



Straumann® CARES® Implant-borne prosthetics

Basic Information

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1 Introduction

Purpose of this guide

This guide was created for dental technicians working with the Straumann® CARES® Visual software for designing customized abutments, bars and screw-retained bridges.

Additionally, it provides complementary information regarding the conventional working steps in the dental laboratory when working with the Straumann® CARES® CAD/CAM system e.g. correct handling of the scanbodies, wax-up sleeves, etc.

Additional brochures are:

- *Basic information on Tooth prosthetic procedures, 152.821*
- *Basic Procedure Straumann® CARES® System, 701098*
- *Straumann® CARES® 8.8, 490.020/en*

All of the described devices are CAD-derived and CAM-manufactured. Straumann® CARES® Visual supports you designing the devices within indication-related conditions.

Instructions provided are insufficient to serve as the only means for processing and placing Straumann® CARES® Implant-borne prosthetics related components. Only those dental professionals thoroughly trained in dental restorations should be processing and placing these devices. Processing and placing Straumann® CARES® Implant-borne prosthetics and related components without proper training may lead to failure of the restoration. Restoration failure may lead to restoration removal or other complications.

Failure to follow the procedures outlined in these instructions may harm the patient and/or lead to any or all of the following complications:

- Aspiration or swallowing of a component
- Breakage
- Infection

Note

- Implant-borne superstructures require optimal oral hygiene on the part of the patient. This must be considered by all involved parties when planning and designing the restoration.
- Consult the brochure *Basic Information on the Surgical Procedures, 152.754* for information on indications and contraindications of Straumann® Dental implants, such as required minimum number of implants, implant type, diameter and loading protocols.

2 General information

CARES® Prosthetics incorporates state-of-the-art technology

The Straumann® CARES® Implant-borne prosthetics provide you with customized solutions for single tooth, multiple tooth gaps and fully edentulous jaws. Different materials and kinds of restorations are available to give you flexibility in the way you restore the implants.



2.1 Restorative options with the Straumann® CARES® portfolio

	Single-tooth restoration		Bridges		Edentulous	
	Screw-retained	Cement-retained	Screw-retained	Cement-retained	Screw-retained	Cement-retained
CARES® Abutment, Ti		●		●		
CARES® Abutment, TAN	●					
CARES® Abutment, CoCr	●		●		●	
CARES® Abutment, ZrO ₂	●	●		●		
CARES® Screw-retained bridge			●		●	
CARES® Bars, removable prosthetics					●	
CARES® Fixed Bars, fixed prosthetics			●		●	
CARES® X-Stream™ solution	●	●	●	●	●	


CARES® X-Stream™

The one-step prosthetic solution: 1 scan, 1 design, 1 delivery

CARES® X-Stream™ is an innovative example of an efficient digital workflow, streamlining clinical steps and simplifying long processes, while ensuring high quality prosthetics.

CARES® X-Stream™ provides a full prosthetic solution, flexible in use, to restore Straumann implants. With only one scan and one simultaneous and adaptive prosthetic element design, all required prosthetic components (e.g. Variobase® Abutments and their relevant bridge) are manufactured in the Straumann validated environment and arrive together in one delivery with an excellent fit of the components. This optimization of the necessary processing steps reduces turnaround time and related costs considerably.

CARES® X-Stream™ restorative options

		Tooth replacement options ¹ Full-contour or frameworks for single tooth, bridges ² and bars ²								
		Ceramic						Metal		Polymer
		n!ce™ (lithium aluminosilicate ceramic reinforced with lithium disilicate available in 12 shades)	IPS e.max® CAD (Lithium-disilicate available in 45 shades)	zerion® UTML ^{3,4} (ultra translucent multi-layered zirconium dioxide available in 4 VITA shades and 1 Bleach shade)	zerion® ML ⁵ (high translucent multi-layered zirconium dioxide available in 3 shades)	3M™ ESPE™ Lava™ Plus Zirconia ⁵ (high translucent zirconium dioxide available in 16 VITA shades and 2 Bleach shades)	zerion® ⁵ (low translucent zirconium dioxide available in 9 shades)	coron® (Cobalt Chromium)	ticon® (Titanium Grade 4)	polycon® ae ⁴ (PMMA available in 5 shades)
										
CARES® Abutment, Zirconium dioxide ^{6,8}		Single tooth	Single tooth	≤3 units	Full arch	Full arch	Full arch			Full arch
CARES® Abutment, Titanium ^{7,8}		Single tooth	Single tooth	≤3 units	Full arch	Full arch	Full arch	Full arch	Full arch	Full arch
Variobase® for crown		Single tooth	Single tooth	Single tooth	Single tooth	Single tooth	Single tooth	Single tooth		Single tooth
Variobase® for bridge/bar ⁹				≤3 units	Full arch	Full arch	Full arch	Full arch	Full arch	Full arch
Variobase® coping for Screw-retained Abutment ⁹				≤3 units	Full arch	Full arch	Full arch	Full arch	Full arch	Full arch

¹ Application and material availability might differ from country to country. Please contact your local sales representative for a detailed overview of the available applications and prosthetic lines. ² Bridges and bars are available with up to 10 implant abutment connections. ³ Molar bridge excluded. ⁴ Not available for Bars. ⁵ Only available for Fixed bars. ⁶ Not available for NNC and WN. ⁷ Not available for NNC. ⁸ Restorations only available without screw channel hole. ⁹ Restorations only available with screw channel hole.

2.2 Technical requirements

There are many ways to a CARES® Restoration. Therefore there are different “combinations” of infrastructure which are required for designing and ordering Straumann® CARES® Restorations:

Desktop scanner

The patient situation can be taken with a conventional impression tray. The dental laboratory scans the fabricated master model (preferably with removable segments) with a Straumann® approved desktop scanner.

Software

The restoration is designed with Straumann® CARES® Visual or a Straumann® approved software (e.g. plug-in with Dental Wings Software Version 3.5, 3shape software version 2.8.8.7, or 3M™ Lava Scan ST with DWOS 7.0 installed), which is engineered to ensure that the restoration dimension complies with the Straumann® manufacturing capabilities.

Intraoral scanners (incl. repositionable implant analogs)

The patient situation can be scanned with a Straumann® approved intraoral scanner (e.g. iTero™ or 3M™ True Definition Scanner. The data can be imported in the Straumann® approved software (e.g. Straumann® CARES® Visual version 5.IO or higher).




















Straumann® CARES® Solution WS (working station) is a solution for customers who do not require scanning the physical master cast and therefore do not have to invest in a desktop scanner.

Scan & Shape Service

If the dental laboratory does not have a Straumann® approved desktop scanner but wishes to order a Straumann® CARES® prosthetic component, they may send in their stl file, master model or wax-up of the restoration to the Straumann® CARES® Scan & Shape service.¹

¹ The CARES® Scan & Shape service is not available in all countries, please check with your local sales representative for further information. Additional information about the CARES® Scan & Shape service can be found in the brochures “The Way To Straumann® CARES® Abutments” and “Straumann® CARES® Scan & Shape Process Guide”.

2.3 System overview

			Implant Level Prosthetics
			NNC
Transfer parts	Straumann® Mono Scanbody		048.173
	Straumann® Scanbody		—
	Wax-up sleeve		048.137 048.137V4
	Straumann® Repositionable implant analog		—
	Straumann® Analog		048.124
CARES® Abutments	CARES® Abutments, ZrO ₂ (Zirconium Dioxide)		—
	CARES® Abutments, Ti (Titanium Grade 4)		—
	CARES® Abutments, TAN (Ti ₆ Al ₇ Nb)		—
	CARES® Abutments, CoCr		—
CARES® Screw-retained bridges and bars	CARES® Screw-retained bridges Ti (Titanium Grade 4)		—
	CARES® Screw-retained bridges coron® (Cobalt-chromium)		—
	CARES® Bar Ti (Titanium Grade 4)		—
	CARES® Bar coron® (Cobalt -chromium)		—
	CARES® Milled Bar Ti (Titanium Grade 4)		—
	CARES® Milled Bar coron® (Cobalt-chromium)		—
SRBB	CARES Basic Fixed Bar Ti (Titanium Grade 4)		—
	CARES Basic Fixed Bar coron (Cobalt-chromium)		—
	CARES Advanced Fixed Bar Ti (Titanium Grade 4)		—
	CARES Advanced Fixed Bar coron® (Cobalt-chromium)		—
Straumann® Abutments included in the CARES® Digital workflow	Straumann® Screw-retained Abutment		—
	Straumann® Variobase® for Crown		048.712 ⁵ or 048.709 010.6034 ⁵ or 022.0021
	Straumann® Variobase® for Bridge/Bar		010.6026 ⁵ or 022.0002
Accessories screws	Abutments and Screw-retained bridges and bars screws		048.313
	Occlusal screw on abutment level		—

Implant Level Prosthetics					Abutment Level Prosthetics	
RN	WN	SC	NC	RC	NC	RC
048.168	048.169	025.0025	025.2915	025.4915	025.0001 (D 4.6 mm) 025.0000 (D 3.5 mm)	025.0001 (D 4.6 mm)
048.068	048.069	—	025.2905	025.4905	—	—
048.088 048.088-04	048.089 048.098-04	—	025.2903 025.2903-04	025.4903 025.4903-04	—	—
048.129	048.172	—	025.2102	025.4102	025.0007 (D 3.5 mm) 025.0008 (D 4.6 mm)	025.0008 (D 4.6 mm)
048.108 048.124	048.171	—	025.2101	025.4101	023.2754 (0°, D 3.5 mm) 023.4756 (0°, D 4.6 mm) 023.4757 (angled, D 4.6 mm)	023.4756 (0°, D 4.6 mm) 023.4757 (angled, D 4.6 mm)
040.688	—	—	027.2650	027.4650	—	—
040.689	040.694	—	027.2620	027.4620	—	—
010.6002	010.6003	010.6032	010.6000	010.6001	—	—
010.6067	010.6068	—	010.6065	010.6066	—	—
010.1076 to 010.1090						
010.1051 to 010.1065						
010.1091 to 010.1099						
010.1065 to 010.1074						
010.1149 to 010.1157						
010.1140 to 010.1148						
010.113 to 010.1121						
010.1104 to 010.112						
010.1131 to 010.1139						
010.1122 to 101.1130						
—	—	—	—	—	022.2745 to 022.2758	022.4745 to 022.4755
048.713 ⁵ or 048.710 010.6035 ⁵ or 022.0022	048.714 ⁵ or 048.711 010.6036 ⁵ or 022.0023	—	022.2653 ⁵ or 025.2921 010.6038 ⁵ or 022.0027	022.4653 ⁵ or 025.4921 010.6037 ⁵ or 022.0026	—	—
010.6027 ⁵ or 022.0003	010.6028 ⁵ or 022.0004	—	010.6024 ⁵ or 022.0000	010.6025 ⁵ or 022.0001	010.6023 ⁵ (D 4.6 mm) or 023.0001 (D 4 mm) 010.6022 ⁵ (D 3.5 mm) or 023.000 (3.5 mm)	010.60235 (D 4.6 mm) or 023.0001 (D 4.6 mm)
048.354 ¹ 048.356 ^{2,3}	048.356 ^{2,3}	—	025.4906 ¹ 025.4900 ² 025.2926 ³	025.4906 ¹ 025.4900 ² 025.2926 ³	NC/RC Screw for Screw-retained abutment straight 0°, GH 1 mm: 023.4749 straight 0°, GH 2.5 mm: 023.4750 straight 0°, GH 4 mm: 023.4760 angled, 17°/30°: 025.0002	
—	—	—	—	—	023.4763 ⁴	

¹ For CARES® Abutments, ZrO₂

² For CARES® Abutments, Ti and TAN; for Straumann® Variobase®

³ For CARES® Screw-retained bridges and bars, Ti and coron®

⁴ Occlusal screw on abutment level for CARES® Screw-retained bridges and bars, Ti and coron®

⁵ Article numbers of the Straumann® Variobase® ordered with CARES® X-Stream™

3 Preparation for CARES® Visual

Pre-conditions

- The tooth shade has been identified and noted (via color chart or digital measuring device).
- Impression has been taken.

Both, shade information and impression were sent to the dental lab.

3.1 Fabrication of the master cast

Fabricate the master cast using standard methods and type 4 dental stone (ISO 6873). A gingival mask should always be used to ensure the emergence profile is optimally contoured. To ensure high-quality restorations, the following requirements must be considered:

- Only use new, undamaged and original Straumann® Implant/Abutment analogs.
- The implant analogs must be embedded in the stone and must not move in the model.
- A gingival mask should always be used to ensure the emergence profile is optimally contoured. For CARES® SRBB¹ a large range removable gingival mask is necessary to enable Straumann to conduct a fit check.
- Preferably use scannable material for the gingival mask.

Important note for CARES® SRBB on Straumann® Screw-retained Abutments

Please keep in mind that CARES® SRBB are milled based on their master cast. Therefore, a precise replication of the oral situation is essential for a good fitting of the CARES® SRBBs.

For abutment-level CARES® SRBB, the master cast represents the oral situation. Therefore, it is necessary to use a master model with abutment analogs, created from an oral abutment-level impression of the final abutments, and torqued with 35 Ncm.

Master models with subsequently hand-tightened (< 35 Ncm) abutments may not accurately represent the oral situation and therefore could lead to a poor fitting restoration with height and alignment deviations, although it will fit the model. Therefore, when it is required to place abutments subsequently on the master model, only a torque of 35 Ncm will represent the final oral situation adequately. The subsequently placed abutment should be rotated so that it fits against one end of the implant/abutment interface's play and the dentist must be informed that the abutment has to be rotated in the same direction during oral placement.

If a SRBB on subsequently placed Screw-retained Abutments is ordered, the stone model with the torqued abutments is required for production.



3.2 Planning / Wax-up sleeves

For optimal esthetic planning, especially in the labial region, design a full anatomic wax-up and confirm the size and position intraorally.

For CARES® Abutments, the wax-up can be scanned with the wax-up sleeve holder and ordered (as an alternative to designing it in CARES® Visual) – for more information see brochure *Basic procedure CARES® system, 701097*.

For CARES® Screw-retained bridges, the wax-up can be scanned and used as a reference when designing the restoration in CARES® Visual.

Wax-up sleeves

Wax-up sleeves are used for waxing-up the abutment.

Note: The wax-up sleeves are designed for single use only. If they are used more than once, an accurate reproduction of the abutment's position with reference to the implant position cannot be guaranteed and the milling results may be inaccurate.

3.2.1 Straumann® CARES® Wax-up kit

The Straumann® CARES® Wax-up kit includes all wax-up sleeve holders which are required for placing the wax-up sleeves in the desktop scanner. They are required for correct scanning of the customized abutment.

Article number: 019.0063. Straumann® CARES® Wax-up kit (used for Straumann® Abutments)



3.2.2 Step-by-step instructions for use



Insert a wax-up sleeve into the master cast.

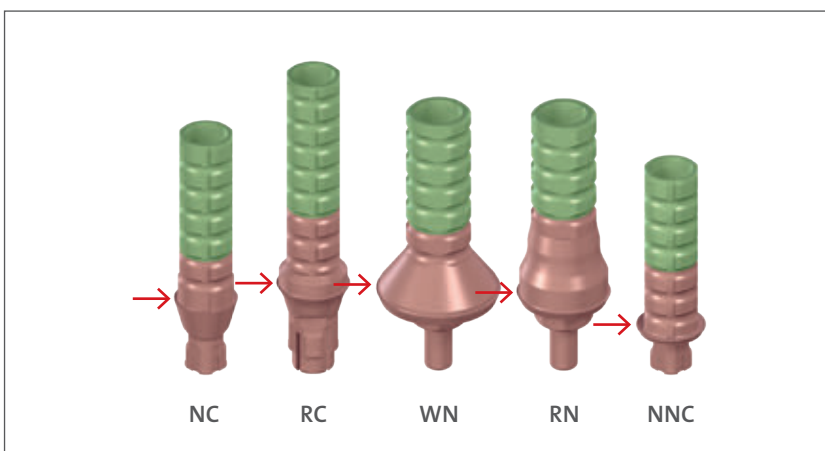
A Shortening wax-up sleeves in general

The section above the implant shoulder represents the minimum body, and must not be ground (displayed red in the graphic to the left). Only in the upper section can the wax-up sleeve be reduced (displayed green in the graphic to the left). Do not wax below the basal margin of the wax-up sleeve (red arrow).

Note: Sharp-edged modeling must be avoided.

B Shortening wax-up sleeves for Variobase™ Abutments

The wax-up abutment must have a minimal height due to the Variobase™ Abutment height. The section above the implant shoulder represents the minimum body and must not be ground (displayed red in the graphic below). Only in the upper section can the wax-up sleeve be reduced (displayed green in the graphic below). Do not wax below the basal margin of the wax-up sleeve (red arrow).



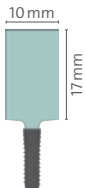
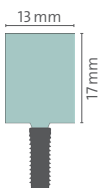
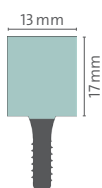

C Waxing up the abutment/screw-retained bridge

Use only scannable wax to ensure an accurate scan (e.g. CopyCAD Wax from Straumann®). If no scannable wax is used, apply scan spray.

Note: To ensure stability, it is recommended to make a frame with modeling resin with low shrinkage when waxing up bridges.

The projecting part of the wax-up sleeve must always be cut off before scanning, otherwise this section will also be scanned and therefore milled.

3.2.3 Maximum geometry for production of CARES® Abutments

Implant platform	NC	RC	RN	WN
Wax-up Sleeve art. no.	025.2903	025.4903	048.088	048.089
Maximum geometry dimension				
CARES® Abutment, ZrO ₂ art. no.	027.2650	027.4650	040.688	—
CARES® Abutment, Ti art. no.	027.2620	027.4620	040.689	040.694
CARES® Abutment, TAN art. no.	010.6000	010.6001	010.6002	010.6003
CARES® Abutment, CoCr art. no.	010.6065	010.6066	010.6067	010.6068

Note: The angulation of the wax-up must not exceed 30°.

Option A: Full anatomic design



A full anatomical wax-up should also be prepared for optimal esthetic planning. Use the wax-up sleeve to model the shape of the full anatomic temporary abutment.

Option B: Reduced anatomic design



A reduced anatomical wax-up should also be prepared for optimal esthetic planning.



Prepare a silicone key over the full wax-up to determine the optimal shape of the restoration.

Option C: Design of a coping



Use the wax-up sleeve to model the shape of the coping



Check the wax-up with the silicone key.

3.3 Straumann® Scanbodies

Product description

The Straumann® Scan Bodies represent the position and orientation of the respective dental implant or analog in CAD/CAM scanning procedures. This helps the CAD/CAM software to correctly align the subsequent CAD/CAM restorations.

Product overview

Straumann® offers two different types of scanbodies which differ in terms of handling and scanner compatibility:

- Straumann® CARES® Mono scanbody (on implant and abutment level)
- Straumann® Scanbody

Make sure to select the correct Straumann® Scanbody according to the software version (see compatibility chart on page 8).

Note: The Straumann® Scanbodies and all components are intended for single use only. Multiple use of a scanbody can lead to inaccurate results. Make sure the stability of the dental implant is sufficient to support the screwing/unscrewing operations of the scanbodies. Scan spray is not required at any time.

3.3.1 Straumann® CARES® Mono Scanbody

Product properties and benefits at a glance

Improved handling

- Single component incl. self-retaining screw
- Abutment level on Straumann® Screw-retained abutment
- Improved functionality
- Optimized geometry for the Straumann® CARES® Scan CS2 scanner and iTero™
- Optimized system configuration for multi-unit restorations
- Well-accepted material
- PEEK for excellent scanning results



Step-by-step instructions for use



Assembling

Check proper fit of the scanbody in the analog and hand-tighten the self-retaining screw (maximum 15 Ncm). Only use the Straumann® SCS Screwdriver to fix the post in the analog. Check again for proper fit and for any rotational or vertical looseness. If a single-tooth restoration is planned, orient the angled surface of the scanbody buccally (not adjacent to the approximal tooth).

Avoid any contact of the scanbody to the approximal teeth.

3.3.2 Straumann® Scanbody

A Product properties and benefits at a glance

Two-component scanbody

- Contains scan post, scan cap and fixation screw

For single-tooth restorations

- Scanbody geometry to meet requirements of etkon™ es1 and iTero™ scanners.

Well-accepted material

- PEEK for excellent scanning results

B Step-by-step instruction for use

Assembling

Before placing the scanbody in the master cast, ensure that all components are clean and in undamaged condition (neither scratches, deformations nor discolorations). Check proper fit of the scan post in the analog, insert the fixation screw and hand-tighten (maximum 15Ncm). Only use the SCS Screwdriver to fix the post in the analog. Check again for proper fit to prevent any rotational or vertical looseness.

Place the scan cap on the scan post. Ensure that the flat parts in the connection area of the scan cap and the scan post are aligned to one another. The flat parts are the rotational security feature between scan cap and scan post. If correctly placed, the cap clicks on the post. Slightly press with your fingertip to avoid any gaps between cap and post.



4 Restorations, designing and finishing



4.1 Restoration: CARES® Abutment

Intended use

- Cement-retained crowns
- Cement-retained bridges via mesostructure
- Screw-retained, directly veneered crowns (CARES® Abutments, ZrO₂ and TAN)

Material:

- Titanium grade 4
- Titanium-Aluminium-Niobium (TAN)
- Cobalt Chromium
- Zirconium dioxide

Contraindication

- Allergies to materials used, which may include any or all of the following: zirconium dioxide (ZrO₂), yttrium oxide Y₂O₃, Aluminum oxide Al₂O₃, Hafnium dioxide HfO₂, titanium (Ti), titanium alloy (Ti₆Al₄Nb titanium, niobium, aluminum or TAN), coron® (cobalt-chromium alloy): Co, Cr, W, Si, Mn, N, Nb, Fe.

Characteristics

- With the CARES® Abutment CoCr and the CARES® Abutment TAN you have two material options for direct veneering depending on your preferences. These are the abutments of choice for screw-retained one piece metal restorations.
- CARES® Abutment, ZrO₂ is the abutment of choice in the anterior region and for patients with thin gingiva
- Anatomic emergence profile
- A patient-specific emergence profile supports soft tissue management and an esthetic outcome
- Straumann® Guarantee for Straumann® CARES® Abutments

4.1.1 Designing CARES® Workflow

Step 1 – Preparation for CARES® Visual

Follow the preparation requirements according to chapter 3

Step 2 – Designing with CARES® Visual

Design the restoration according the brochure *Straumann® CARES® Visual, 152.825*

4.1.2 Finishing of the Straumann® CARES® Abutment Titanium at the dental lab

Fabricate a Meso abutment made of Titanium Grade 4 for cement-retained restorations.



Cement-retained crown

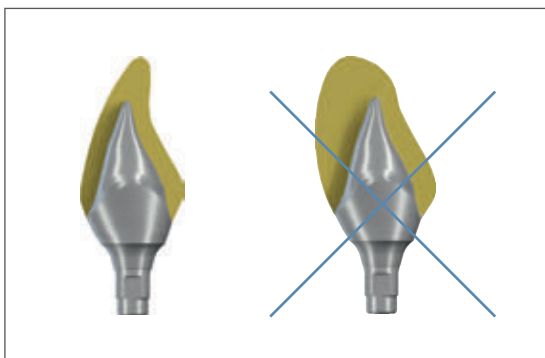
- Mount the Straumann® CARES® Abutment Titanium on the implant analog
- Use a standard procedure to fabricate the cement-retained single crown
- Veneer the restoration, if necessary, and/or polish the final restoration

Note: Always use a polishing aid to protect the abutment's prosthetic connection.

Preparation for delivery to the dentist

- Clean the restoration before it is sent to the dentist
- Fix the final restoration hand-tight on the master cast

4.1.3 Finishing of the Straumann® CARES® Abutment TAN at the dental lab



The anatomically shaped CARES® Abutment TAN is a proven solution for direct veneering in screw-retained solutions.

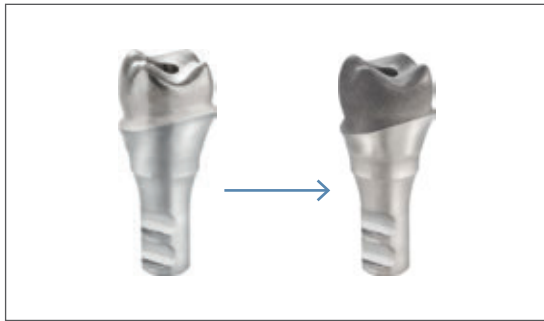
- Fabricate a screw-retained crown with a ceramic which is compatible with the thermal expansion coefficient of TAN.
- Straumann® CARES® TAN Abutments have a thermal expansion coefficient of $9.9 \times 10^{-6} \text{ K}^{-1}$ within the range of $20^\circ\text{C} - 500^\circ\text{C} / 68^\circ\text{F} - 932^\circ\text{F}$.

Note: Particular attention must be given to an even layer thickness of the porcelain veneered on the abutment.



The firing process develops a mechanically stable and biocompatible oxide layer.

The oxide layer must not be removed from the implant abutment connection.



Step 1 – Sandblasting

Sandblast only with noble corundum.

- Grain size 120–150 µm and 2 bar pressure
- Blast in angle 45° to object
- Steam clean the surface

Note: Do not sandblast the connection! Protect the connection either with polishing aid or implant analog.



Step 2 – Veneering crown

Important: for this step, the processing instructions of the respective veneering material manufacturer apply.

Note: Any titanium veneering material can be used



Step 3 – Finishing crown

- Polish the emergence profile between connection and ceramic veneering.
- Protect the connection with the polishing aid or implant analog.

Note: The connection must not be polished.



Step 4 – Preparation for delivery to the dentist

- Clean the restoration before sending to the dentist
- Screw the final restoration hand tight on the master cast

4.1.4 Finishing of Straumann® CARES® Abutment CoCr at the dental lab



The anatomically shaped Straumann® CARES® Abutment CoCr is an additional option for a direct veneerable, screw-retained solution.

Precondition: When planning in CARES® Visual please consider a minimal wall thickness of 0.4 mm of the veneering porcelain.



Step 1: Prepare for veneering

- Screw the abutment into the polishing aid to protect the implant-abutment-interface
- Sandblast the area that has to be veneered with aluminum oxide and clean this area afterwards with steam

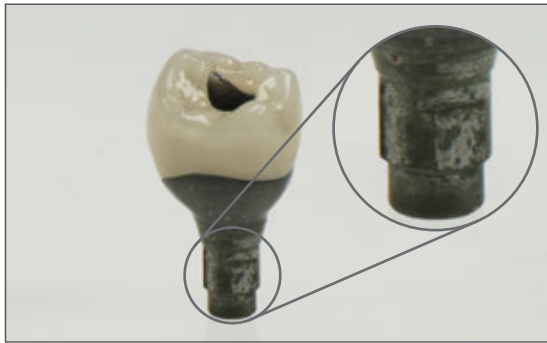
Note: Do not sandblast the connection with aluminum oxide! Protect the connection with polishing aid.



Step 2: Veneering crown

- Fabricate a ceramic screw-retained crown
- Use a veneering-ceramic which is compatible with the thermal expansion coefficient ($14.3 \times 10^{-6} \text{ K}^{-1}$) of the Straumann® CARES® CoCr Abutment
- For this step, the processing instructions of the respective veneering material/manufacturer applies
- Protect the connection with the polishing aid and polish the emergence profile

Note: Particular attention must be given to an even layer thickness of the porcelain veneered on the abutment.



Excursus: Removal of the oxide-layer

During firing the CoCr abutment forms an oxide layer at the implant-abutment-interface which has to be removed to ensure the perfect fit of the abutment on the implant.



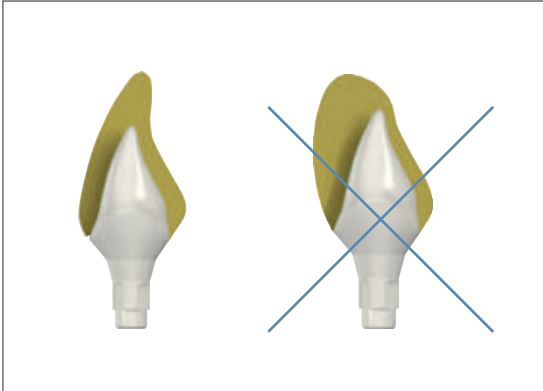
Perform indirect sandblasting of the implant-abutment-interface with glass beads, 50 μ m/2 bar to remove the oxide layer.



Step 3: Preparation for delivery to the dentist

Clean the abutment and screw it hand tight on the master cast before sending it to the dentist.

4.1.5 Finishing of Straumann® CARES® Abutment ZrO₂ at the dental laboratory



Option A: Screw-retained crown

Straumann® CARES® Ceramic Abutment

- Fabricate a screw-retained crown with a ceramic that is synchronized to the thermal expansion coefficient of zirconium dioxide.
- Straumann® CARES® Ceramic Abutments made of zirconium dioxide have a thermal expansion coefficient of $10.5 \times 10^{-6}/K$ (25 °C – 500 °C, 77 °F – 932 °F).

Note: Particular attention must be given to an even layer thickness of the porcelain veneered on the abutment.



Option B: Cement-retained crown

- Mount the Straumann® CARES® Ceramic Abutment on the implant analog.
- Use a standard procedure to fabricate the cement-retained single crown.
- Veneer the structure.



Preparation for delivery to the dentist

- Clean the restoration before sending to the dentist.
- Fix the final restoration hand tight on the master cast.

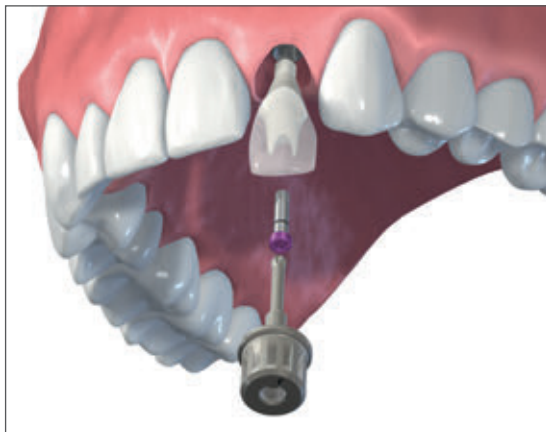
4.1.6 Insertion (dentist's office)

Straumann® CARES® Abutments – Prosthetic procedure

Preparation

- Remove the healing cap or temporary restoration.
- Remove the superstructure from the master cast and/or unscrew the abutment from the analog.
- Clean and dry the interior of the implant and the abutment thoroughly.

Note: Use transfer aids. Never use cement when the abutment is inserted into the implant. Straumann® CARES® Abutments made from zirconium dioxide are not autoclavable and must not be cleaned by steam blasting.

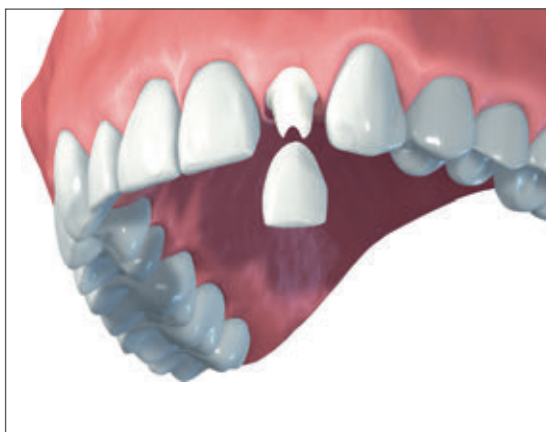


This is an example for Straumann® CARES® Abutment ZrO₂. The same procedure applies for Straumann® CARES® Abutment TAN.

Final insertion Straumann® CARES® Abutments

Option A: Screw-retained crown

- Position the cleaned Straumann® CARES® Abutment in the implant.
- Tighten the screw to 35 Ncm using the SCS Screwdriver along with the ratchet and the torque control device.
- Close the SCS configuration of the screw with cotton and sealing compound (e.g. gutta-percha). This allows a later removal of the customized abutment in case a crown replacement is required.



This is an example for Straumann® CARES® Abutment ZrO₂. The same procedure applies for Straumann® CARES® Abutment Titanium.

Option B: Cement-retained crown

- Position the cleaned Straumann® CARES® Abutment in the implant.
- Tighten the screw to 35 Ncm using the SCS Screwdriver along with the ratchet and the torque control device.
- Close the SCS configuration of the screw with cotton and sealing compound (e.g. gutta-percha). This allows a later removal of the customized abutment in case a crown replacement is required.
- Cement the superstructure to the abutment.
- Remove superfluous cement.

Note: Use only the special basal screws provided for the Straumann® CARES® Abutment.



4.2 CARES® X-Stream™

The one-step prosthetic solution: 1 scan, 1 design, 1 delivery

CARES® X-Stream™ is an innovative example of an efficient digital workflow, streamlining clinical steps and simplifying lengthy processes for implant-based prosthetic restorations.

Intended use

- Cement retained crowns, bridges or overdentures for CARES® X-Stream™ restorative options with Straumann® CARES® Abutments
- Screw-retained crowns, bridges or overdentures for CARES® X-Stream™ restorative options with Straumann Variobase®

Restorative options

The broad range of restorative options is described in chapter 2.1 ("Restorative options with the Straumann® CARES® portfolio", see p. 4).

Characteristics

- **Higher productivity** thanks to one design, one order and one delivery of the prosthetic components required for a patient restoration case
- **Increased efficiency** due to the highly precise prosthetics ensuring best fit between components
- **Validated long-term performance** with the original Straumann® implant-abutment connection

4.2.1 Designing CARES® Workflow

Step 1 – PREPARATION for CARES® Visual

Follow the preparation requirements according to chapter 3.

Step 2 – DESIGNING with CARES® Visual

Design the restoration according the brochure *Straumann® CARES® Visual*, 152.825.

4.2.2 Finishing

CARES® X-Stream™ workflow with CARES® Abutments

- Unpack the delivered Straumann® CARES® Abutment and the CARES® crown, bridge or bar.
- Finalize the CARES® crown, bridge or bar when relevant. **Note:** only cement-retained restorations are possible.

Please refer to the “Instructions for Use” brochure of the specific CARES® crown, bridge or bar material or to the brochure *Basic information on Straumann® CARES® Tooth prosthetic procedures*, 152.821 for the detailed and material-specific processing steps.

CARES® X-Stream workflow with Straumann® Variobase®

- Unpack the delivered Variobase® and the CARES® crown, bridge or bar.
- Finalize the CARES® crown, bridge or bar when relevant. **Note:** cement-retained as well as screw-retained restorations are possible.

Please refer to the “Instructions for Use” brochure of the specific CARES® crown, bridge or bar material or to the brochure *Basic information on Straumann® CARES® Tooth prosthetic procedures*, 152.821 for the detailed and material specific processing steps.

Note: CARES® crown, bridge or bar or bar should only be processed mechanically if absolutely necessary. The “Instructions for Use” of the specific crown, bridge or bar apply. CARES® crown, bridge or bar must not be sandblasted.

4.2.3 Bonding

Note: the following instructions are only for a CARES® X-Stream™ workflow restoration with a Variobase® and CARES® crowns, bridges or bars ordered with a screw channel hole.

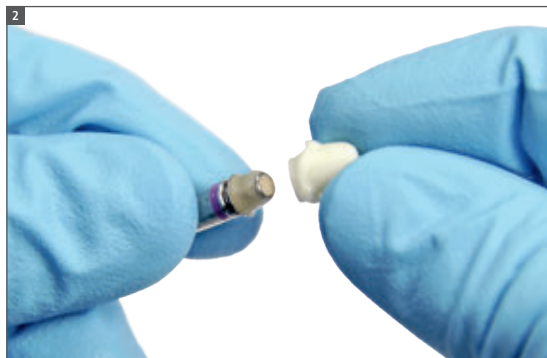


Step 1 – Fixing on master model

Fix the abutments to the implant analogs by tightening the Basal Screws hand-tight or fix the copings on the abutment analogs by tightening the Occlusal Screws hand-tight. Seal the screw channel with wax to prevent excess cement from flowing into the screw channel.

Note:

- It is not necessary to sandblast the Variobase® for obtaining a strong bond.
- To ensure precise seating of the prosthetic restoration on the Variobase®, always bond on the master model.
- For Variobase® for crown, due to the symmetrical nature of the four cams, confirm the position of the crown according to the actual patient anatomy prior to bonding.



Step 2 – Bonding

Apply self-adhesive dental cement² on the Variobase®. Follow the cement manufacturer's instructions. Bond the prosthetic restoration to the Variobase®.

Note:

- Immediately remove excess cement from the Variobase® prosthetic component. Polish the lower margin of the prosthetic restoration after the cement has dried.
- Always use a polishing aid to protect the abutment's prosthetic connection.
- Do not fire the abutment after bonding.





4.2.4 The use of transfer aids for single tooth prosthetics

To ensure correct transfer of the abutment position from the master cast to the patient, an individual index can be fabricated on the master cast using acrylic. The index is secured with support from the adjacent teeth.

Note: The occlusal screw opening must not be covered with acrylic. Ensure that no acrylic gets into the interior of the abutment, otherwise it might not be possible to loosen the basal screw.

4.2.5 Insertion (dentist's office)

The final restoration is fixed on the master cast before it is delivered to the doctor's office.

Step 1 – Preparation

- Remove the healing cap or temporary restoration.
- Remove the superstructure from the master cast and unscrew the abutment from the analog.
- Clean and dry the interior of the implant and the abutment thoroughly.

Note: Always ensure that surfaces of threads and screw heads are clean and that a new screw is used for the final restoration.

Step 2 – Final insertion



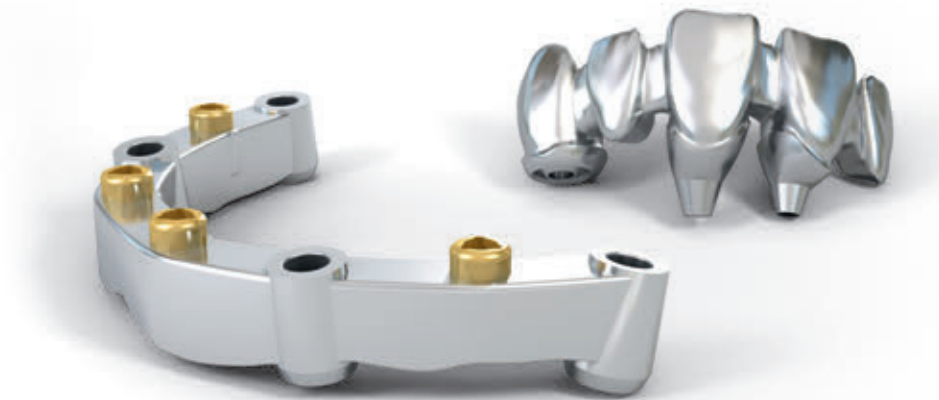
Option A: Screw-retained final restoration

- Position the sterilized Straumann® abutment and bonded crown in the implant. Tighten the screw to 35 Ncm using the SCS Screwdriver along with the ratchet and the torque control device.
- Close the SCS screw channel with cotton and sealing compound (i.e. gutta-percha). This allows for later removal of the Straumann® abutment in case a crown, bridge or bar replacement is required.



Option B: Cement-retained final restoration

- Position the sterilized Straumann® abutment in the implant. Tighten the screw to 35 Ncm using the SCS Screwdriver along with the ratchet and the torque control device.
- Close the SCS screw channel with cotton and sealing compound (i.e. gutta-percha). This allows for later removal of the Straumann® abutment in case a crown, bridge or bar replacement is required.
- Cement the superstructure to the abutment.
- Remove excess cement.



4.3 Restoration: CARES® Screw-retained bridges and bars (SRBB)

Intended use

Straumann® CARES® SRBB are prosthetic mesostructures, either directly screwed to the endosseous dental implant or to the screw-retained abutment intended as an aid in prosthetic rehabilitations for multiple-tooth replacement or fully edentulous patients.

Material

- Titanium grade 4
- Cobalt-chromium alloy (coron®)

Contraindications

- Patients with bruxism, since an overload of the device may occur.
- Allergies or hypersensitivity to chemical ingredients of the following materials used:
coron® (cobalt-chromium alloy): cobalt (Co), chromium (Cr), tungsten (W), silicon (Si), manganese (Mn), niobium (Nb), commercially pure titanium grade 4 (Ti), TAN (titanium alloy Ti₆Al₇Nb): titanium (Ti), aluminum (Al), niobium (Nb).

Important note for CARES® SRBB on Straumann® Screw-retained Abutments

Please keep in mind that CARES® SRBB are milled based on their master cast. Therefore, a precise replication of the oral situation is essential for a good fitting of the CARES® SRBBs.

For abutment-level CARES® SRBB, the master cast represents the oral situation. Therefore, it is necessary to use a master model with abutment analogs, created from an oral abutment-level impression of the final abutments, and torqued with 35 Ncm.

Master models with subsequently hand-tightened (< 35 Ncm) abutments may not accurately represent the oral situation and therefore could lead to a poor fitting restoration with height and alignment deviations, although it will fit the model. Therefore, when it is required to place abutments subsequently on the master model, only a torque of 35 Ncm will represent the final oral situation adequately. The subsequently placed abutment should be rotated so that it fits against one end of the implant/abutment interface's play and the dentist must be informed that the abutment has to be rotated in the same direction during oral placement.

If a SRBB on subsequently placed Screw-retained Abutments is ordered, the stone model with the torqued abutments is required for production.

Characteristics

Straumann® CARES® SRBB working conditions

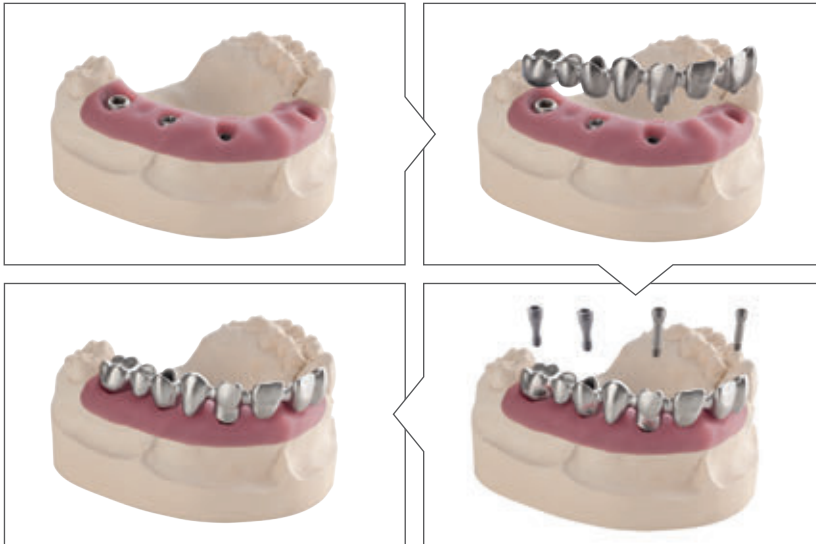
	CARES® SRBB are available on following Straumann® Platforms		Divergence compensation between any two Platforms		Screws for Straumann® CARES® SRBB
			Ti	Coron®	
Implant Level	Straumann® Soft Tissue Level implants	Regular Neck (RN)	50°	40°	synOcta® Basal screw 048.356
		Wide Neck (WN)			
	Straumann® Bone Level implants	Regular CrossFit® (RC)	30°	30°	NC / RC SRBB BL screw 025.2926
		Narrow CrossFit® (NC)			
Abutment level	Straumann® Screw-retained Abutment	D 4.6 mm	50°	40°	NC/RC Occlusal screw, TAN for coping, screw-retained abutment 023.4763
		D 3.5 mm	30°	30°	

Important: when combining different platforms with each other, the smallest divergence compensation value is applicable.

Note

- Straumann® Repositionable Implant Analogs are not intended to be used for Straumann® CARES® SRBB. Please consider the model preparation instructions described in chapter 3.1. Straumann may return the order if the requirements are not fulfilled.
- **Allways use new abutment-/occlusal-screws for patient use.**
- The screws delivered together with the CARES® SRBB are meant for patient use. For additional screws in case of loss or for lab use, only use the screws mentioned in the chart above.

4.3.1 Straumann CARES® Screw-retained bridge



Intended use

- Straumann® CARES® Screw-retained bridge is a framework which is intended for direct veneering with appropriate techniques in dental technology or wrapping with acrylics in combination with pre-fabricated teeth, to treat partially or totally edentulous cases.

Characteristics

- 2 to 16 units
- Placement on 2 to 16 platforms
 - Straumann Soft Tissue Level (RN, WN), Bone Level (NC, RC) and BL / TL mixed implant platforms
 - Screw-retained Abutment
 - mixing of implant- and abutment-level platforms
- Maximum number of anterior pontics: 4 (only possible between the canines)
- Maximum number of posterior pontics: 3
- Maximum number of free-ends: 1 per end
- Straumann® Guarantee for Straumann® CARES® Screw-retained bridges and bars

4.3.1.1 Designing: CARES® Workflow

Step 1 – PREPARATION for CARES® Visual

Follow the preparation requirements according chapter 3

Note: For optimal esthetic planning especially in the labial region, model a full anatomic wax-up and confirm the size and position intraorally. The wax-up can be scanned and used as reference when designing the restoration in CARES® Visual.

Step 2 – DESIGNING with CARES® Visual

Design the restoration according to the brochure *Straumann® CARES® Visual – Step-by-step instructions for crowns and bridges*, 152.825 or watch the CARES® Tutorial videos online for further guidance.

Step 3 – ORDER PROCESS for CARES® SRBB

Order the restoration according to the process described in the brochure *Straumann® CARES® Screw-retained bridge and bar: Service and Process* – see p. 40.

4.3.1.2 Finishing



Step 1

Delivery of the bridge and screws for patient use from Straumann®:

Use the included patient label for patient records in the laboratory. The bridge can be directly placed on the master model, no additional processing, grinding or adjustments is needed.



Step 2

Check the tension-free fit on the master cast (e.g. Sheffield test) and also check the occlusal situation with an antagonist model.



Step 3 (optional)

To further check the fit, send the bridge to the dentist for an additional try-on in the patient's mouth. Make sure the screws used are not damaged. Insert the screws with the SCS Screwdriver. The friction fit secures the screws to the instrument during insertion and ensures safe handling.

Step 4

Prepare and process the bridge according to the instructions from the supplier of the veneering material.



Step 5

Use appropriate veneering techniques for dental technology to veneer the framework. Be sure to follow the instructions for use of the veneering material of your choice, which must be appropriate for the framework material.

Note: Consider anatomical guidelines when veneering. The “freedom in centric” concept should be used for the occlusion.

Step 6

Send the master cast, the bridge together with new screws, the IFU leaflet and patient labels to the restorative dentist.

4.3.1.3 Insertion (dentist's office)

The final restoration is delivered to the dentist's office on the master cast together with new screws, IFU and patient labels.



Step 1

Remove the healing abutment or temporary restoration.

Step 2

Clean and dry the interior of the implants/Screw-retained abutments, the screws and the bridgework thoroughly (cleaning, disinfection and sterilization according to the brochure *Guideline for Cleaning, Disinfection and Sterilization*, 152.802).

Step 3

Check the fit of the bridge before fixing it in the patient's mouth. Do not attach the bridge if the fit appears to be unsatisfactory (e.g. when performing a Sheffield test).



Step 4

Position the cleaned bridge on the implants/Screw-retained abutments and insert the screws. Tighten the implant screws with 35 Ncm and the occlusal Screws of the Screw-retained abutments with 15 Ncm by using the SCS Screwdriver with the ratchet and the torque control device.

Note

The friction fit secures the screws to the instrument during insertion and ensures a safe handling.

Step 5

Close the screw channels with cotton and sealing compound (e.g. gutta-percha or composite). This allows a later removal of the bridge if maintenance is needed.

Step 6

Polish the filling material.

Note

If additional screws are needed, consult the table "CARES® SRBB working conditions" in chapter 4.3 (p. 27) for the article numbers.

4.3.2 CARES® Bars



Intended use

Straumann® CARES® bars for fixed Prosthetics are superstructures for the direct application with dental resin and prefabricated acrylic teeth to treat edentulous cases.

Straumann® CARES® bars for removable prosthetics are retentive elements to be combined with an overdenture to treat edentulous cases.



Characteristics

- Placement on 2 to 10 platforms
 - Straumann Soft Tissue Level (RN, WN), Bone Level (NC, RC) and BL / TL mixed implant
 - Screw-retained Abutment
- Free end extensions possible
- Large bar design variety:
 - Dolder® U-shape (regular and mini)
 - Dolder® egg-shape (regular and mini)
 - Dolder® mix (e.g. egg-shaped anterior, U-shaped free-end extensions)
 - MP-Clip® bar
 - Ackermann-Bar®
 - Round Bar
 - Milled bar
 - Basic Fixed Bar
 - Advanced Fixed Bar
- Straumann® Guarantee for Straumann® CARES® Screw-retained bridges and bars

Straumann® CARES® Bars, removable prosthetics

Dolder® U-shape Bar	Dolder® Egg-shape Bar	Milled Bar
		
<ul style="list-style-type: none"> • U-shaped cross-section • Rigid and stable combination of bar and matrix 	<ul style="list-style-type: none"> • Egg-shaped cross-section • Vertical translation and rotation possible 	<ul style="list-style-type: none"> • Adjustable height and width • 0°, 4°, 6°, 8° wall taper • Threads for SFI® Anchor CD20 and Locator® Bar .Abutment • Align common insertion axis of the attachments • More resistant against mastication forces, compared to attachments on their own
Ackermann-Bar®	Round Bar	MP-Clip® Bar
		
<ul style="list-style-type: none"> • Round-section bar • 2 rider concepts for space saving mounting • Bar diameter 1.8 mm 	<ul style="list-style-type: none"> • Round-section bar • Bar diameter 1.9 mm 	<ul style="list-style-type: none"> • Economical alternative to prefabricated metal matrixes • The retention intensity can easily be adjusted by exchanging the retention inserts. • Bar diameter 1.8 mm

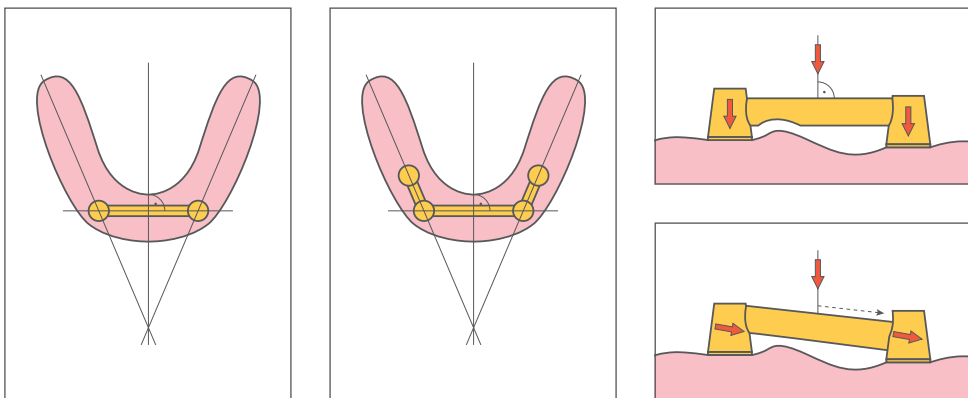
Straumann® CARES® Fixed Bars, fixed prosthetics

Basic Fixed Bar (Shapes: lambda, cross, trapezoid)	Advanced Fixed Bar
	
<ul style="list-style-type: none"> • For direct application of dental resin and prefabricated acrylic teeth, fully embedded in the final prosthesis • Easy tissue relining, ideal solution for ongoing tissue management • Bar is delivered sandblasted • Economical alternative to a ceramic-veneered bridge 	<ul style="list-style-type: none"> • For direct application of dental resin and prefabricated acrylic teeth, fully embedded in the final prosthesis • Ideally used for long edentulated ridges that are well healed and stable • Bar is delivered sandblasted • Economical alternative to a ceramic-veneered bridge

4.3.2.1 CARES® Bars, removable prosthetics

Bar Positioning

To ensure optimal force distribution, position the bar parallel to the occlusal plane and place it physiologically optimal over the alveolar ridge. Consider the path of insertion of the cover denture when designing the bar. To avoid horizontal forces, design the bar parallel to the occlusal plane.¹



Pictures: Jager/Wirz 1994

Designing: CARES® Workflow

Step 1 – PREPARATION for CARES® Visual (removable and fixed prosthetics)

Follow the preparation requirements according to chapter 3

Note: For optimal esthetic planning of the bar, make a set-up of the overdenture in wax and confirm it intraorally. The set-up can be scanned and used as reference when designing the bar in CARES® Visual.

Step 2 – DESIGNING with CARES® Visual

Please refer to the online tutorials and the CARES® Visual guidelines in the software.

Step 3 – ORDER PROCESS for CARES® SRBB

Order the restoration according to the process described in the brochure *Straumann® CARES® Screw-retained bridge and bar, Service and Process*.

Please consult the Appendix in this brochure.

¹ Jager, K. Wirz J. Unterkiefer-Hybridprothesen mit vier Implantaten. Eine In-Vitro-Spannungsanalyse. Schweiz. Monatsschr. Zahnmed., 104, 1489-1494 (1994).

Finishing



Step 1

Delivery of the bar and the screws for patient use from Straumann®: Use the included patient label for patient records on laboratory paperwork. The bridge can be placed directly on the master model, no additional processing, grinding or adjustments should be made

Note: Be advised that changing the shape or the cross-section of the bar for removable prosthetics might have a negative impact on the fit of the matrices on the bars. Do not alter or weaken the connection interface between bar and bar copings.



Step 2

Check the tension-free fit on the master cast (e.g. Sheffield test).

Step 3 (optional)

To further check the tension-free fit, send the bar to the dentist for an additional try-on in the patient's mouth. Make sure the screws used are not damaged. Insert the screws with the SCS screwdriver. The friction fit secures the screws to the instrument during insertion and ensures safe handling.



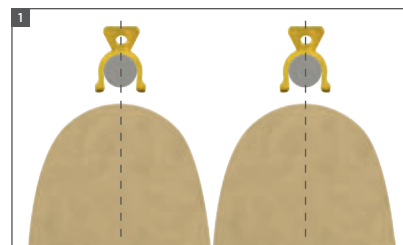
Step 4

Fabricate the final prosthesis according the following instructions.

For optimal fit and best performance of the Straumann® CARES® Bar, it is recommended to combine the device only with the corresponding original matrices of the CARES® system (5.6 Bar Male and Female components)

MP-CLIP® Bar

- Attach the spacer with the sleeve on the bar and make sure that it fits perfectly.
- Cut the sleeve back according to the height of the bar and block out the space between the sleeve and gingiva as well as the implant caps with wax.
- Finalize the denture according to the standard dental technique. Remove the bar from the denture and strip the spacer from the sleeve. Use the insert positioner to place the retention insert in the metal sleeve.



Ackermann®, Dolder® and Round Bar matrix

Ackermann®: Use the Ackermann® Bar Matrix A in the posterior and Matrix B in the anterior region.

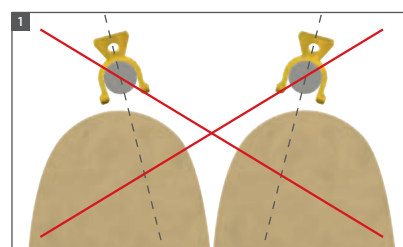
Dolder® Bar: Shorten the matrix according to the length of the bar. To ensure a secure fixation in the denture, the matrix should be at least 5 mm long.

Ackermann®, Dolder® and Round Bar: Place the matrix on the bar. Place the according spacer between the bar and the matrix during polymerization.

Ackermann® and Round Bar: To prevent the matrices from premature wear and to achieve a consistent insertion axis of the denture, position the matrices in parallel to each other (Fig. 1). Block out the space between matrix / bar and gingiva as well as the implant caps with wax (Fig. 2). Ensure that the lamellae of the matrix is blocked out adequately to enable deflection when the denture is inserted or removed.

Dolder® Bar: Block out half of the height of the Dolder® Matrix (Fig. 3).

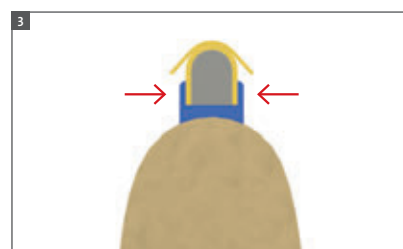
Ackermann®, Dolder® and Round Bar: Finalize the denture according to the standard dental technique.



Milled Bar

- Place attachments and female parts on the bar and prepare for polymerization.
- Block out all undercuts between bar and model as well as the implant caps.
- Finalize the denture according to standard dental technique.

Note: To avoid unwanted loading of the implants during chewing, always use the according spacer between the bar and the matrix when polymerizing. This also ensures the vertical translation of the prosthesis to the bar.



Varying the retention force of the bar matrix

Only the appropriate activator/deactivator may be used for activating/deactivating the bar matrix.

- To activate the matrix, press its walls together with the activator.
- To deactivate the matrix, push its walls apart with the deactivator.

Step 5

Send the master cast, the bar, the prosthesis, new screws, the IFU and the patient labels to the restorative dentist.

Note: The IFU must be sent together with the restoration to the dentist.



Insertion (dentist's office)

The final restoration is delivered to the dentist's office on the master cast together with new screws, IFU and patient labels.

Step 1

Remove the temporary restoration.

Step 2

Clean and dry the interior of the implants/Screw-retained abutments, screws and the bar thoroughly (cleaning, disinfection and sterilization according the brochure *Guideline for Cleaning, Disinfection and Sterilization*, 152.802.

Step 3

Check the fit of the bar before fixing it in the patient's mouth. Do not attach the framework if the fit appears to be unsatisfactory (e.g. when performing a Sheffield test).

Step 4

Position the cleaned framework on the implants and insert the patient screws. Tighten the implant screws to 35 Ncm and the Occlusal Screws of the Screw-retained abutments with 15 Ncm, using the SCS Screwdriver with the ratchet and the torque controdevice.

Note: The friction fit secures the screws to the instrument during insertion and ensures a safe handling. If additional screws are needed, consult the table "CARES® SRBB Working conditions" in chapter 4.4 for the article numbers.

Step 5

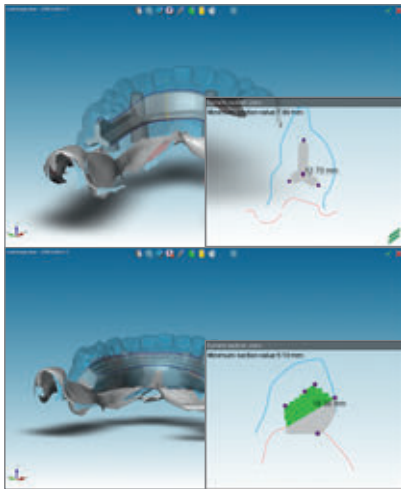
Attach final prosthesis.



4.3.2.2 CARES® Fixed Bars, fixed prosthetics

This step-by-step instruction is a handling guideline for the CARES® Basic and Advanced Fixed Bars. The following steps are considered a prerequisite:

- The prosthetic planning has been completed and aligned between all members of the treatment team
- A wax try-in of the prosthesis has been verified in the patient's mouth
- Straumann implants have been implanted
- The accuracy of the master models has been counter-checked with a verification jig, to ensure accurate representation of the patient's oral situation



Step 1

Design in CARES® Visual

To have an ideal adaptation of the CARES® Fixed Bars to the final prosthesis it is recommended to scan the wax try-in as an overlay (see picture on the left).

CARES® Advanced Fixed Bar: Determine the acrylic/metal finishing line according to the wax try-in.

For more details on designing the CARES® Basic and Advanced Fixed Bar please consult the CARES® Visual guidelines in the software.



Step 2

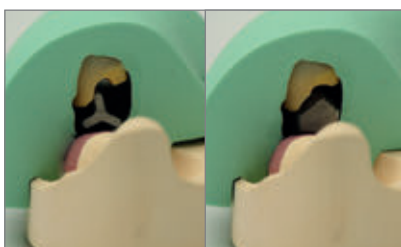
Fit check

After receiving the CARES® Fixed Bar check the fit on the master cast.

Step 2a

Optional:

To further check the fit, send the bar to the dentist for an additional appointment for a try-in in the patient's mouth. To ensure the screws used are not damaged please insert the screws with the SCS Screwdriver. The friction fit secures the screws to the instrument during insertion and ensures safe handling.



Step 3

Flask the verified wax try-in

Place the verified wax try-in on the master cast and flask it.

Remove the flask and boil out the wax.

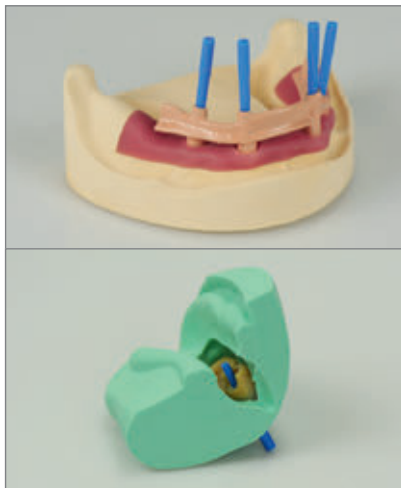
Attach the bar to the master cast and ensure that the teeth in the flask don't interfere with the bar.



Step 4

Bar preparation

Apply opaque on the area where the acrylic will be applied according to the veneering system of choice.



Step 5

Close the screw channels of the bar during the acrylic adaptation phase. For example, use a Q-tip with the cotton applicator removed to close the screw channels of the bar. Insert the shaft of the Q-tip long enough for it to block out the screw channel when applying the acrylics.



Step 6

Finalizing the prosthetic restoration

Process and finish the prosthesis according to conventional dental techniques.






Step 7

Insertion in patient's mouth




- Check the fit of the bar before fixing it in the patient's mouth; if the implant-interface is subgingival, take a radiograph to verify the fit.
- Do not attach the bar if the fit appears to be unsatisfactory.
- Always use new abutment/occlusal screws for patient use.
- Torque implant level SRBB*: 35 Ncm
- Torque screw-retained abutment: 35 Ncm
- Torque occlusal screw for abutment-level SRBB*: 15 Ncm

5 Auxiliaries and instruments

5.1 SCS Screwdrivers

Art. No.		Article	Dimensions	Material
046.400		SCS Screwdriver for ratchet, extra short	Length 15 mm	Cronidur® 30
046.401		SCS Screwdriver for ratchet, short	Length 21 mm	Cronidur® 30
046.402		SCS Screwdriver for ratchet, long	Length 27 mm	Cronidur® 30




5.2 Ratchet and Torque control device

Art. No.		Article	Dimensions	Material
046.119		Ratchet includes service instrument	Length 84 mm	Stainless steel
046.049		Torque control device for ratchet	Length 82 mm	Stainless steel
046.064		Holding key	Length 85 mm	Stainless steel


5.3 Polishing aids and analog holder

Art. No.		Article	Dimensions	Material
046.245		Polishing protector for RN synOcta® Copings, transocclusal screw-retained	Length 15 mm	Stainless steel
025.2920 025.2920-04		NC Polishing aid	Length 16 mm	Stainless steel
046.239		Analog holder	Length 105 mm	Al/Steel
025.4920 025.4920-04		RC Polishing aid	Length 16 mm	Stainless steel
025.0004 025.0004V4		Polishing Aid for Screw-retained Abutment D 3.5 mm	—	TAN
025.0005 025.0005V4		Polishing Aid for Screw-retained Abutment D 4.6 mm	—	TAN
025.0006		Lab processing Screw for Screw-retained Abutment	Length 20 mm	SST

5.4 Auxiliaries for bar matrices

Art. No.		Article	Dimensions	Material
046.150		Activator set for all bar matrices, three-part	Length 50 mm	Stainless steel
046.151		Deactivator for Dolder® Bar matrices, mini	Length 66 mm	Grilon BS/Brass
046.152		Deactivator for Dolder® Bar matrices, regular	Length 66 mm	Grilon BS/Brass

5.5 Wax-up kits

Art. No.		Article	Dimensions	Material
019.0063		Straumann® CARES® Wax-up kit contains wax-up sleeve holders for Straumann® Dental restorations on Straumann® Implant		

5.6 Bar male and female components

Art. No.		Article	Dimensions	Material
048.414		Dolder® bar matrix includes spacer, regular	Length 25 mm Height 2.75 mm	Elitor®/ Brass
048.413		Dolder® bar matrix includes spacer, mini	Length 25 mm Height 3.5 mm	Elitor®/ Brass
		Round-Bar Female part Components available through your local Cendres + Méteaux representative.	Length 3.5 mm Height 3.6mm	
		Ackermann-Bar® Female part A Components available through your local Cendres + Méteaux representative.	Length 3.5 mm Height 3.5 mm	
		Ackermann-Bar® Female part B Components available through your local Cendres + Méteaux representative.	Length 3.5 mm Height 4.75 mm	
		MP-Clip® Female part Components available through your local Cendres + Méteaux representative.	Length 5 mm Height 3 mm	
048.804-V2 048.804-V10 048.805-V2 048.805-V10		Zest Bar Anchor Locator® Bar Abutment (2 Pack) Locator® Bar Abutment (10 Pack) Locator® Bar Male Processing Package (2 Pack) Locator® Bar Male Processing Package (10 Pack)	Thread diameter: 2 mm Locator® diameter: 3.86 mm	Titanium Grade 5

6 Appendix

6.1 Related documentation

490.020/en	Straumann® CARES® Brochure
150.926	Instructions for Use for Straumann® CARES® Abutments, ZrO ₂
150.927	Instructions for Use for Straumann® CARES® Abutments, Ti
701572	Instructions for Use for Straumann® CARES® Abutments, TAN
700996	Instructions for Use for Straumann® CARES® Screw-retained bridges and Straumann® CARES® Bars
701593	Instructions for Use for Straumann® Variobase® for Crown
701627	Instructions for use for Straumann® Variobase® Prosthetics Components for Bridge/Bar
701149	Instructions for Use for Straumann® CARES® Mono Scanbody
150.771	Instructions for Use for Straumann® Scanbody
701933	Instructions for Use for nlce™ restorations
701945	Instructions for Use for zerion® ML and UTML
701654	Instructions for Use for 3M™ ESPE™ Lava™ Plus Zirconia
701049	Instructions for Use for zerion® LT
150.772	Instructions for Use for IPS e.max® CAD
701051	Instructions for Use for ticon®
701050	Instructions for Use for coron®
701053	Instructions for Use for polycon® ae
152.802	Guideline for Cleaning, Disinfection and Sterilization
152.821	Basic information on Straumann® CARES® Tooth Prosthetic Procedures

Straumann® CARES® Screw-retained bridge and bar – Service and process

The process differs from country to country. Please select the brochure that is valid for you:

	Order no.	Language	Area of validity
043	490.043-de	German	Germany and Switzerland
	490.043-en	English	Great Britain
	490.043-fr	French	France and Switzerland
	490.043-it	Italian	Italy and Switzerland
044	490.044-en	English	APAC region
045	490.045-en	English	USA, Netherlands and Nordic countries
	490.045-de	German	Austria
	490.045-fr	French	Canada and Belgium
	490.045-es	Spanish	Spain and Portugal

All documents as well as further software-related information are available in the Straumann® CARES® Visual software (“Products and Services” tile).

7 Important guidelines

Please note

Practitioners must have appropriate knowledge and instruction in the handling of the Straumann CAD/CAM products or other Straumann products ("Straumann Products") for using the Straumann Products safely and properly in accordance with the instructions for use.

The Straumann Product must be used in accordance with the instructions for use provided by the manufacturer. It is the practitioner's responsibility to use the device in accordance with these instructions for use and to determine, if the device fits to the individual patient situation.

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Availability

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Caution

In addition to the caution notes in this document, our products must be secured against aspiration when used intraorally.

Validity

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Documentation

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Explanation of the symbols on labels and instruction leaflets


 Batch code


 Catalogue number


 Sterilized using irradiation

 Lower limit of temperature


 Upper limit of temperature

 Temperature limitation


 Rx only Caution: Federal law restricts this device to sale by or on the order of a dental professional.


 Do not re-use

 Non-sterile

 Caution, consult accompanying documents

 Use by

 Keep away from sunlight

 Straumann Products with the CE mark fulfill the requirements of the Medical Devices Directive 93/42 EEC

 Consult instructions for use

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