

# BASIC INFORMATION

Straumann® TLC Implant System





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# ABOUT THIS GUIDE

This surgical and prosthetic procedure describes the steps required for implantation and restoration of the Straumann® TLC Implant System. The Straumann® TLC Implant System is recommended for use only by clinicians with advanced surgical skills. It is assumed that the user is familiar with placing dental implants. Not all detailed information will be found in this guide. Reference to existing Straumann® procedure manuals will be made throughout this document.












Not all products shown are available in all markets.

# 1. THE STRAUMANN® TLC IMPLANT SYSTEM

The Straumann® TLC Implant System offers apically tapered tissue level implants (TLC) that are designed for high primary stability and immediate treatment procedures.

The Straumann® TLC Implants are made from the material Roxolid® with the SLActive® surface and are available in the maximum endosteal outer diameters  $\varnothing$  3.3 mm,  $\varnothing$  3.75 mm,  $\varnothing$  4.5 mm,  $\varnothing$  5.5 mm and  $\varnothing$  6.5 mm with length options from L 8 mm to L 18 mm for the maximum endosteal outer diameter  $\varnothing$  3.3 mm, L 6 mm to L 18 mm for diameters  $\varnothing$  3.75 mm and  $\varnothing$  4.5 mm, and L 6 mm to L 16 mm for diameter  $\varnothing$  5.5 mm and  $\varnothing$  6.5 mm. A unified color code simplifies identification of instruments and implants for the available maximum endosteal outer diameters. The Straumann® TLC implants are available with a 1.8 mm shoulder (Standard Plus - SP).

The Straumann® TLC prosthetic components are identified with NT (Narrow TorcFit™/one dot), RT (Regular TorcFit™/two dots) and WT (Wide TorcFit™/three dots), corresponding to the implant shoulder diameters of  $\varnothing$  3.5 mm,  $\varnothing$  4.8 mm and  $\varnothing$  6.5 mm respectively.

Straumann® TLC Implant									
	$\varnothing$ 3.3 mm		$\varnothing$ 3.75 mm		$\varnothing$ 4.5 mm		$\varnothing$ 5.5 mm	$\varnothing$ 6.5 mm	
Color code	 (white)		 (red)		 (green)		 (brown)	 (black)	
Prosthetic base	NT	RT	NT	RT	RT	WT	WT		
Connection	TorcFit™								
Image									
SLActive®									
Available lengths	6 mm	–		035.7206S	035.7306S	035.7506S	035.7606S	035.7706S	035.7806S
	8 mm	035.7008S	035.7108S	035.7208S	035.7308S	035.7508S	035.7608S	035.7708S	035.7808S
	10 mm	035.7010S	035.7110S	035.7210S	035.7310S	035.7510S	035.7610S	035.7710S	035.7810S
	12 mm	035.7012S	035.7112S	035.7212S	035.7312S	035.7512S	035.7612S	035.7712S	035.7812S
	14 mm	035.7014S	035.7114S	035.7214S	035.7314S	035.7514S	035.7614S	035.7714S	035.7814S
	16 mm	035.7016S	035.7116S	035.7216S	035.7316S	035.7516S	035.7616S	035.7716S	035.7816S
	18 mm	035.7018S	035.7118S	035.7218S	035.7318S	035.7518S	035.7618S	–	

To obtain more information about the indications and contraindications related to each implant, please refer to the corresponding instructions for use. Instructions for use can be found at [www.ifu.straumann.com](http://www.ifu.straumann.com).

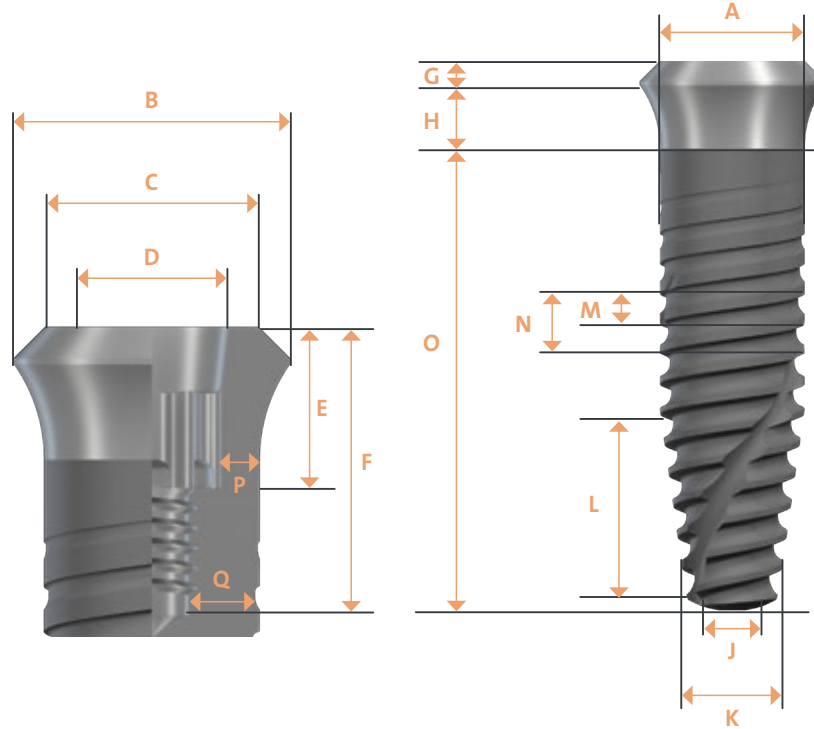
**Note:**

Particular care should be taken when placing small-diameter Roxolid® implants ( $\varnothing$  3.3 mm) in the molar region or other high-load situations due to the risk of implant overload.

# 2. IMPLANT

## 2.1 DESIGN AND SPECIFICATION

TLC Standard Plus



Straumann® TLC Implant								
	Ø 3.3 mm NT	Ø 3.3 mm RT	Ø 3.75 mm NT	Ø 3.75 mm RT	Ø 4.5 mm RT	Ø 4.5 mm WT	Ø 5.5 mm WT	Ø 6.5 mm WT
(A) Maximum outer diameter	Ø 3.3 mm		Ø 3.75 mm		Ø 4.5 mm		Ø 5.5 mm	Ø 6.5 mm
(B) Shoulder diameter	Ø 3.5 mm	Ø 4.8 mm	Ø 3.5 mm	Ø 4.8 mm	Ø 6.5 mm			
(C) Platform diameter	Ø 2.9 mm	Ø 3.7 mm	Ø 2.9 mm	Ø 3.7 mm	Ø 5.0 mm			
(D) Connection diameter					Ø 2.7 mm			
(E) Connection depth					2.8 mm			
(F) Connection depth including screw hole					5.4 mm			
(G) 45° bevel height	0.3 mm	0.55 mm	0.3 mm	0.55 mm	0.75 mm			
(H) Smooth shoulder height Standard Plus					1.8 mm			
<b>Implant lengths: 6 mm to 10 mm</b>								
(J) Apical diameter core	1.52 mm		1.81 mm		2.36 mm		3.18 mm	
(K) Apical diameter threads	2.22 mm		2.63 mm		3.5 mm		4.63 mm	5.71 mm
(L) Tapered part/taper	2.6 mm/14°				2.7 mm/14°		2.6 mm/14°	
<b>Implant lengths: 12 mm to 18 mm</b>								
(J) Apical diameter core	1.35 mm		1.61 mm		2.1 mm		2.21 mm	2.76 mm
(K) Apical diameter threads	2.05 mm		2.37 mm		3.1 mm		4.14 mm	4.87 mm
(L) Tapered part/taper	5 mm/8°		5.2 mm/8°		5.5 mm/8°			6.5 mm/8°
(M) Thread spacing/flank lead/depth	0.8 mm/ 20°/0.35 mm				0.9 mm/20°/0.45 mm		1 mm/ 20°/ 0.5 mm	1.15 mm/ 20°/ 0.75 mm
(N) Thread pitch*	1.6 mm				1.8 mm		2 mm	2.3 mm
(O) Lengths	8-18 mm		6-18 mm			6-16 mm		
(P) Wall thickness top	0.5 mm		0.67 mm		1.05 mm		1.55 mm	2.05 mm
(Q) Wall thickness mid	0.79 mm		1.03 mm		1.24 mm		1.70 mm	2.03 mm
Number of chip flutes	2				4			

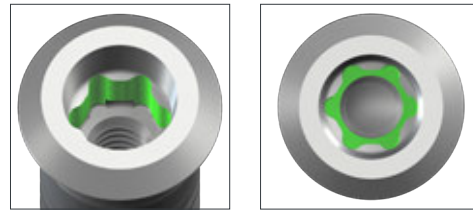
\* Implant advances by this amount with every rotation.

# 3. CONNECTION

The Straumann® TLC Implant features the intuitive TorcFit™ connection. This connection supports self-guiding insertion for clear-cut tactile feedback. Six positions enable a simple yet flexible alignment and outstanding protection against rotation.

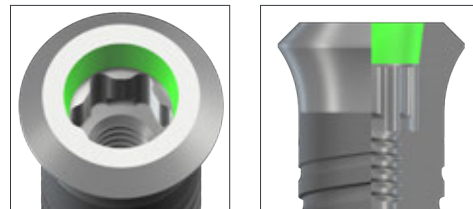
## Improved Torx with six positions:

- Allows transmission of high torques
- Simple yet flexible implant and abutment alignment



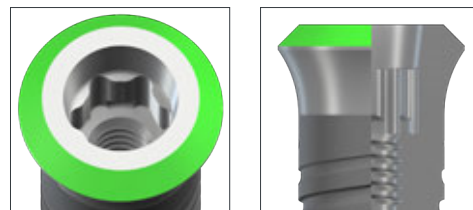
## 7° conical prosthetic connection:

- High mechanical stability



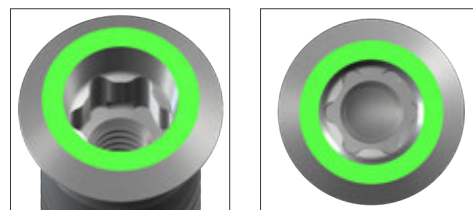
## 45° shoulder prosthetic connection:

- High mechanical stability
- Exact implant-abutment fit
- Extra wide emergence profiles (implants with diameter >5.5 mm)
- Divergence compensation for bridges

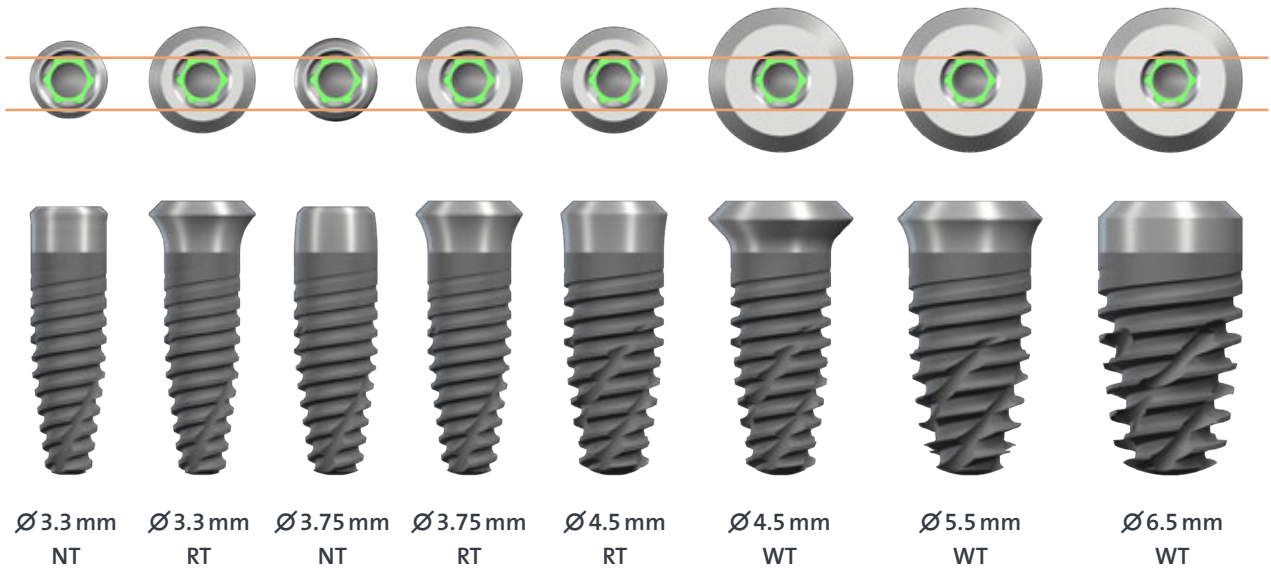


## Flat top portion:

- High accuracy for Scanbody



All TLC Implants have the same inner geometry regardless of the diameter of the implant.  
This allows the use of the same implant driver for all implants.

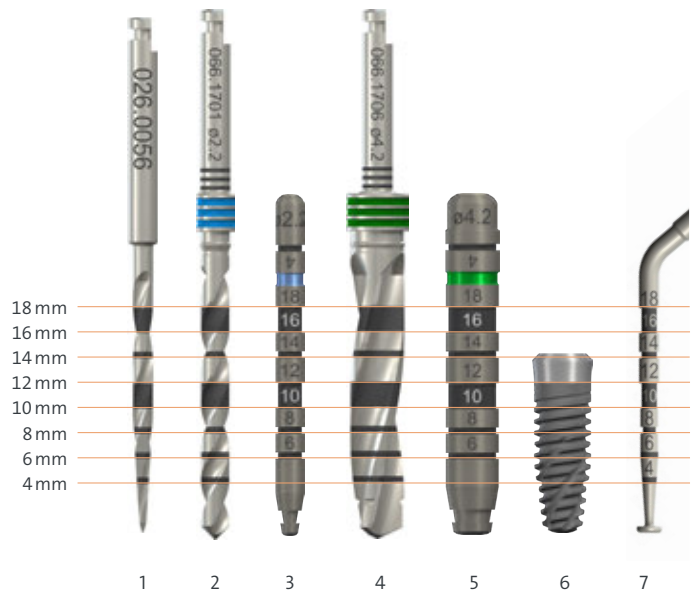




# 4. INSTRUMENTS

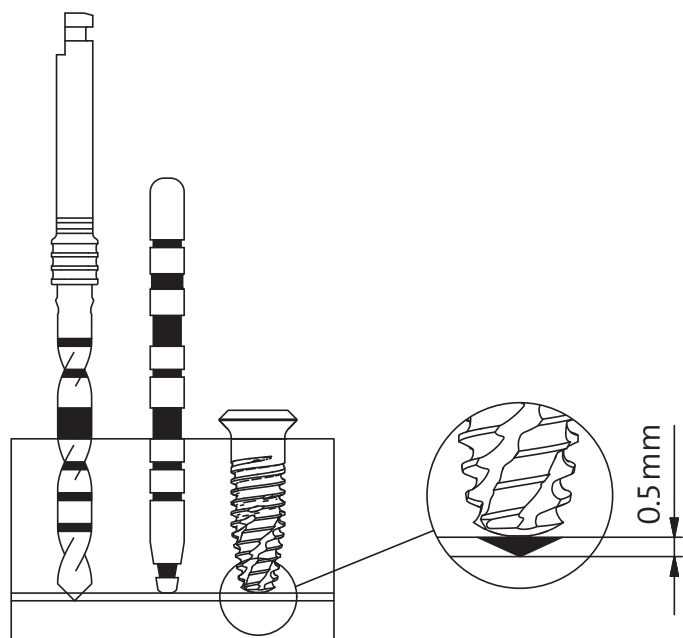
The Straumann® TLC Implant System is supplied with a specific set of instruments.

The instruments have depth marks at 2 mm intervals that correspond to the available implant lengths. The first bold mark on the drills represents 10 mm and 12 mm, where the lower edge of the mark corresponds to 10 mm and the upper edge to 12 mm. The second bold mark on the long drills represents 16 mm and 18 mm, where the lower edge of the mark corresponds to 16 mm and the upper edge to 18 mm.




















1. Needle Drill: 026.0056
2. Pilot Drill, long: 066.1701
3. Alignment Pin: 046.799
4. Drill  $\varnothing$ 4.2 mm, long: 066.1706
5. Depth Gauge: 046.804
6. TLC Implant  $\varnothing$ 4.5 RT / 12 mm: 035.75125
7. Implant Depth Gauge: 066.2000

**Warning:** Due to the function and design of the drills, the drill tip is up to 0.5 mm longer than the insertion depth of the implant. For example, if you drill until the 10 mm marking the actual osteotomy has a depth of 10.5 mm.



## 4.1 VELODRILL™

The TLC VeloDrill™ line in the Straumann® Dental Implant System are delivered color-coded, the color corresponding to the specific implant diameter. For precise depth control, VeloDrill™ are compatible with a disposable Drill Stop (refer to *Straumann® Drill Stop – Basic Information (702874/en)*). VeloDrills™ are compatible for freehand and guided surgery.

	Needle Drill	Pilot Drill	Drills						
Color	–								
Image (short)									
Diameter	Ø1.6 mm	Ø2.2 mm	Ø2.8 mm	Ø3.2 mm	Ø3.5 mm	Ø3.7 mm	Ø4.2 mm	Ø4.7 mm	Ø5.2 mm
Step diameter	–	–	Ø2.5 mm	Ø3.0 mm	Ø3.3 mm	Ø3.6 mm	Ø3.9 mm	Ø4.4 mm	Ø4.9 mm
Short	026.0054	066.1301	066.1302	066.1303	066.1304	066.1305	066.1306	066.1307	066.1308
Long	026.0056	066.1701	066.1702	066.1703	066.1704	066.1705	066.1706	–	
Material	Stainless steel								

## 4.2 EXTERNAL IRRIGATION WHEN USING DRILL EXTENDER

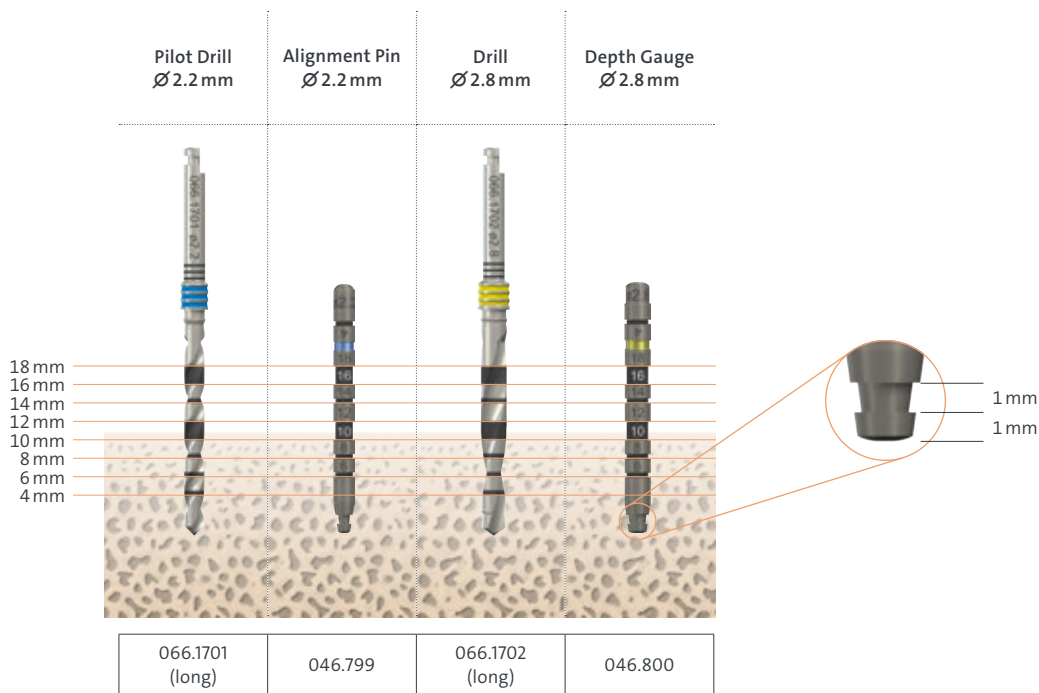


The Drill Stop reduces the effectiveness of the irrigation when a Drill Extender is used. In this case use additional external irrigation (e.g. with a syringe) to ensure proper cooling of the osteotomy during drilling.

### 4.3 ALIGNMENT PIN AND DEPTH GAUGES

Alignment Pins and Depth Gauges are available for accurate depth measurements and alignment of orientation and position of the osteotomy. Their diameters and color correspond to the drill diameters and are compatible with all Straumann® Dental Implant Systems.

The tip and the groove are both 1.0 mm long. This allows distortion measurements on an interoperative radiograph.



### 4.4 IMPLANT DEPTH GAUGE

Implant depth gauge for accurate depth measurement and tactile examination of the osteotomy.

Blue end: use to examine osteotomy made by pilot drill Ø2.2 mm.

Yellow end: use to examine osteotomy made with drill Ø2.8 mm and wider.












The Implant Depth Gauge is made of titanium alloy (TAN) and is compatible with all Straumann® Dental Implant Systems.




Implant Depth Gauge, 066.2000

## 4.5 IMPLANT DRIVER

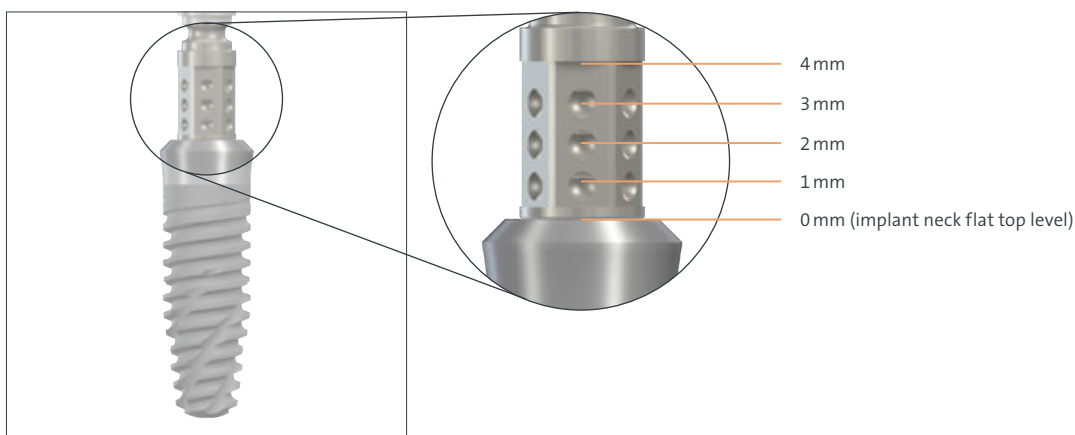
Specific Implant Driver to use for pick-up and insertion of the Straumann® TLC Implants.

Implant Driver type								
Implant Driver for Handpiece 				Implant Driver for Ratchet 			Implant Driver for Ratchet, screw-retained	
								
short	medium	long	extra long	short	medium	long	short	long
Length 21 mm	Length 26 mm	Length 31 mm	Length 36 mm	Length 21 mm	Length 26 mm	Length 31 mm	Length 21 mm	Length 31 mm
Stainless steel								
066.4101	066.4107	066.4102	066.4108	066.4201	066.4207	066.4202	066.4205	066.4206

**Note:** Consider the available intra-oral space when selecting the implant driver. The long and extra-long versions are recommended for anterior only.

Surgical Handle for TorcFit™ Implant Driver

Stainless steel
066.4000

The Implant Driver for Handpiece (long (066.4102), extra long (066.4108)) is compatible with the Surgical Handle, for TorcFit™ Implant Driver. If manual surgical Implant drivers are used to insert the implant, special attention is required to avoid over-tightening.



The round markings on the Implant Drivers indicate the distance to the implant flat top in 1 mm steps. As the SP implant has a 1.8 mm implant shoulder, the distance of the first round marking to the SLActive® surface margin is 1.8mm + 1mm = 2.8mm, that of the second round mark is 3.8 mm, that of the third round mark is 4.8 mm.

## 4.6 RATCHET AND TORQUE CONTROL DEVICES

The Ratchet is a two-part lever arm instrument with a rotary knob for changing the direction of force. It is supplied with a service instrument, which is used to tighten and loosen the head screw. The Holding Key (046.064) can be used to stabilize the Ratchet.

Two different Torque Control Devices are available for defined torque transmission or for torque measurements, with markings of 15Ncm / 35Ncm and 35-50Ncm / 80Ncm respectively. Choose the appropriate device depending on the intended use.

Ratchet and Torque Control Devices				
	Holding Key	Ratchet	Torque Control Device for Ratchet	Torque Control Device for Ratchet, Surgical
Intended use	Auxiliary	Torque transmission	Prosthetic	Surgical
Torque markings	NA	NA	0/15/35Ncm	0/35/50/80Ncm
Article Number	046.064	046.119	046.049	066.1100
Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel, DLC coated

**Note:** To ensure prolonged perfect function and cleanability, the Ratchet must always be taken apart and the individual parts disinfected, cleaned and sterilized after use. Its function must be checked in good time before each use.

Always use the Service Instrument to tighten the bolt of the Ratchet before use.

Torque reading on Torque Control Device:



## 4.7 STRAUMANN® MODULAR CASSETTE

The Straumann® Modular Cassette is used for the sterilization and the secure storage of the surgical instruments and auxiliary instruments. For guidelines on how to clean and sterilize the cassette, please refer to *Straumann® Modular Cassette, Basic Information (702527/en)*. The B and C modules can be stacked as shown in the picture.

The QR code on the trays of the modular cassette leads to an online webpage to support with documents for the implant surgical workflow and the cassette setup and maintenance.



## 4.8 SETUP FOR TLC FREEHAND SURGERY

B Module, Tray TorcFit™ BLC, TLC, BLX, TLX  
041.787

**BLC/TLC Profile Drills**

Profile Drill 034.362, Profile Drill 034.363, Profile Drill 034.365, Profile Drill 034.366, Profile Drill 034.367

**Alignment pin & depth gauges**

Alignment pin 046.799, Depth Gauge 046.800, Depth Gauge 046.801, Depth Gauge 046.802, Depth Gauge 046.803, Depth Gauge 046.804, Depth Gauge 046.805, Depth Gauge 046.806, Depth Gauge 046.807

**Spare parts (optional)**

SCS Screwdriver 046.401, Drill Extender 040.563, SCS Screwdriver for Handpiece 046.411

**Implant Driver for ratchet**  
066.4201  
066.4207  
066.4202

**Implant Driver for handpiece**  
066.4101  
066.4107  
066.4102

**Straumann BLC - TLC - BLX - TLX**

**Spare parts**

**Profile Drills**

**QR code**

**Alignment Pin/Depth gauges**

**VeloDrills™**

Ø 2.2, Ø 2.8, Ø 3.2, Ø 3.5, Ø 3.7, Ø 4.2, Ø 4.7, Ø 5.2, Ø 6.2

**Illustration for drill depth mark**

4 6 10 12 16 18

**Needle Drill**  
026.0056

**Round Bur**  
044.003  
044.004

**Needle Drills and Round Burs**

066.1702, 066.1502, 066.1302, 066.1704, 066.1504, 066.1304, 066.1706, 066.1506, 066.1306, 066.1508, 066.1308

066.1701, 066.1501, 066.1301, 066.1703, 066.1503, 066.1303, 066.1705, 066.1505, 066.1305, 066.1507, 066.1307, 066.1509, 066.1309

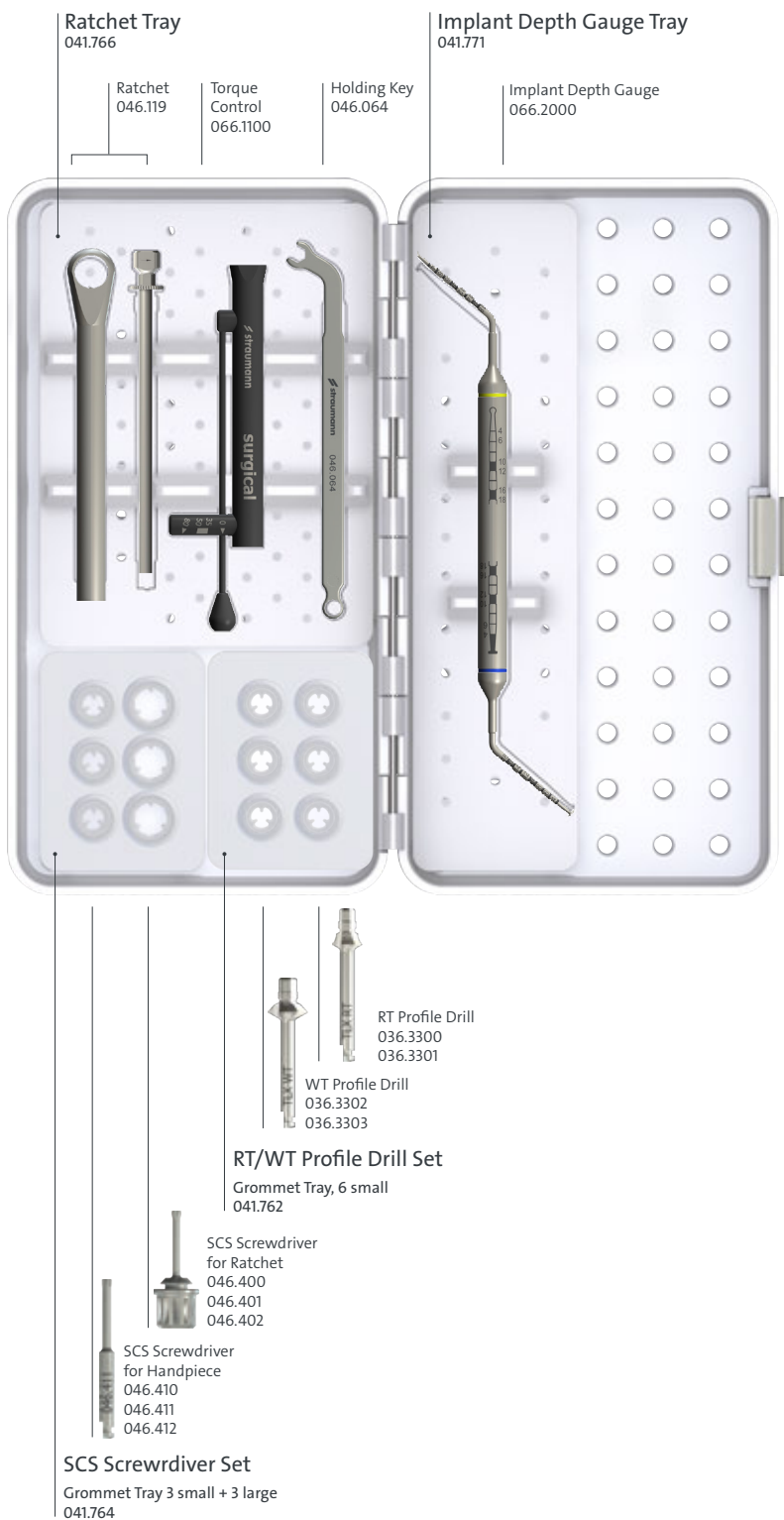
**VeloDrills™**

Choose one drill length between short, medium or long depending on the implant length used. See article list on page 79.

For more information refer to *Straumann® Modular Cassette Selection Guide (702824/en)*.

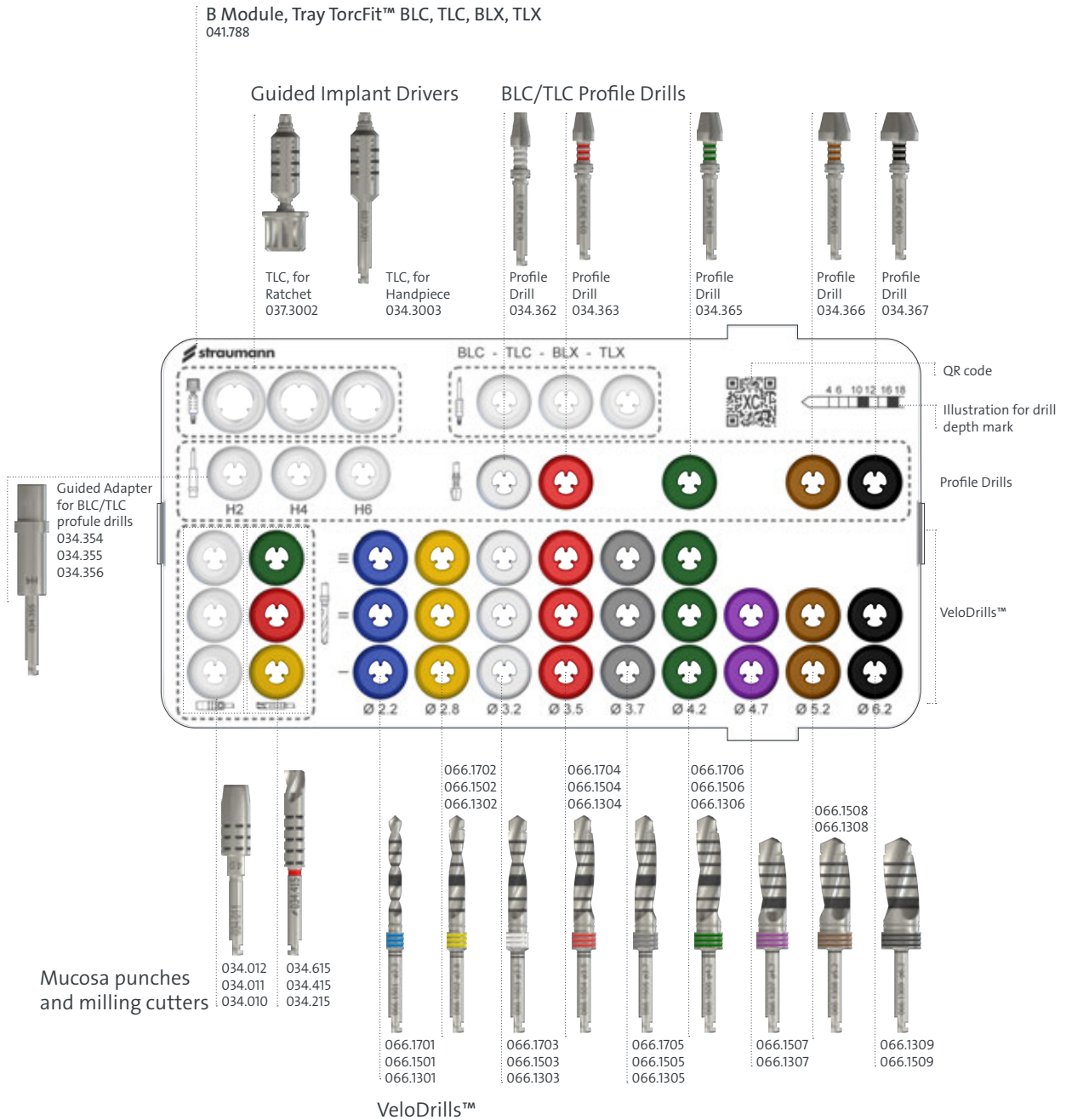
For additional instruments and tools, please use the A-module. The A Module mainly stores surgical tools that can be shared among different implant lines. Users can set up the A Module according to their needs by changing the removable trays inside the A Module.

**A Module**  
041.761

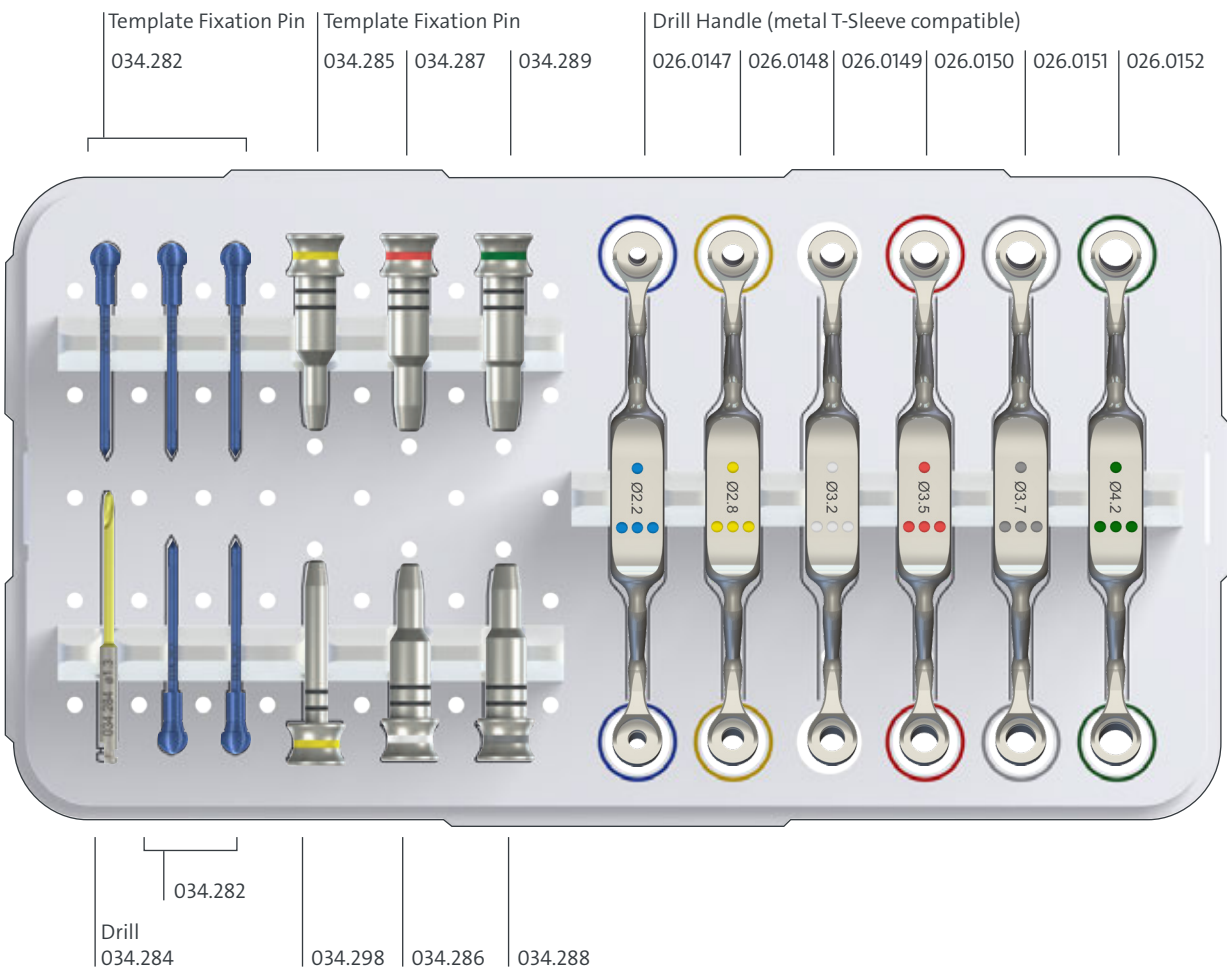




## 4.9 SETUP FOR TLC GUIDED SURGERY



C Module Guided Surgery  
041.772



# 5. SURGICAL PROCEDURE AND HEALING PHASE

The workflow for the surgical procedure for the Straumann® TLC Implant System involves 3 steps:

- Preoperative planning
- Implant bed preparation
- Implant insertion

## 5.1 PREOPERATIVE PLANNING

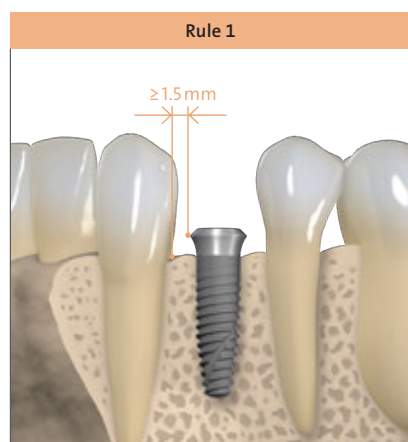
Prosthetic-driven planning is recommended, and close communication between the patient, dentist, surgeon and dental technician is imperative for achieving the desired esthetic result.

To determine the topographical situation, axial orientation and the appropriate implants, making a wax-up / set up using the previously prepared study cast is recommended. Subsequently, the type of superstructure can be defined. The wax-up / set-up can later be used as the basis for a custom-made X-ray or drill template and for a temporary restoration.

**Note:** Abutments should always be loaded axially. Ideally, the long axis of the implant is aligned with the cusps of the opposing tooth. Extreme cusp formation should be avoided as this can lead to unphysiological loading.

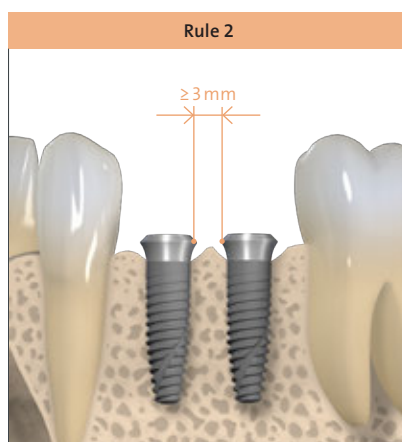
Mesiodistal bone availability is an important factor when choosing the implant type and diameter as well as the inter-implant distances if multiple implants are placed. The point of reference on the implant for measuring mesiodistal distances is always the largest diameter of the implant.

The following three rules should be regarded as minimum guidelines:



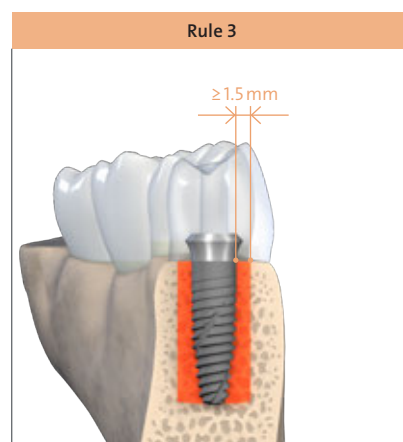
**Rule 1:** Distance to adjacent tooth at implant shoulder level

A minimum distance of **1.5 mm from the implant shoulder to the adjacent tooth** (mesial and distal) is recommended.



**Rule 2:** Distance to adjacent implants at bone level.

A minimum distance of **3 mm between two adjacent implant shoulders** (mesiodistal) is recommended.



**Rule 3:** The facial and palatal bone layer must be at least 1.5 mm thick in order to ensure stable hard and soft tissue conditions. Within this limitation, a restoration-driven orofacial implant position and axis should be chosen to allow the placement of screw-retained restorations.

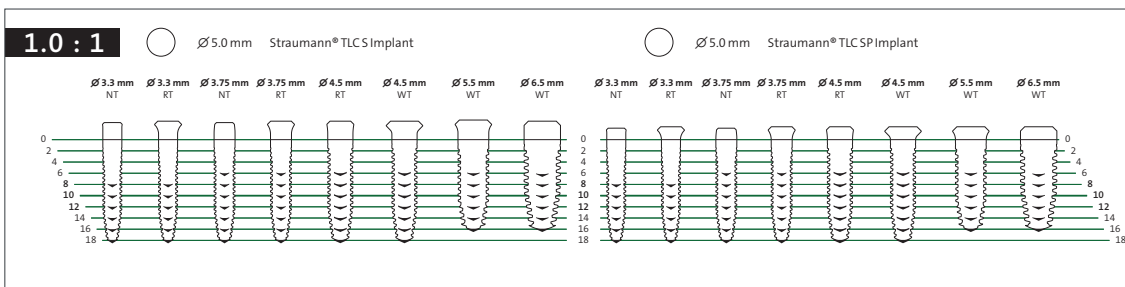
**Caution:** An augmentation procedure is indicated if the orofacial bone wall is less than 1.5 mm or a layer of bone is missing on one or more sides. This technique should be employed only by dentists with adequate experience in the use of augmentation procedures.

### 5.1.1 X-ray reference foil

The vertical bone availability determines the maximum allowable length of the implant that can be placed. A minimum distance of 2 mm between the apex of the implant and the alveolar nerve should be kept. For easier determination of the vertical bone availability, we recommend the use of an X-ray reference foil with X-ray Reference Sphere.

The TLC X-ray reference foils are used for measurement and comparison. They assist the user in selecting the suitable implant type, diameter and length. Similar to the distortions that occur in X-rays, the implant dimensions are shown on the individual reference foils with the corresponding distortion factors (1:1 to 1.7:1). Each magnification factor or scale is determined by showing the X-ray Reference Sphere on the reference foil. First, compare the size of the X-ray Reference Sphere on the patient's X-ray with the size of the Reference Sphere on the reference foil. Superimpose the two pictures to find the correct scale. Next, determine the spatial relations around the implant position, and establish the implant length and insertion depth.

For more information regarding the preparation of a X-ray jig with the Reference Spheres see the *Straumann® Dental Implant System, Basic Information (702084/en)*.



**Note:** For Straumann® TLC Implants use only the X-ray reference foil specific to the TLC Implant.

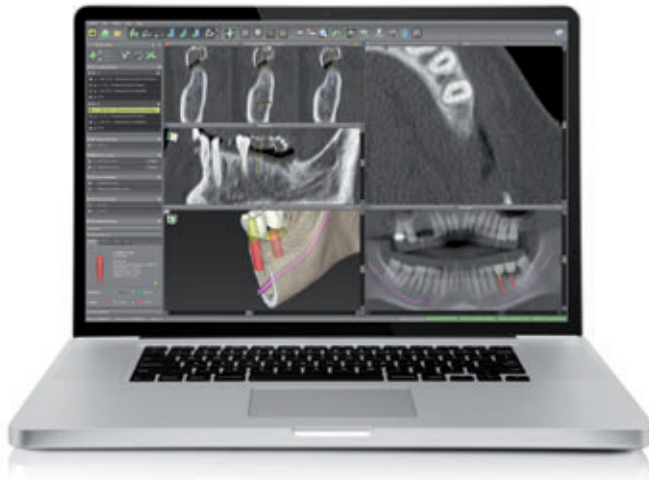
To calculate the effective bone availability, use the following formula:

$$\frac{\text{X-ray Reference sphere 5 mm} \times \text{bone availability (X-ray*)}}{\text{Reference sphere diameter on the X-ray}} = \text{effective bone availability}$$

\* Taking into consideration all implant-related anatomical structures (e.g. mandibular canal, sinus maxillaris, etc.)

### 5.1.2 Planning software

Another possibility is digital planning with e.g. coDiagnostiX®. This 3D diagnostics and implant planning software is designed for the image-guided surgical planning of dental implants, including TLC Implants, which are included in the system's digital library. Working with the software is based on a patient's medical image data, such as a CT (Computed Tomography) or DVT (Digital Volume Tomography) scan processed by coDiagnostiX®.



Planning includes the calculation of several views (such as virtual OPG or a 3-dimensional reconstruction of the image dataset), analysis of the image data and the placement of implants, abutments and drilling sleeves.

coDiagnostiX® software is designed for use by professionals with appropriate knowledge in implantology and surgical dentistry. For further information, please refer to the coDiagnostiX® Manual.



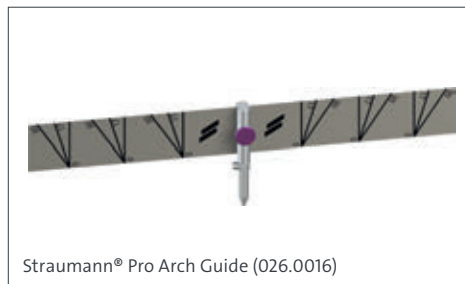
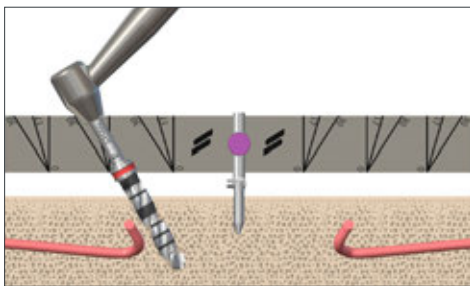
#### CARES® Synergy workflow

CARES® Synergy provides real-time communication between the implant planning software (coDiagnostiX®) and the lab software (i.e. Straumann® CARES®) and improves implant planning by visualizing the relationship between the proposed implant position and the proposed restoration.

### 5.1.3 Straumann® Pro Arch Guide


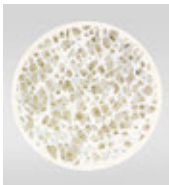
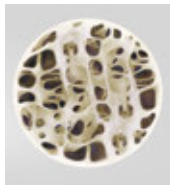
For intraoperative visual and three-dimensional orientation of the implant angulation (mesial/distal) and oral parallelization, use the Straumann® Pro Arch Guide.

The Pro Arch Guide is used in edentulous jaws for surgical implant placement. The Pro Arch Guide can be easily bent to adapt to the dental arch. It is secured by drilling into the symphysis with a  $\varnothing 2.2$  mm Drill No. 1 and a pin in the jaw. The drilling depth for the bone cavity of the pin is 10 mm. The drilling depth can be checked optically using the depth markings on the drills. Use the TS Hexagonal Screwdriver (046.420) to adjust and disassemble.



For further information on the treatment of edentulous patients and angulated placement of TLC Implants, please refer to the *Straumann® Pro Arch, Basic Information (702166/en)*.

### 5.1.4 Bone density definition

Cross sectional view of different types of bone quality*		
Type I	Type II/III	Type IV
Hard	Medium	Soft
Thick cortical bone with marrow cavity	Thin cortical bone with dense trabecular bone of good strength	Very thin cortical bone with low density trabecular bone of poor strength
		

\* Lekholm U, Zarb G. Patient selection and preparation in Tissue Integrated Prostheses. Branemark P I, Zarb G A, Albrektsson T (eds). pp199–210. Quintessence, 1985.

## 5.2 IMPLANT BED PREPARATION

The Straumann® Modular Cassette with specific instruments is used to prepare the implant bed. Different drill protocols should be employed depending on the bone density. This offers the flexibility to adapt the implant bed preparation to the individual bone quality and anatomical situation.

A quick guide to the surgical drill protocol is printed on the cassette and indicates the final drill recommended for each implant diameter and bone density.

	Implant maximum endosteal outer diameter			
Bone density	Ø 3.3	Ø 3.75	Ø 4.5	Ø 5.5
Soft	● 2.2	● 2.2	○ 3.2	● 4.2
Medium	● 2.8 + P 3.3	○ 3.2 + P 3.75	● 3.7 + P 4.5	● 4.7 + P 5.5
Hard	○ 3.2 + P 3.3	● 3.5 + P 3.75	● 4.2 + P 4.5	● 5.2 + P 5.5

Final drill diameter

Profile Drill

**Note:** Every implant bed has to be initiated with the pilot drill (Ø2.2 mm) to full implant length. On the quick guide only the final drill is displayed. The clinician can decide whether or not a sequence of drills with increasing diameters is used. Use the drills in a clockwise drill rotation direction, use intermittent drilling technique and provide ample cooling with pre-cooled (5°C, 41°F) sterile saline solution. Do not exceed the recommended drill speeds, as indicated on the next page.

### 5.2.1 Workflow for TLC Ø3.3 mm

Implant bed preparation, illustrated with a TLC Implant Ø3.3 mm / 12 mm RT

Pilot drilling Check implant axis		Decide on bone density	Finalize implant bed according to bone density			Implant placement
Profile Drill	Alignment Pin Ø2.2 mm		Drill Ø2.8 mm	Drill Ø3.2 mm	Profile Drill Ø3.3 mm	
		Soft	→			TLC Ø3.3 mm SLActive® 12 mm, Roxolid®
		Medium	→ ●	→ P		
		Hard	→ ○	→ P		
800 rpm			800 rpm	800 rpm	300 rpm	15 rpm
066.1301			066.1302	066.1303	034.362	

**Note:** Particular care should be taken when placing small-diameter implants (Ø3.3 mm) in the molar region or other highload situations due to the risk of implant overload.

**Warning:** Due to the function and design of the drills, the drill tip is up to 0.5 mm longer than the insertion depth of the implant. For example, if you drill to the 12 mm marking, the actual implant bed has a depth of 12.5 mm.

Cortical bone treatment: In the presence of a hard cortical bone layer, it is recommended to widen the implant bed in this area using a Ø3.3 mm Profile Drill for Ø3.3 mm implants, independent of the overall bone-quality.

Subcrestal implant placement: Consider the final implant position for drill depth and never undersize in length with the Pilot Drill.



### 5.2.2 Workflow for TLC Ø3.75 mm

Implant bed preparation, illustrated with a TLC Implant Ø3.75 mm / 12 mm RT

Pilot drilling Check implant axis		Decide on bone density	Finalize implant bed according to bone density				Implant placement
Profile Drill	Alignment Pin Ø2.2 mm		Drill Ø2.8 mm	Drill Ø3.2 mm	Drill Ø3.5 mm	Profile Drill Ø3.75 mm	
		Soft	→				TLC Ø3.75 mm SLActive® 12 mm, Roxolid®
		Medium	→ ●	→ ○	→	→ P	
		Hard	→ ●	→	→ ●	→ P	
800 rpm		800 rpm	800 rpm	800 rpm	300 rpm	15 rpm	
066.1301		066.1302	066.1303	066.1304	034.363		

**Warning:** Due to the function and design of the drills, the drill tip is up to 0.5mm longer than the insertion depth of the implant. For example, if you drill to the 12 mm marking, the actual implant bed has a depth of 12.5 mm.

Cortical bone treatment: In the presence of a hard cortical bone layer, it is recommended to widen the implant bed in this area using a Ø3.75 mm Profile Drill for Ø3.75 mm implants, independent of the overall bone-quality.

Subcrestal implant placement: Consider the final implant position for drill depth and never undersize in length with the Pilot Drill.

### 5.2.3 Workflow for TLC $\varnothing$ 4.5 mm

Implant bed preparation, illustrated with a TLC Implant  $\varnothing$ 4.5 mm / 12 mm RT

Pilot drilling Check implant axis		Decide on bone density	Finalize implant bed according to bone density				Implant placement
Profile Drill	Alignment Pin $\varnothing$ 2.2 mm		Drill $\varnothing$ 3.2 mm	Drill $\varnothing$ 3.7 mm	Drill $\varnothing$ 4.2 mm	Profile Drill $\varnothing$ 4.5 mm	
		Soft					TLC $\varnothing$ 4.5 mm SLActive <sup>®</sup> 12 mm, Roxolid <sup>®</sup>
		Medium					
		Hard					
800 rpm			800 rpm	800 rpm	800 rpm	300 rpm	15 rpm
066.1301			066.1303	066.1305	066.1306	034.365	

**Warning:** Due to the function and design of the drills, the drill tip is up to 0.5 mm longer than the insertion depth of the implant. For example, if you drill to the 12 mm marking, the actual implant bed has a depth of 12.5 mm.

**Cortical bone treatment:** In the presence of a hard cortical bone layer, it is recommended to widen the implant bed in this area using a  $\varnothing$ 4.5 mm Profile Drill for  $\varnothing$ 4.5 mm implants, independent of the overall bone-quality.

**Subcrestal implant placement:** For implant with diameter  $\varnothing$ 4.5 and larger never undersize in length with the drill  $\varnothing$ 3.2 mm.

### 5.2.4 Workflow for TLC Ø5.5 mm

Implant bed preparation, illustrated with a TLC Implant Ø5.5 mm / 12 mm WT

Pilot drilling Check implant axis		Decide on bone density	Finalize implant bed according to bone density					Implant placement
Profile Drill	Alignment Pin Ø2.2 mm		Drill Ø3.2 mm	Drill Ø4.2 mm	Drill Ø4.7 mm	Drill Ø5.2 mm	Profile Drill Ø5.5 mm	
		Soft						TLC Ø5.5 mm SLActive® 12 mm, Roxolid®
		Medium						
		Hard						
800 rpm			800 rpm	800 rpm	800 rpm	800 rpm	300 rpm	15 rpm
066.1301			066.1303	066.1306	066.1307	066.1308	034.366	

**Warning:** Due to the function and design of the drills, the drill tip is up to 0.5mm longer than the insertion depth of the implant. For example, if you drill to the 12 mm marking, the actual implant bed has a depth of 12.5 mm.

Cortical bone treatment: In the presence of a hard cortical bone layer, it is recommended to widen the implant bed in this area using a Ø5.5 mm Profile Drill for Ø5.5 mm implants, independent of the overall bone-quality.

Subcrestal implant placement: For implant with diameter Ø4.5 and larger never undersize in length with the drill Ø3.2 mm.

### 5.2.5 Workflow for TLC Ø6.5 mm

Implant bed preparation, illustrated with a TLC Implant Ø6.5 mm / 12 mm WT

Pilot drilling Check implant axis		Decide on bone density	Finalize implant bed according to bone density						Implant placement
Drill No. 1 Ø2.2 mm	Alignment Pin Ø2.2 mm		Drill No. 3 Ø3.2 mm	Drill No. 6 Ø4.2 mm	Drill No. 7 Ø4.7 mm	Drill No. 8 Ø5.2 mm	Drill No. 9 Ø6.2 mm	Profile Drill Ø6.5 mm	
		Soft							<b>TLC Ø6.5 mm SLActive® 12 mm, Roxolid®</b>
		Medium							
		Hard							
800 rpm			800 rpm	800 rpm	800 rpm	800 rpm	800 rpm	300 rpm	15 rpm
066.1301			066.1303	066.1304	066.1306	066.1308	066.1309	034.367	











**Warning:** Due to the function and design of the drills, the drill tip is up to 0.5 mm longer than the insertion depth of the implant. For example, if you drill to the 12 mm marking, the actual implant bed has a depth of 12.5 mm.

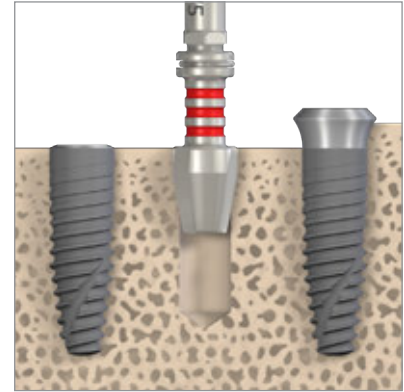
**Cortical bone treatment:** In the presence of a hard cortical bone layer, it is recommended to widen the implant bed in this area using a Ø6.5 mm Profile Drill for Ø6.5 mm implants, independent of the overall bone-quality.

**Subcrestal implant placement:** For implant with diameter Ø4.5 and larger never undersize in length with the drill Ø3.2 mm.

### 5.2.6 Subcrestal placement requires additional profile drilling





#### Profile Drills 1 for BLC and TLC Implants

<b>Color</b>					
<b>Image</b>					
<b>Article number</b>	034.362	034.363	034.365	034.366	034.367
<b>To be used with</b>	BLC and TLC Ø3.3 mm	BLC and TLC Ø3.75 mm	BLC and TLC Ø4.5 mm	BLC and TLC Ø5.5 mm	BLC and TLC Ø6.5 mm
<b>Material and rpm</b>	Stainless steel, 300 rpm				



In the presence of a hard cortical bone layer, it is recommended to widen the implant bed in this area using a Profile Drill diameter matching the implant diameter independent of the overall bone-quality.

#### Profile Drills 2 for the RT and WT platforms of TLC and TLX Implants

<b>Platform</b>	RT		WT	
<b>Length</b>	24mm	34mm	24mm	34mm
<b>Image</b>				
<b>Article number</b>	036.3300	036.3301	036.3302	036.3303
<b>To be used with</b>	TLC and TLX RT implants		TLC and TLX WT implants	
<b>Material and rpm</b>	Stainless steel, 400 rpm			

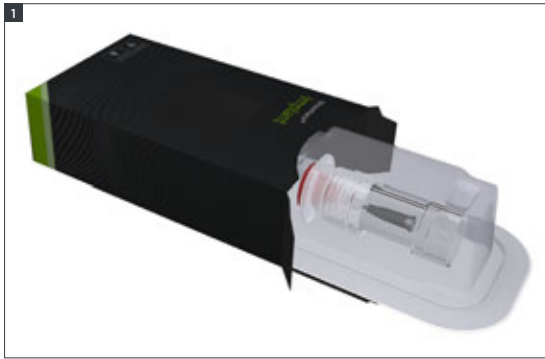


Should the clinician, at their own clinical judgment, deem it necessary to insert the implant deeper, it is recommended to profile drill with the dedicated instruments for RT and WT platforms.

**Note:** When using an Straumann® TLC or TLX Implants with an unflaired NT platform, no Profile Drill 2 is needed.

## 5.3 IMPLANT PICK UP

The TLC implants are provided with an implant carrying system that supports direct pick-up with an appropriate Implant Driver.



**Step 1 – Open box and remove seal of blister to get access to the implant vial.**

**Note:** Patient label can be found on the blister seal. The blister ensures the sterility of the implant. Do not open the blister until immediately prior to implant placement.

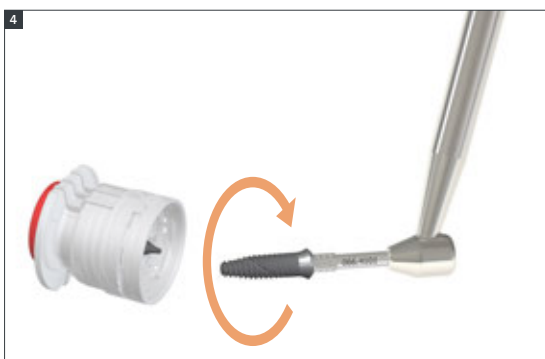


**Step 2 – Open the vial with a counter-clockwise turn and remove the lid together with the implant.**



**Step 3 – Hold the vial lid and connect the Implant Driver to the implant using the Handpiece. You hear a click when the Implant Driver is attached correctly.**

**Caution:** Make sure that the Implant Driver is properly seated and pull slightly on the driver to verify that it is correctly attached. This check must be performed before every use even when the Implant Driver has been successfully used before. Replace the Implant with a new one if insufficient attachment occurs.

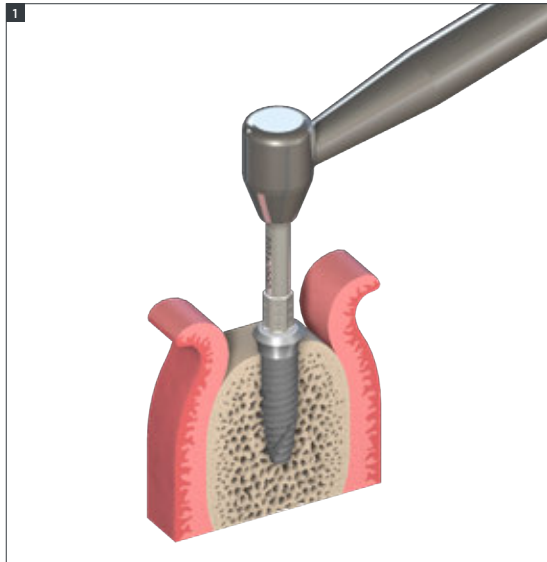


**Step 4 – A slight clockwise turn is needed to remove the implant from its holder.**

**Note:** After removing the implant from the solution, the chemical activity of SLActive® is ensured for 15 minutes.

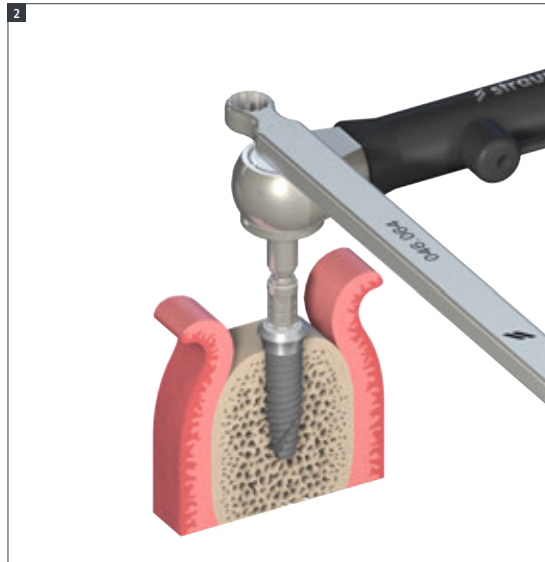
## 5.4 IMPLANT PLACEMENT

A Straumann® TLC implant can be placed using the Handpiece, or manually using the Ratchet. Do not exceed the recommended maximum speed of 15 rpm when using the Handpiece.



Step 1 – Place the implant

Place the implant with the driver in the implant bed by turning it clockwise.



Step 2 – Final position

Use the Ratchet to move the implant to its final position by turning it clockwise.

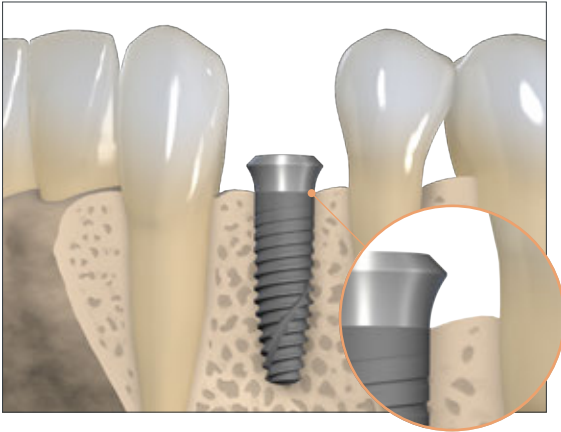
If there is strong resistance remove the implant, place the implant together with the implant driver back into the vial and widen the implant bed according to the drill protocol.

**Note:** For immediate function, a final torque of at least 35 Ncm should be achieved. Excessive insertion torque must be avoided because this can lead to resorption of the bone.

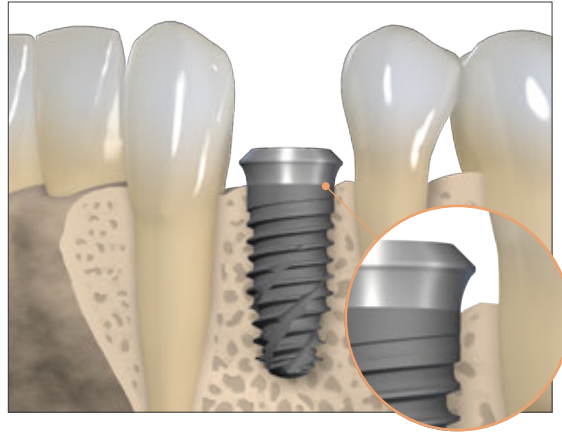
### Final implant position NT/RT/WT implants

During coronoapical implant positioning, the TLC implant is best placed with the SLActive® surface margin at bone level.

**Note:** Straumann® implants allow for flexible coronoapical implant positioning, depending on individual anatomy, implant site, the type of restoration planned, and preference. Should the clinician, for any reason related to his own clinical judgement, deem necessary to insert the implant deeper, a subcrestal placement of 0.5 mm is possible. For subcrestal placement, the use of profile drills is required, see paragraph 5.2.6.



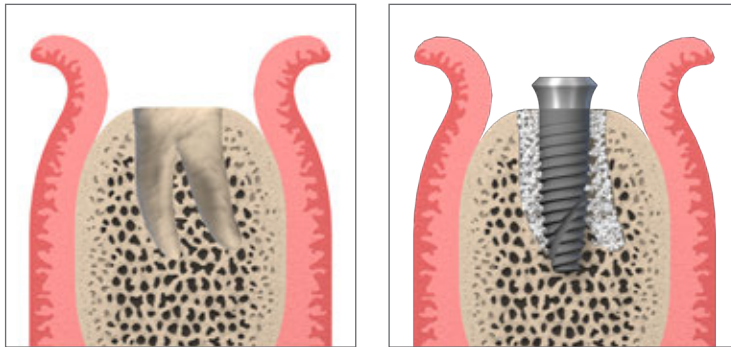
Regular TorcFit™ (RT) Implants with a  $\varnothing$ 4.8 mm shoulder



Wide TorcFit™ (WT) Implants with a  $\varnothing$ 5.5 mm shoulder



## 5.5 GAP MANAGEMENT



As no implant will match the individual anatomical situation after tooth extraction exactly, immediate treatment procedures may require additional bone grafting (“gap management”) and soft tissue / wound healing management. Different grafting materials, barrier membranes and healing agents are used to support safe, enduring stability of the implant inside the bony compartment as well as sufficient hard and soft tissue to ensure esthetics.

Bone grafting materials	Product	Country availability	Reason why
<b>Allograft</b>	Straumann® AlloGraft botiss maxgraft®	North America (Straumann® AlloGraft) Selected countries in Europe (botiss maxgraft®)	Fast graft to bone turnover supporting early and long-term implant stability Full remodeling potential Bone vitality
<b>Xenograft</b>	botiss cerabone® Straumann® XenoGraft	Global	Long-term graft presence supporting volume preservation
<b>Synthetic alternative</b>	Straumann® BoneCeramic™		Prolonged graft to bone turnover Volume preservation



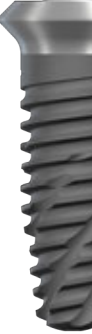
Barrier membranes prohibit cells - particularly epithelial cells - from penetrating their structure, and thereby allow slow-growing bone tissue to re-occupy the grafted space.


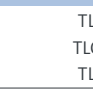

Barrier Membranes	Product	Country availability	Reason why
<b>Porcine collagen membrane</b>	botiss jason®	Global	Very thin but strong structure Easy handling Prolonged barrier function Fully resorbable
	Straumann® Membrane Flex	North America, Iberia, Distributor & Emerging Markets (Europe, Middle East and Africa)	Appropriate barrier function for non-complex cases Easy handling Fully resorbable
	botiss collprotect®	Europe	
<b>Bovine collagen membrane</b>	Straumann® Membrane Plus	North America	Long barrier function Fully resorbable
<b>Synthetic dPTFE membrane</b>	botiss permamem®	Europe	Ultra thin, strong structure Open healing possible Non-resorbable Has to be removed manually after <4 weeks

The immediacy approach for placing dental implants is demanding on the human body. With its clinically proven beneficial impact on wound healing and favorable influence on scar tissue, Straumann® Emdogain® can make a real difference. We recommend a thin layer of Emdogain® on top of the membrane and after socket closure.



## 5.6 PRIMARY IMPLANT CLOSURE

TLC Implant Closure Caps, sterile			
	NT Closure Cap	RT Closure Cap	WT Closure Cap
			
Compatibility	TLC Implant Ø 3.3	TLC Implant Ø 3.3 TLC Implant Ø 3.75 TLC Implant Ø 4.5	TLC Implant Ø 4.5 TLC Implant Ø 5.5 TLC Implant Ø 6.5
Recommended tightening torque	Hand-tight		
Article number	1.5 mm: 036.02015	0 mm: 036.32005 1.5 mm: 036.12015	–
Material	Titanium		

TLC Implant Healing Caps, sterile			
	NT Healing cap	RT Healing cap	WT Healing cap
			
Compatibility	TLC Implant Ø 3.3	TLC Implant Ø 3.3 TLC Implant Ø 3.75 TLC Implant Ø 4.5	TLC Implant Ø 4.5 TLC Implant Ø 5.5 TLC Implant Ø 6.5
Recommended tightening torque	Hand-tight		
Article number	3 mm: 036.0203S 4.5 mm: 036.0204S	2 mm: 036.1202S 3 mm: 036.1203S 4.5 mm: 036.1204S	2 mm: 036.2202S 3 mm: 036.2203S 4.5 mm: 036.2204S
Material	Titanium		

**Note:** Since the TLC closure caps and Healing Caps cover the whole implant shoulder, gingiva, bone particles or bone graft particles can easily be trapped between closure cap or Healing Cap and implant. It is recommended to clean the implant connection thoroughly prior to the placement of the closure cap or Healing Cap and to check the proper seating prior to wound closure, e.g. visually or by taking an X-ray.

## 5.7 HEALING PHASE

For the delayed loading surgical protocol, it is recommended to follow the healing time durations as indicated below:

Situation	Healing phase	
	SLActive®	SLA®
<ul style="list-style-type: none"> <li>• Good bone quality and adequate bone quantity</li> <li>• Implants with a diameter of 3.75 mm and wider and a Straumann® SLActive®/SLA® surface length of ≥ 8 mm</li> </ul>	At least 3–4 weeks	At least 6 weeks
<ul style="list-style-type: none"> <li>• Cancellous bone quality</li> <li>• Implants with a diameter of 3.3 mm</li> <li>• Implants with a Straumann® SLActive®/SLA® length of 6 mm</li> </ul>	At least 8 weeks	At least 12 weeks
<ul style="list-style-type: none"> <li>• Straumann® SLActive®/SLA® surface is not completely in contact with the bone</li> <li>• Bone augmentation measures* are necessary</li> </ul>	Healing phase corresponding to the situation	

# 6. PROSTHETIC WORKFLOW OVERVIEW

## 6.1 ABUTMENT OVERVIEW

	Straumann® Cementable Abutment	Straumann® Variobase® for Crown	Variobase® for Bridge/Bar for Cylindrical	Variobase® for Crown AS	Variobase® C	Straumann® CARES® Abutment TAN	Straumann® CARES® Abutment CoCr S	Straumann® CARES® Abutment CoCr AS	Straumann® CARES® Bridge/Bar	Straumann® Novaloc® ADLC	Gold Abutment, crown	Gold Abutment, bridge
<b>Single crown</b>												
Screw-retained		•		•	•		•	•			•	•
Cement-retained	•	•		•	•	•		•			•	•
<b>Bridge</b>												
Screw-retained			•				•		•			
Cement-retained	•		•						•			
<b>Removable overdentures</b>												
Telescope	•											
Retentive anchor										•		
Bar							•		•			
<b>Impression</b>												
Implant level	•	•	•	•	•							
Abutment level												
Material	Titanium alloy						Cobalt Chromium		Titanium alloy		Ceramicor®	







	Single and multi-unit replacement				Edentulous treatment	
	Screw-retained		Cement-retained		Fixed	Removable
<b>Premium</b>	 Gold Abutment, crown	 Gold Abutment, bridge	 Gold Abutment, crown	 Gold Abutment, bridge	 CARES® Advanced Fixed Bar	
<b>Advanced</b>	 CARES® Screw-retained Bridge	 CARES® Abutment CoCr S/AS	 CARES® Abutment TAN	 Cementable Abutment	 CARES® Basic Fixed Bar	 CARES® Milled Bar
			 Pre-Milled Abutment Blanks		 CARES® Screw-retained Bridge	
<b>Standard</b>	 Variobase® for Crown	 Variobase® for Crown AS	 Variobase® for Bridge/Bar	 Variobase® C	 Variobase® for Bridge/Bar	 Novaloc® ADLC

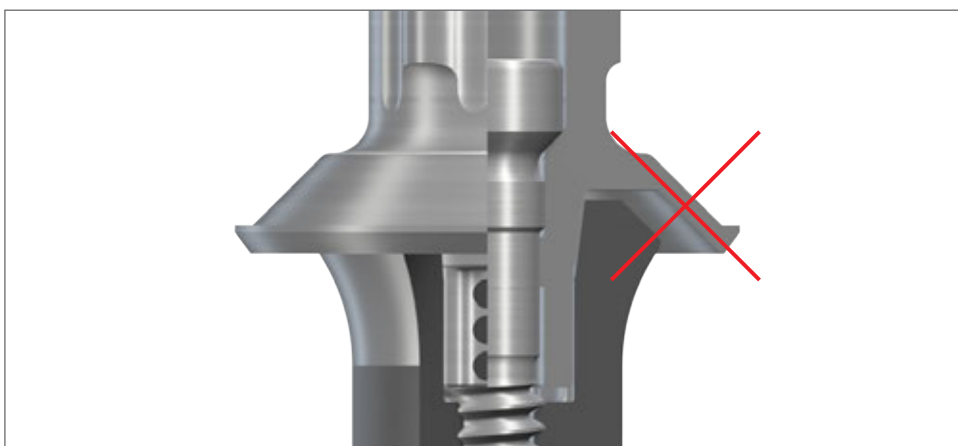
## 6.2 LASER MARKING SYSTEM

The Straumann® TLC Implant System has a simple and consistent laser marking system, for quick and precise identification of secondary parts, and auxiliaries.

This concept allows for correct identification of matching components, and simplifies the communication between the individuals involved in the treatment process.

- Components laser-marked NT (Narrow, TorcFit™) and with one dot can be used on all TLC Implants with the NT shoulder.
- Components laser-marked RT (Regular, TorcFit™) and with two dots can be used on all TLC implants with the RT shoulder.
- Components laser-marked WT (Wide, TorcFit™) and with three dots can be used on all TLC implants with the WT shoulder.

	Prosthetic platform	Implant Diameters	Implant platform
NT ●	One dot 	∅ 3.3 mm	NT 
RT ●●	Two dots 	∅ 3.3 mm ∅ 3.75 mm ∅ 4.5 mm	RT 
WT ●●●	Three dots 	∅ 4.5 mm ∅ 5.5 mm	WT 



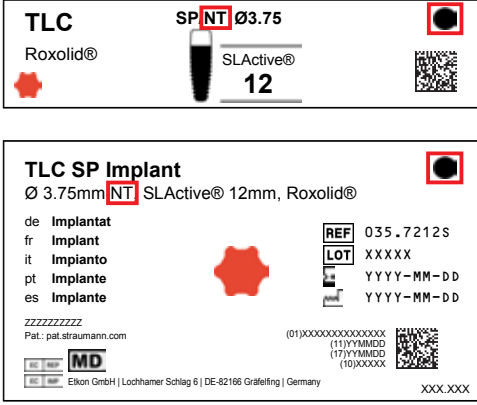
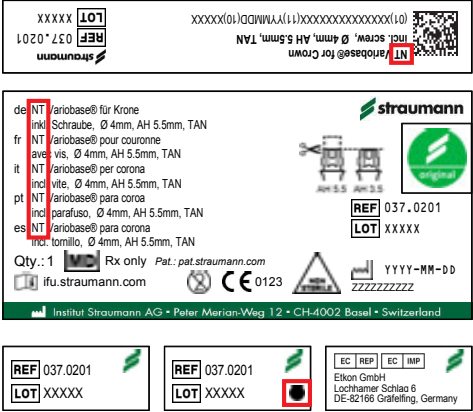
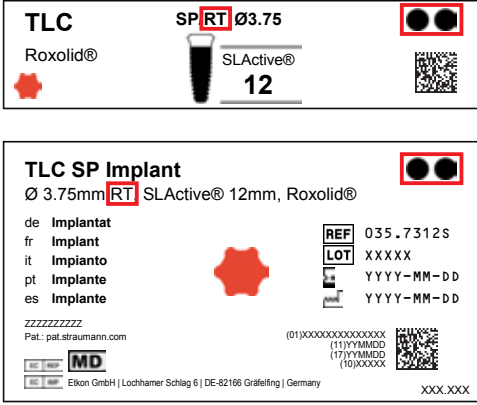
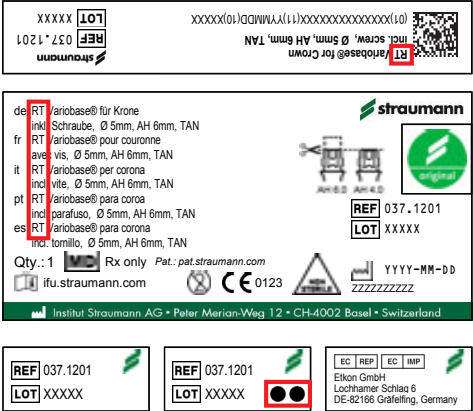
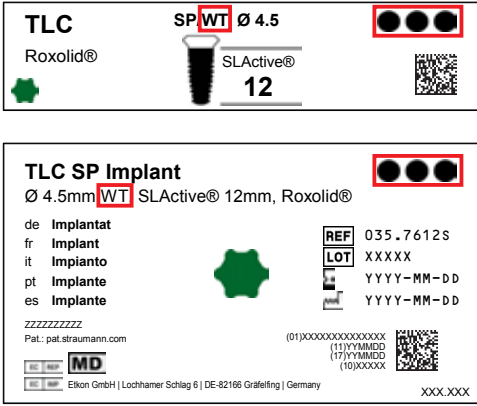
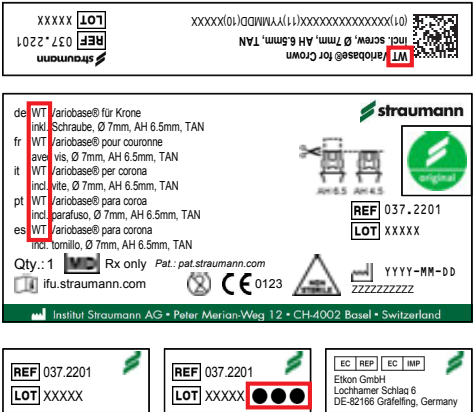
No WT Abutments on NT and RT Implants!

No NT Abutments on RT and WT Implants!

No RT Abutments on NT and WT Implants!

### 6.2.1 How to match fitting components

To quickly find the matching components, refer to the platform name (NT, RT or WT) and/or to the dot concept on the product label.

	TLC implant label	TLC prosthetic component label
<b>NT platform</b> ●	 <p><b>TLC</b> Roxidid® SP <b>NT</b> Ø3.75 SLActive® 12</p> <p><b>TLC SP Implant</b> Ø 3.75mm <b>NT</b> SLActive® 12mm, Roxidid®</p> <p>de Implantat fr Implant it Impianto pt Implante es Implante</p> <p>REF 035.7212S LOT XXXXX YYYY-MM-DD YYYY-MM-DD</p> <p>Pat.: pat.straumann.com Elkon GmbH   Lochamer Schlag 6   DE-82166 Grafelfing   Germany</p>	 <p>LOT XXXXX REF 037.0201 incl. screw, Ø 4mm, AH 5.5mm, TAN</p> <p>de NT Variobase® für Krone inkl. Schraube, Ø 4mm, AH 5.5mm, TAN fr NT Variobase® pour couronne ave. vis, Ø 4mm, AH 5.5mm, TAN it NT Variobase® per corona incl. vite, Ø 4mm, AH 5.5mm, TAN pt NT Variobase® para coroa incl. parafuso, Ø 4mm, AH 5.5mm, TAN es NT Variobase® para corona incl. tornillo, Ø 4mm, AH 5.5mm, TAN</p> <p>Qty.: 1 Rx only Pat.: pat.straumann.com ifu.straumann.com</p> <p>REF 037.0201 LOT XXXXX</p> <p>EC REP EC IMP Elkon GmbH Lochamer Schlag 6 DE-82166 Grafelfing, Germany</p>
<b>RT platform</b> ●●	 <p><b>TLC</b> Roxidid® SP <b>RT</b> Ø3.75 SLActive® 12</p> <p><b>TLC SP Implant</b> Ø 3.75mm <b>RT</b> SLActive® 12mm, Roxidid®</p> <p>de Implantat fr Implant it Impianto pt Implante es Implante</p> <p>REF 035.7312S LOT XXXXX YYYY-MM-DD YYYY-MM-DD</p> <p>Pat.: pat.straumann.com Elkon GmbH   Lochamer Schlag 6   DE-82166 Grafelfing   Germany</p>	 <p>LOT XXXXX REF 037.1201 incl. screw, Ø 5mm, AH 6mm, TAN</p> <p>de RT Variobase® für Krone inkl. Schraube, Ø 5mm, AH 6mm, TAN fr RT Variobase® pour couronne ave. vis, Ø 5mm, AH 6mm, TAN it RT Variobase® per corona incl. vite, Ø 5mm, AH 6mm, TAN pt RT Variobase® para coroa incl. parafuso, Ø 5mm, AH 6mm, TAN es RT Variobase® para corona incl. tornillo, Ø 5mm, AH 6mm, TAN</p> <p>Qty.: 1 Rx only Pat.: pat.straumann.com ifu.straumann.com</p> <p>REF 037.1201 LOT XXXXX</p> <p>EC REP EC IMP Elkon GmbH Lochamer Schlag 6 DE-82166 Grafelfing, Germany</p>
<b>WT platform</b> ●●●	 <p><b>TLC</b> Roxidid® SP <b>WT</b> Ø 4.5 SLActive® 12</p> <p><b>TLC SP Implant</b> Ø 4.5mm <b>WT</b> SLActive® 12mm, Roxidid®</p> <p>de Implantat fr Implant it Impianto pt Implante es Implante</p> <p>REF 035.7612S LOT XXXXX YYYY-MM-DD YYYY-MM-DD</p> <p>Pat.: pat.straumann.com Elkon GmbH   Lochamer Schlag 6   DE-82166 Grafelfing   Germany</p>	 <p>LOT XXXXX REF 037.2201 incl. screw, Ø 7mm, AH 6.5mm, TAN</p> <p>de WT Variobase® für Krone inkl. Schraube, Ø 7mm, AH 6.5mm, TAN fr WT Variobase® pour couronne ave. vis, Ø 7mm, AH 6.5mm, TAN it WT Variobase® per corona incl. vite, Ø 7mm, AH 6.5mm, TAN pt WT Variobase® para coroa incl. parafuso, Ø 7mm, AH 6.5mm, TAN es WT Variobase® para corona incl. tornillo, Ø 7mm, AH 6.5mm, TAN</p> <p>Qty.: 1 Rx only Pat.: pat.straumann.com ifu.straumann.com</p> <p>REF 037.2201 LOT XXXXX</p> <p>EC REP EC IMP Elkon GmbH Lochamer Schlag 6 DE-82166 Grafelfing, Germany</p>

## 6.3 OVERVIEW OF PROSTHETIC COMPONENTS



Impression-taking components Implant analogs	Engaging (with index)			Non-engaging (without index)					
	036.0000	036.0001	036.0002	065.0140	065.0137	065.0143	036.3230	036.0100	036.1102

	Cement-retained	Screw-retained	Fixed	Removable
Temporary Abutment for Crown				
Temporary Abutment for Bridge				
Cementable Abutment				
Variobase® Abutment				
CARES® Abutment				
CARES® Bridge/Bar			 CARES® Screw-retained Bridge  CARES® Advanced Fixed Bar  CARES® Basic Fixed Bar	 CARES® Milled Bar
Novaloc® ADLC				
Gold Abutment, for Crown and Bridge				
	037.0300	037.0301		



Impression-taking components Implant analogs	Engaging (with index)			Non-engaging (without index)					
	Cement-retained		Screw-retained		Fixed		Removable		
Temporary Abutment for Crown									
Temporary Abutment for Bridge									
Cementable Abutment							-		
Variobase® Abutment									
CARES® Abutment									
CARES® Bridge/Bar			-		 CARES® Screw-retained Bridge		 CARES® Advanced Fixed Bar		 CARES® Milled Bar
					 CARES® Basic Fixed Bar				
Novaloc® ADLC							 Novaloc® ADLC		
Gold Abutment, for Crown and Bridge							-		



Impression-taking components Implant analogs	Engaging (with index)	Non-engaging (without index)
	 036.2000   036.2001   036.2002	 065.0142   065.0139   065.0145   036.3230   036.1100   036.2102

	Cement-retained	Screw-retained	Fixed	Removable
Temporary Abutment for Crown	 037.2000			
Temporary Abutment for Bridge	 037.2001			
Cementable Abutment	 037.2100			
Variobase® Abutment	 037.2201	 037.2203	 037.2204	 037.2205
CARES® Abutment				
CARES® Bridge/Bar			 CARES® Screw-retained Bridge	 CARES® Milled Bar
			 CARES® Advanced Fixed Bar	
			 CARES® Basic Fixed Bar	
Novaloc® ADLC				
Gold Abutment, for Crown and Bridge	 037.2300	 037.2301		



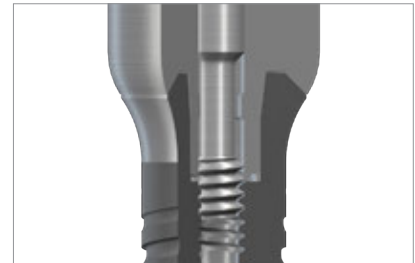
# 7. IMPORTANT CONSIDERATIONS

## 7.1 HOW TO VERIFY CORRECT IMPRESSION POST SEATING

Impression post screws in TorcFit™ Tissue Level implants will only engage with the implant if correctly seated. Correctly seated Impression Posts seal at the shoulder of the implant.

For TLC implants, only TorcFit™ Tissue Level auxiliaries and prosthetic components are to be used for ideal seating.

**Note:** TorcFit™ auxiliaries and prosthetic components for Tissue Level implants are not to be used with Bone Level implant systems. Likewise, TorcFit™ auxiliaries and prosthetic components for Bone Level implants are not to be used with Tissue Level implant systems.



## 7.2 REMOVAL OF NT SCREW-RETAINED ABUTMENTS IN TORCFIT™ TISSUE LEVEL IMPLANTS

Due to tight sealing of the 7° conus of the TorcFit™ connection, NT Screw-retained Abutments can lock tightly into TorcFit™ Tissue Level implants after final insertion.

### 7.2.1 Removal Tool for Basal Screw (065.0008 and 065.0009)

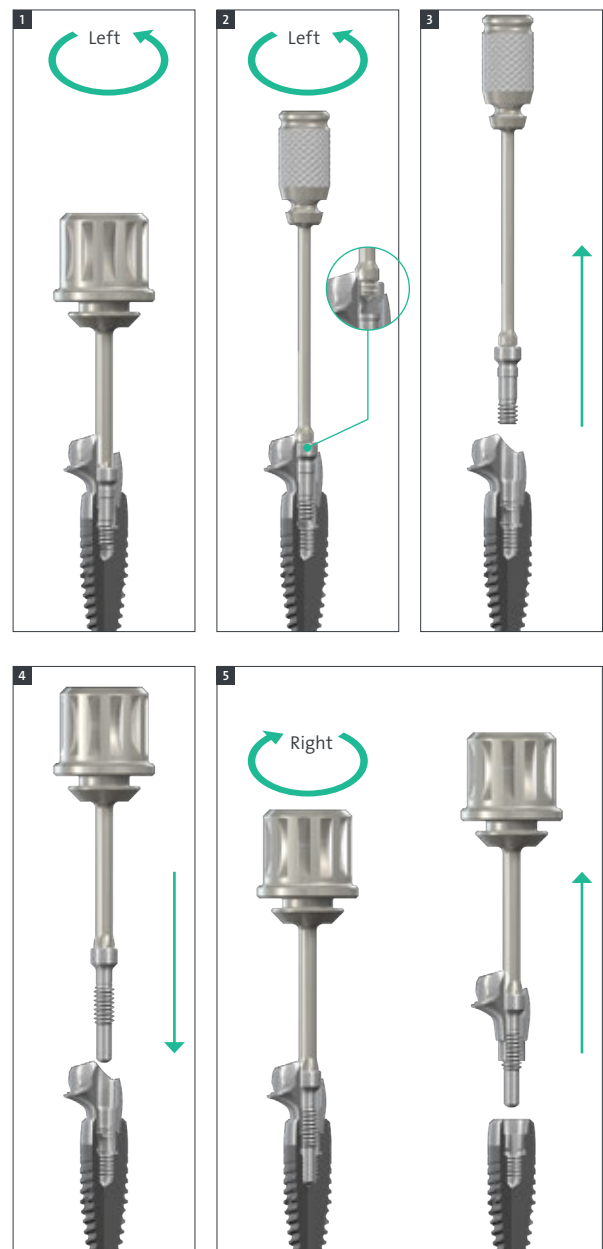
If the basal screw cannot be removed with the SCS Screwdriver [1], the Removal Tool may be used.

This tool features a left-hand thread that engages in the basal screw head [2] to remove the Basal Screw [3].

### 7.2.2 Abutment Removal Screw (065.0007)

In case the NT Screw-retained Abutment for TorcFit™ Tissue Level implants cannot be removed using the SCS Screwdriver alone, the Abutment Removal Screw can be used.

Insert the SCS Screwdriver into the Abutment Removal Screw. Engage the screw into the abutment [4] until the grip is sufficient enough to free the abutment from the implant [5].

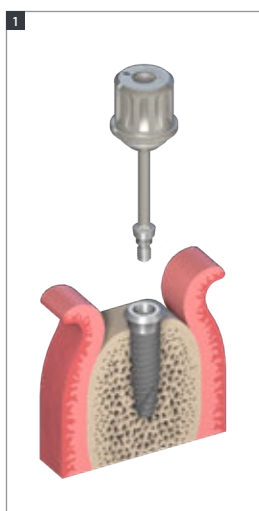


# 8. SOFT TISSUE MANAGEMENT

After implantation, the implant is closed – hand-tightened – with a Closure Cap or a Healing Cap or immediately loaded with a final abutment to protect the implant. With the Closure Cap or the Healing Cap, the surgeon can choose between submucosal and transmucosal healing and has all options available for soft tissue management made possible through a set of secondary healing components. The closure cap and Healing Cap are recommended for intermediate use. After the soft-tissue healing phase they are replaced with the appropriate temporary or final restoration.

## 8.1 SUBMUCOSAL HEALING

For submucosal healing (healing under closed mucoperiosteal flap) the use of a Closure Cap or shorter Healing Cap is recommended. Submucosal healing is suggested in esthetic indications and for implantations with simultaneous guided bone restoration (GBR) or membrane technique. A second surgical procedure is required for uncovering the implant and insertion of the desired secondary component.



### Step 1 – Inserting the Closure Cap or the Healing Cap (1.5 mm) after first surgery

Ensure that the internal configuration of the implant is clean.

Pick up the Closure Cap or the Healing Cap with the SCS Screwdriver. The friction fit will secure the Closure Cap or the Healing Cap to the instrument during insertion and will allow safe handling.

Hand-tighten the Closure Cap or the Healing Cap. The design will provide a tight connection between the two components.

**Note:** All Closure Cap or a Healing Cap are delivered sterile and ready to use.

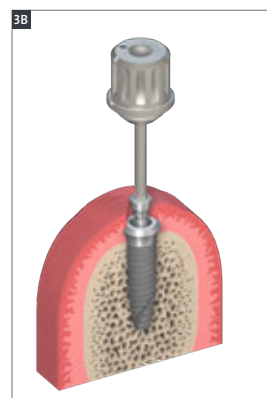
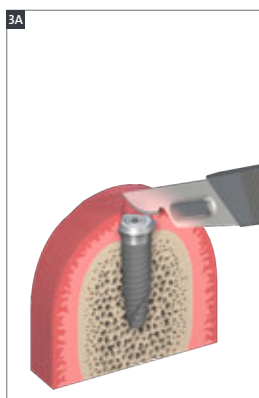
Subsequent loosening is made easier by applying chlorhexidine gel or sterile Vaseline to the Closure Cap or a Healing Cap before it is screwed into the implant.



### Step 2 – Wound closure

Adapt the mucoperiosteal flaps carefully and suture together with interrupted sutures.

Make sure a tight seal is formed over the implant.

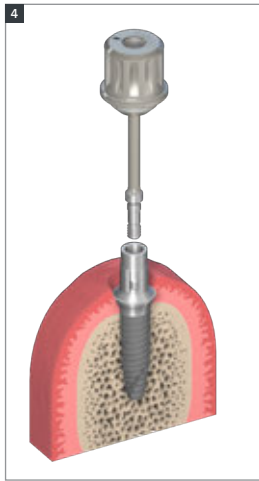


### Step 3 – Reopening and removal: second surgery

Locate the implant.

Make a small crestal incision down to the Closure Cap or a short Healing Cap.

Spread the flap slightly and remove the Closure Cap or a short Healing Cap with the SCS Screwdriver.



#### Step 4 – Insertion and wound closure

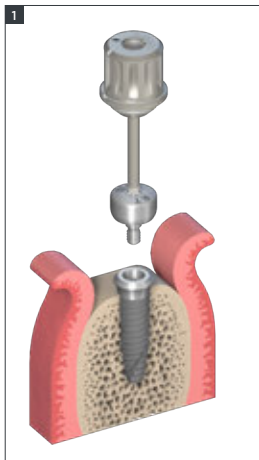
Rinse the exposed internal connection of the implant thoroughly with sterile saline solution.

Insert the abutment.

Adapt the soft tissue and suture it back tightly without tension around the abutment.

## 8.2 TRANSMUCOSAL HEALING

A versatile portfolio of Healing Caps is available for all Straumann® implants, enabling soft-tissue sculpturing during transmucosal healing.



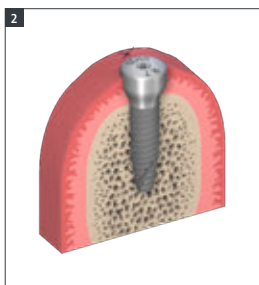
#### Step 1 – Insertion

Ensure that the internal configuration of the implant is clean and bloodless.

Insert the Healing Cap with the SCS Screwdriver. The friction fit secures the components to the instrument during insertion and ensures safe handling.

Hand-tighten the Healing Cap. The design will provide a tight connection between the two components.

**Note:** All Healing Caps are delivered sterile and ready to use. Subsequent loosening is made easier by applying chlorhexidine gel or sterile Vaseline to the Healing Cap before it is screwed into the implant.



#### Step 2 – Wound closure

Adapt the soft tissue and suture it back tightly around the Healing Cap.

# 9. TEMPORARY RESTORATION

## 9.1 HEALING CAP – TITANIUM GRADE 4

### 9.1.1 Intended use

- Soft tissue management
- Closure of implant connection for submerged and non-submerged healing

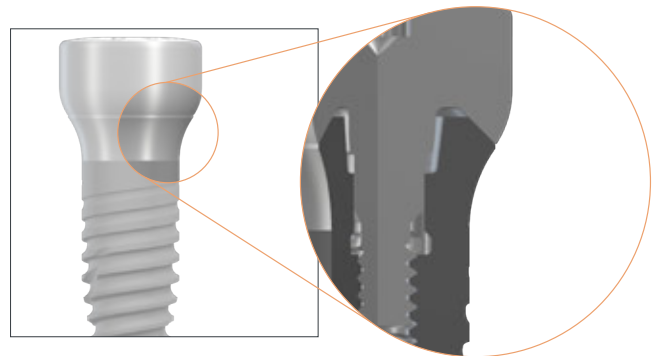
### 9.1.2 Characteristics

#### Simple

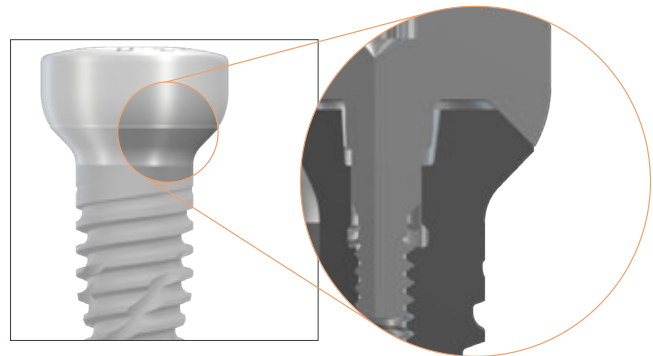
- One-piece design
- Laser-marked diameters and gingiva heights on the flat top
- Cylindrical section gives space to soft tissue

#### Reliable

- Tight sealing on the outer shoulder of implant

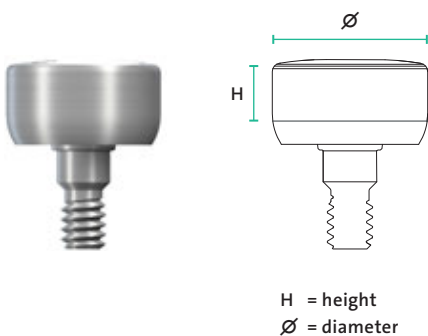


RT Healing Cap sealing mechanism



WT Healing Cap sealing mechanism

### 9.1.3 Overview of Healing Cap dimensions



		Diameter (Ø)		
		For NT final abutment	For RT final abutment	For WT final abutment
H	0 mm	Ø2.7 mm		
	1.5 mm	Ø4.0 mm	Ø5.5 mm	–
	2 mm	–		Ø7.2 mm
	3 mm	Ø4.0 mm		
	4.5 mm	Ø4.0 mm		



## 9.2 TEMPORARY ABUTMENT – TITANIUM ALLOY (TAN)

### 9.2.1 Intended use

- Cement-retained temporary crowns

### 9.2.2 Characteristics

#### More solutions

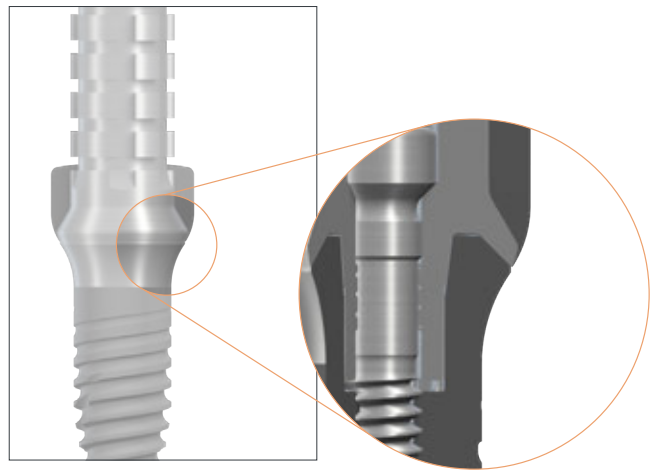
- Narrow diameter for narrow interdental spaces
- Crowns
- Anterior and posterior region
- Laser marked connection

#### Reliable

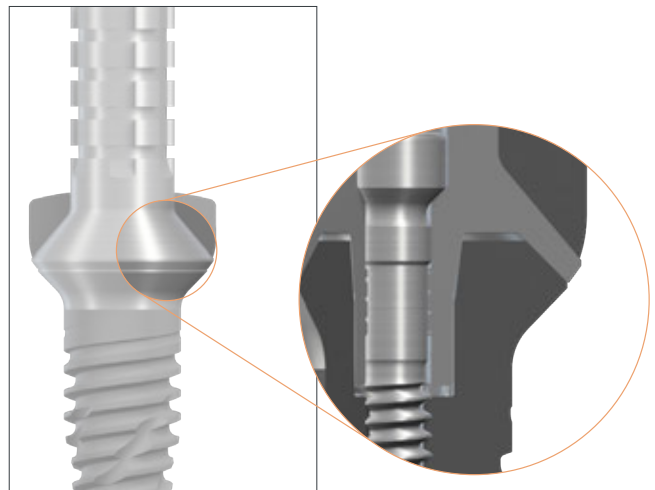
- High stability due to titanium alloy (TAN) material
- TorcFit™ connection for Tissue Level implants for engaging and non-engaging abutments
- Tight sealing on the outer shoulder of implant

**Note:** Do not use for longer than 180 days. Place temporary restorations out of occlusion.

The Temporary Abutment can be shortened vertically no more than 6 mm with standard tools and procedures.









RT Temporary Abutment

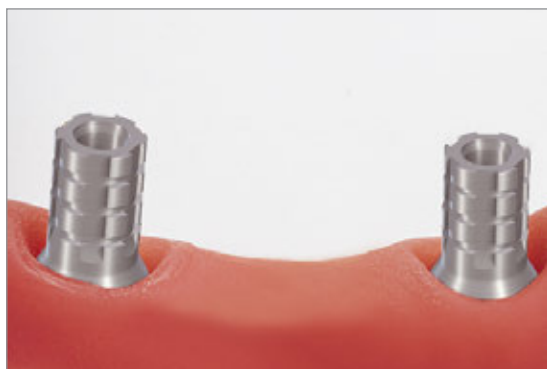


WT Temporary Abutment

### 9.2.3 Overview of temporary abutment

Implant shoulder $\varnothing$ 3.5mm NT		Implant shoulder $\varnothing$ 4.8mm RT		Implant shoulder $\varnothing$ 6.5mm WT	
Crown	Bridge	Crown	Bridge	Crown	Bridge
					
037.0000	037.0001	037.1000	037.1001	037.2000	037.2001

Fabrication of the temporary restoration on implant shoulder  $\varnothing$ 3.5mm NT,  $\varnothing$ 4.8mm RT and implant shoulder  $\varnothing$ 6.5mm WT are identical.



#### Chairside fabrication

The posts are shortened below the occlusion level and the occlusal openings are sealed with wax or cotton wool. To avoid the titanium showing through the resin, coating the posts with opaquer prior to veneering is recommended.

The temporary restoration is fabricated with the usual standard techniques, such as vacuum-formed foil or, as in conventional fabrication of temporaries, with strip crowns filled with resin which are attached to the post. After biting down, the excess is removed and after curing, the crown/bridge is removed, polished and the occlusal screw channels are opened again.



#### Fabrication in the laboratory

The posts can be veneered by grinding ready-made acrylic teeth or by direct modelling with resin. This option is suitable especially if there is a silicone index of the wax-up. The TAN posts are silanized to ensure better adhesion of the resin. To avoid the titanium showing through the resin, coating the posts with opaquer prior to veneering is recommended. The temporary is made with veneering resin. Integration of a metal reinforcement between the posts is recommended for bridge constructions.

**Important:** Prefabricated TAN posts cannot be used for the casting technique.

When inserting the posts, we recommend a tightening torque of:  
- 15Ncm.

**Important:** The temporary abutments must not remain in situ for more than 6 months and the restoration must always be under-occluded in order to reduce lateral forces.

# 10. IMPRESSION TAKING

## 10.1 CONVENTIONAL IMPLANT LEVEL IMPRESSION TAKING

### 10.1.1 Intended use

- Closed-tray impression procedure
- Open-tray impression procedure

### 10.1.2 Characteristics

#### Simple

- Laser-marked and color-coded components for easy information transfer from mouth to master model
- Color-coded closed-tray Impression Post for easy information transfer from mouth to master model
- Guide screw can be tightened either by hand or with the SCS Screwdriver (15Ncm)

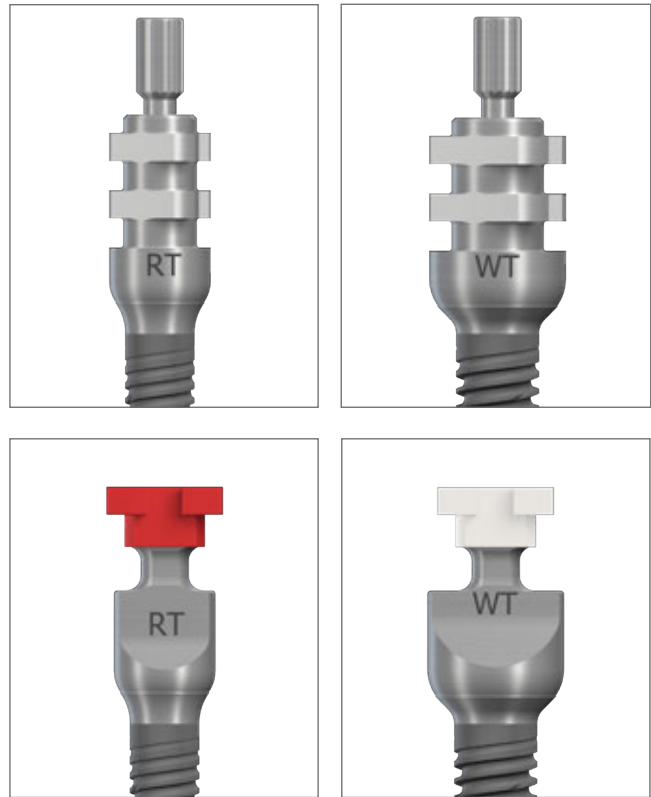
#### Reliable

- Seating on top portion of implant shoulder ensures high accuracy
- Clear-cut tactile response from the prosthetic connection verifies proper seating of components
- Easy removal

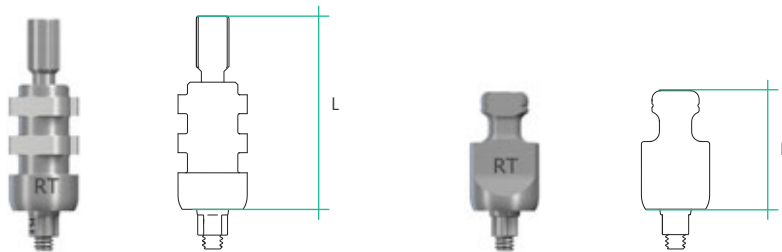
**Note:** Open-tray impression procedure requires a custom-made tray or tray with perforations.

Impression posts are intended for single use to ensure optimal fit and precise impression taking for each patient.

Impression posts are supplied non-sterile.












### 10.1.3 Overview of Impression Post dimensions



L = length

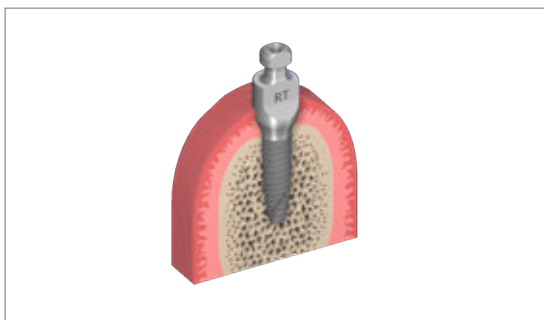
	L = Length	
	Short	Long
Impression Post – Open tray	15 mm	21 mm
Impression Post – Closed tray	9.5 mm	–

## 10.2 CLOSED-TRAY IMPRESSION PROCEDURE

Implant shoulder $\varnothing$ 3.5mm NT			Implant shoulder $\varnothing$ 4.8mm RT			Implant shoulder $\varnothing$ 6.5mm WT		
NT Impression Post Closed Tray, with 1 guide screw & 2 caps	NT Implant Analog		RT Impression Post Closed Tray, with 1 guide screw & 2 caps	RT Implant Analog		WT Impression Post Closed Tray, with 1 guide screw & 2 caps	WT Implant Analog	
	non engaging 			non engaging 			non engaging 	
036.0002	065.0143	036.0100	036.1002	065.0144	036.0102	036.2002	065.0145	036.1100

The impression-taking procedures for implant shoulder  $\varnothing$ 3.5mm NT,  $\varnothing$ 4.8mm RT and implant shoulder  $\varnothing$ 6.5mm WT are identical.

**Important:** Only the integral Impression Post must be used. The margin and the TorcFit™ connection must not be damaged to ensure accuracy of the transfer procedure. The Impression Post is delivered non-sterile and intended for single use only.



### Step 1 – Positioning the Impression Post

- Ensure sufficient access to the implant site in order to avoid pinching in the gingival tissue.
- Clean the internal configuration of the implant thoroughly from blood, tissue, etc. prior to the impression procedure.
- Place the Impression Post accurately into the implant and tighten the guide screw hand-tight using the SCS Screwdriver.

**Note:** Ensure that the lateral planar area of the post is facing mesial and distal.



- Place the polymer Impression Cap on top of the fixed Impression Post. Ensure that the color of the cap corresponds to the platform name or to the dots concept of the Impression Post and that the arrows are aligned with the oral-vestibular direction.
- Push the Impression Cap in an apical direction until it clicks. The Impression Cap is now firmly seated on the Impression Post.





### Step 2 – Impression taking

- Take the impression using an elastomeric impression material (polyvinyl siloxane or polyether rubber).

**Note:** Due to its low tensile strength, hydrocolloid is not suitable for this application.



- Once the material is cured, carefully remove the tray. The Impression Cap remains in the impression material and therefore is automatically pulled off from the Impression Post with the removal of the tray.
- Unscrew and remove the Impression Post and send it with the impression tray to the dental technician.



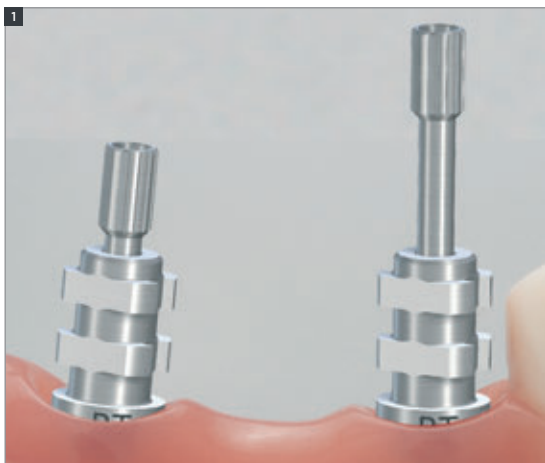
### 10.3 OPEN-TRAY IMPRESSION PROCEDURE

Implant shoulder Ø3.5mm NT			Implant shoulder Ø4.8mm RT			Implant shoulder Ø6.5mm WT							
NT Impression Post Open Tray, short, including guide screw, H 15mm	NT Impression Post Open Tray, long, including guide screw, H 21mm	NT Implant Analog	RT Impression Post Open Tray, short, including guide screw, H 15mm	RT Impression Post Open Tray, long, including guide screw, H 21mm	RT Implant Analog	WT Impression Post Open Tray, short, including guide screw, H 15mm	WT Impression Post Open Tray, long, including guide screw, H 21mm	WT Implant Analog					
	non engaging			non engaging			non engaging						
036.0000	065.0140	036.0001	065.0137	036.0100	065.0141	036.1001	065.0138	036.0102	036.2000	065.0142	036.2001	065.0139	036.1100

The open-tray impression-taking procedure for implant shoulder Ø3.5mm NT, Ø4.8mm RT and implant shoulder Ø6.5mm WT is identical.

For this impression procedure a custom-made tray or tray with perforations is needed.

**Important:** Only the integral Impression Post must be used. The margin and the TorcFit™ connection must not be damaged to ensure accuracy of the transfer procedure. The Impression Post is delivered non-sterile and intended for single use only.



#### Step 1 – Positioning of the Impression Post

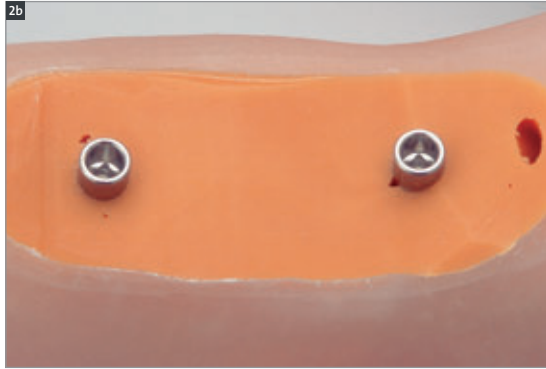
- Ensure sufficient access to the implant site in order to avoid pinching in the gingival tissue.
- Clean the internal configuration of the implant thoroughly from blood, tissue, etc. prior to the impression procedure.
- Place the Impression Post accurately into the implant and tighten the guide screw hand-tight using the SCS Screwdriver.



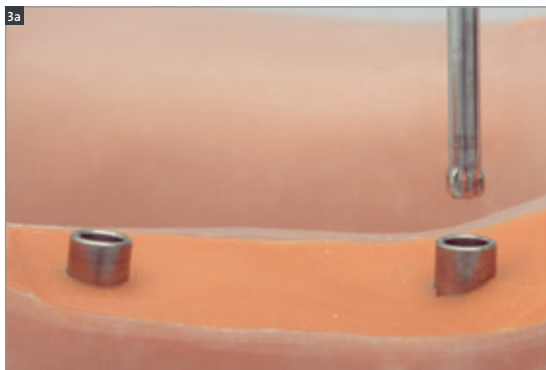
#### Step 2 – Impression taking

The custom-made tray (light-cured resin) contains perforations for the Impression Posts.

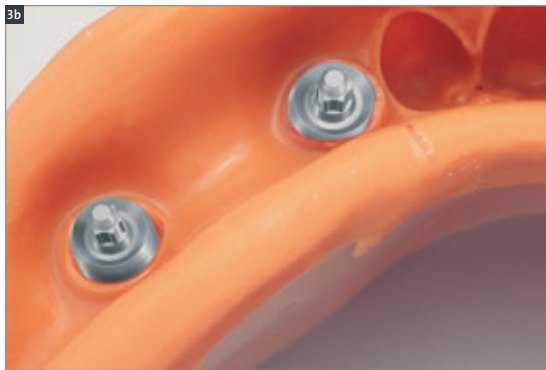
**Note:** Due to its low tensile strength, hydrocolloid is not suitable for this application.



The impression is taken using an elastomeric impression material (polyvinyl siloxane or polyether rubber).













Step 3 – Once cured, the Impression Post is loosened and the impression is removed



## 10.4 DIGITAL IMPRESSIONS: STRAUMANN® SCANBODY

### 10.4.1 Product description

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

TLC							
	Scanbody NT/RT/WT for implant-level scanning			Straumann® ScanPost S RB/WB L (Variobase® C) for implant-level scanning		Scanbody for Screw-retained Abutment, for abutment level, Ø 4.6 mm, PEEK / TAN	
	 036.3230			 065.0038		 025.0081	
Compatibility	 036.0100	 036.0102	 036.1100	 036.1102	 036.2100	 036.2102	 065.1013
Number of components	2: Scanbody, self-retaining screw						
Component/material	Scanbody: polymer (PEEK) Screw: titanium alloy (TAN)						

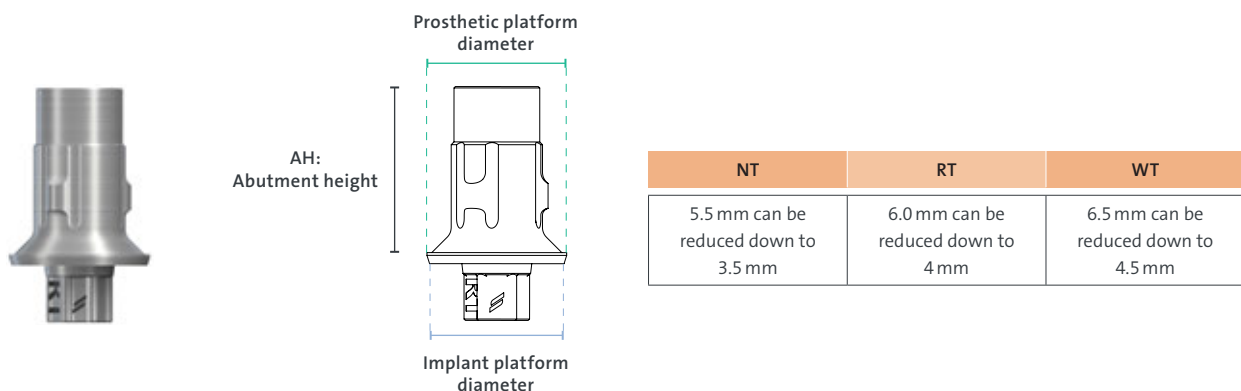
For detailed instructions on how to use the Scanbody, please refer to *Basic Information Straumann Scanbody* (450.037/en).

# 11. FINAL RESTORATION

## 11.1 STRAUMANN® VARIOBASE®

The Straumann® Variobase® prosthetic components provide dental laboratories with the flexibility to create customized prosthetic restorations. In addition, Variobase® Abutments come with the benefit of the original Straumann® connection and the unique Straumann® engaging mechanism.








Single-unit restorations		<p><b>Variobase® for Crown</b></p> <ul style="list-style-type: none"> <li>Abutment heights:           <ul style="list-style-type: none"> <li>NT: 5.5 mm</li> <li>RT: 6 mm</li> <li>WT: 6.5 mm</li> </ul> </li> <li>Possibility to tailor the abutment height:           <ul style="list-style-type: none"> <li>NT 5.5 mm down to 3.5 mm</li> <li>RT 6 mm down to 4 mm</li> <li>WT 6.5 mm down to 4.5 mm</li> </ul> </li> </ul>
Single-unit restorations		<p><b>Variobase® for Crown AS</b></p> <ul style="list-style-type: none"> <li>Screw-channel angulation of up to 25°</li> </ul> <p>Abutment heights:</p> <ul style="list-style-type: none"> <li>NT: 6.5mm</li> <li>RT: 7.0mm</li> <li>WT: 7.5mm</li> </ul>
Multi-unit and full-arch restoration		<p><b>Variobase® for Bridge/Bar</b></p> <ul style="list-style-type: none"> <li>Cementation Aid for Variobase® for Bridge/Bar Cylindrical supporting an easy cementation procedure</li> </ul>
Multi-unit and full-arch restoration		<p><b>Variobase® C</b></p> <ul style="list-style-type: none"> <li>Integrated in Sirona®'s software libraries</li> <li>Chimney design matches the shape of Sirona®'s scanbodies and pre-fabricated screw-channel in material blocks</li> </ul>











### 11.1.1 Variobase® component overview

The following Variobase® prosthetic components can be used on TorcFit™ platforms for Tissue Level implants:

	NT	RT	WT
	Ø 3.5 mm	Ø 4.8 mm	Ø 6.5 mm
Abutments Variobase® for Crown	 037.0201	 037.1201	 037.2201
Burn-out Copings for Variobase® for Crown	 037.0211	 037.1211	 037.2211
Basal Screw for Variobase® for Crown	 036.3110		





	NT	RT	WT
	Ø 3.5 mm	Ø 4.8 mm	Ø 6.5 mm
Abutments Variobase® for Crown AS	 037.0203	 037.0203	 037.2203
Burn-out Copings for Variobase® for Crown AS	 037.0212	 037.1212	 037.2212
Basal Screw for Variobase® for Crown AS	 036.3111		

	NT	RT	WT
	Ø 3.5 mm	Ø 4.8 mm	Ø 6.5 mm
Abutments Variobase® for Bridge/Bar Cylindrical	 037.0204	 037.1204	 037.2204
Cementation Aid	 160.3		
Burn-out Copings for Variobase® for Bridge/Bar Cylindrical	 037.0213	 037.1213	 037.2213
Basal Screw for Variobase® for Bridge/Bar Cylindrical	 036.3110		

For detailed instructions on how to use Variobase® Abutments, please refer to *Straumann® Variobase® Basic Information* (702087/en).

### Chairside implant-borne restoration with third-party CAD/CAM systems

Variobase® C is specifically designed to meet third-party CAD/CAM requirements. Variobase® C is compatible with the components used in the Sirona® CEREC® or in-lab CAD/CAM workflow.

	NT	RT	WT
	Ø 3.5 mm	Ø 4.8 mm	Ø 6.5 mm
Variobase® C*	 037.0205	 037.1205	 037.2205
Sirona® Scanbody size	"S"		"L"
Material block screw-hole size	"S"		"L"
Replacement screw	 036.3110		

\* Available from Straumann®

Straumann® ScanPost is not required for TorcFit™ for Tissue Level implants

#### Note:

- Please use Scanbody size L when using the Sirona® ScanPost®.
- Order the Variobase® C via the Straumann sales channels.
- Order the Sirona® scanbody through the Sirona® distribution channels.
- Order the material block with pre-fabricated screw-channel through the material manufacturer's distribution channels.

For detailed instructions on how to use Variobase® Abutments, please refer to *Straumann® Variobase® Basic Information (702087/en)*.

## 11.2 STRAUMANN® NOVALOC® ABUTMENTS

The Straumann® Novaloc® Retentive System for hybrid dentures offers an innovative carbon-based abutment coating (ADLC<sup>1</sup>) with excellent wear resistance, overcoming up to 60° implant divergence. Both the straight and 15° angled abutments are available in various abutment heights, covering a broad range of clinical implant situations. Together with its durable PEEK<sup>2</sup> matrices, the Novaloc® Retentive System provides a unique and long-lasting attachment performance.



#### Characteristics

- PEEK<sup>2</sup> matrix inserts offering excellent chemical and physical properties
- Matrix accommodates up to 40° prosthetic divergence between two abutments
- 6 retention strengths offer optimal adjustment of the denture retention
- Matrix Housing available in titanium, or color-neutral PEEK<sup>2</sup> for a higher aesthetic outcome
- Carbon-based abutment coating (ADLC<sup>1</sup>) offers a smooth surface and ultimate hardness for excellent wear resistance

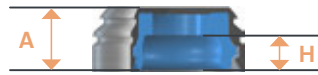
For detailed instructions on how to use Novaloc® Abutments with TorcFit™ for Tissue Level implants, please refer to *Straumann® Novaloc® Retentive System for Hybrid Dentures (702067/en)*.

<sup>1</sup> Amorphous Diamond-Like Carbon

<sup>2</sup> Polyether ether ketone

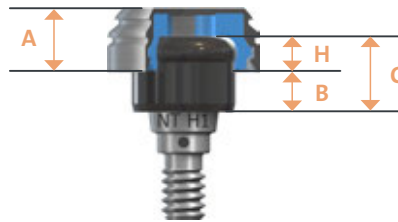
### Novaloc® Matrix dimensions for TorcFit™ Tissue Level implants

	A	H
Novaloc® Matrix	2.3	1.4



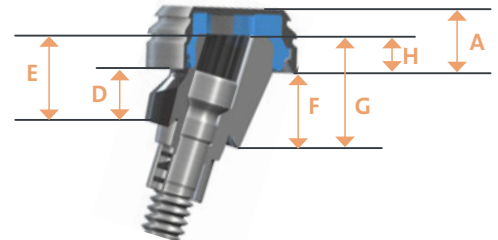
### Novaloc® Straight Abutment dimensions for TorcFit™ Tissue Level implants

		B	C
NT TorcFit™ Tissue Level implants	Novaloc® H1	1.35	2.75
	Novaloc® H2	2.35	3.75
	Novaloc® H3	3.35	4.75
	Novaloc® H4	4.35	5.75
	Novaloc® H5	5.35	6.75
	Novaloc® H6	6.35	7.75
RT TorcFit™ Tissue Level implants	Novaloc® H1	1.5	2.9
	Novaloc® H2	2.5	3.9
	Novaloc® H3	3.5	4.9
	Novaloc® H4	4.5	5.9
	Novaloc® H5	5.5	6.9
	Novaloc® H6	6.5	7.9
WT TorcFit™ Tissue Level implants	Novaloc® H1	1.7	3.1
	Novaloc® H2	2.7	4.1
	Novaloc® H3	3.7	5.1
	Novaloc® H4	4.7	6.1
	Novaloc® H5	5.7	7.1
	Novaloc® H6	6.7	8.1



### Novaloc® Angled Abutment dimensions for TorcFit™ Tissue Level implants

		Short side		Long side	
		D	E	F	G
NT TorcFit™ Tissue Level implants	Novaloc® H2	1.8	3.2	2.7	4.1
	Novaloc® H3	2.7	4.1	3.7	5.1
	Novaloc® H4	3.7	5.1	4.6	6.0
	Novaloc® H5	4.7	6.1	5.6	7.0
	Novaloc® H6	5.6	7.0	6.6	8.0
RT TorcFit™ Tissue Level implants	Novaloc® H2	1.8	3.2	3.0	4.4
	Novaloc® H3	2.7	4.1	4.0	5.4
	Novaloc® H4	3.7	5.1	5.0	6.4
	Novaloc® H5	4.7	6.1	5.9	7.3
	Novaloc® H6	5.6	7.0	6.9	8.3
WT TorcFit™ Tissue Level implants	Novaloc® H2	1.8	3.2	3.5	4.9
	Novaloc® H3	2.7	4.1	4.4	5.8
	Novaloc® H4	3.7	5.1	5.4	6.8
	Novaloc® H5	4.7	6.1	6.4	7.8
	Novaloc® H6	5.6	7.0	7.3	8.7





## 11.3 STRAUMANN® CEMENTABLE ABUTMENTS STRAIGHT AND ANGLED FOR CROWNS AND BRIDGES

### Intended use

- Cement-retained restorations

### Characteristics

- 0° and 15°
- Due to their design, angled abutments must not be trimmed or individually modified.
- A torque of 35 Ncm is recommended for inserting the abutments.

In situations where a screw-retained solution is contraindicated, the dental technician can fabricate a cement-retained superstructure directly with this abutment.

Cement-retained bridge constructions in combination with implant shoulders of Ø3.5 mm (NT), Ø4.8 mm (RT) and Ø6.5 mm (WT) are also possible. The abutment can be shortened on the master cast if required.



### A) Fabrication of the superstructure

Insert the abutment in the Implant Analog for TorcFit™ Tissue Level implant using an SCS Screwdriver.

**Important:** The abutment must be properly positioned in the TorcFit™ connection before the screw is tightened.

The screw is tightened by hand using the SCS Screwdriver



### B) Processing the copings

**Step 1** – Where occlusal space is limited, the abutment can be shortened and the post height shall not be shorter than 4.0 mm.

**Important:** The abutment must not be ground laterally but only shortened occlusally to maintain proper stability.

**Step 2** – To facilitate the working procedure, prefabricated burn-out plastic copings are available to the dental technician. The copings are made from burn-out plastic (POM).

The Plastic Copings feature a snap-on mechanism, which makes them easier to fix onto the TorcFit™ for Tissue Level implants abutment. The snap-on mechanism of the BoC (3 small knobs inside the burn-out coping that click into the groove in the abutment) must be removed from the inside of the final cast in order for the crown to properly fit onto the abutment.

**Step 3** – The Plastic Copings can also be shortened and are adjusted to the height of the shortened abutment.

The occlusal opening is sealed temporarily with wax or plastic. Waxing up then takes place directly over the Plastic Coping.



**Step 4** – The investment material must be matched to the casting alloy used (follow the manufacturer’s directions and recommendations).

**Important:** Burn-out plastics are characterized by the fact that they swell up when they are burned out. For this reason it is important that the outside of the Plastic Coping is completely covered with wax. The wax burns off and therefore creates sufficient space in the mold for expansion when burned out in the oven. There must be a wax layer of at least 0.3 mm in the marginal region (do not wax above the delicate margin). If there is insufficient waxing in the marginal region of the coping, there is a risk that the frustum will break in the interior of the invested coping, due to the effects of the expansion of the plastic in the mold.



**Step 5** – The construction can now be veneered in the conventional way. The veneering materials must be matched to the alloy used (follow the manufacturer’s directions and recommendations).



#### Fitting the final restoration

The restoration is delivered to the dentist with the original abutments on the master cast.

Remove the Healing Cap or temporary restoration. Thoroughly clean and dry the interior of the implants.

Unscrew the screws of the abutments from the master cast using an SCS Screwdriver and transfer the abutment to the patient’s mouth. Use the SCS Screwdriver attached to the mounted Basal Screw for the transfer.

**Important:** Properly position the cleaned TorcFit™ for Tissue Level implants cementable Abutment without the use of cement.

Tighten the abutment screw with the SCS Screwdriver along with the Ratchet (046.119) and Torque Control Device (046.049 or 066.1100).

**Important:** The abutment must first be properly positioned in the TorcFit™ connection of the implant before the screw is tightened.

**Important:** When the superstructure is cemented on top of the angled cementable abutment, the occlusal openings must be first re-sealed with wax or gutta-percha.

## 11.4 STRAUMANN® GOLD ABUTMENTS

### Intended use

- Screw-retained or cement-retained crowns and bridges
- Cement-retained bridges via mesostructure (custom abutment technique)
- Telescopic crowns and telescopic bridges

### Characteristics

### Simple

- Easy wax-up and protection of the screw channel due to modelling aid (burn-out polymer)

### Reliable

- Excess cement is easily removed by raising the cement margin using an individually designed mesostructure
- TorcFit™ connection

**Note:** For screw-retained bridges the gold abutment for bridge must be used.



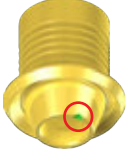
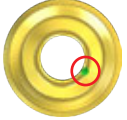


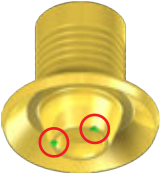
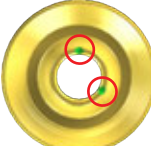
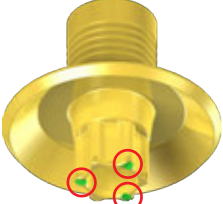

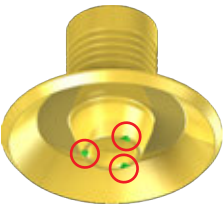



### Portfolio

	NT	RT	WT
	H 3 mm	H 3.6 mm	H 4 mm
Gold Abutment, for Crown	 037.0300	 037.1300	 037.2300
Gold Abutment, for Bridge	 037.0301	 037.1301	 037.2301
NT/RT/WT Basal Screw	 036.3110		

The Straumann® TLC Implant System has a simple and consistent laser marking for quick and precise identification of secondary parts and auxiliaries. For the TorcFit™ for Tissue Level implants Gold Abutment the laser marking is replaced by little grooves that are positioned at the bottom of the Gold Abutment.

This concept allows for correct identification of matching components and simplifies the communication between the individuals involved in the treatment process.

	Implant diameters	Gold Abutment, crown		Gold Abutment, bridge	
NT (Narrow TorcFit™)	∅3.3 mm ∅3.75 mm				
RT (Regular TorcFit™)	∅3.3 mm ∅3.75 mm ∅4.5 mm				
WT (Wide TorcFit™)	∅4.5 mm ∅5.5 mm ∅6.5 mm				

For detailed instructions on how to use Gold Abutments, please refer to *Straumann® synOcta® Prosthetic System, Basic Information* (702163/en).

## 11.5 STRAUMANN® CARES® ABUTMENTS

### Intended use

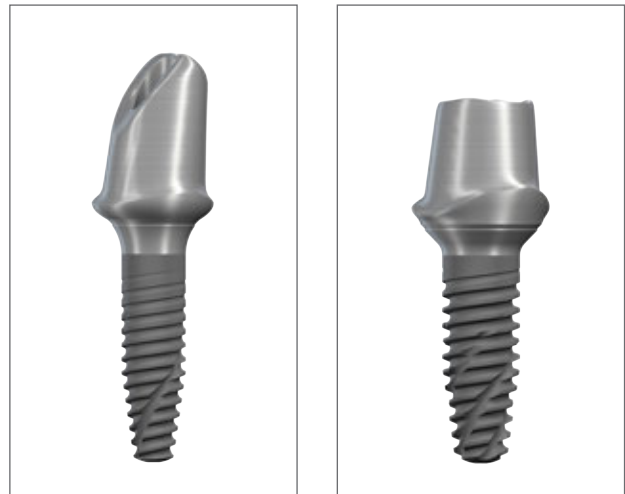
- Cement-retained crowns
- Cement-retained bridges via mesostructure
- Screw-retained (CARES® TAN), directly veneerable crowns

### Material

- Titanium-Aluminum-Niobium (TAN)
- Cobalt-chromium alloy (coron®)

### Characteristics

- Screw-retained one piece metal restorations
- Anatomical emergence profile
- A patient-specific emergence profile
- Straumann® Guarantee for Straumann® CARES® Abutments
- CoCr for direct veneering
- Straumann® CARES® Abutment CoCr with Angled Solution (AS)



For detailed instructions on how to use CARES® abutments, please refer to *Straumann® CARES® Implant-borne prosthetics, Basic Information (702165/en)*.

## 11.6 STRAUMANN® PRE-MILLED ABUTMENT BLANKS (PMAB)

### Intended use

- Cement-retained crowns
- Cement-retained bridges

### Material

- Titanium-Aluminum-Niobium (TAN)

### Characteristics

- Produce original Straumann® one-piece customized titanium-alloy abutments with your in-house milling equipment.
- Straumann® Pre-milled Abutment Blanks are compatible with the MEDENTiKA® Pre-Face Blank holder and the Amann Girrbach Blank holder used in the Straumann® CARES® M series.



**Note:** RB, WB, NT, RT, WT PMAB (TAN) are not for direct veneering.

## 11.7 STRAUMANN® SCREW-RETAINED BARS AND BRIDGES (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 re-habilitations for multiple-tooth replacement or fully edentulous patients.

### Material

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



### 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.

Master models with subsequently hand-tightened (< 35Ncm) 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, if abutments subsequently need to be placed on the master model, only a torque of 35Ncm will adequately represent the final oral situation. 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 an SRBB on subsequently placed Screw-retained Abutments is ordered, the stone model with the torqued abutments is required for production.

For detailed instructions on how to use CARES® abutments, please refer to *Straumann® CARES® Implant-borne prosthetics, Basic Information (702165/en)*.

### Straumann® CARES® SRBB working conditions

		CARES® SRBB are available on the following Straumann® platforms	Divergence compensation between any two platforms		Screws for Straumann® CARES® SRBB
			Ti	coron®	
Implant Level	Straumann® TLC Implants	Narrow TorcFit™ (NT)	40°		Basal Screw, straight, TAN 036.3110
		Regular TorcFit™ (RT)			
		Wide TorcFit™ (WT)			
Abutment level	Straumann® Screw-retained Abutment	∅ 4.6 mm	50°	40°	NC/RC Occlusal Screw, TAN for Coping, Screw-retained Abutment 023.4763
		∅ 3.5 mm	30°	30°	

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

### Note

- Straumann® Repositionable Implant Analogs are not intended to be used for Straumann® CARES® SRBB. Straumann® may return the order if the requirements are not fulfilled.
- **Always use new abutment-/occlusal-screws for patient use.**
- The screws delivered with the CARES® SRBB are meant for patient use. For additional screws in case of loss or for lab use, only use the screws listed in the chart above.

## 11.8 STRAUMANN® CARES® SCAN & SHAPE

CARES® Scan & Shape allows you benefit from the knowledge and experience of a highly trained team of CAD/CAM dental experts to provide a tailored design service. The concept is designed to ensure the best possible fit of the final restorations. You can now order: customized abutments\*, CARES® Screw-retained Bars and Bridges (SRBB), CARES® X-Stream™ Restorative Options and tooth-borne restorations via Scan & Shape.\*

Whether you're expanding your business or you have an existing staff member out for an extended period of time, we're open 24/7 so you don't have to be.

### Ordering process

- The CARES® Scan & Shape online ordering platform provides a one-stop-shop for all your customized prosthetics.
- Send digital files of the master cast or of the intra-oral situation by using our STL-File upload service.
- Traditional workflows – send us your master cast and/or wax-up model\*.

### Premium Straumann Service

- Custom-made abutment design
- Straumann® Original connection
- Straumann precision fit between implant and abutment

### Compatible solutions

- Provides a streamlined “one-stop shop” and an efficient digital workflow.
- Benefit from Straumann® CARES® Scan & Shape services for customized abutments and CARES® X-Stream™ single restoration for all major implant platforms.

**Note:** For detailed information on all Straumann® CARES® offerings, please see *Basic Information Straumann® CARES® Scan & Shape* (702168/en).

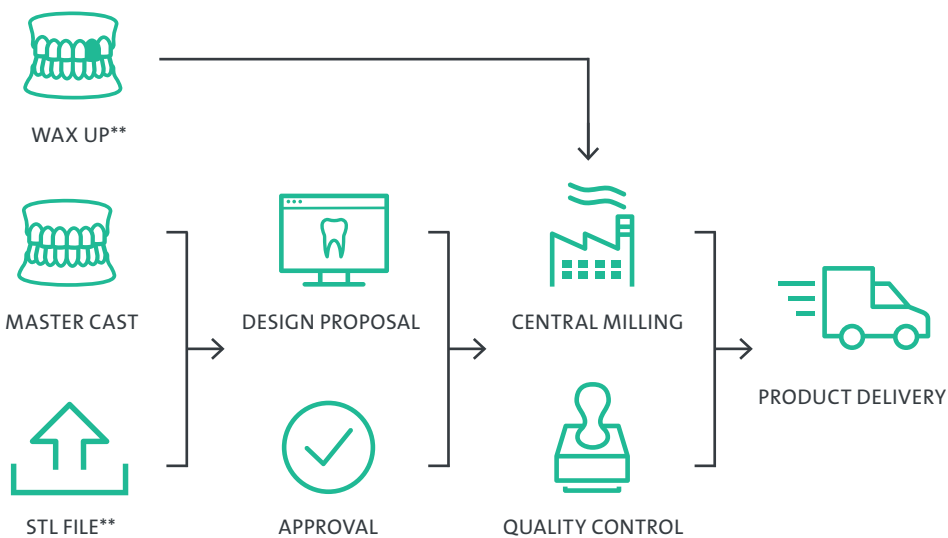
\* Not all products, services and workflows are available in all countries. Please contact your sales representative for a detailed overview.

### 11.8.1 Straumann® CARES® Scan & Shape workflow overview\*

Even CAD/CAM proficient labs can take advantage of our design service. If you are using 3Shape®, exocad®, Dental Wings® or any other dental-design software you can simply upload your STL files of the master cast or of the intra-oral situation.

#### Digital functionality\*\*

- Upload your case from any open system such as 3Shape®, exocad®, Dental Wings®, etc.
- Upload your STL file of the lower jaw, upper jaw, bite registration, together with a scan of the diagnostic wax-up for SRBBs.



#### Simple workflow

##### Log onto Straumann® CARES® Scan & Shape Online

- Send us your STL files, ship us your models or wax-ups\*\*
- Manage your orders online anytime around the clock
- Receive your CARES® prosthetics just the way you want it

#### Scan & Shape online platform product portfolio

For a complete overview of the Straumann® CARES® Scan & Shape product portfolio, consult *Straumann® CARES® Scan & Shape, Basic Information (702168/en)* or contact your local Straumann® representative.



\* Not all products, services and workflows are available in all countries.

\*\* STL File upload option and model workflow may vary from country to country. Not all products are available through wax up workflow.

Please contact your local sales representative for a detailed overview of the available workflows and products.



## 11.9 SMILE IN A BOX®

Smile in a Box® is a flexible treatment planning and manufacturing service which helps to grow and develop your dental practice. This service drives value by improving patient acceptance and allowing access to digital dentistry without investment. Gain more efficiency by reducing chair time with immediate treatment protocols. Increase the level of confidence in implant placement through a more predictable workflow using guided surgery. Focus on your passion by choosing what you outsource to us and what steps to keep in house. Scale your business - no matter where you are in your practice growth plans.



# 12. FURTHER INFORMATION









For further information, please consult the following brochures:

- *Straumann® Modular Cassette, Basic Information (702527/en)*
- *Straumann® VeloDrill™ System for Guided Surgery, Basic Information (702526/en)*
- *Straumann® Drill stop, Basic Information (702874/en)*
- *Straumann® Modular Cassette Selection Guide, Basic Information (702824/en)*
- *Straumann® Bone Level Prosthetic Procedures, Basic Information (702061/en)*
- *Straumann® Variobase® Basic Information (702087/en)*
- *Straumann® Novaloc® Retentive System for Hybrid Dentures (702067/en)*
- *Straumann® CARES® Implant-borne prosthetics, Basic Information (702165/en)*
- *Straumann® CARES® Scan & Shape, Basic Information (702168/en)*
- *Straumann® Scanbody, Basic Information (450.037/en)*




# 13. PRODUCT REFERENCE LIST

Some items of the Straumann® Dental Implant System are not available in all countries.









## 13.1 TLC STANDARD PLUS IMPLANTS SLACTIVE®

Art. No.	Image	Article	Dimensions	Material
035.7008S		Straumann® TLC SP implants	Ø 3.3 mm NT SLActive® 8 mm	Roxidid®
035.7010S			Ø 3.3 mm NT SLActive® 10 mm	
035.7012S			Ø 3.3 mm NT SLActive® 12 mm	
035.7014S			Ø 3.3 mm NT SLActive® 14 mm	
035.7016S			Ø 3.3 mm NT SLActive® 16 mm	
035.7018S			Ø 3.3 mm NT SLActive® 18 mm	
035.7108S		Straumann® TLC SP implants	Ø 3.3 mm RT SLActive® 8 mm	Roxidid®
035.7110S			Ø 3.3 mm RT SLActive® 10 mm	
035.7112S			Ø 3.3 mm RT SLActive® 12 mm	
035.7114S			Ø 3.3 mm RT SLActive® 14 mm	
035.7116S			Ø 3.3 mm RT SLActive® 16 mm	
035.7118S			Ø 3.3 mm RT SLActive® 18 mm	
035.7206S		Straumann® TLC SP implants	Ø 3.75 mm NT SLActive® 6 mm	Roxidid®
035.7208S			Ø 3.75 mm NT SLActive® 8 mm	
035.7210S			Ø 3.75 mm NT SLActive® 10 mm	
035.7212S			Ø 3.75 mm NT SLActive® 12 mm	
035.7214S			Ø 3.75 mm NT SLActive® 14 mm	
035.7216S			Ø 3.75 mm NT SLActive® 16 mm	
035.7218S	Ø 3.75 mm NT SLActive® 18 mm			
035.7306S		Straumann® TLC SP implants	Ø 3.75 mm RT SLActive® 6 mm	Roxidid®
035.7308S			Ø 3.75 mm RT SLActive® 8 mm	
035.7310S			Ø 3.75 mm RT SLActive® 10 mm	
035.7312S			Ø 3.75 mm RT SLActive® 12 mm	
035.7314S			Ø 3.75 mm RT SLActive® 14 mm	
035.7316S			Ø 3.75 mm RT SLActive® 16 mm	
035.7318S	Ø 3.75 mm RT SLActive® 18 mm			
035.7506S		Straumann® TLC SP implants	Ø 4.5 mm RT SLActive® 6 mm	Roxidid®
035.7508S			Ø 4.5 mm RT SLActive® 8 mm	
035.7510S			Ø 4.5 mm RT SLActive® 10 mm	
035.7512S			Ø 4.5 mm RT SLActive® 12 mm	
035.7514S			Ø 4.5 mm RT SLActive® 14 mm	
035.7516S			Ø 4.5 mm RT SLActive® 16 mm	
035.7518S	Ø 4.5 mm RT SLActive® 18 mm			
035.7606S		Straumann® TLC SP implants	Ø 4.5 mm WT SLActive® 6 mm	Roxidid®
035.7608S			Ø 4.5 mm WT SLActive® 8 mm	
035.7610S			Ø 4.5 mm WT SLActive® 10 mm	
035.7612S			Ø 4.5 mm WT SLActive® 12 mm	
035.7614S			Ø 4.5 mm WT SLActive® 14 mm	
035.7616S			Ø 4.5 mm WT SLActive® 16 mm	
035.7618S	Ø 4.5 mm WT SLActive® 18 mm			
035.7706S		Straumann® TLC SP implants	Ø 5.5 mm WT SLActive® 6 mm	Roxidid®
035.7708S			Ø 5.5 mm WT SLActive® 8 mm	
035.7710S			Ø 5.5 mm WT SLActive® 10 mm	
035.7712S			Ø 5.5 mm WT SLActive® 12 mm	
035.7714S			Ø 5.5 mm WT SLActive® 14 mm	
035.7716S			Ø 5.5 mm WT SLActive® 16 mm	
035.7806S		Straumann® TLC SP implants	Ø 6.5 mm WT SLActive® 6 mm	Roxidid®
035.7808S			Ø 6.5 mm WT SLActive® 8 mm	
035.7810S			Ø 6.5 mm WT SLActive® 10 mm	
035.7812S			Ø 6.5 mm WT SLActive® 12 mm	
035.7814S			Ø 6.5 mm WT SLActive® 14 mm	
035.7816S			Ø 6.5 mm WT SLActive® 16 mm	



















## 13.2 CLOSURE CAPS

Art. No.	Image	Article	Dimensions	Material
036.3200S		NT/RT/WT Closure Cap	Ø 2.7 mm, H 0 mm	Titanium
036.3200SV4				
036.0201S		NT Closure Cap	Ø 4 mm, H 1.5 mm	
036.0201SV4				
036.1201S		RT Closure Cap	Ø 5.5 mm, H 1.5 mm	
036.1201SV4				




## 13.3 HEALING CAPS

Art. No.	Image	Article	Dimensions	Material
036.0203S		NT Healing Cap	Ø 4 mm, H 3 mm	Titanium
036.0204S		NT Healing Cap	Ø 4 mm, H 4.5 mm	
036.1202S		RT Healing Cap	Ø 5.5 mm, H 2 mm	
036.1203S		RT Healing Cap	Ø 5.5 mm, H 3 mm	
036.1204S		RT Healing Cap	Ø 5.5 mm, H 4.5 mm	
036.2202S		WT Healing Cap	Ø 7.2 mm, H 2 mm	
036.2203S		WT Healing Cap	Ø 7.2 mm, H 3 mm	
036.2204S		WT Healing Cap	Ø 7.2 mm, H 4.5 mm	




## 13.4 IMPRESSION POSTS

Art. No.	Image	Article	Dimensions	Material
036.0000		NT Impression Post Open Tray	short, including guide screw, H 15 mm	TAN (Titan alloy)
036.1000		RT Impression Post Open Tray		
036.2000		WT Impression Post Open Tray		
036.0001		NT Impression Post Open Tray	long, including guide screw, H 21 mm	
036.1001		RT Impression Post Open Tray		
036.2001		WT Impression Post Open Tray		
036.0002		NT Impression Post Closed Tray	with 1 guide screw & 2 caps	TAN (Titan alloy)/ POM
036.1002		RT Impression Post Closed Tray		
036.2002		WT Impression Post Closed Tray		
065.0140		NT Impression Post Open Tray	Short, incl. guide screw, H 15 mm, non-engaging	TAN
065.0141		RT Impression Post Open Tray		
065.0142		WT Impression Post Open Tray		
065.0137		NT Impression Post Open Tray	Long, incl. guide screw, H 21 mm, non-engaging	
065.0138		RT Impression Post Open Tray		
065.0139		WT Impression Post Open Tray		
065.0143		NT Impression Post Closed Tray	With 1 guide screw & 2 caps, non-engaging	TAN (Titan alloy)/ POM
065.0144		RT Impression Post Closed Tray		
065.0145		WT Impression Post Closed Tray		

## 13.5 IMPLANT ANALOGS

Art. No.	Image	Article	Dimensions	Material
036.0100		NT Implant Analog	L 12 mm	TAN (Titan alloy)
036.0102		RT Implant Analog		
036.1100		WT Implant Analog		



## 13.6 REPOSITIONABLE IMPLANT ANALOGS

Art. No.	Image	Article	Dimensions	Material
036.1102		NT Repositionable Implant Analog		Stainless steel
036.2100		RT Repositionable Implant Analog		
036.2102		WT Repositionable Implant Analog		







## 13.7 SCANBODY

Art. No.	Image	Article	Dimensions	Material
036.3230		Scanbody NT/RT/WT	Ø 4.0 mm, H 10 mm	Stainless steel







## 13.8 BASAL SCREWS

Art. No.	Image	Article	Dimensions	Material
036.3110		NT/RT/WT Basal Screw		TAN (Titan alloy)
036.3111		NT/RT/WT Basal Screw AS		














## 13.9 TEMPORARY ABUTMENTS

Art. No.	Image	Article	Dimensions	Material
037.0000		NT Temporary Abutment, for Crown	H 10.3 mm	TAN (Titan alloy)
037.1000		RT Temporary Abutment, for Crown		
037.2000		WT Temporary Abutment, for Crown		
037.0001		NT Temporary Abutment, for Bridge		
037.1001		RT Temporary Abutment, for Bridge		
037.2001		WT Temporary Abutment, for Bridge		







## 13.10 VARIOBASE® FOR CROWN

Art. No.	Image	Article	Dimensions	Material
<b>Abutments</b>				
037.0201		NT Variobase® for Crown including Screw	Ø 4 mm, AH 5.5 mm	TAN (Titan alloy)
037.1201		RT Variobase® for Crown including Screw	Ø 5 mm, AH 6 mm	
037.2201		WT Variobase® for Crown including Screw	Ø 7 mm, AH 6.5 mm	
<b>Burn-out Copings</b>				
037.0211		NT Burn-out Coping for Variobase® for Crown	AH 5.5 mm	POM
037.0211V4		NT Burn-out Coping for Variobase® for Crown		
037.1211		RT Burn-out Coping for Variobase® for Crown	AH 6 mm	
037.1211V4		RT Burn-out Coping for Variobase® for Crown		
037.2211		WT Burn-out Coping for Variobase® for Crown	AH 6.5 mm	
037.2211V4		WT Burn-out Coping for Variobase® for Crown		




## 13.11 VARIOBASE® FOR CROWN AS

Art. No.	Image	Article	Dimensions	Material
<b>Abutments</b>				
037.0203		NT Variobase® for Crown AS including Screw	∅4 mm, AH 6.5 mm	TAN (Titan alloy)
037.1203		RT Variobase® for Crown AS including Screw	∅5 mm, AH 7 mm	
037.2203		WT Variobase® for Crown AS including Screw	∅7 mm, AH 7.5 mm	
<b>Burn-out Copings</b>				
037.0212		NT Burn-out Coping 25°, for Variobase® for Crown AS	AH 6.5 mm	POM
037.1212		RT Burn-out Coping 25°, for Variobase® for Crown AS	AH 7 mm	
037.2212		WT Burn-out Coping 25°, for Variobase® for Crown AS	AH 7.5 mm	
<b>Instruments and Accessories</b>				
046.786		AS Screwdriver for Ratchet, extra-short	L 15 mm	TAN (Titan alloy)
046.787		AS Screwdriver for Ratchet, short	L 21 mm	
046.788		AS Screwdriver for Ratchet, long	L 27 mm	
046.789		AS Screwdriver for Handpiece, extra-short	L 20 mm	
046.790		AS Screwdriver for Handpiece, short	L 26 mm	
046.791		AS Screwdriver for Handpiece, long	L 32 mm	
046.792		AS Screwdriver Handling Aid		


## 13.12 VARIOBASE® FOR BRIDGE/BAR CYLINDRICAL

Art. No.	Image	Article	Dimensions	Material
<b>Abutments</b>				
037.0204		NT Variobase® for Bridge/Bar Cylindrical including Screw	AH 3.5 mm	TAN (Titan alloy)
037.1204		RT Variobase® for Bridge/Bar Cylindrical including Screw	AH 4.0 mm	
037.2204		WT Variobase® for Bridge/Bar Cylindrical including Screw	AH 4.5 mm	
<b>Burn-out Copings</b>				
037.0213		NT Burn-out Coping for Variobase® for Bridge/Bar	AH 3.5 mm	POM
037.0213V4				
037.1213		RT Burn-out Coping for Variobase® for Bridge/Bar	AH 4 mm	
037.1213V4				
037.2213		WT Burn-out Coping for Variobase® for Bridge/Bar	AH 4.5 mm	
037.2213V4				

## 13.13 VARIOBASE® C







Art. No.	Image	Article	Dimensions	Material
<b>Abutments</b>				
037.0205		NT Variobase® C		TAN (Titan alloy)
037.1205		RT Variobase® C		
037.2205		WT Variobase® C		

## 13.14 CEMENTABLE ABUTMENTS




Art. No.	Image	Article	Dimensions	Material
<b>Abutments</b>				
037.0100		NT Cementable Abutment straight 0°, for crowns/bridges	AH 5.7 mm	TAN (Titan alloy)
037.1100		RT Cementable Abutment straight 0°, for crowns/bridges		
037.2100		WT Cementable Abutment straight 0°, for crowns/bridges	AH 6 mm	
037.0101		NT Cementable Abutment angled 15°		
037.1101		RT Cementable Abutment, angled 15°		
037.2101		WT Cementable Abutment, angled 15°		
<b>Burn-out Copings</b>				
037.0110		NT Burn-out Coping, for cementable abutment straight 0° for crown	AH 6.2 mm	POM
037.1110		RT Burn-out Coping, for cementable abutment straight 0° for crown		
037.2110		WT Burn-out Coping, for cementable abutment straight 0° for crown	AH 6.5 mm	
037.0112		NT Burn-out Coping, for cementable abutment angled 15° for crowns & bridges		
037.1112		RT Burn-out Coping, for cementable abutment angled 15° for crowns & bridges		
037.2112		WT Burn-out Coping, for cementable abutment angled 15° for crowns & bridges	AH 6.2 mm	
037.0111		NT Burn-out Coping, for cementable abutment straight 0° for bridge		
037.1111		RT Burn-out Coping, for cementable abutment straight 0° for bridge		
037.2111		WT Burn-out Coping, for cementable abutment straight 0° for bridge	AH 6.5 mm	




































## 13.15 GOLD ABUTMENTS

Art. No.	Image	Article	Dimensions	Material
037.0300		NT Gold Abutment, crown	H 3 mm	Ceramicor®/POM
037.1300		RT Gold Abutment, crown	H 3.6 mm	
037.2300		WT Gold Abutment, crown	H 4 mm	
037.0301		NT Gold Abutment, bridge	H 3 mm	
037.1301		RT Gold Abutment, bridge	H 3.6 mm	
037.2301		WT Gold Abutment, bridge	H 4 mm	

## 13.16 PRE-MILLED ABUTMENT BLANKS

Art. No.	Image	Article	Dimensions	Material
037.0600		NT Pre-Milled Abutment Blank for MEDENTiKA® Holder	Ø 11.5 mm	TAN (Titan alloy)
037.1600		RT Pre-Milled Abutment Blank for MEDENTiKA® Holder		
037.2600		WT Pre-Milled Abutment Blank for MEDENTiKA® Holder		
037.0601		NT Pre-Milled Abutment Blank for MEDENTiKA® Holder	Ø 15.8 mm	
037.1601		RT Pre-Milled Abutment Blank for MEDENTiKA® Holder		
037.2601		WT Pre-Milled Abutment Blank for MEDENTiKA® Holder		
037.0610		NT Pre-Milled Abutment Blank for CARES®	Ø 12 mm	
037.1610		RT Pre-Milled Abutment Blank for CARES®		
037.2610		WT Pre-Milled Abutment Blank for CARES®		

## 13.17 NOVALOC® ABUTMENTS

Art. No.	Image	Article	Dimensions	Material
<b>Novaloc®, straight</b>				
037.0500		NT Novaloc® ADLC, straight 0°	H1	TAV
037.1500		RT Novaloc® ADLC, straight 0°		
037.2500		WT Novaloc® ADLC, straight 0°		
037.0501		NT Novaloc® ADLC, straight 0°	H2	
037.1501		RT Novaloc® ADLC, straight 0°		
037.2501		WT Novaloc® ADLC, straight 0°		
037.0502		NT Novaloc® ADLC, straight 0°	H3	
037.1502		RT Novaloc® ADLC, straight 0°		
037.2502		WT Novaloc® ADLC, straight 0°		
037.0503		NT Novaloc® ADLC, straight 0°	H4	
037.1503		RT Novaloc® ADLC, straight 0°		
037.2503		WT Novaloc® ADLC, straight 0°		
037.0504		NT Novaloc® ADLC, straight 0°	H5	
037.1504		RT Novaloc® ADLC, straight 0°		
037.2504		WT Novaloc® ADLC, straight 0°		
037.0505		NT Novaloc® ADLC, straight 0°	H6	
037.1505		RT Novaloc® ADLC, straight 0°		
037.2505		WT Novaloc® ADLC, straight 0°		
<b>Novaloc®, angled</b>				
037.0510		NT Novaloc® ADLC, angled 15°	H2	TAV
037.1510		RT Novaloc® ADLC, angled 15°	H2	
037.2510		WT Novaloc® ADLC, angled 15°	H2	
037.0511		NT Novaloc® ADLC, angled 15°	H3	
037.1511		RT Novaloc® ADLC, angled 15°	H3	
037.2511		WT Novaloc® ADLC, angled 15°	H3	
037.0512		NT Novaloc® ADLC, angled 15°	H4	
037.1512		RT Novaloc® ADLC, angled 15°	H4	
037.2512		WT Novaloc® ADLC, angled 15°	H4	
037.0513		NT Novaloc® ADLC, angled 15°	H5	
037.1513		RT Novaloc® ADLC, angled 15°	H5	
037.2513		WT Novaloc® ADLC, angled 15°	H5	
037.0514		NT Novaloc® ADLC, angled 15°	H6	
037.1514		RT Novaloc® ADLC, angled 15°	H6	
037.2514		WT Novaloc® ADLC, angled 15°	H6	

CE 0481

\* Manufacturer: Valoc AG, Theodorshofweg 22, 4310 Rheinfelden, Switzerland  
Distributor: Institut Straumann AG, Peter Merian-Weg 12, 4002 Basel, Switzerland

Art. No.	Image	Article	Dimensions	Material
<b>Auxiliaries*</b>				
2010.721-STM		Novaloc® Model Analog, blue, 4 pcs		Aluminum
2010.720-STM		Novaloc® Model Analog - Angled 15°, red, 4 pcs		
2010.722-STM		Novaloc® Impression Coping, red, 4 pcs		PEEK
<b>Retention Inserts*</b>				
2010.601-STM		<b>Novaloc® Processing Package</b>		
		Matrix Housing (including Processing Insert), 2 pcs		Titanium / POM
		Retention Insert White - Light, 2 pcs	Light, approx. 750g	PEEK
		Retention Insert Yellow - Medium, 2 pcs	Medium, approx. 1200g	
		Retention Insert Green - Strong, 2 pcs	Strong, approx. 1650g	
Processing Collar, 2 pcs		Silicone		
2010.611-STM		<b>Novaloc® Processing Package PEEK</b>		
		Matrix Housing PEEK (including Processing Insert), 2 pcs		PEEK / POM
		Retention Insert White - Light, 2 pcs	Light, approx. 750g	
		Retention Insert Yellow - Medium, 2 pcs	Medium, approx. 1200g	
		Retention Insert Green - Strong, 2 pcs	Strong, approx. 1650g	
Processing Collar, 2 pcs		Silicone		
2010.710-STM		Novaloc® Retention Insert Red - Extra-Light, 4 pcs	Extra-light, approx. 300g	PEEK
2010.711-STM		Novaloc® Retention Insert White - Light, 4 pcs	Light, approx. 750g	
2010.712-STM		Novaloc® Retention Insert Yellow - Medium, 4 pcs	Medium, approx. 1200g	
2010.713-STM		Novaloc® Retention Insert Green - Strong, 4 pcs	Strong, approx. 1650g	
2010.714-STM		Novaloc® Retention Insert Blue - Extra-Strong, 4 pcs	Extra-strong, approx. 2100g	
2010.715-STM		Novaloc® Retention Insert Black - Ultra-Strong, 4 pcs	Ultra-strong, approx. 2550g	
<b>Auxiliaries*</b>				
2010.701-STM		Novaloc® Matrix Housing (including Processing Insert), 4 pcs		Titanium / POM
2010.702-STM		Novaloc® Matrix Housing PEEK (including Processing Insert), 4 pcs		PEEK / POM
2010.703-STM		Novaloc® Matrix Housing - Extended (including Processing Insert), 4 pcs		Titanium / POM












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\* Manufacturer: Valoc AG, Theodorshofweg 22, 4310 Rheinfelden, Switzerland

Distributor: Institut Straumann AG, Peter Merian-Weg 12, 4002 Basel, Switzerland

## 13.18 INSTRUMENTS

































### 13.18.1 A Module – Order list





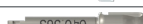


Art. No.	Image	Product
041.761		Straumann® Modular Cassette, A Module
041.766		A Module Ratchet Tray
046.119		Ratchet
066.1100		Torque Control Device
046.064		Holding Key
041.764		Grommet Tray, 3 small + 3 large
046.400		SCS Screwdriver for Ratchet, extra-short
046.401		SCS Screwdriver for Ratchet, short
046.402		SCS Screwdriver for Ratchet, long
046.410		SCS Screwdriver for Handpiece, extra short
046.411		SCS Screwdriver for Handpiece, short
046.412		SCS Screwdriver for Handpiece, long
041.771		Implant Depth Gauge Tray
066.2000		Implant Depth Gauge
041.762		Grommet Tray, 6 small

Art. No.	Image	Product
036.3300		RT Profile Drill, short, for implants Ø 3.75/Ø 4.8 mm
036.3302		WT Profile Drill, short, for implants Ø 5.5 mm
036.3301		RT Profile Drill, long, for implants Ø 3.75/Ø 4.8 mm
036.3303		WT Profile Drill, long, for implants Ø 5.5 mm
044.304		Bone Profiler for RT, length 28 mm
044.305		Bone Profiler for WT, length 25 mm
049.406S		TLX/TLC Guiding Cylinder, length 9.8 mm, Ø 3.6 mm

For details see *Straumann® Modular Cassette Selection Guide (702824/en)*.

### 13.18.2 B Module – Order list

Art. No.	Image	Product
041.776		Straumann® Modular Cassette, B Module, Base + Lid
041.787		B Module, TorcFit™ BLC/TLC/BLX/TLX Tray
041.785		B Module, TorcFit™ BLC/TLC Tray (for implant up to Ø4,5 mm)
044.003		Roundburr, Ø2.3 mm, stainless steel.
044.004		Roundburr, Ø3.1 mm, stainless steel.
026.0056		Needle Drill, long, Ø1.6 mm, L 41mm, stainless steel
066.1501		X Pilot VeloDrill™, guided, Ø2.2 mm, medium, stainless steel
066.1502		X VeloDrill™, guided, Ø2.8 mm, medium, stainless steel
066.1503		X VeloDrill™, guided, Ø3.2 mm, medium, stainless steel
066.1504		X VeloDrill™, guided, Ø3.5 mm, medium, stainless steel
066.1505		X VeloDrill™, guided, Ø3.7 mm, medium, stainless steel
066.1506		X VeloDrill™, guided, Ø4.2 mm, medium, stainless steel
066.1507		X VeloDrill™, guided, Ø4.7 mm, medium, stainless steel
066.1508		X VeloDrill™, guided, Ø5.2 mm, medium, stainless steel
066.1509		X VeloDrill™, guided, Ø6.2 mm, medium, stainless steel
034.362		BLC/TLC Profile Drill, short, FIBA compatible, Ø3.3 mm, L 27 mm, stainless steel
034.363		BLC/TLC Profile Drill, short, FIBA compatible, Ø3.75 mm, L 26 mm, stainless steel
034.365		BLC/TLC Profile Drill, short, FIBA compatible, Ø4.5 mm, L 26 mm, stainless steel
034.366		BLC/TLC Profile Drill, short, Ø5.5 mm, L 26 mm, stainless steel
034.367		BLC/TLC Profile Drill, short, Ø6.5 mm, L 26 mm, stainless steel
046.799		Alignment Pin, Ø2.2 mm, L 27 mm, TAN
046.800		Depth Gauge, Ø2.8 mm, L 27 mm, TAN
046.801		Depth Gauge, Ø3.2 mm, L 27 mm, TAN
046.802		Depth Gauge, Ø3.5 mm, L 27 mm, TAN
046.803		Depth Gauge, Ø3.7 mm, L 27 mm, TAN
046.804		Depth Gauge, Ø4.2 mm, L 27 mm, TAN
046.805		Depth Gauge, Ø4.7 mm, L 27 mm, TAN
046.806		Depth Gauge, Ø5.2 mm, L 27 mm, TAN
046.807		Depth Gauge, Ø6.2 mm, L 27 mm, TAN
066.4201		TorcFit™ Implant Driver for ratchet, short, L 21 mm, stainless steel
066.4207		TorcFit™ Implant Driver for ratchet, medium, L 26 mm, stainless steel
066.4202		TorcFit™ Implant Driver for ratchet, long, L 31 mm, stainless steel
















Art. No.	Image	Product
066.4101		TorcFit™ Implant Driver for handpiece, short, L 21 mm, stainless steel
066.4107		TorcFit™ Implant Driver for handpiece, medium, L 26 mm, stainless steel
066.4102		TorcFit™ Implant Driver for handpiece, long, L 31 mm, stainless steel
066.4108		TorcFit™ Implant Driver for handpiece, extra long, L 36 mm, stainless steel
040.563		Drill Extender*, L 23 mm, stainless steel
046.401		SCS Screwdriver, for ratchet, short, L 21 mm, stainless steel
046.411		SCS Screwdriver for handpiece, short, L 26 mm, stainless steel

\* The drill extender can be used to extend the drill in length by 14.5 mm.

**Note:** The VeloDrills™ exist also in short (for 4-12 mm) implants and long (for 4-18 mm implants). According to the typical implant length placed, the tray can be set up with the preferred VeloDrill™ length.

For guided surgery instruments, please check *Selection Guide Modular Cassette (702824/en)*.

### 13.18.3 C Module for Guided Surgery – Order list

Art. No.	Image	Product
041.772		Straumann® Modular Cassette, C Module, Guided surgery
026.0147		Drill handle, Ø2.2 mm, 1 mm/3 mm*
026.0148		Drill handle, Ø2.8 mm, 1 mm/3 mm*
026.0149		Drill handle, Ø3.2 mm, 1 mm/3 mm*
026.0150		Drill handle, Ø3.5 mm, 1 mm/3 mm*
026.0151		Drill handle, Ø3.7 mm, 1 mm/3 mm*
026.0152		Drill handle, Ø4.2 mm, 1 mm/3 mm*
034.284		Drill for Template Fixation Pin, Ø1.3 mm
034.282		Template Fixation Pin, Ø1.3 mm
034.298		Template Fixation Pin, Ø2.8/2.8 mm
034.285		Template Fixation Pin, Ø5/2.8 mm
034.286		Template Fixation Pin, Ø5/3.2 mm
034.287		Template Fixation Pin, Ø5/3.5 mm
034.288		Template Fixation Pin, Ø5/3.7 mm
034.289		Template Fixation Pin, Ø5/4.2 mm

\*Drill Handles compatible with metal sleeves, for the use with PEEK sleeves please use the self-locking handles with article numbers 034.291 - 034.296.



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