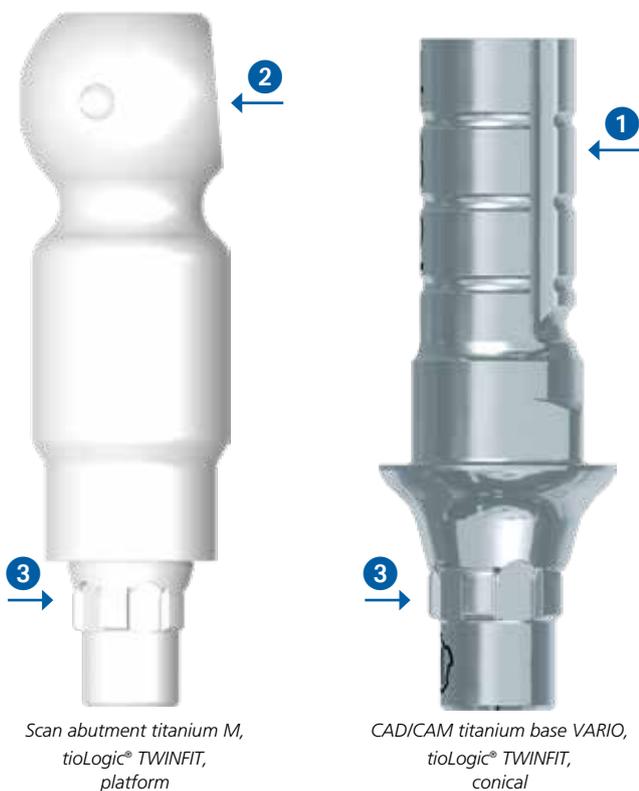
- The wall thickness of the ceramic abutment must **NOT** be less than 0.5 mm.
- Preparation of a chamfer with angled inner edge and a minimum step of 0.5 mm.

CAUTION:

It is possible to open the adhesive cylinder on a pre-prepared surface ① for an angled screw aperture.

In order to achieve the correct angle when planning, the scanning surface ② on the scan abutment and the desired exit of the angled screw aperture ① must be on the same side. The cam of the inner connection ③ is located on the opposite side in both cases.

4. CAD/CAM titanium adhesive bases.



Choice of material for the tioLogic® TWINFIT implant system.



CAD/CAM titanium adhesive bases are suitable for adhesion in the case of multi-unit bridge restorations or full-arch restorations in the edentulous mandible or maxilla. They have a platform connector geometry for all series of abutments S, M and L which ensures the prosthesis sits optimally. There is no rotational security to enable maximum freedom when positioning the base on the implant. The cone for bonding has retention grooves. It is 3.0 mm high and can compensate for divergences of up to 30°. By using the bonding technique, the ceramic bridges, manufactured using CAD/CAM, can be fitted passively. Before bonding, the head of the prosthetic screw, which fixes the CAD/CAM titanium base, is covered with wax. The bonding surfaces of the ceramic sleeve and of the CAD/CAM titanium base are blasted with aluminum oxide (50 µm/2 bar).

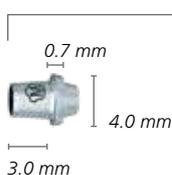
It is also advisable to use the silanization method to condition this area on the CAD/CAM titanium base. Before bonding, ensure the surfaces are dry and free from grease.

Use the adhesive according to the manufacturer's instructions. After bonding, excess material is removed and the ceramic abutment is put into position (observing the rotational security). The all-ceramic crown is completed according to the manufacturer's instructions.

Safety information.

- The wall thickness of the ceramic abutment must **NOT** be less than 0.5 mm.
- Preparation of a chamfer with angled inner edge and a minimum step of 0.5 mm.
- **NOT** approved for single restorations

CAD/CAM titanium adhesive base M





5. CAD/CAM titanium bases – CEREC.

The tiologic® TWINFIT titanium bases CEREC for use with the Dentsply Sirona inLab system enable CAD/CAM manufacture of hybrid abutments for aesthetic prosthetic restorations. They are available in all three prosthetic series of abutments S, M and L with conical and platform connector geometry, and are coordinated with the tiologic® TWINFIT implant system. Sirona Dental System customers order the scan body from their Dentsply Sirona partner as usual.

Before bonding, the head of the prosthetic screw, which fixes the CAD/CAM titanium base, is covered with wax. The bonding surfaces of the ceramic sleeve and of the CAD/CAM titanium base are blasted with aluminum oxide (50 µm/2 bar). It is also advisable to use the silanization method to condition this area on the CAD/CAM titanium base. Before bonding, ensure the surfaces are dry and free from grease. Use the adhesive according to the manufacturer's instructions. After bonding, excess material is removed and the ceramic abutment is put into position (observing the rotational security). The all-ceramic crown is completed according to the manufacturer's instructions.

Safety information.

- The wall thickness of the ceramic abutment must **NOT** be less than 0.5 mm.
- Preparation of a chamfer with angled inner edge and a minimum step of 0.5 mm.
- **NOT** approved for single restorations

CAD/CAM titanium base M, Sirona CEREC



Choice of material for the tioLogic® TWINFIT implant system.

Occlusally screw-retained solutions.

4Base abutments.

The prosthetic assortment is rounded off by the innovative 4Base system for screw-retained superstructures with angulations up to 50°. A uniform interface facilitates prosthetic restoration. This minimizes augmentative measures, thereby reducing treatment time. Prerequisite for the successful use of the 4Base system is the best possible accurate angular position of the implant. The more accurate these angles can be maintained, the easier the prosthetic treatment. The conus of each abutment should be positioned parallel to one another.

The mounted insertion guide facilitates the insertion of the angulated 4Base abutments. At the same time, they secure the pre-assembled Anotite screw in the 4Base abutment. The insertion guide can be bent sideways to tighten the Anotite screw. To ensure that the implants are reliably placed in the correct angle, we recommend the use of navigated implant placement with the pOstition for tioLogic® system (see Surgery Manual pOstition for tioLogic® REF 989-999-20). 4Base abutments with conical and platform connector geometry are available for the S, M and L series of abutments. They are offered in 3 angulations: 0°, 20° and 30°. The cone of the 4Base abutments is always identical (40°), so that only one size of impression posts, closure caps etc. is required.

For biomechanical reasons we recommend that the following angulations are not exceeded:

- Abutment with 0°: -20° – 20°
- Abutment with 20°: 0° – 40°
- Abutment with 30°: 10° – 50°

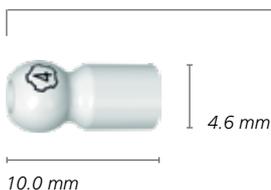
The 4Base CAD/CAM scan caps titanium are fixed with the prosthetic screw L 6.0 mm on the 4Base abutments. After selecting the indication in the tioLogic® TWINFIT data set of the respective software, the scan caps 4Base can be scanned. The matching process and design are carried out according to the instructions of the software manufacturer and dental prosthetic rules. The angulated screw aperture is also the best solution for the entire segment that is occlusally screw-retained, both for 4Base and for hybrid constructions (here: 4Base abutments).

This guarantees prosthetic results that are aesthetic and functional. The screw aperture can be inclined at an angle of 20° to the implant axis, allowing discreet emergence in the palatal area, particularly in the anterior region.



Angulated 4Base abutment with mounted, flexible insertion guide.

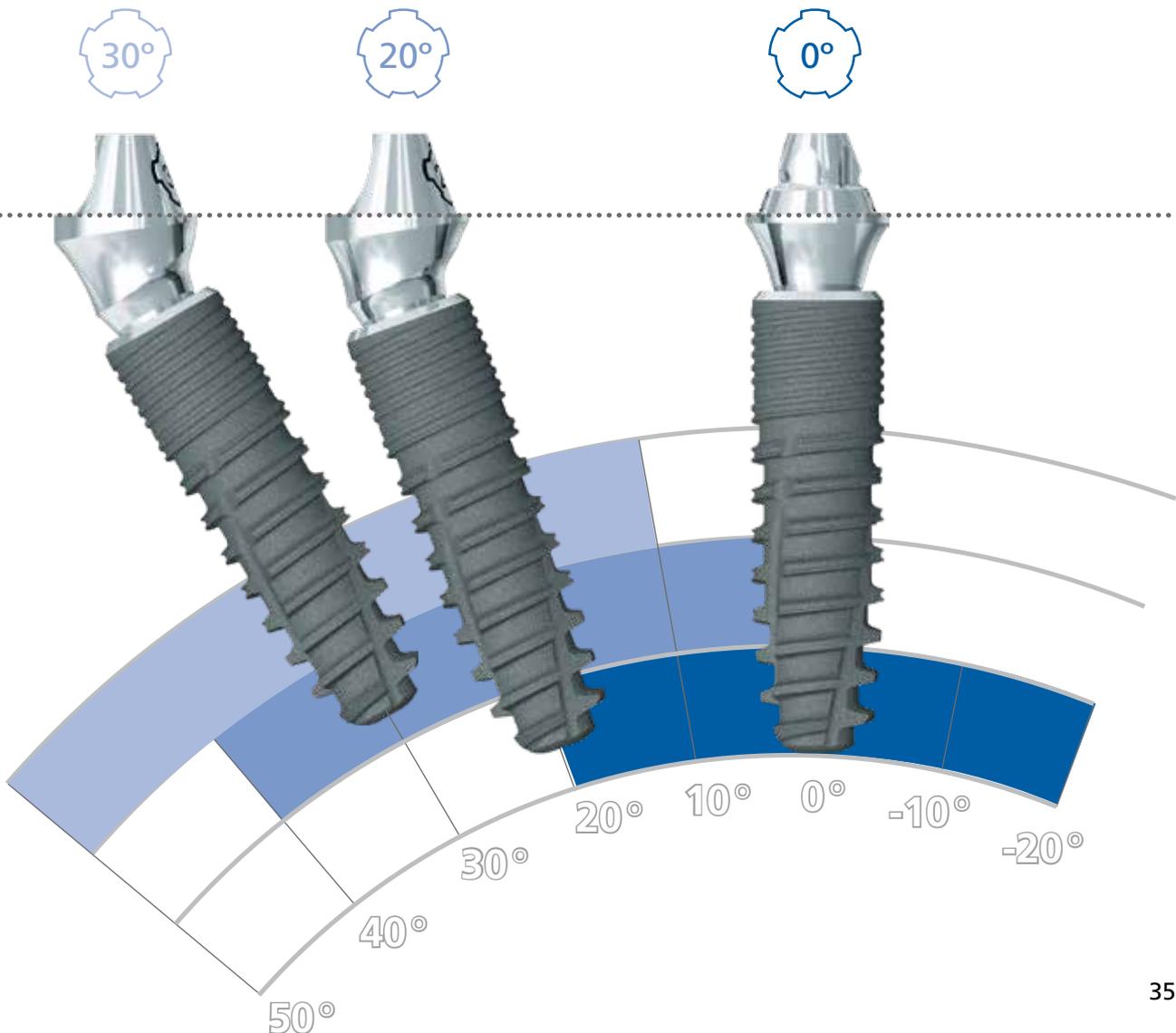
4Base CAD/CAM scan cap, titanium, tioLogic® TWINFIT



Safety information.

- In case of steep inclination of the implants, a splinted denture is absolutely essential.
- The product should **NOT** be used if there is a known allergic reaction to one or more of the material components.
- Different types of alloy in the oral cavity can lead to galvanic reactions.
- **NO** restorations with mixed retention (tooth/4Base).
- **NO** grinding or shortening 4Base abutments.

Abutments	Laser marking <small>scan cap</small>	Seating surface <small>superstructure</small>	Angle of convergence <small>per side / total</small>	Cone height <small>in mm</small>	Angulation <small>(of abutments to the implant axis)</small>
4Base	④	ø 4.6 mm	40°	2.6 mm	0°, 20°, 30°



Choice of material for the tioLogic® ST / tioLogic® TWINFIT implant systems.



Laboratory implants for printed and cast models.

All laboratory implants can be used in both analog and digital workflow.

The cavities of the laboratory analogs are stored in the CAD/CAM libraries of the various software manufacturers in order to achieve an optimum fit and the correct positioning of the laboratory analogs in 3D model printing.

For the exact transfer of the implant position, the intra-oral scan takes place via a scan abutment titanium directly on the implant shoulder. The scan abutments titanium and the laboratory implants are available in the S, M or L series of abutments.

CAUTION:

The connector geometry between the tioLogic® ST and tioLogic® TWINFIT systems are not compatible with each other.

In the case of a bar, bridge or all-on-4 restoration, the intra-oral scan can also be performed via the matching scan cap titanium on the bar, bridge, AngleFix or 4Base abutments.

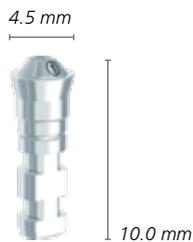
The respective scan caps and the laboratory implants for bars, bridges, AngleFix and 4Base are matched to one another via laser markings.



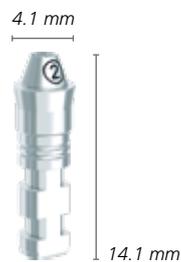
tiologic
ST



Laboratory implant, tiologic® ST
(for printed and cast models)



Laboratory implant bar, tiologic® ST,
(for printed and cast models)



Laboratory implant bridge tiologic® ST
(for printed and cast models)

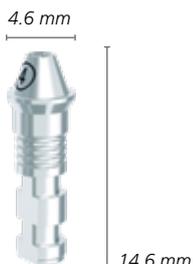


Laboratory implant, AngleFix,
tiologic® ST
(for printed and cast models)

tiologic
TWINFIT



Laboratory implant, tiologic® TWINFIT
(for printed and cast models)



4Base laboratory implant, tiologic® TWINFIT
(for printed and cast models)

Choice of material for the tioLogic® ST / tioLogic® TWINFIT implant systems.

Laboratory implants for printed and cast models.

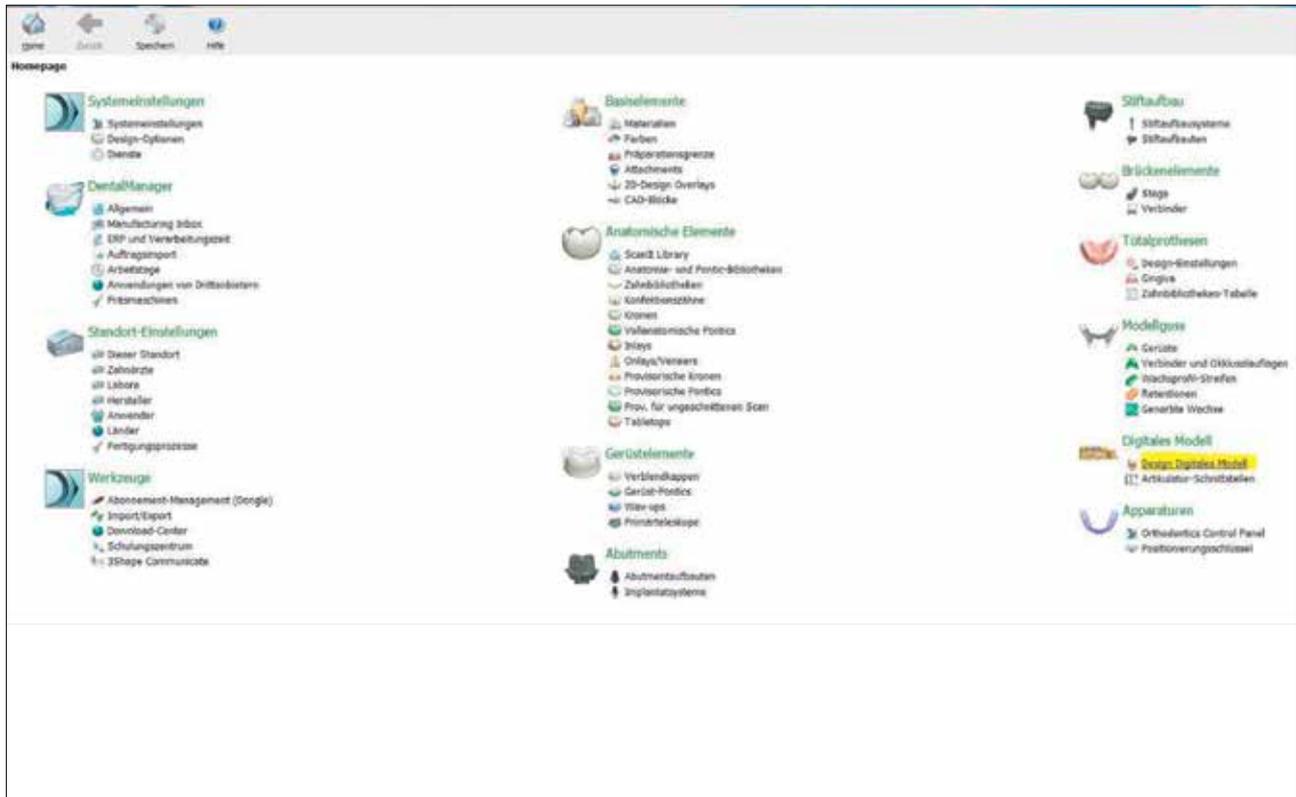
Important:

The surface of the scan abutment titanium is optimized for digital capture, both intra-orally and on the model without scanning spray.

In order to achieve an optimum fit and correct seating of the laboratory implant cavity during model printing, the parameters should be checked in the respective software and adjusted if necessary.

In order for the counter screw supplied to fix the laboratory analog at the apical end in the printed model, the model base should be printed with a sufficient height ①.

If a detachable mucosa is created, it should not be lower than 1.0 mm below the interface to ensure the optimal locking and holding function of the laboratory analog in the neck area of the printed model ②. The 3 retention tabs should still be visible in the printed model for monitoring purposes.



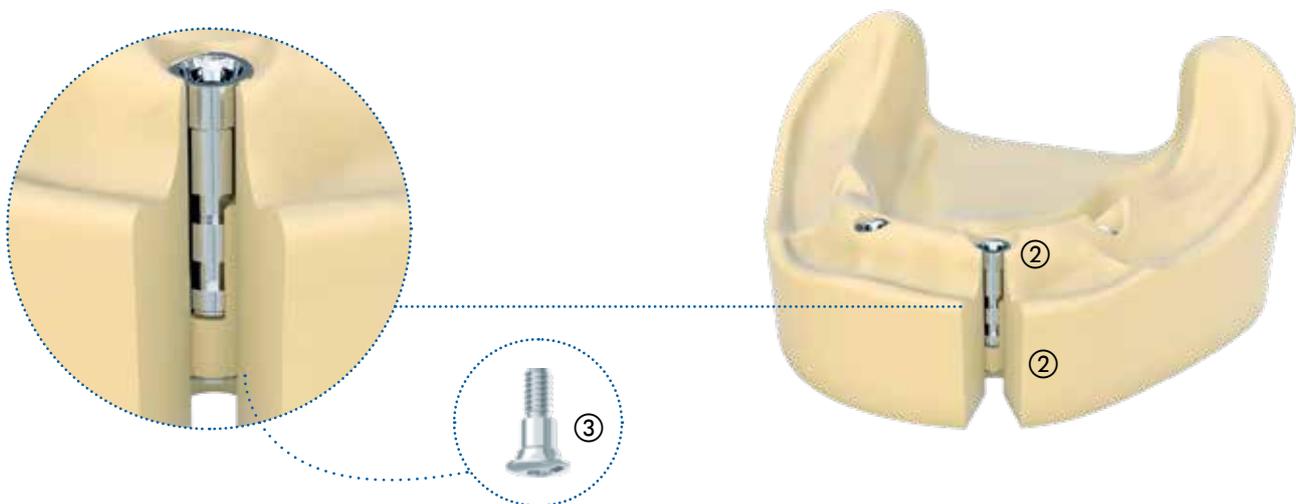
Exemplary presentation on the Dental System Control Panel from 3Shape:

Under the heading "Digital Model" → "Design digital model", the settings "Model and manufacture" can be checked and adjusted if necessary.

The parameter "distance from analog to model" must be set to 0. Otherwise, there will be deviations in the analog diameter. In addition, the "height alignment of analog hole (mm)" should be observed. If this is adjusted, the cavity is displaced in a horizontal orientation.

Name	Modell und Fertigung								
	Abstand Konstruktion Modell (mm)	Allgemeiner Abstand (mm)	Abstand des Analoglochkonturs (mm)	Überlappung des Analoglochkonturs (mm)	Anzahl der Analoglochkonture	Abstand vom Analog zum Modell	Höhenverschiebung von Analogloch (mm)	Analoglochz. (Zahlenreihenfolge)	Analoglochz. Abstand (mm)
Digital Model	0.100	0.100	0.800	0.020	8	0.100	0.000	NEIN	0.500
Dreiva Falschell	0.100	0.100	0.800	0.020	8	0.100	0.000	NEIN	0.500
Guid. 3DS ProJet 3000	0.100	0.100	0.800	0.020	8	0.100	0.000	NEIN	0.500
Falt. 3DS ProJet 3000	0.100	0.100	0.800	0.020	8	0.100	0.000	NEIN	0.500
DEDICAM-Print	0.100	0.100	0.800	0.000	0	0.000	0.000	JA	0.800
StoneRock Half Auto Print	0.100	0.100	0.800	0.020	8	0.100	0.000	NEIN	0.500
StoneRock Half All Print	0.100	0.100	0.800	0.020	8	0.100	0.000	NEIN	0.500
StoneRock Full Auto Print	0.100	0.100	0.800	0.020	8	0.100	0.000	NEIN	0.500
StoneRock Full All Print	0.100	0.100	0.800	0.020	8	0.100	0.000	NEIN	0.500
Proteways LD15 PCAST Co.	0.100	0.100	0.800	0.000	0	0.000	0.000	JA	0.800
DCS-HAPE Stone for 3Shape	0.100	0.100	0.800	0.020	8	0.100	0.000	JA	0.800
Disposent Test	0.000	0.000	0.800	0.000	8	0.000	0.000	JA	0.800
ModelManufacturingH	0.100	0.100	0.800	0.020	8	0.100	0.000	NEIN	0.500

When the model is printed with the planned cavities, the laboratory implant for printed and cast models can be inserted in accordance with the intended series of abutments S, M or L. For this purpose, the laboratory implant is placed on the manual insertion key and fixed with the counter screw. The laboratory implant is then aligned in the cavity and pressed in. The closure screw supplied with the laboratory implant ③ enables the laboratory implant to be fixed in the end position from apical.



Manufacturing Centers Dentaurum.



Mack Dentaltechnik GmbH

Dieselstraße 25 | 89160 Dornstadt, Germany | Tel. +49 73 48/2006-0

Email for orders and data sets: inbox@mack-dentaltechnik.de

white digital dental GmbH

F.-O.-Schimmel-Straße 7 | 09120 Chemnitz, Germany | Tel. +49 371/5204975-0

Email for orders and data sets: job@mywhite.de

InduDent AG

Obere Kaiserswerther Str. 17 | 47249 Duisburg, Germany | Tel. +49 203/7691-265

Order portal for data upload: www.indudent.de/content/auftrag



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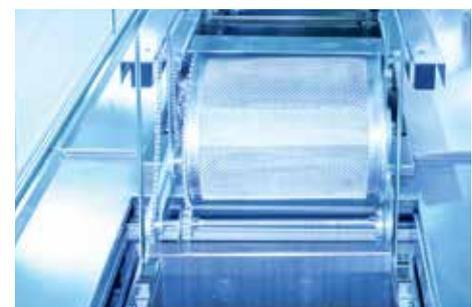
M MACK
DENTALTECHNIK

High-tech in-house.



There is a high level of professional knowledge in our company that has been built up over the years in our own research and development facilities, both in Germany and in France. Highly qualified employees work together in interdisciplinary teams to find answers to the challenges the future poses. At the same time, long-standing cooperations with experts from universities and clinics contribute to finding new developments and innovations.

A further result of these efforts: a comprehensive product portfolio which is one of Dentaurum's strengths. No other dental company has such an extensive range of products offering a total of more than 8,500 articles.





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Turnstr. 31 | 75228 Ispringen | Germany | Tel. +49 72 31/803-0 | Fax +49 72 31/803-295
www.dentaurum.com | info@dentaurum.com