Technical Information

Straumann® TLX Implant System

Basic Information

straumann

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About this guide

This surgical and prosthetic procedure describes the steps required for implantation and restoration of the Straumann® TLX Implant System. The Straumann® TLX 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® TLX Implant System

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

The Straumann® TLX Implants are made from the material Roxolid® with the SLActive® surface and are available in the maximum endosteal outer diameters ∅ 3.75 mm, ∅ 4.5 mm, ∅ 5.5 mm and ∅ 6.5 mm, with length options from 6 mm to 18 mm for the maximum endosteal outer diameter ∅ 3.75 mm and ∅ 4.5 mm, and 6 mm to 12 mm for diameters ∅ 5.5 mm and ∅ 6.5 mm. A unified color code simplifies identification of instruments and implants for the available maximum endosteal outer diameters. The Straumann® TLX implants are available with either a 1.8 mm shoulder (Standard Plus - SP) or with a 2.8 mm shoulder (Standard - S).

The Straumann® TLX 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 ∅ 3.5 mm, ∅ 4.8 mm and ∅ 6.5 mm respectively.

		Straumann® TLX SP Implant ∅ 3.75 mm		Straumann® TLX SP Implant ∅ 4.5 mm		Straumann® TLX SP Implant ∅ 5.5 mm	Straumann® TLX SP Implant ∅ 6.5 mm
Shoulder Height		Standard Plus - Implant shoulder 1.8mm					
Color code		(red)		(green)		(brown)	(black)
Prosthetic Base		NT	RT	NT	RT	WT	WT
Connection		TorcFit™					
Picture							
SLActive®							
Available lengths	6 mm	035.3006S	035.3106S	035.3406S	035.3506S	035.3706S	035.3806S
	8 mm	035.3008S	035.3108S	035.3408S	035.3508S	035.3708S	035.3808S
	10 mm	035.3010S	035.3110S	035.3410S	035.3510S	035.3710S	035.3810S
	12 mm	035.3012S	035.3112S	035.3412S	035.3512S	035.3712S	035.3812S
	14 mm	035.3014S	035.3114S	035.3414S	035.3514S	–	
	16 mm	035.3016S	035.3116S	035.3416S	035.3516S		
	18 mm	035.3018S	035.3118S	035.3418S	035.3518S		

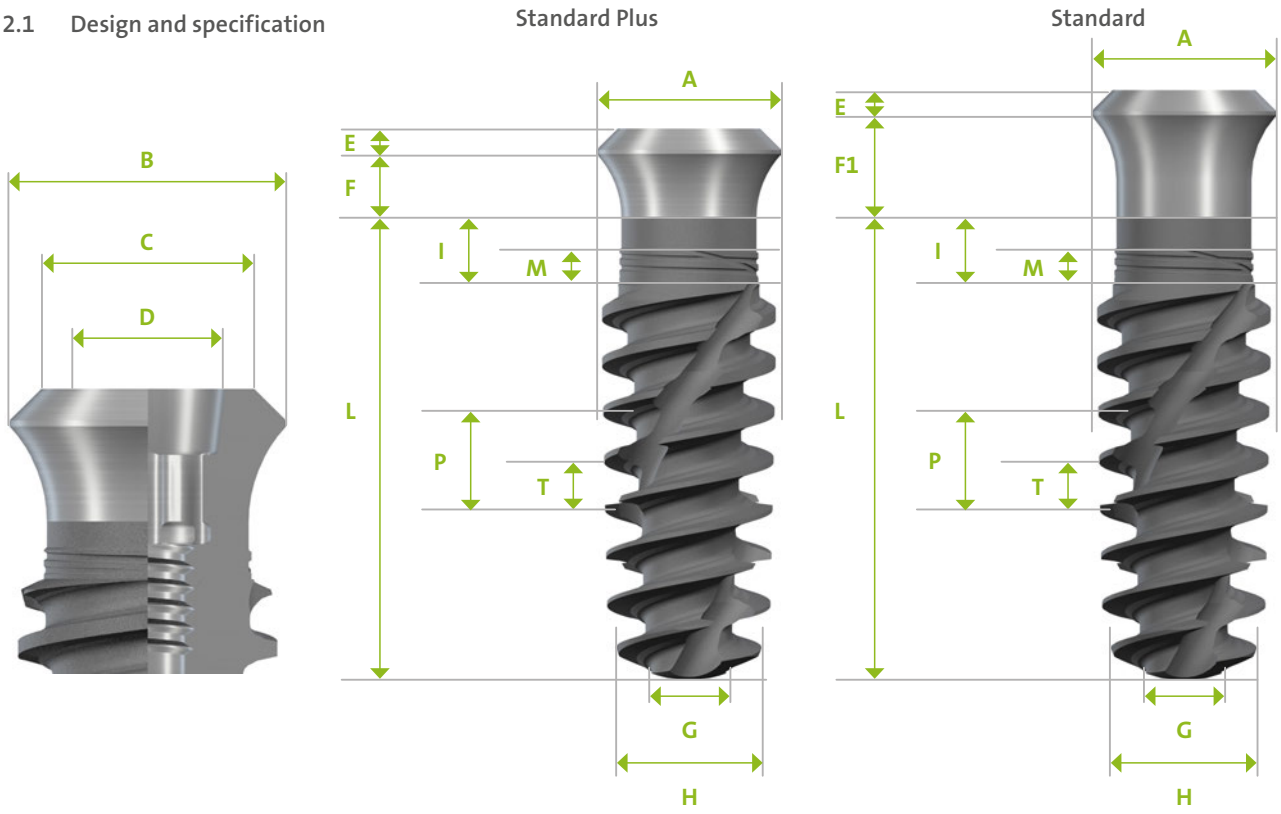
		Straumann® TLX S Implant Ø 3.75 mm		Straumann® TLX S Implant Ø 4.5 mm		Straumann® TLX S Implant Ø 5.5 mm	Straumann® TLX S Implant Ø 6.5 mm
Shoulder Height		Standard - Implant shoulder 2.8mm					
Color code		(red)		(green)		(brown)	(black)
Prosthetic Base		NT	RT	NT	RT	WT	WT
Connection		TorcFit™					
Picture							
SLActive®							
Available lengths	6 mm	035.1006S	035.1106S	035.1406S	035.1506S	035.1706S	035.1806S
	8 mm	035.1008S	035.1108S	035.1408S	035.1508S	035.1708S	035.1808S
	10 mm	035.1010S	035.1110S	035.1410S	035.1510S	035.1710S	035.1810S
	12 mm	035.1012S	035.1112S	035.1412S	035.1512S	035.1712S	035.1812S
	14 mm	035.1014S	035.1114S	035.1414S	035.1514S	N/A	
	16 mm	035.1016S	035.1116S	035.1416S	035.1516S		
	18 mm	035.1018S	035.1118S	035.1418S	035.1518S		

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.

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

2. Implant

2.1 Design and specification



Straumann® TLX SP Implant
Ø 4.5 mm

Straumann® TLX S Implant
Ø 4.5 mm

	Straumann® TLX Implant Ø 3.75 mm NT	Straumann® TLX Implant Ø 3.75 mm RT	Straumann® TLX Implant Ø 4.5 mm NT	Straumann® TLX Implant Ø 4.5 mm RT	Straumann® TLX Implant Ø 5.5 mm WT	Straumann® TLX Implant Ø 6.5 mm WT
[A] Maximum outer diameter	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] 45° bevel height	0.5 mm					
[F] Smooth shoulder height* Standard Plus (SP)	1.8 mm					
[F1] Smooth shoulder height* Standard (S)	2.8 mm					
[G] Apical diameter, body	Ø 1.9 mm				Ø 2.0 mm	Ø 3.0 mm
[H] Apical diameter, threads	Ø 2.9 mm		Ø 3.6 mm		Ø 4.0 mm	Ø 5.2 mm
Number of apical cutting edges	2			4		
[L] Implant lengths: 6 mm, 8 mm						
[I] Threads to shoulder height	1.0 mm					
[M] Micro threads height	0.5 mm					
[P] Thread pitch**	1.7 mm		2.0 mm		2.1 mm	2.5 mm
[T] Thread spacing	0.85 mm		1.0 mm			
[L] Implant lengths: 10 mm, 12 mm, 14 mm						
[I] End of threads to shoulder distance	1.7 mm					
[M] Micro threads height	0.85 mm					
[P] Thread pitch**	2.2 mm		2.5 mm			2.8 mm
[T] Thread spacing	1.1 mm		1.25 mm			
[L] Implant lengths: 16 mm, 18 mm						
[I] Threads to shoulder height	2.0 mm				NA	
[M] Micro threads height	1.0 mm					
[P] Thread pitch**	2.6 mm		2.8 mm			
[T] Thread spacing	1.3 mm		1.4 mm			

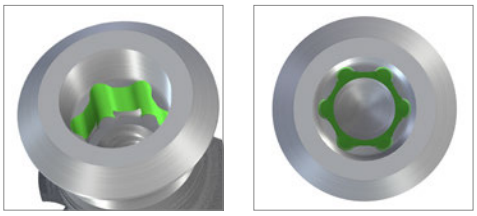
** This quote refers to height of the shoulder with a smooth non-SLActive surface*
*** Implant advances by this distance with every full rotation (360°)*

3. Connection

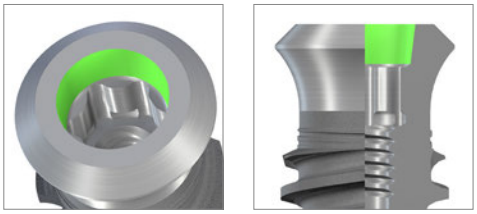
The Straumann® TLX Implant features the intuitive TorcFit™ connection. This connection supports self-guiding insertion, for clear-cut tactile feedback. Six positions enable a simple yet flexible alignment and outstanding protection against rotation.

All TLX 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**.

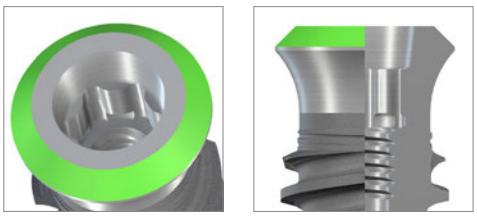
Improved Torx with six positions:
- Allows transmission of high torques
- Simple yet flexible implant and abutment alignment
- Clear-cut and guided component insertion via cylindrical guidance



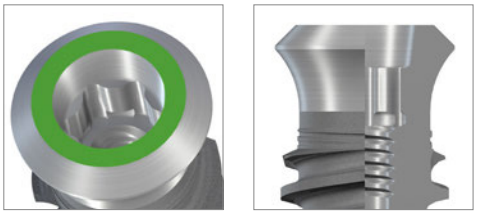
7° conical prosthetic connection:
- High mechanical stability



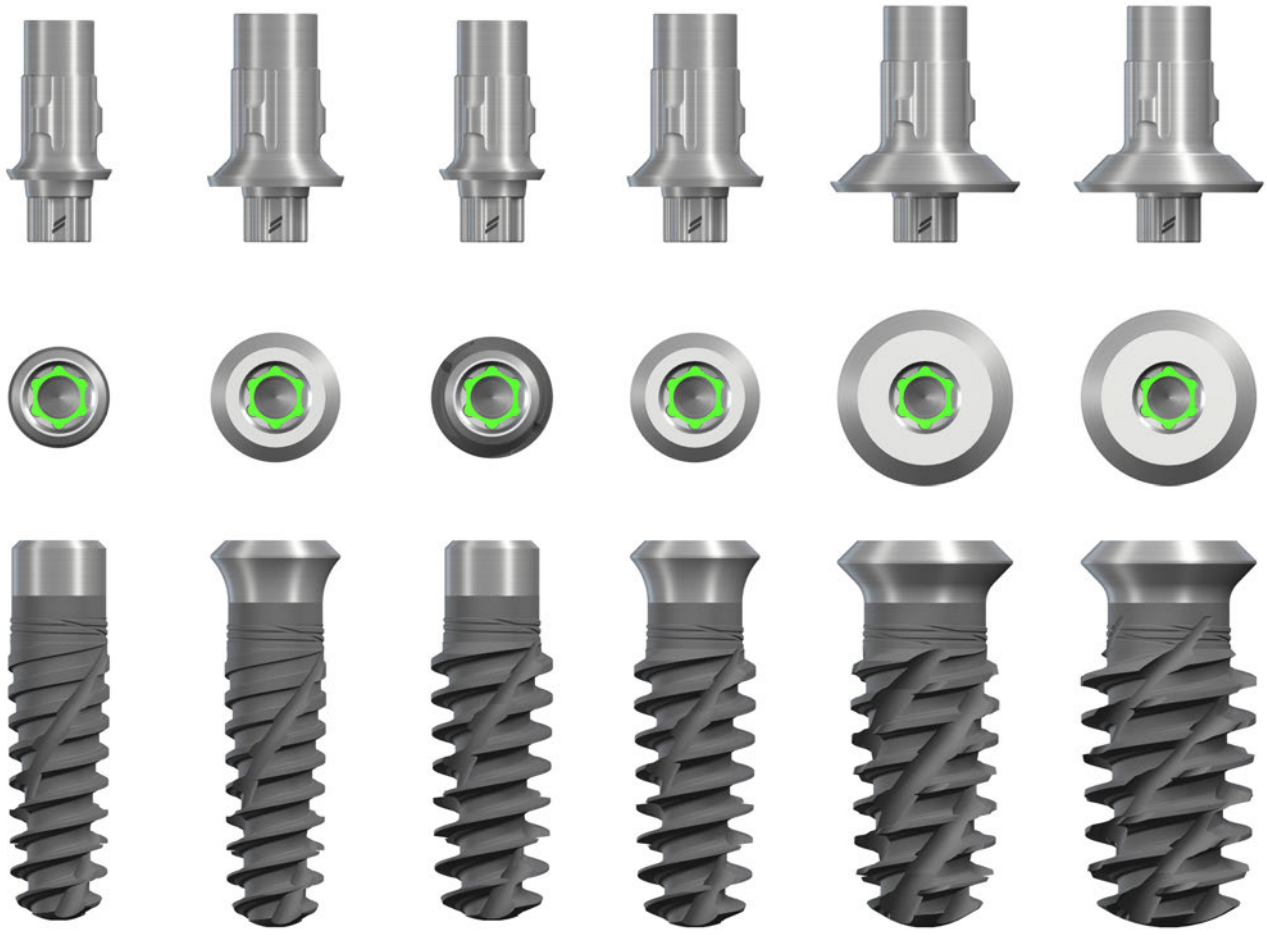
45° shoulder prosthetic connection:
- High mechanical stability
- Exact implant-abutment fit
- Extra wide emergence profiles (implants with diameter >5.0 mm)
- Divergence compensation for bridges



Flat Top portion:
- High accuracy for scanbody



Same inner geometry regardless of the diameter of the implant. Same implant driver for all implants. Precisely machined shoulder.



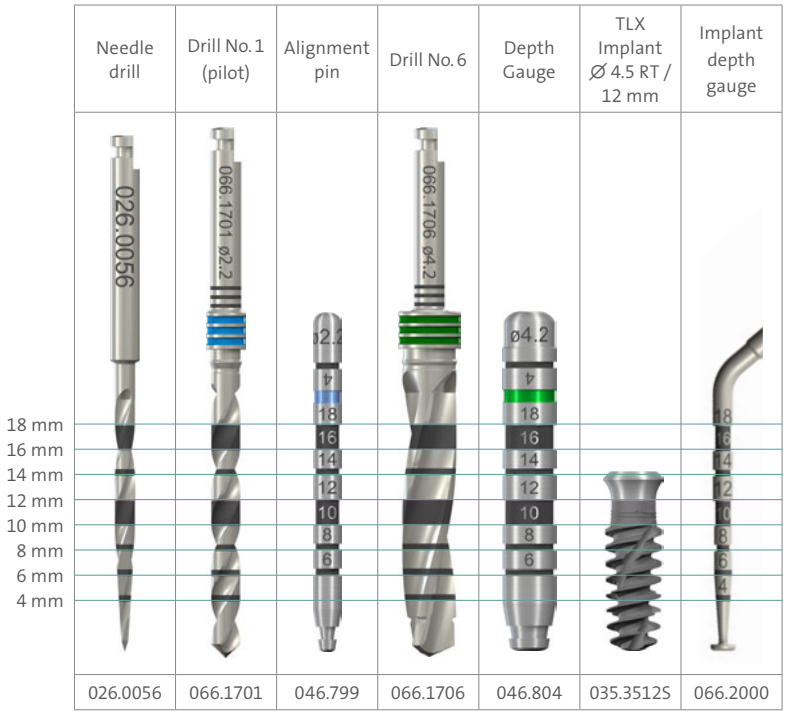
Ø 3.75 mm NT	Ø 3.75 mm RT	Ø 4.5 mm NT	Ø 4.5 mm RT	Ø 5.5 mm WT	Ø 6.5 mm WT

Pictures above refer to Straumann® TLX SP Implants.

4. Instruments

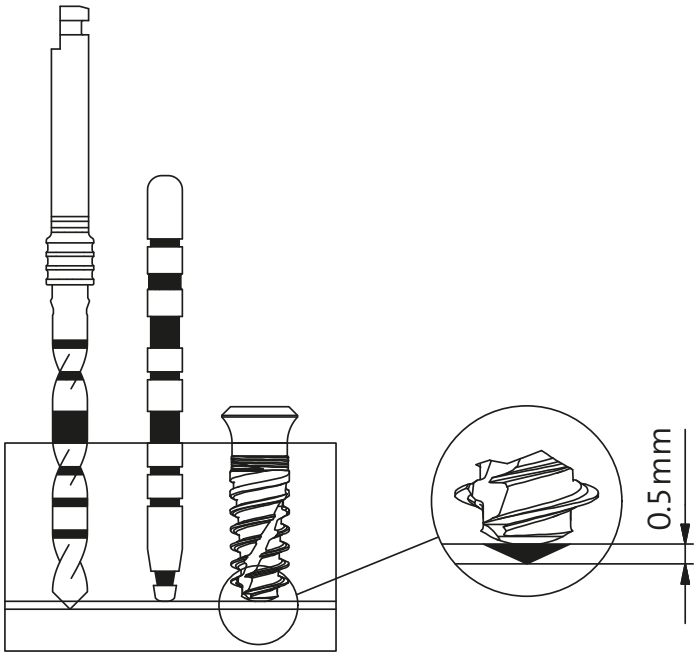
The Straumann® TLX Implant System is supplied with a specific set of instruments.

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.



Needle drill	Drill No. 1 (pilot)	Alignment pin	Drill No. 6	Depth Gauge	TLX Implant ∅ 4.5 RT / 12 mm	Implant depth gauge
026.0056	066.1701	046.799	066.1706	046.804	035.3512S	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™

All TLX VeloDrill™ in the Straumann® 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)).

	Needle drill	Drill No. 1 (pilot)	Drill No. 2	Drill No. 3	Drill No. 4	Drill No. 5	Drill No. 6	Drill No. 7	Drill No. 8	Drill No. 9
Color	–									
Picture (short)										
Diameter	Ø 1.6 mm	Ø 2.2 mm	Ø 2.8 mm	Ø 3.2 mm	Ø 3.5 mm	Ø 3.7 mm	Ø 4.2 mm	Ø 4.7 mm	Ø 5.2 mm	Ø 6.2 mm
Step diameter	NA	NA	Ø 2.5 mm	Ø 3.0 mm	Ø 3.3 mm	Ø 3.6 mm	Ø 3.9 mm	Ø 4.4 mm	Ø 4.9 mm	Ø 5.7 mm
Short	026.0054	066.1301	066.1302	066.1303	066.1304	066.1305	066.1306	066.1307	066.1308	066.1309
Long	026.0056	066.1701	066.1702	066.1703	066.1704	066.1705	066.1706	066.1707	066.1508	066.1509
Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel

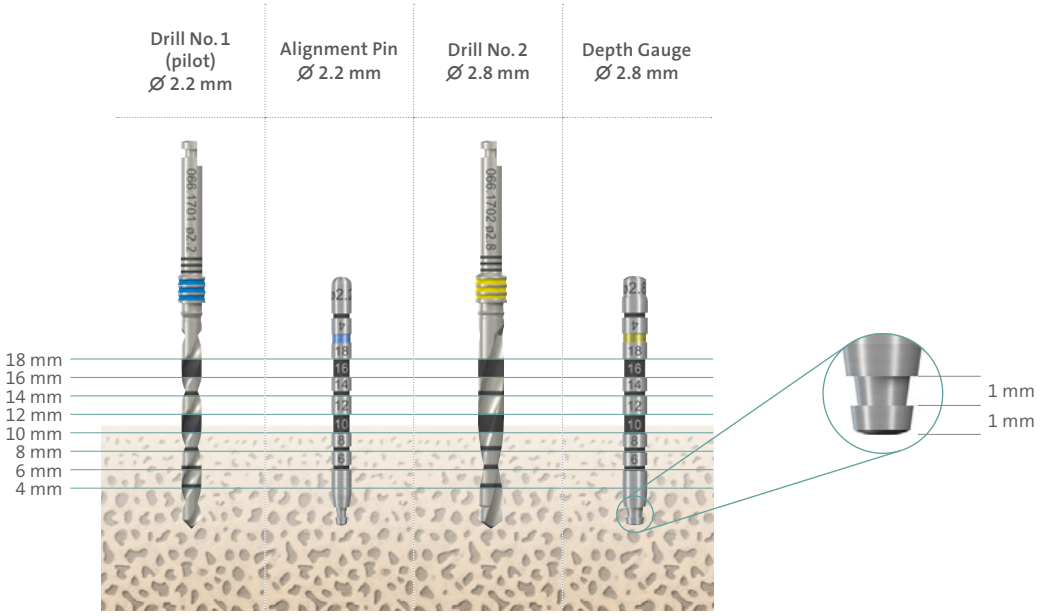
4.2 Drill extender

The stop ring 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® implant systems.

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



066.1701 (long)	046.799	066.1702 (long)	045.800

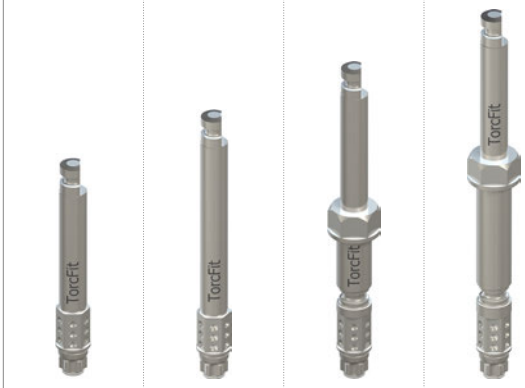
4.4 Implant depth gauge

Implant depth gauge for accurate depth measurement and tactile examination of the osteotomy.
Blue end: use to examine osteotomy made by drill No. 1 (Ø 2.2 mm)
Yellow end: use to examine osteotomy made with drill No. 2 (Ø 2.8 mm) and wider.
Made of titanium-alloy (TAN). Compatible with all Straumann® implant systems.

Implant depth gauge, 066.2000

4.5 Implant driver

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

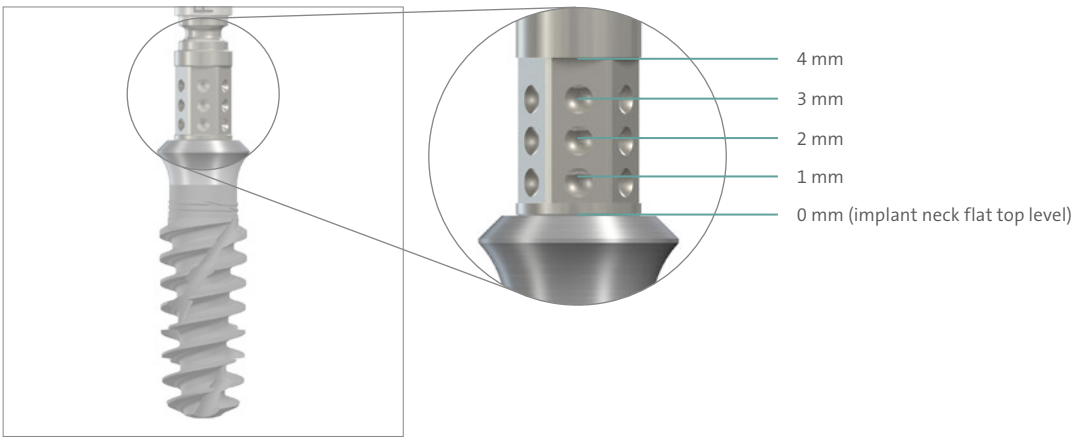
Implant Driver type								
Implant Driver for handpiece				Implant Driver for ratchet			Implant Driver for ratchet, screw-retained	
								
short	medium	long	extra long	short	medium	long	short	long
Length 21 mm	Length 26 mm	Length 31 mm	Length 36 mm	Length 21 mm	Length 26 mm	Length 31 mm	Length 21 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

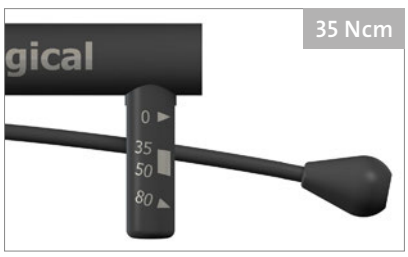
The ratchet is a two-part lever arm instrument with a rotary knob for changing the direction of force. It is supplied with a service instrument, which is used to tighten and loosen the head screw. The Holding Key (046.064) can be used to stabilize the ratchet.

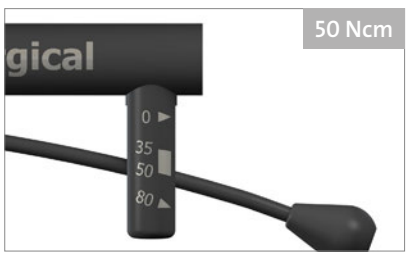
Two different Torque Control Devices are available for defined torque transmission or for torque measurements, with markings of 15Ncm / 35Ncm and 35-50Ncm / 80Ncm respectively. Choose the appropriate device depending on the intended use.

	Ratchet and Torque Control Devices			
	Holding Key	Ratchet	Torque Control Device for Ratchet	TLX Torque Control Device for Ratchet, Surgical
				
Intended use	Auxilliary	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:

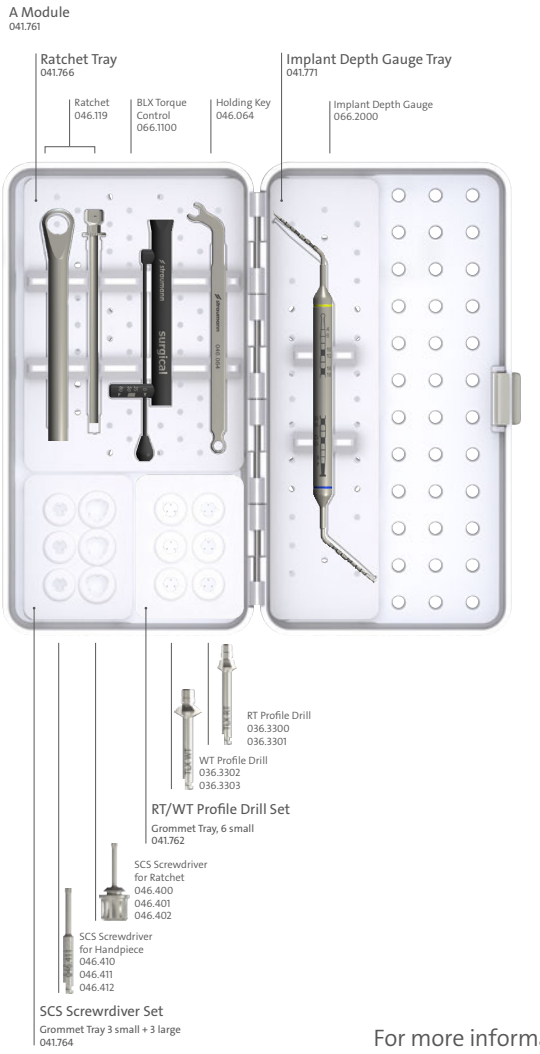


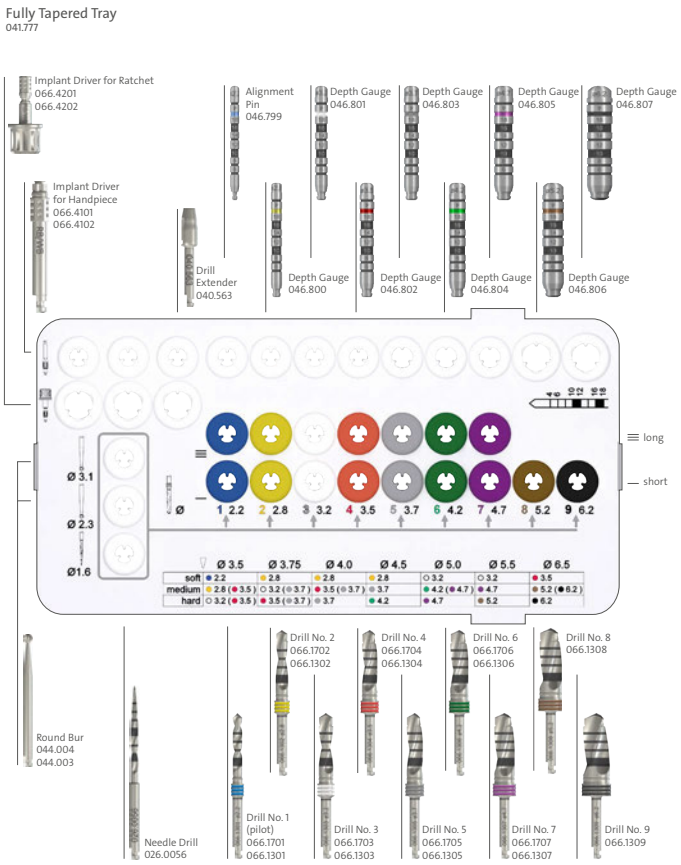


4.7 Straumann® Modular Cassette

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).

4.8 Setup for TLX freehand surgery





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

5. Surgical procedure

The workflow for the surgical procedure for the Straumann® TLX 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.

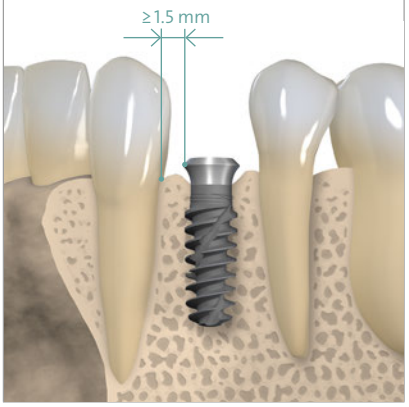
To determine the topographical situation, axial orientation and the appropriate implants, making a wax-up / set up using the previously prepared study cast is recommended. Subsequently, the type of superstructure can be defined. The wax-up / set-up can later be used as the basis for a custom-made X-ray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

The 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:

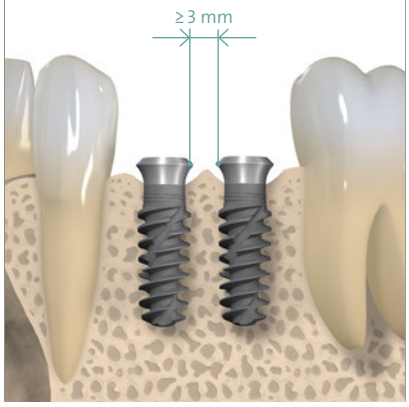
Rule 1



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.

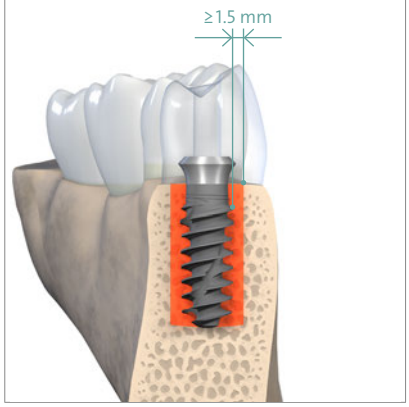
Rule 2



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



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 such that screw-retained restorations are possible.

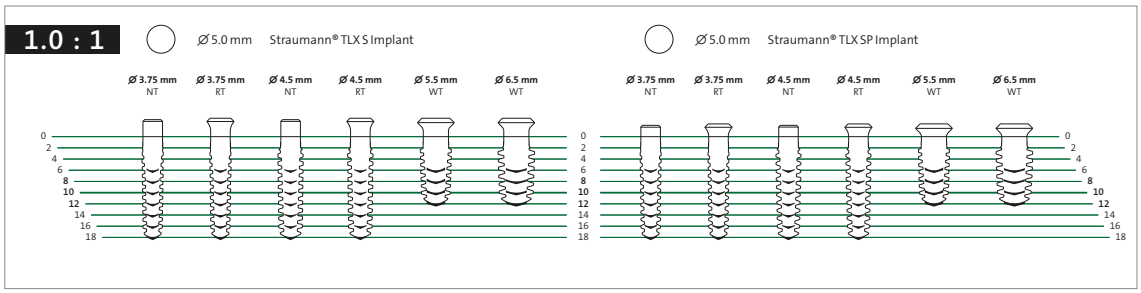
Caution: An augmentation procedure is indicated if the orofacial bone wall is less than 1.5 mm or a layer of bone is missing on one or more sides. This technique should be employed only by dentists with adequate experience in the use of augmentation procedures.

5.1.1 X-ray reference foil

The vertical bone availability determines the maximum allowable length of the implant that can be placed. For easier determination of the vertical bone availability, we recommend the use of an X-ray reference foil with X-ray Reference Sphere (Art. No. 049.076V4).

The TLX X-ray reference foils (Art No. 036.3400) 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). Determining each magnification factor or scale is facilitated 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 *Basic Information on the Surgical Procedures – Straumann® Dental Implant System* (152.754/en).



Note: For Straumann® TLX Implants use only the X-ray reference foil specific to the TLX Implant (Art No. 036.3400).

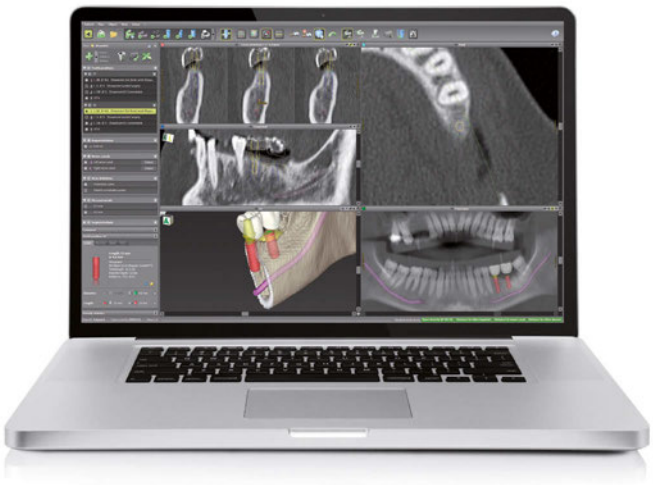
To calculate the effective bone availability, use the following formula:

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

* Taking into consideration all implant-related anatomic 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 TLX 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.

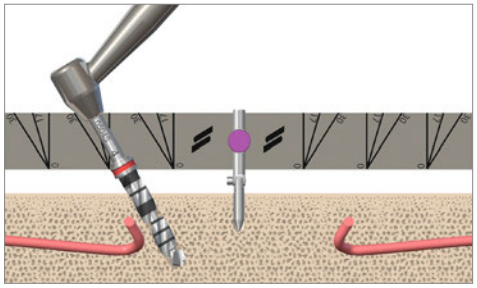
coDiagnostiX® software is designed for use by professionals with appropriate knowledge in implantology and surgical dentistry. For further information, please refer to the coDiagnostiX® Manual.

CARES® Synergy workflow
CARES® Synergy provides real-time communication between the implant planning software (coDiagnostiX) and the lab software (i.e. Straumann® CARES® Visual) 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 ∅ 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. For adjustment and disassembly use the TS Hexagonal Screwdriver (046.420).



Straumann® Pro Arch Guide (026.0016)

For further information about treatment of edentulous patients and angulated placement of TLX Implants, please refer to the *Straumann® Pro Arch, Basic Information* (490.015/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..*

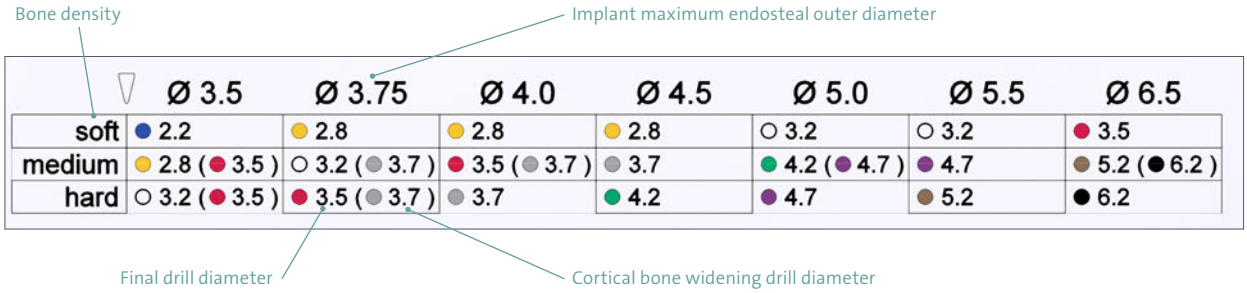
5.2 Implant bed preparation

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.

Numbers in brackets (): to a depth of 4 mm (for implant lengths 6 mm and 8 mm) and 6 mm (for implant lengths 10 mm and longer) only in order to widen the coronal part of the implant bed.

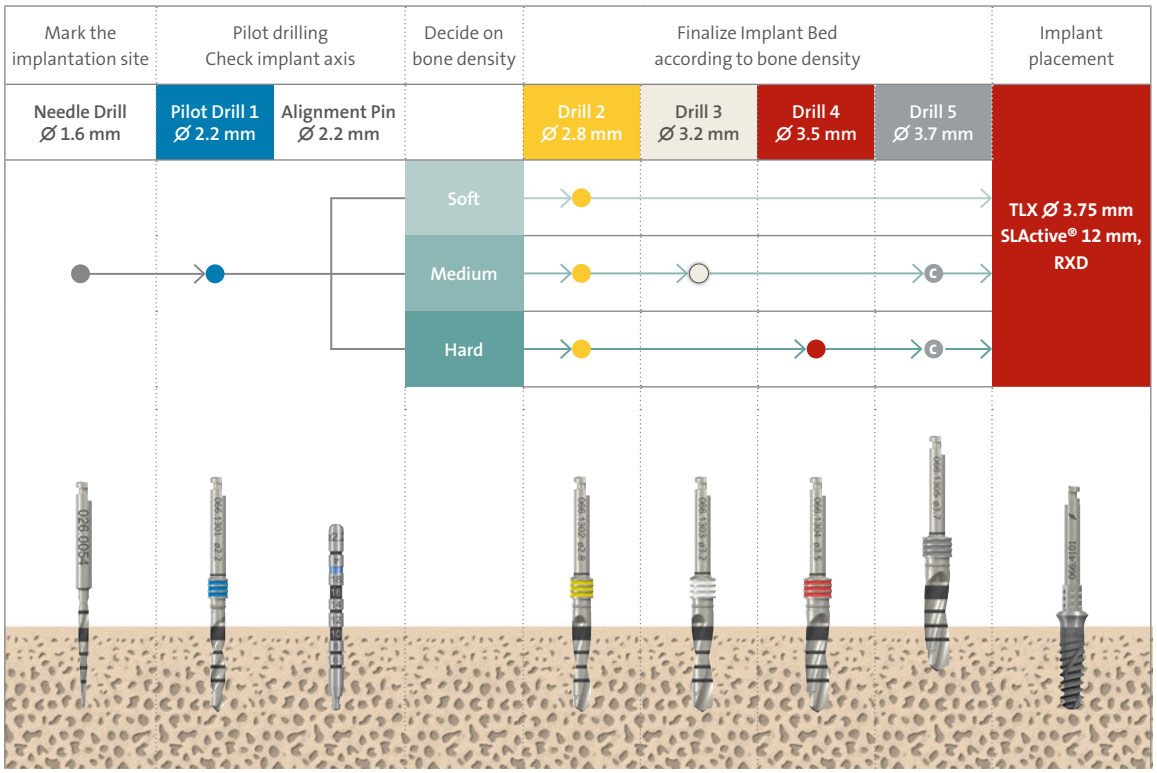
Implant diameters of ∅ 3.5, ∅ 4.0 and ∅ 5.0, printed on the cassette, are only available for BLX Implant System and not for TLX Implant System.



Note: Every implant bed has to be initiated with the pilot drill (∅ 2.2 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. Due to the self-cutting properties of the TLX Implant the implant bed can be underprepared in length by 2 mm with the final drills in soft bone. 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 recommend drill speeds, as indicated on the next page.

5.2.1 Workflow for TLX Ø 3.75 mm

Implant bed preparation, illustrated with a TLX Implant Ø 3.75 mm / 12 mm RT



800 rpm	800 rpm			800 rpm	800 rpm	800 rpm	800 rpm	15 rpm
026.0054	066.1301			066.1302	066.1303	066.1304	066.1305	

C Preparation for cortical bone only:
- do a depth of 4 mm for implants with a length of 6 mm and 8 mm
- do a depth of 6 mm for implants with a length of 10 mm to 18 mm

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 implant bed has a depth of 10.5 mm.

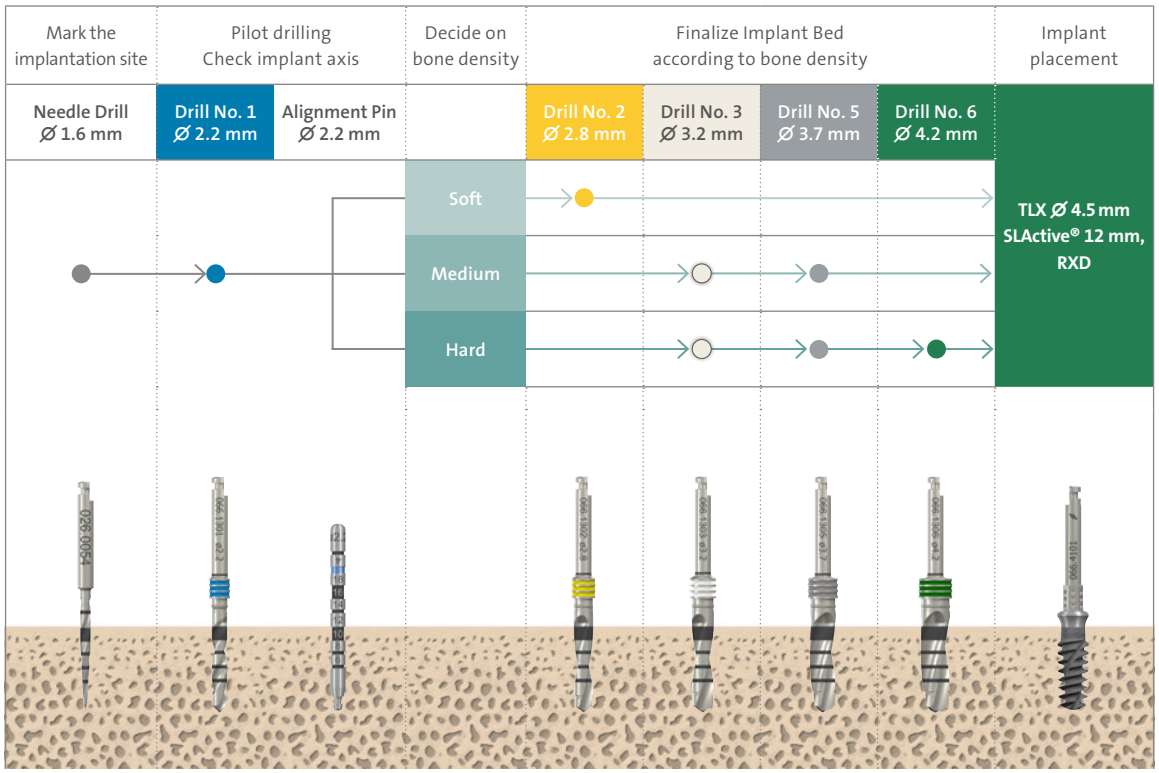
Cortical bone treatment: in the presence of a hard cortical bone layer, it is recommended to widen the implant bed in this area using drill number 5 (Ø 3.7 mm) for Ø 3.75 mm and Ø 4.5 mm implants and drill number 7 (Ø 4.7 mm) for Ø 5.5 mm and Ø 6.5 mm implants, independent of the overall bone-quality.

Subcrestal implant placement: consider final implant position for drill depth, never undersize in length with the pilot drill #1.

Immediate placement: In extraction sites where the implant only engages the apical part, drill # 2 (Ø 2.8 mm) is recommended as the final drill.

5.2.2 Workflow for TLX Ø 4.5 mm

Implant bed preparation, illustrated with a TLX Implant Ø 4.5 mm / 12 mm RT



800 rpm	800 rpm			800 rpm	800 rpm	800 rpm	800 rpm	15 rpm
026.0054	066.1301			066.1302	066.1303	066.1305	066.1306	

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 implant bed has a depth of 10.5 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 drill number 5 (Ø 3.7mm) for Ø 3.75mm and Ø 4.5mm implants and drill number 7 (Ø 4.7mm) for Ø 5.5mm and Ø 6.5mm implants, independent of the overall bone-quality.

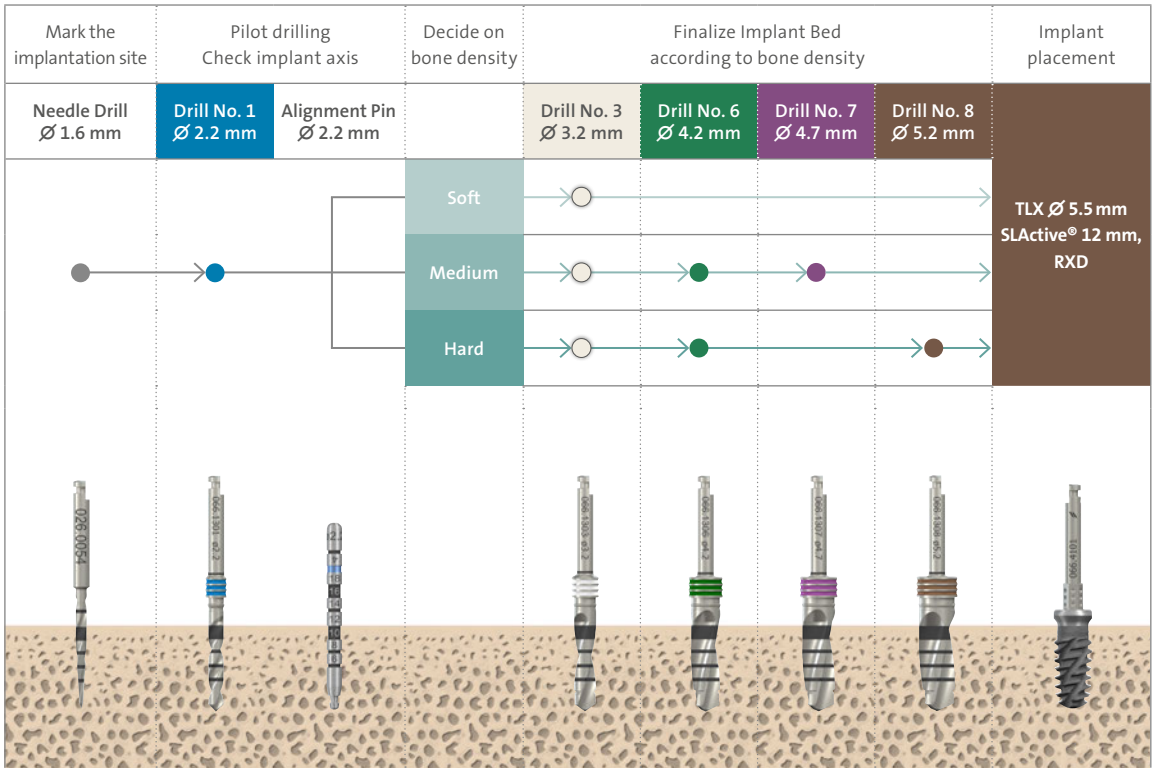
Considerations for hard bone in healed sites: application of the hard bone drill protocol for a TLX implant diameter with wider threads (Ø 4.5 mm, Ø 5.5mm and Ø 6.5 mm) in healed sites results in a small gap between the implant shoulder and the surrounding crestal bone. In such situations it is recommended to consider minor bone grafting around the implant shoulder. This may be accomplished by scraping a small amount of bone with a surgical chisel from the area surrounding the osteotomy (already exposed) and applying it between the implant and the osteotomy.

Subcrestal implant placement: consider final implant position for drill depth, never undersize in length with the pilot drill #1.

Immediate placement: In extraction sites where the implant only engages the apical part, drill # 2 (Ø 2.8 mm) is recommended as the final drill.

5.2.3 Workflow for TLX Ø 5.5 mm

Implant bed preparation, illustrated with a TLX Implant Ø 5.5 mm / 12 mm WT



800 rpm	800 rpm			800 rpm	800 rpm	800 rpm	800 rpm	15 rpm
026.0054	066.1301			066.1303	066.1306	066.1307	066.1308	

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 implant bed has a depth of 10.5 mm.

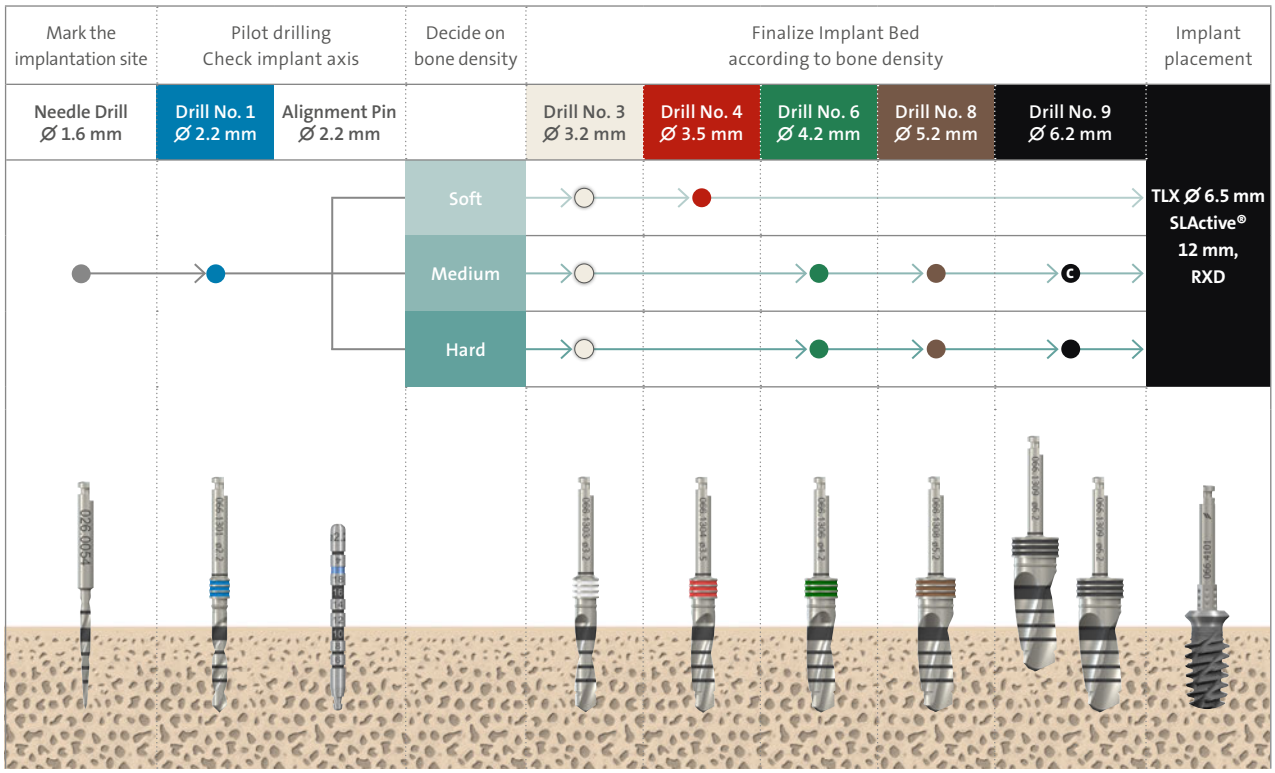
Cortical bone treatment: in the presence of a hard cortical bone layer, it is recommended to widen the implant bed in this area using drill number 5 (Ø 3.7mm) for Ø 3.75mm and Ø 4.5mm implants and drill number 7 (Ø 4.7mm) for Ø 5.5mm and Ø 6.5mm implants, independent of the overall bone-quality.

Considerations for hard bone in healed sites: application of the hard bone drill protocol for a TLX implant diameter with wider threads (Ø 4.5mm, Ø 5.5mm and Ø 6.5 mm) in healed sites results in a small gap between the implant shoulder and the surrounding crestal bone. In such situations it is recommended to consider minor bone grafting around the implant shoulder. This may be accomplished by scraping a small amount of bone with a surgical chisel from the area surrounding the osteotomy (already exposed) and applying it between the implant and the osteotomy.

Subcrestal implant placement: consider final implant position for drill depth, never undersize in length with the pilot drill #1 and #3.

5.2.4 Workflow for TLX Ø 6.5 mm

Implant bed preparation, illustrated with a TLX Implant Ø 6.5 mm / 12 mm WT



800 rpm	800 rpm			800 rpm	800 rpm	800 rpm	800 rpm	800 rpm	15 rpm
026.0054	066.1301			066.1303	066.1304	066.1306	066.1308	066.1309	

C Preparation for cortical bone only:
- do a depth of 4 mm for implants with a length of 6 mm and 8 mm
- do a depth of 6 mm for implants with a length of 10 mm to 18 mm

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 implant bed has a depth of 10.5 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 drill number 5 (Ø 3.7 mm) for Ø 3.75 mm and Ø 4.5 mm implants and drill number 7 (Ø 4.7 mm) for Ø 5.5 mm and Ø 6.5 mm implants, independent of the overall bone-quality.

Considerations for hard bone in healed sites: application of the hard bone drill protocol for a TLX implant diameter with wider threads (Ø 4.5 mm, Ø 5.5 mm and Ø 6.5 mm) in healed sites results in a small gap between the implant shoulder and the surrounding crestal bone. In such situations it is recommended to consider minor bone grafting around the implant shoulder. This may be accomplished by scraping a small amount of bone with a surgical chisel from the area surrounding the osteotomy (already exposed) and applying it between the implant and the osteotomy.

Subcrestal implant placement: consider final implant position for drill depth, never undersize in length with the pilot drill #1 and #3

5.2.5 Profile drilling

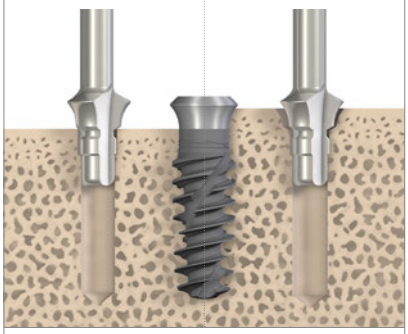
The recommended procedure for Straumann® TLX implants foresees the insertion of the implant with the SLActive® surface margin aligned with the bone level (see left side of the picture below). This procedure does not require profile drilling with specific instruments. This is independent of the bone class.

Should the clinician, for any reason related to his own clinical judgement, deem necessary to insert the implant deeper, (see right side of the picture below), it is recommended to profile drill with the dedicated instruments: TLX, RT, Prof. Drill, S, for imp ∅ 3.75/∅ 4.8, SST Ref. 036.3300 and TLX, WT, Prof. Drill, S, for imp ∅ 5.5/∅ 6.5,SST Ref. 036.3302.

The profile drills for TLX implants are clearly marked TLX. The text field indicated on the label, following the TLX mark, corresponds to the implant shoulder size (RT, WT).

Straumann® TLX Profile Drill

Insertion depth on SLActive® surface margin level	Insertion depth on implant shoulder



Insert the Straumann® TLX Profile Drill according to the planned insertion depth of the implant.

400 rpm max.

Note:
Due to the unflared neck portion, profile drill is not needed for the Straumann® TLX implants with neck size NT.

Caution:
The profile drills are suitable only for the corresponding implant type.

5.3 Implant pick up

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

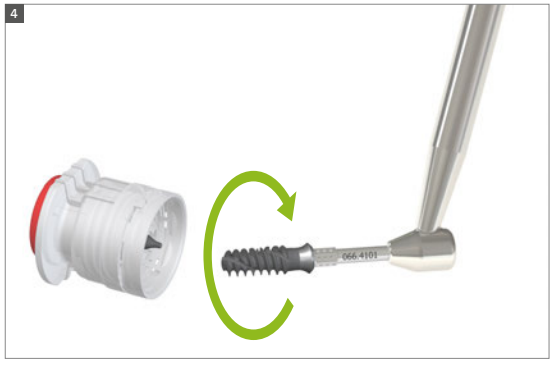
Step 1 – Open box and remove seal of blister to get access to the implant vial.

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 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 driver has been successfully used before. Replace the driver with a new one if insufficient attachment occurs.



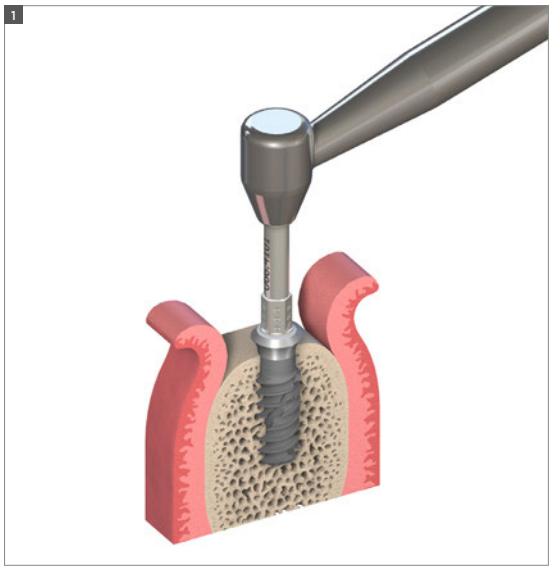
Step 4 – A slight clockwise turn is needed to remove the implant from its holder.

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

5.4 Implant placement

A Straumann® TLX 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.

1



Step 1 – Place the implant

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

2

Step 2 – Final position

Use the Ratchet to move the implant to its final position by turning it clockwise. If strong resistance is occurring before the implant reached its final position, rotate the implant counterclockwise a few turns and continue to insert. Repeat this step a few time if needed.

If resistance is still too strong 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.

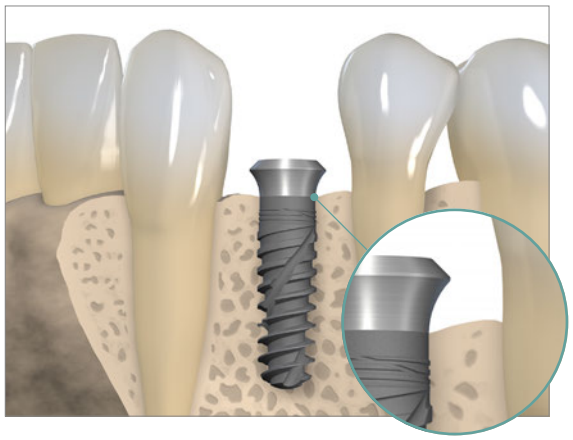
Note: For immediate function, a final torque of at least 35Ncm should be achieved. Excessive insertion torque must be avoided because this can lead to resorption of the bone.

For ISQ measurements: The Osstell Smartpeg type 38 (100455) is compatible with the TLX Implant System.

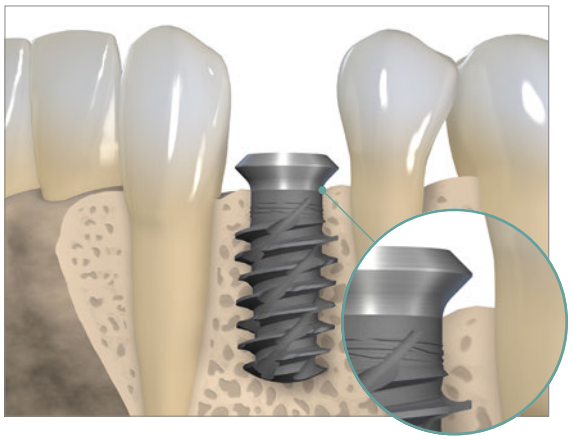
Final implantposition NT/RT/WT implants

Coronoapical implant position. The TLX 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 is possible. For subcrestal placement, the use of profile drills is required, see paragraph 5.2.5.

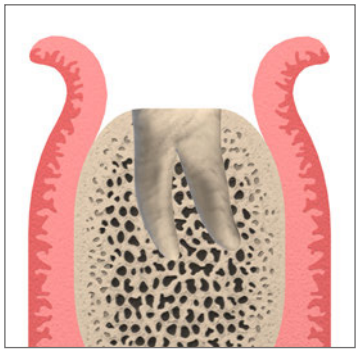


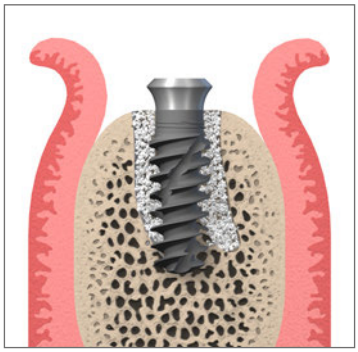
Regular TorcFit™ (RT) Implants with a ∅ 4.8 mm shoulder



Wide TorcFit™ (WT) Implants with a ∅ 6.5 mm shoulder

5.5 Gap management





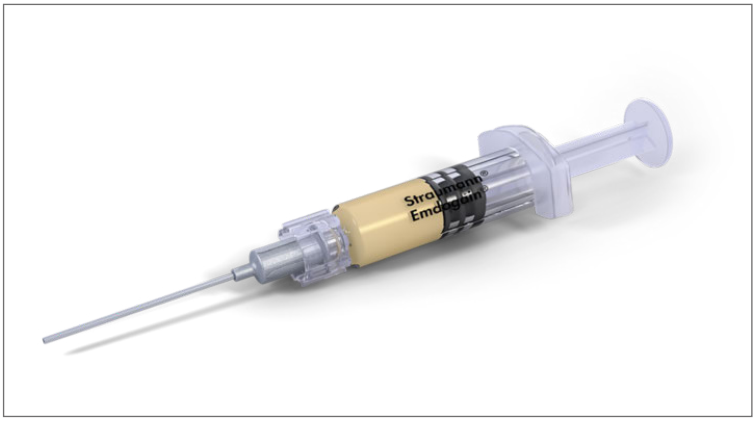
As no implant will match the individual anatomical situation after tooth extraction exactly, immediate treatment procedures may require additional bone grafting ("gap management") and soft tissue / wound healing management.
Different grafting materials, barrier membranes and healing agents are being 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
Allograft	botiss maxgraft®	Selected countries in Europe	Fast graft to bone turnover supporting early and long-term implant stability Full remodeling potential Bone vitality
Xenograft	botiss cerabone®	Global (not US, CD)	Long-term graft presence supporting volume preservation
Synthetic alternative	Straumann® BoneCeramic™	Global	Prolonged graft to bone turnover Volume preservation

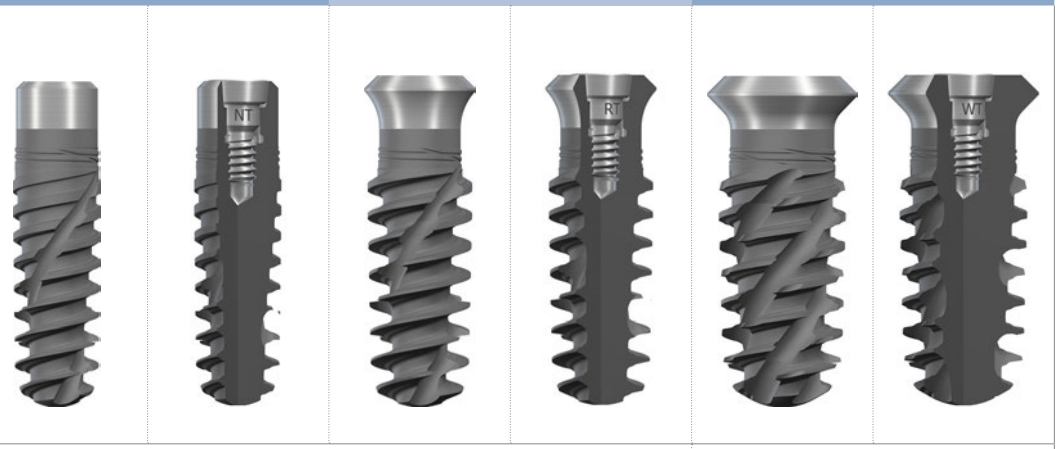
Barrier membranes prohibit the penetration of cells, primarily epithelial, through its structure and thus allow the slow growing bone tissue to re-occupy the grafted space.

Barrier Membranes	Product	Country availability	Reason why
Porcine collagen membrane	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	
Bovine collagen membrane	Straumann® Membrane Plus	North America	Long barrier function Fully resobable
Synthetic dPTFE membrane	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 treasured influence on scar tissue, Straumann® Emdogain can make a real difference. A thin layer of Emdogain on top of the membrane and after socket closure is our recommendation.



5.6 Primary implant closure

	TLX Implant Closure Caps, sterile		
	NT Closure Cap	RT Closure Cap	WT Closure Cap
			
Compatibility	TLX Implant ∅ 3.75 TLX Implant ∅ 4.5		TLX Implant ∅ 5.5 TLX Implant ∅ 6.5
Recommended tightening torque	Hand-tight		
Article Number	0 mm: 036.3200S		
	1.5 mm: 036.0201S	1.5 mm: 036.1201S	–
Material	Titanium		

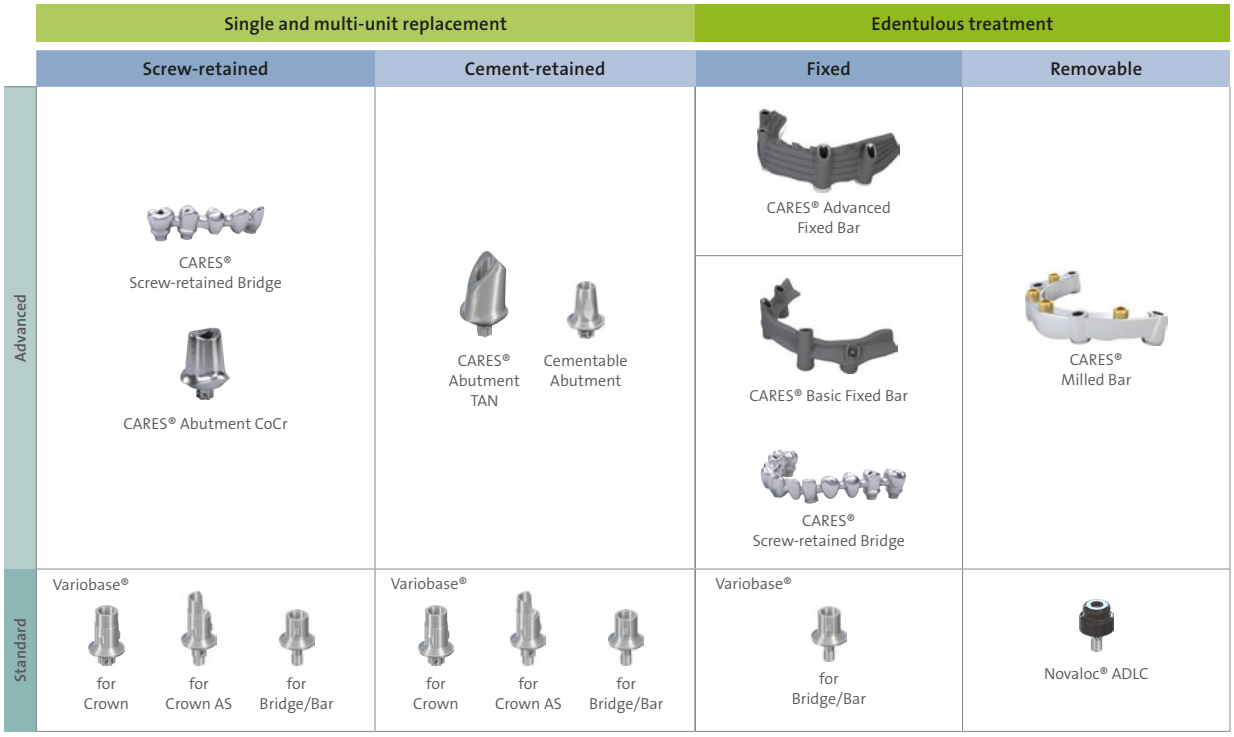
	TLX Implant Healing Caps, sterile		
	NT Healing cap	RT Healing cap	WT Healing cap
Compatibility	TLX Implant ∅ 3.75 TLX Implant ∅ 4.5		TLX Implant ∅ 5.5 TLX Implant ∅ 6.5
Recommended tightening torque	Hand-tight		
Article Number	3 mm: 036.0203S 4.5 mm: 036.0204S	2 mm: 036.1202S 3 mm: 036.1203S 4.5 mm: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

Note: Since the TLX closure caps and healing caps cover the whole implant shoulder, gingiva, bone particles or bone graft particle can easily be trapped between closure cap or healing cap and implant. It's 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.

6. Prosthetic workflow overview

6.1 Abutment overview

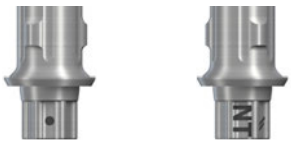
	Straumann® Cementable Abutment	Straumann® Variobase® for Crown	Variobase® for Bridge/Bar Cylindrical	Variobase® for Crown AS	Straumann® CARES® Abutment TAN	Straumann® CARES® Abutment CoCr S	Straumann® CARES® Bridge/Bar	Straumann® Novaloc ADLC
								
Single crown								
Screw-retained		•		•		•		
Cement-retained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

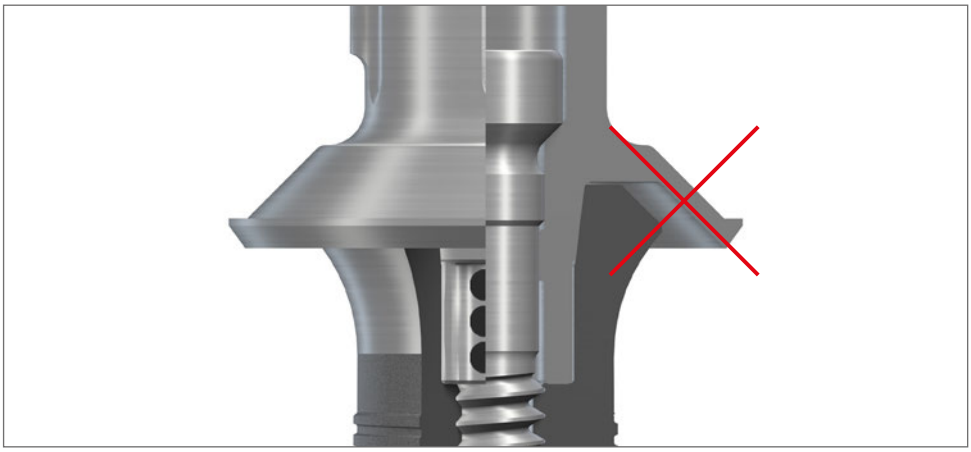


6.2 Laser Marking

The Straumann® TLX Implant System has a simple and consistent laser marking 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 TLX Implants with the NT shoulder.
- Components laser-marked RT (Regular, TorcFit™) and with two dots can be used on all TLX implants with the RT shoulder.
- Components laser-marked WT (Wide, TorcFit™) and with three dots can be used on all TLX implants with the WT shoulder.

Prosthetic platform	Implant Diameters	Implant platform
One dot 	Ø 3.75 mm Ø 4.5 mm	NT 
Two dots 	Ø 3.75 mm Ø 4.5 mm	RT 
Three dots 	Ø 5.5 mm Ø 6.5 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!

6.3 Prosthetic components overview

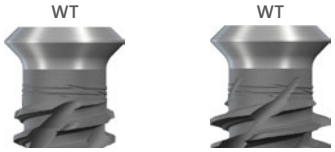
Ø 3.75 mm Ø 4.5 mm

	Cement-retained	Screw-retained	Fixed	Removable
Impression taking Implant Analogs	 036.0000 036.0001 036.0002 036.3220 036.0100 036.1102			
Temporary Abutment Crown	 037.0000		–	
Temporary Abutment Bridge	 037.0001			
Cementable Abutment	 037.0100			
Variobase® Abutment	 037.0201  037.0203  037.0204			
CARES® Abutment				
CARES® Bridge/Bar	–		 CARES® Screw-retained Bridge  CARES® Advanced Fixed Bar  CARES® Basic Fixed Bar	 CARES® Milled Bar
Novaloc® ADLC				

Ø 3.75 mm

Ø 4.5 mm

Impression taking Implant Analogs	 036.1000	 036.1001	 036.1002	 036.3220	 036.0102	 036.2100
	Cement-retained		**Screw-retained**		**Fixed**	**Removable**
Temporary Abutment Crown	 037.1000				–	
Temporary Abutment Bridge	 037.1001					
Cementable Abutment	 037.1100					
Variobase® Abutment	 037.1201	 037.1203	 037.1204			
CARES® Abutment						
CARES® Bridge/Bar	–				 CARES® Screw-retained Bridge  CARES® Advanced Fixed Bar  CARES® Basic Fixed Bar	 CARES® Milled Bar
Novaloc® ADLC						



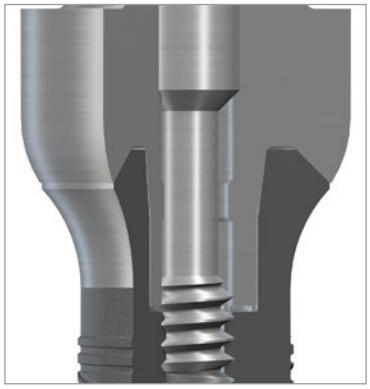
Ø 5.5 mm Ø 6.5 mm

Impression taking Implant Analogs	 036.2000	 036.2001	 036.2002	 036.3220	 036.1100	 036.2102
	Cement-retained		**Screw-retained**		**Fixed**	**Removable**
Temporary Abutment Crown	 037.2000				–	
Temporary Abutment Bridge	 037.2001					
Cementable Abutment	 037.2100					
Variobase® Abutment	 037.2201	 037.2203	 037.2204			
CARES® Abutment						
CARES® Bridge/Bar	–				 CARES® Screw-retained Bridge  CARES® Advanced Fixed Bar  CARES® Basic Fixed Bar	 CARES® Milled Bar
Novaloc® ADLC						

7. Important considerations

7.1 How to verify correct impression post seating

TLX impression post screws will only engage with the implant if correctly seated. Correctly seated impression posts sealing at the shoulder of the implant.



- On the TLX implants only TLX auxiliary and prosthetic components are meant to be inserted for an ideal seat.
- Do not use BLX auxiliary and prosthetic components on the TLX implants.
- Do not use TLX auxiliary and prosthetic components on the BLX implants.

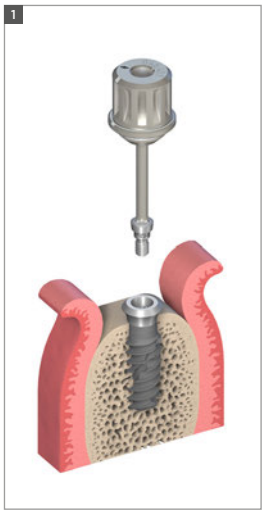
8. Soft tissue management

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.

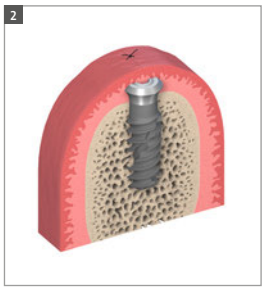
1



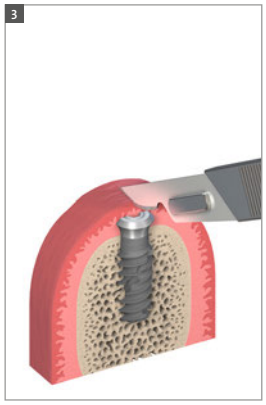
Step 1 – Inserting the Closure Cap or the short Healing Cap (1.5 mm) after first surgery
Ensure that the internal configuration of the implant is clean.
Pick up the Closure Cap or the short Healing Cap with the SCS Screwdriver. The friction fit will secure the Closure Cap or the short Healing Cap to the instrument during insertion and will allow safe handling.
Hand-tighten the Closure Cap or the short Healing Cap. The design will provide a tight connection between the two components.

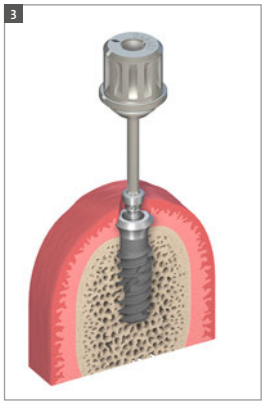
Note: All Closure Cap or a short Healing Cap are delivered sterile and ready to use.
Subsequent loosening is made easier by applying chlorhexidine gel or sterile Vaseline to the Closure Cap or a short Healing Cap before it is screwed into the implant.

2



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.



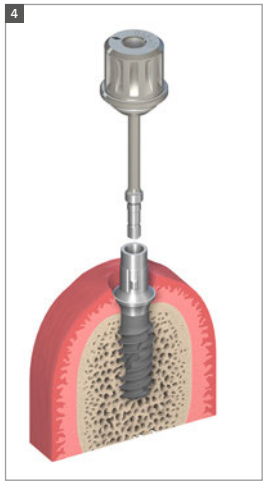


Step 3 – Reopening and removal: second surgery

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.

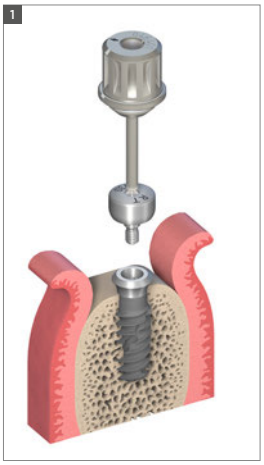
Insert a suitable secondary component.

Adapt the soft tissue and suture it back tightly with¬out tension around the secondary component.

8.2 Transmucosal healing

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

1



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.

2

Step 2 – Wound closure
Adapt the soft tissue and suture it back tightly around the Healing Cap.

9. Temporary restoration

9.1 Prefabricated healing cap made of Titanium grade 4

9.1.1 Intented use

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

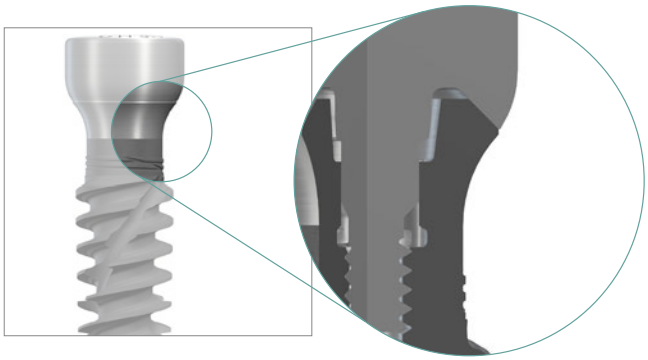
9.1.2 Characteristics

Simple

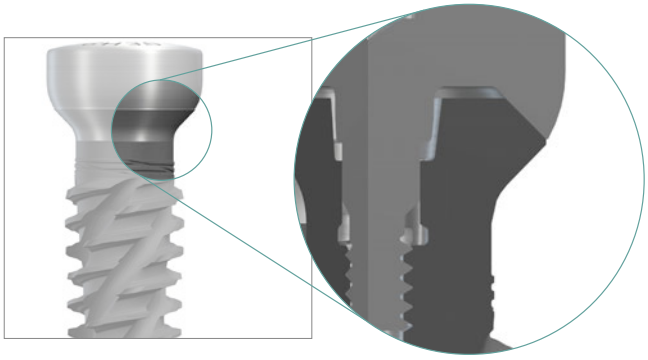
- One-piece design
- Laser-marked diameters and gingiva heights on the flat top
- Cylindrical section gives space to soft tissue

Reliable

- Tight sealing on the outer shoulder of implant
- Keep inner connection untouched

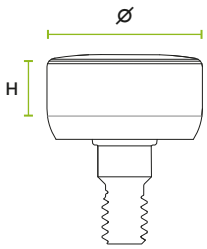


RT healing cap sealing mechanism



WT healing cap sealing mechanism

9.1.3 Overview of healing cap dimensions



H = height
Ø = diameter

		Diameter (Ø)		
		For final abutment NT	For final abutment RT	For final abutment WT
H	0 mm	Ø 2.7 mm		
	1.5 mm	Ø 4.0 mm	Ø 5.5 mm	–
	2 mm	–		Ø 7.2 mm
	3 mm	Ø 4.0 mm		
	4.5 mm			

9.2 Temporary abutment – titanium alloy (TAN)

9.2.1 Intended use

- Cement-retained temporary crowns

9.2.2 Characteristics

More solutions

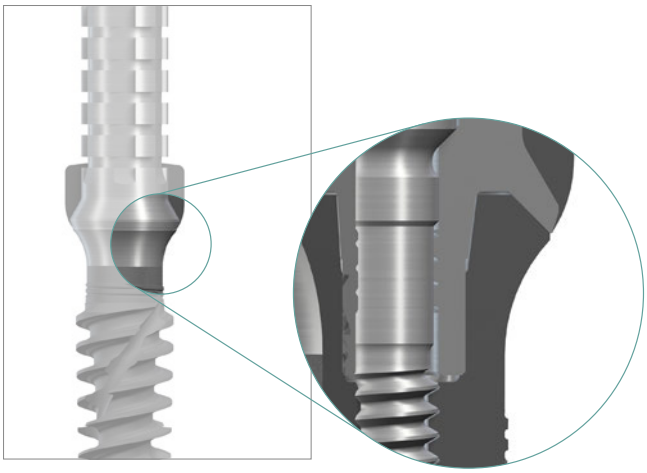
- Narrow diameter for narrow interdental spaces
- Crowns
- Anterior and posterior region
- Laser marked connection

Reliable

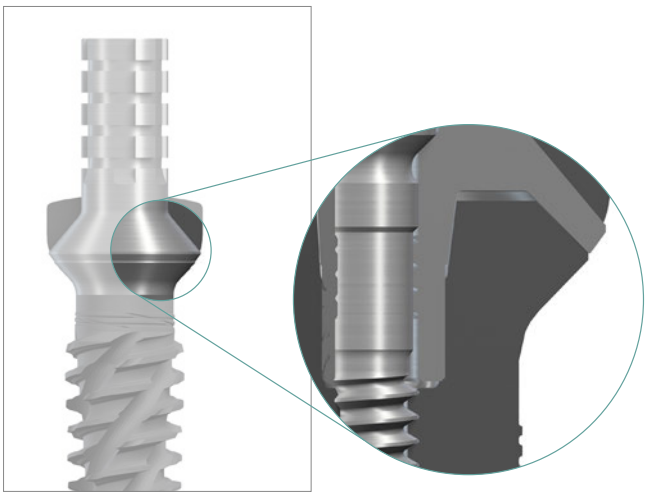
- High stability due to titanium alloy (TAN) material
- TLX connection for engaging and none-engaging abutments
- Tight sealing on the outer shoulder of implant
- Keep inner connection untouched

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

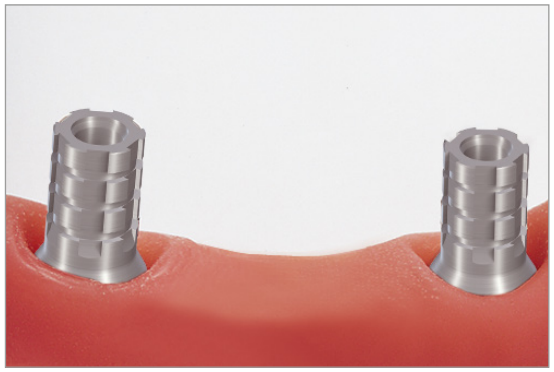


WT temporary abutment

9.2.3 Overview of temporary abutment

Implant shoulder Ø 3.5mm NT		Implant shoulder Ø 4.8mm RT		Implant shoulder Ø 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 Ø 3.5 mm NT, Ø 4.8 mm RT and implant shoulder Ø 6.5 mm WT is 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. For instance 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 silanised 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: the prefabricated TAN posts cannot be used for the casting technique.

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

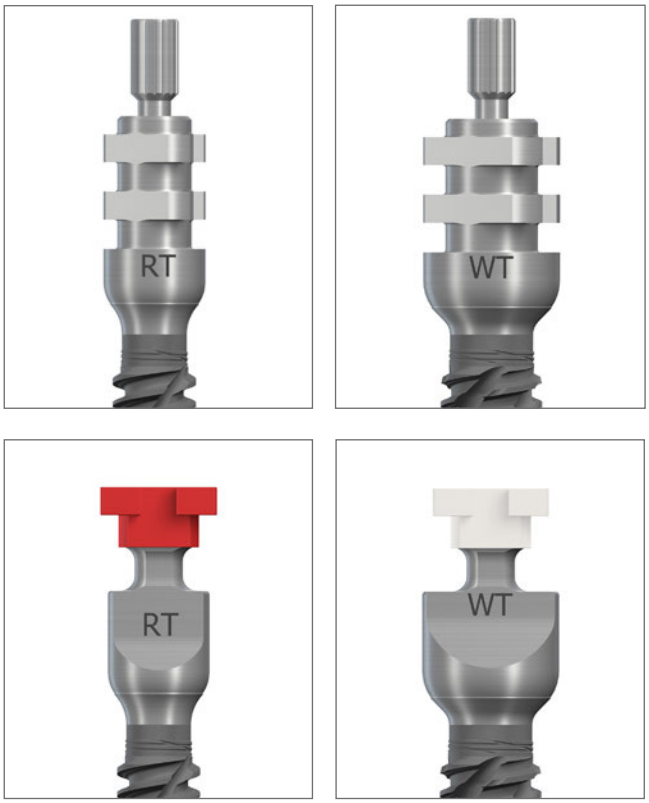
Important: the temporary abutments must not remain in situ for more than 6 months and the restoration must always be under-occluded in order to reduce lateral forces.

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 & 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)

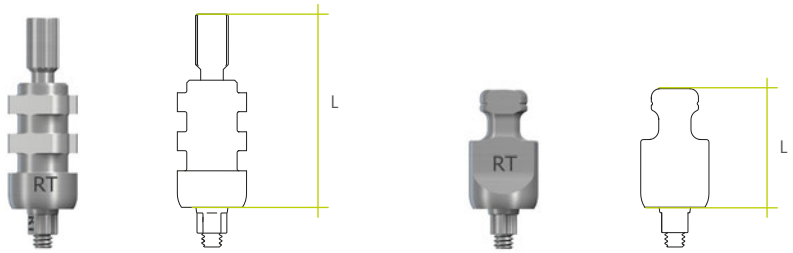
Reliable

- 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

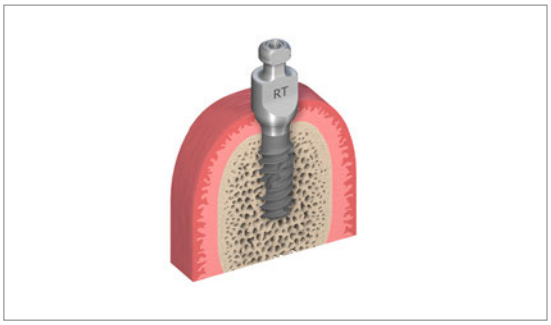
	L = Length	
	Short	Long
Impression post – Open tray	15 mm	21 mm
Impression post – Closed tray	9.5 mm	–

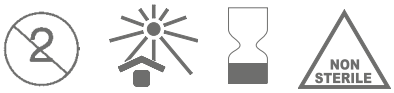
10.2 Closed-tray impression procedure “Screwed”

Implant shoulder ⌀ 3.5mm NT		Implant shoulder ⌀ 4.8mm RT		Implant shoulder ⌀ 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
					
036.0002	036.0100	036.1002	036.0102	036.2002	036.1100

The impression-taking procedures for implant shoulder ⌀ 3.5 mm NT, ⌀ 4.8 mm RT and implant shoulder ⌀ 6.5 mm WT is 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.





1a

1b

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)

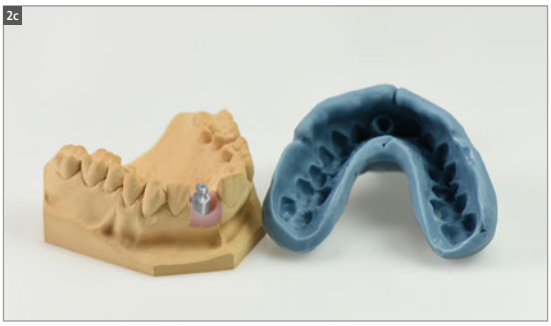
Note: Ensure that the lateral planar area of the post is facing mesial and distal.

- 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 apical direction until it clicks. The impression cap is now firmly seated on the impression post.

2a

2b

2c



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 together with the impression tray to the dental technician.

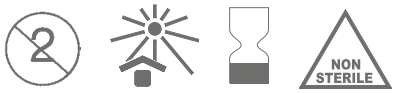
10.3 Open-tray impression procedure “Screwed”

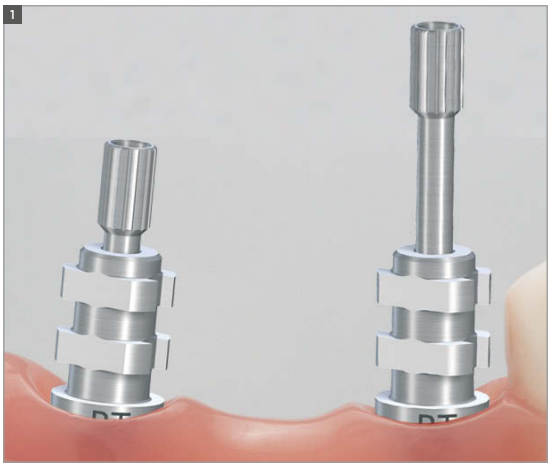
Implant shoulder Ø 3.5mm NT			Implant shoulder Ø 4.8mm RT			Implant shoulder Ø 6.5mm WT		
NT Impression Post Open Tray, short, incl. guide screw, H 15mm	NT Impression Post Open Tray, long, incl. guide screw, H 21mm	NT Implant Analog	RT Impression Post Open Tray, short, incl. guide screw, H 15mm	RT Impression Post Open Tray, long, incl. guide screw, H 21mm	RT Implant Analog	WT Impression Post Open Tray, short, incl. guide screw, H 15mm	WT Impression Post Open Tray, long, incl. guide screw, H 21mm	WT Implant Analog
								
036.0000	036.0001	036.0100	036.1000	036.1001	036.0102	036.2000	036.2001	036.1100

The open-tray impression-taking procedure for implant shoulder Ø 3.5 mm NT, Ø 4.8 mm RT and implant shoulder Ø 6.5 mm 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.





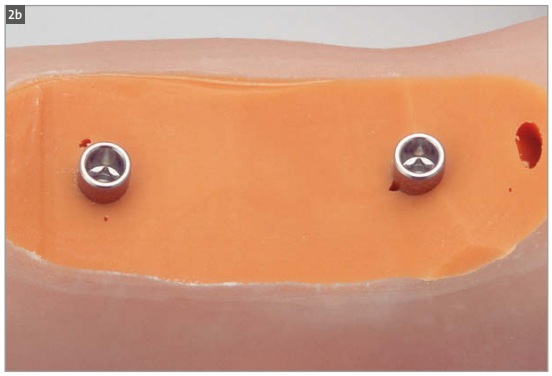
Step 1 – Positioning of the Impression Post

- 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)

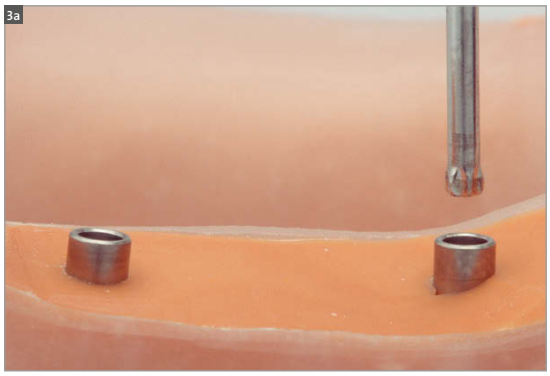
Step 2 – Impression taking

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.


2b

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


3a

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


3b

10.4 Digital impressions: Straumann® CARES® Mono Scanbody

10.4.1 Product description

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

	TLX					
	CARES® NT/RT/WT mono scan body for implant level scanning					
	 036.3220					
Compatibility	 036.0100	 036.0102	 036.1100	 036.1102	 036.2100	 036.2102
Number of components	2: scanbody, self-retaining screw					
Component/material	**Scanbody:** polymer (PEEK) **Screw:** titanium alloy (TAN)					

For detailed instructions how to use the CARES® Mono Scanbody, please refer to *Step-by-step instructions on the intraoral scanbodies, Basic Information* (702063/en).

The Medentika® LX 1400 scanbody is compatible with the TLX Implant System.

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

Variobase® for Crown
- Abutment heights:
  - NT: 5.5 mm
  - RT: 6 mm
  - WT: 6.5 mm
- Possibility to tailor the abutment height:
  - NT 5.5 mm down to 3.5 mm
  - RT 6 mm down to 4 mm
  - WT 6.5 mm down to 4.5 mm

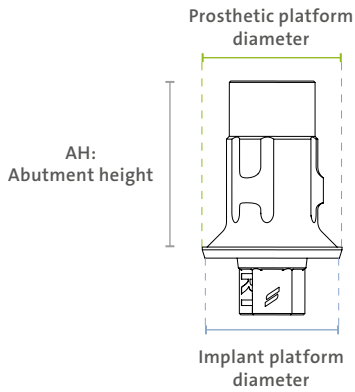
Single-unit restorations

Variobase® for Crown AS
- Screw-channel angulation of up to 25°

Abutment heights:
- NT: 6.5mm
- RT: 7.0mm
- WT: 7.5mm

Multi-unit and full-arch restoration

Variobase® for Bridge/Bar
- Cementation Aid for Variobase® for Bridge/Bar Cylindrical supporting an easy cementation procedure



NT	RT	WT
5.5 mm can be reduced until 3.5 mm	6.0 mm can be reduced until 4 mm	6.5 mm can be reduced until 4.5 mm

11.1.1 Variobase® component overview

Following Variobase® prosthetic components cover the the TLX Implant platforms:

	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
Screws 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
Screws 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
Screws 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).

11.2 Straumann® Novaloc® Abutments

The Straumann® Novaloc® Retentive System for hybrid dentures offers an innovative carbon-based abutment coating (ADLC[1]) with an excellent wear resistance, over-coming 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[2] matrices, the Novaloc® Retentive System provides a unique and long-lasting attachment performance.

Characteristics

- PEEK[2] matrix inserts offering excellent chemical and physical properties
- Matrix accommodates up to 40° prosthetic diver-gence between two abutments
- 6 retention strengths offer optimal adjustment of the denture retention
- Matrix Housing available in titanium, or color-neutral PEEK[2] for a more aesthetic outcome
- Carbon-based abutment coating (ADLC[1]) offering a smooth surface and ultimate hardness

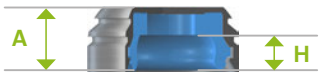
→ for excellent wear resistance

For detailed instructions on how to use TLX Novaloc® Abutments, please refer to *Straumann® Novaloc® Retentive System for Hybrid Dentures* (702067/en).

1 *Amorphous Diamond-Like Carbon*
2 *Polyether ether ketone*

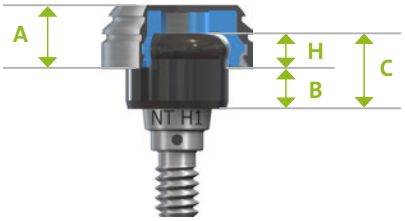
TLX Novaloc® Matrix Dimensions

	A	H
Novaloc® Matrix	2.3	1.4



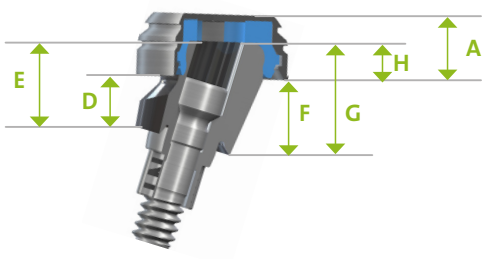
TLX Novaloc® Straight Abutment Dimensions

		B	C
TLX NT	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
TLX RT	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
TLX WT	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



TLX Novaloc® Angled Abutment Dimensions

		Short side		Long side	
		D	E	F	G
TLX NT	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
TLX RT	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
TLX WT	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 tightening 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 ∅ 3.5 mm NT, ∅ 4.8 mm RT and ∅ 6.5 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 TLX Analog using an SCS Screwdriver.
Important: The abutment must be properly positioned in the TorcFit™ before the screw is tightened.
The screw is tightened by hand using the SCS Screwdriver


1

B) Process of the copings

Step 1 – Where occlusal space is limited, the abutment can be short¬ened by a maximum of 2.0 mm.
Important: The abutment must not be ground laterally but only shortened occlusally to maintain proper stability.


2

Step 2 – To facilitate the working procedure, prefabricated burn-out plastic copings are available to the dental technician. The copings are made from completely burn-out plastic (POM).
The Plastic Copings are equipped with a snap-on mechanism, which makes them easier to fix onto the TLX 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.


3

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.


4

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).


6

Fitting the final restoration
The restoration is delivered to the dentist with the original abut¬-ments 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 in the patient's mouth. Use the SCS Screwdriver attached to the mounted basal srew for the transfer.
Important: Properly position the cleaned TLX cementable Abut-ment 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® CARES® Abutments

11.4.1 Intended use

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

11.4.2 Material

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

11.4.3 Characteristics

- Screw-retained one piece metal restorations
- Anatomic emergence profile
- A patient-specific emergence profile
- Straumann® Guarantee for Straumann® CARES® Abutments
- CoCr for direct veneering

For detailed instructions how to use CARES® abutments, please refer to *Straumann® CARES® Implant-borne prosthetics, Basic Information* (152.822/en).

11.5 Straumann® Screw-retained Bars and Bridges (SRBB)

11.5.1 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.

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

For detailed instructions how to use CARES® abutments, please refer to *Straumann® CARES® Implant-borne prosthetics, Basic Information* (152.822/en).

11.5.3 Straumann® CARES® SRBB working conditions

CARES® SRBB are available on following Straumann® platforms		Divergence compensation between any two platforms		Screws for Straumann® CARES® SRBB
		Ti	coron®	
Straumann® TLX Implants	Narrow TorcFit™ (NT)	40°		Basal Screw, straight, TAN 036.3110
	Regular TorcFit™ (RT)			
	Wide TorcFit™ (WT)			

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

Note

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

11.6 Straumann® CARES® Scan & Shape

CARES® Scan & Shape lets you benefit from the knowledge and experience of a highly trained team of CADCAM 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 via Scan & Shape: customized abutments*, CARES® Screw-retained Bars and Bridges (SRBB)*, CARES® X-Stream™ Restorative Options and tooth-borne restorations.

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-Files 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).

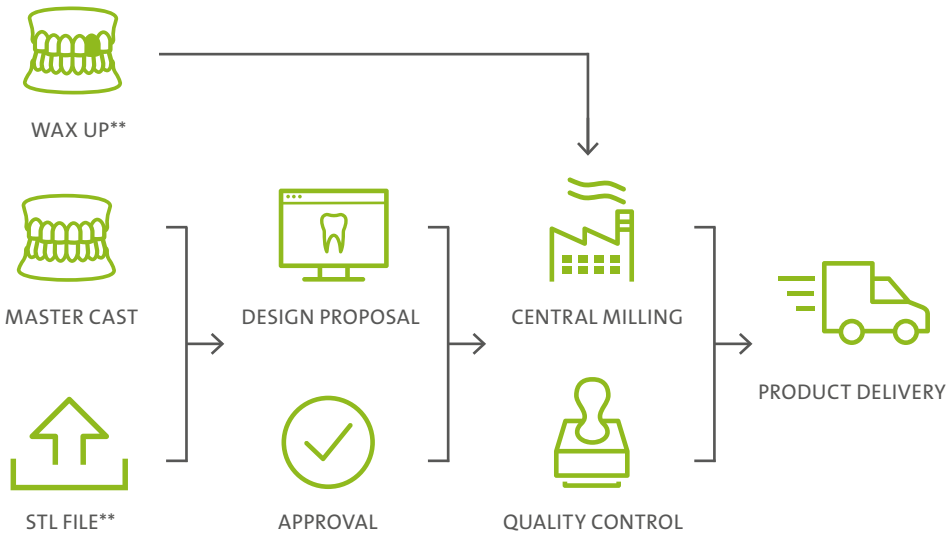
** Not all products, services and workflows are available in all countries. Please contact your sales representative for a detailed overview.*

11.6.1 Straumann® CARES® Scan & Shape workflow overview*

Even CADCAM 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.

* *Product offering may vary from country to country.*
Not all products 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.

11.7 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. Our offering 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 trough 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 furhter information, please consult the following brochures:

- *Straumann® Modular Cassette, Basic Information* (702527/en)
- *Straumann® Velodrills, 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* (152.810/en)
- *Straumann® Variobase® Basic Information* (702087/en)
- *Straumann® Novaloc® Retentive System for Hybrid Dentures* (702067/en)
- *Straumann® CARES® Implant-borne prosthetics, Basic Information* (152.822/en)
- *Straumann® CARES® Scan & Shape, Basic Information* (702168/en)
- *Step-by-step instructions on the intraoral scanbodies, Basic Information* (702063/en)

13. Product reference List

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

13.1 TLX Standard Plus Implants

Art. No.	Image	Article	Dimensions	Material
035.3006S		Straumann® TLX SP Implant	⌀ 3.75 mm NT SLActive® 6 mm	Roxolid®
035.3008S			⌀ 3.75 mm NT SLActive® 8 mm	
035.3010S			⌀ 3.75 mm NT SLActive® 10 mm	
035.3012S			⌀ 3.75 mm NT SLActive® 12 mm	
035.3014S			⌀ 3.75 mm NT SLActive® 14 mm	
035.3016S			⌀ 3.75 mm NT SLActive® 16 mm	
035.3018S			⌀ 3.75 mm NT SLActive® 18 mm	
035.3106S		Straumann® TLX SP Implant	⌀ 3.75 mm RT SLActive® 6 mm	Roxolid®
035.3108S			⌀ 3.75 mm RT SLActive® 8 mm	
035.3110S			⌀ 3.75 mm RT SLActive® 10 mm	
035.3112S			⌀ 3.75 mm RT SLActive® 12 mm	
035.3114S			⌀ 3.75 mm RT SLActive® 14 mm	
035.3116S			⌀ 3.75 mm RT SLActive® 16 mm	
035.3118S			⌀ 3.75 mm RT SLActive® 18 mm	
035.3406S		Straumann® TLX SP Implant	⌀ 4.5 mm NT SLActive® 6 mm	Roxolid®
035.3408S			⌀ 4.5 mm NT SLActive® 8 mm	
035.3410S			⌀ 4.5 mm NT SLActive® 10 mm	
035.3412S			⌀ 4.5 mm NT SLActive® 12 mm	
035.3414S			⌀ 4.5 mm NT SLActive® 14 mm	
035.3416S			⌀ 4.5 mm NT SLActive® 16 mm	
035.3418S			⌀ 4.5 mm NT SLActive® 18 mm	
035.3506S		Straumann® TLX SP Implant	⌀ 4.5 mm RT SLActive® 6 mm	Roxolid®
035.3508S			⌀ 4.5 mm RT SLActive® 8 mm	
035.3510S			⌀ 4.5 mm RT SLActive® 10 mm	
035.3512S			⌀ 4.5 mm RT SLActive® 12 mm	
035.3514S			⌀ 4.5 mm RT SLActive® 14 mm	
035.3516S			⌀ 4.5 mm RT SLActive® 16 mm	
035.3518S			⌀ 4.5 mm RT SLActive® 18 mm	
035.3706S		Straumann® TLX SP Implant	⌀ 5.5 mm WT SLActive® 6 mm	Roxolid®
035.3708S			⌀ 5.5 mm WT SLActive® 8 mm	
035.3710S			⌀ 5.5 mm WT SLActive® 10 mm	
035.3712S			⌀ 5.5 mm WT SLActive® 12 mm	
035.3806S		Straumann® TLX SP Implant	⌀ 6.5 mm WT SLActive® 6 mm	Roxolid®
035.3808S			⌀ 6.5 mm WT SLActive® 8 mm	
035.3810S			⌀ 6.5 mm WT SLActive® 10 mm	
035.3812S			⌀ 6.5 mm WT SLActive® 12 mm	

13.2 TLX Standard Implants

Art. No.	Image	Article	Dimensions	Material
035.1006S		Straumann® TLX S Implant	TLX S Ø 3.75 NT, SLActive® 6mm	Roxolid®
035.1008S			TLX S Ø 3.75 NT, SLActive® 8mm	
035.1010S			TLX S Ø 3.75 NT, SLActive® 10mm	
035.1012S			TLX S Ø 3.75 NT, SLActive® 12mm	
035.1014S			TLX S Ø 3.75 NT, SLActive® 14mm	
035.1016S			TLX S Ø 3.75 NT, SLActive® 16mm	
035.1018S			TLX S Ø 3.75 NT, SLActive® 18mm	
035.1106S		Straumann® TLX S Implant	TLX S Ø 3.75 RT, SLActive® 6mm	Roxolid®
035.1108S			TLX S Ø 3.75 RT, SLActive® 8mm	
035.1110S			TLX S Ø 3.75 RT, SLActive® 10mm	
035.1112S			TLX S Ø 3.75 RT, SLActive® 12mm	
035.1114S			TLX S Ø 3.75 RT, SLActive® 14mm	
035.1116S			TLX S Ø 3.75 RT, SLActive® 16mm	
035.1118S			TLX S Ø 3.75 RT, SLActive® 18mm	
035.1406S		Straumann® TLX S Implant	TLX S Ø 4.5 NT, SLActive® 6mm	Roxolid®
035.1408S			TLX S Ø 4.5 NT, SLActive® 8mm	
035.1410S			TLX S Ø 4.5 NT, SLActive® 10mm	
035.1412S			TLX S Ø 4.5 NT, SLActive® 12mm	
035.1414S			TLX S Ø 4.5 NT, SLActive® 14mm	
035.1416S			TLX S Ø 4.5 NT, SLActive® 16mm	
035.1418S			TLX S Ø 4.5 NT, SLActive® 18mm	
035.1506S		Straumann® TLX S Implant	TLX S Ø 4.5 RT, SLActive® 6mm	Roxolid®
035.1508S			TLX S Ø 4.5 RT, SLActive® 8mm	
035.1510S			TLX S Ø 4.5 RT, SLActive® 10mm	
035.1512S			TLX S Ø 4.5 RT, SLActive® 12mm	
035.1514S			TLX S Ø 4.5 RT, SLActive® 14mm	
035.1516S			TLX S Ø 4.5 RT, SLActive® 16mm	
035.1518S			TLX S Ø 4.5 RT, SLActive® 18mm	
035.1706S		Straumann® TLX S Implant	TLX S Ø 5.5 WT, SLActive® 6mm	Roxolid®
035.1708S			TLX S Ø 5.5 WT, SLActive® 8mm	
035.1710S			TLX S Ø 5.5 WT, SLActive® 10mm	
035.1712S			TLX S Ø 5.5 WT, SLActive® 12mm	
035.1806S		Straumann® TLX S Implant	TLX S Ø 6.5 WT, SLActive® 6mm	Roxolid®
035.1808S			TLX S Ø 6.5 WT, SLActive® 8mm	
035.1810S			TLX S Ø 6.5 WT, SLActive® 10mm	
035.1812S			TLX S Ø 6.5 WT, SLActive® 12mm	

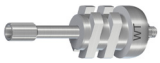
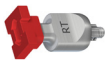
13.2 Closure Caps

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

13.3 Healing Caps

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

13.4 Impression

Art. No.	Image	Article	Dimensions	Material
036.0000		NT Impression Post Open Tray	short, incl. guide screw, H 15 mm	TAN (Titan alloy)
036.1000		RT Impression Post Open Tray	short, incl. guide screw, H 15 mm	
036.2000		WT Impression Post Open Tray	short, incl. guide screw, H 15 mm	
036.0001		NT Impression Post Open Tray	long, incl. guide screw, H 21 mm	
036.1001		RT Impression Post Open Tray	long, incl. guide screw, H 21 mm	
036.2001		WT Impression Post Open Tray	long, incl. guide screw, H 21 mm	
036.0002		NT Impression Post Closed Tray	with 1 guide screw & 2 caps	TAN (Titan alloy) / POM
036.1002		RT Impression Post Closed Tray	with 1 guide screw & 2 caps	
036.2002		WT Impression Post Closed Tray	with 1 guide screw & 2 caps	

13.5 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 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
036.3220		CARES® NT/RT/WT Mono Scanbody	⌀ 3.8 mm, H 10 mm	PEEK/TAN

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 AS		TAN (Titan alloy)

13.9 Temporary Restoration

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
Abutments				
037.0201		NT Variobase® for Crown incl. Screw	⌀ 4 mm, AH 5.5 mm	TAN (Titan alloy)
037.1201		RT Variobase® for Crown incl. Screw	⌀ 5 mm, AH 6 mm	
037.2201		WT Variobase® for Crown incl. Screw	⌀ 7 mm, AH 6.5 mm	
Burn-out Copings				
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
Abutments				
037.0203		NT Variobase® for Crown AS incl. Screw	⌀ 4mm, AH 6.5mm	TAN (Titan alloy)
037.1203		RT Variobase® for Crown AS incl. Screw	⌀ 5mm, AH 7mm	
037.2203		WT Variobase® for Crown AS incl. Screw	⌀ 7mm, AH 7.5mm	
Burn-out Copings				
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	

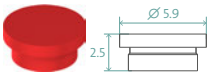
13.12 Variobase® for Bridge/Bar Cylindrical

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

13.13 Cementable Abutments

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

13.14 Novaloc® Abutments

Art. No.	Image	Article	Dimensions	Material
Novaloc®, straight				
037.0500		NT Novaloc® ADLC, straight 0°	H1	TAV
037.1500		RT Novaloc® ADLC, straight 0°	H1	
037.2500		WT Novaloc® ADLC, straight 0°	H1	
037.0501		NT Novaloc® ADLC, straight 0°	H2	
037.1501		RT Novaloc® ADLC, straight 0°	H2	
037.2501		WT Novaloc® ADLC, straight 0°	H2	
037.0502		NT Novaloc® ADLC, straight 0°	H3	
037.1502		RT Novaloc® ADLC, straight 0°	H3	
037.2502		WT Novaloc® ADLC, straight 0°	H3	
037.0503		NT Novaloc® ADLC, straight 0°	H4	
037.1503		RT Novaloc® ADLC, straight 0°	H4	
037.2503		WT Novaloc® ADLC, straight 0°	H4	
037.0504		NT Novaloc® ADLC, straight 0°	H5	
037.1504		RT Novaloc® ADLC, straight 0°	H5	
037.2504		WT Novaloc® ADLC, straight 0°	H5	
037.0505		NT Novaloc® ADLC, straight 0°	H6	
037.1505		RT Novaloc® ADLC, straight 0°	H6	
037.2505		WT Novaloc® ADLC, straigtH0°	H6	
Auxiliaries*				
2010.721-STM		Model Analog, blue, 4 pcs		Aluminum
2010.720-STM		Model analogue, angled 15°, red, 4 pcs		
2010.722-STM		Forming/Fixing Matrix, red, 4 pcs		PEEK

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
Novaloc®, angled				
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	
Retention Inserts*				
2010.601-STM		**Processing Package titanium**		
		Titanium Matrix Housing (including Mounting Insert), 2 pcs		Titanium / PEEK
		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	
		Mounting Collar, 2 pcs		Silicone
2010.611-STM		**Processing Package PEEK**		
		PEEK Matrix Housing (including Mounting Insert), 2 pcs		PEEK
		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	
		Mounting Collar, 2 pcs		Silicone
2010.710-STM		Novaloc® Retention Insert, red, 4 pcs	Extra-light, approx. 300g	PEEK
2010.711-STM		Novaloc® Retention Insert, white, 4 pcs	Light, approx. 750g	
2010.712-STM		Novaloc® Retention Insert, yellow, 4 pcs	Medium, approx. 1200g	
2010.713-STM		Novaloc® Retention Insert, green, 4 pcs	Strong, approx. 1650g	
2010.714-STM		Novaloc® Retention Insert, blue, 4 pcs	Extra-strong, approx. 2100g	
2010.715-STM		Novaloc® Retention Insert, black , 4 pcs	Ultra-strong, approx. 2550g	

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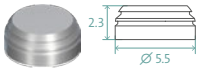
Art. No.	Image	Article	Dimensions	Material
Auxiliaries*				
2010.701-STM		Matrix Housing, titanium (including Mounting Insert), 4 pcs		Titanium / PEEK
2010.702-STM		Matrix Housing, PEEK (including Mounting Insert), 4 pcs		PEEK
2010.703-STM		Matrix Housing with attachment option (including Mounting Insert), 4 pcs		Titanium / PEEK

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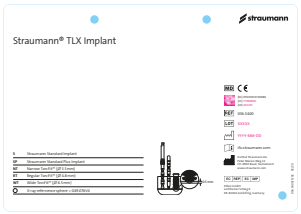
13.15 Instruments

13.15.1 A Module – Order list

Art. No.	Image	Product
041.761		Straumann® Modular Cassette, A Module
041.766		A Modul Ratchet Tray
046.119		Ratchet
066.1100		BLX 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
041.764		Grommet Tray, 3 small + 3 large
036.3400		TLX X ray Reference Foil

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

13.15.2 B Module – Order list

Art. No.	Image	Product
041.776		Straumann® Modular Cassette, B Module, Base + Lid
041.777		B Module, Fully Tapered Tray
040.563		Drill extender
044.003		Round bur, Ø 2.3 mm
044.004		Round bur, Ø 3.1 mm
026.0056		Needle drill, long, Ø 1.6 mm
066.1301		X VeloDrill™, short, Ø 2.2 mm
066.1302		X VeloDrill™, short, Ø 2.8 mm
066.1303		X VeloDrill™, short, Ø 3.2 mm
066.1304		X VeloDrill™, short, Ø 3.5 mm
066.1305		X VeloDrill™, short, Ø 3.7 mm
066.1306		X VeloDrill™, short, Ø 4.2 mm
066.1307		X VeloDrill™, short, Ø 4.7 mm
066.1308		X VeloDrill™, short, Ø 5.2 mm
066.1309		X VeloDrill™, short, Ø 6.2 mm

Art. No.	Image	Product
066.1701		X VeloDrill™, long, Ø 2.2 mm
066.1702		X VeloDrill™, long, Ø 2.8 mm
066.1703		X VeloDrill™, long, Ø 3.2 mm
066.1704		X VeloDrill™, long, Ø 3.5 mm
066.1705		X VeloDrill™, long, Ø 3.7 mm
066.1706		X VeloDrill™, long, Ø 4.2 mm, BLX
066.1707		X VeloDrill™, long, Ø 4.7 mm, BLX
046.799		Alignment Pin, Ø 2.2 mm
046.800		Depth Gauge, Ø 2.8 mm
046.801		Depth Gauge, Ø 3.2 mm
046.802		Depth Gauge, Ø 3.5 mm
046.803		Depth Gauge, Ø 3.7 mm
046.804		Depth Gauge, Ø 4.2 mm
046.805		Depth Gauge, Ø 4.7 mm
046.806		Depth Gauge, Ø 5.2 mm
046.807		Depth Gauge, Ø 6.5 mm
066.4201		Implant driver for Ratchet, short, BLX
066.4101		Implant driver for Handpiece, short, BLX

Profile Drills

Art. No.	Image	Product	Dimensions	Material
036.3300		TLX, RT, Prof. Drill, S, for imp Ø 3.75/Ø 4.8		SST
036.3302		TLX, WT, Prof. Drill, S, for imp Ø 5.5/Ø 6.5		SST

13.15.3 A-Module setup

A Module
041.761

Ratchet Tray
041.766

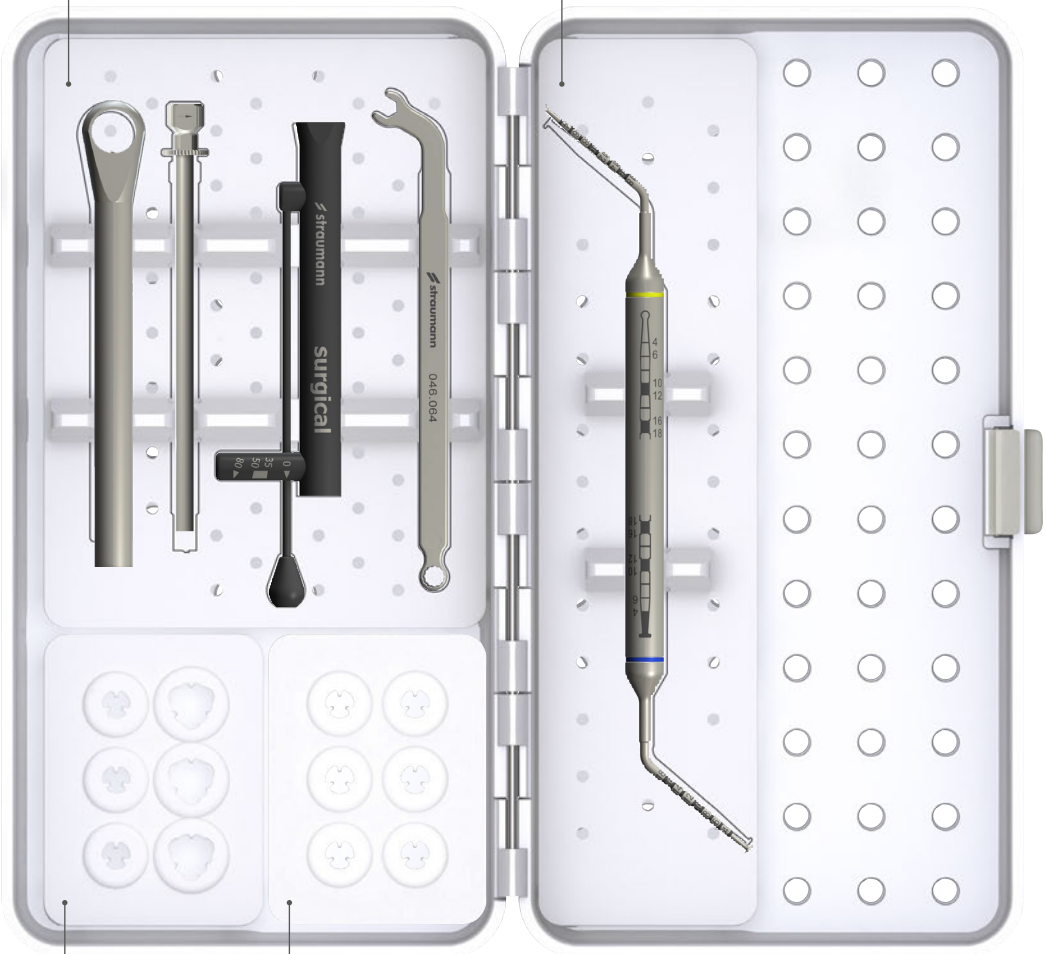
Ratchet
046.119

BLX Torque Control
066.1100

Holding Key
046.064

Implant Depth Gauge Tray
041.771

Implant Depth Gauge
066.2000



RT Profile Drill
036.3300
036.3301

WT Profile Drill
036.3302
036.3303

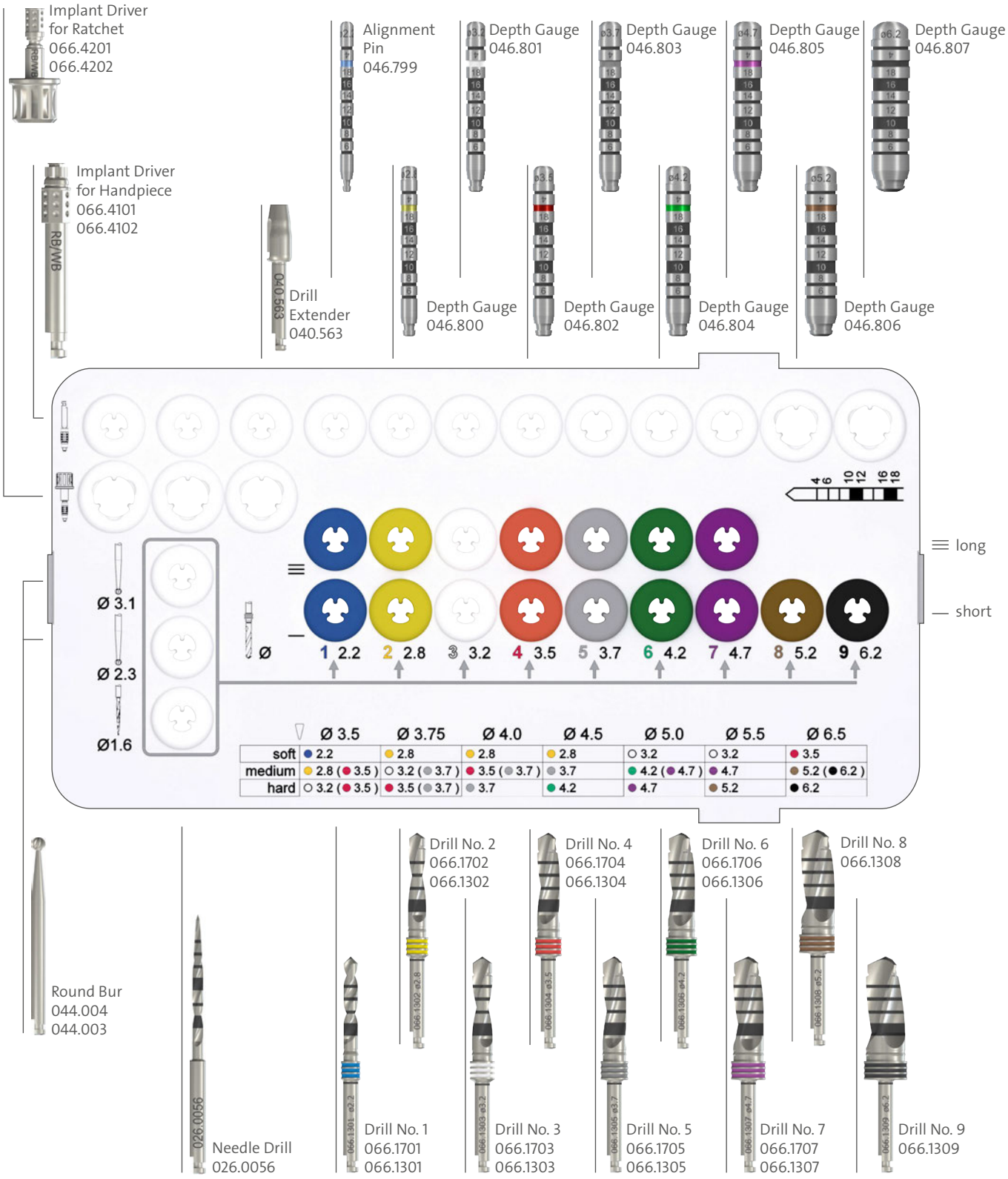
RT/WT Profile Drill Set
Grommet Tray, 6 small
041.762

SCS Screwdriver for Ratchet
046.400
046.401
046.402

SCS Screwdriver for Handpiece
046.410
046.411
046.412

SCS Screwrdiver Set
Grommet Tray 3 small + 3 large
041.764

Fully Tapered Tray
041.777



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