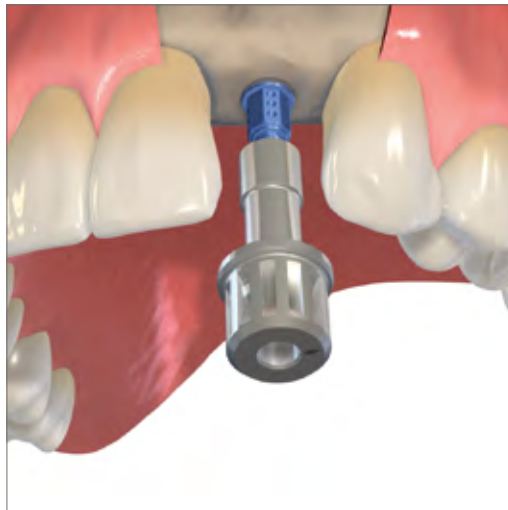


SURGICAL PROCEDURES
FOR ROXOLID® IMPLANTS



ABOUT THIS BROCHURE

The brochure *Surgical Procedures for Roxolid® Implants* provides dental practitioners and related specialists with information about the implant and its surgical procedure. For further information, please refer to the main surgical brochure *Basic Information on the Surgical Procedure – Straumann® Dental Implant System*.

The brochure is divided into the following main parts:

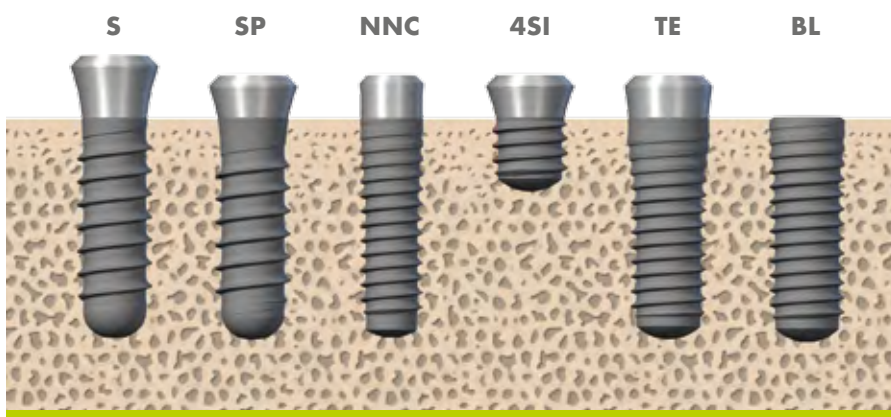
- Straumann® Roxolid® Implants
- Surgical procedures
- Indications and contraindications
- Preoperative planning
- Overview of Roxolid® Implants

For further information about the NNC prosthetic procedure, please refer to the following brochure: *Prosthetic Procedures for the Narrow Neck CrossFit® Implant*.

1. STRAUMANN® ROXOLID® IMPLANTS

1.1 OVERVIEW

Straumann® Roxolid Implants offer six implant lines with diverse body and neck designs, ranging from the classic Soft Tissue Level to the Bone Level Implant and some additional hybrid solutions. All implants can be placed with the Straumann® Surgical cassette while using very similar surgical procedures.



- S** Straumann® Standard Implant
- SP** Straumann® Standard Plus Implant
- NNC** Straumann® Narrow Neck CrossFit® Implant
- 4SI** Straumann® 4 mm Short Implant
- TE** Straumann® Tapered Effect Implant
- BL** Straumann® Bone Level Implant

Straumann dental implants are available in three endosteal diameters: Ø 3.3 mm, Ø 4.1 mm, and Ø 4.8 mm. A unified color code simplifies the identification of instruments and implants.

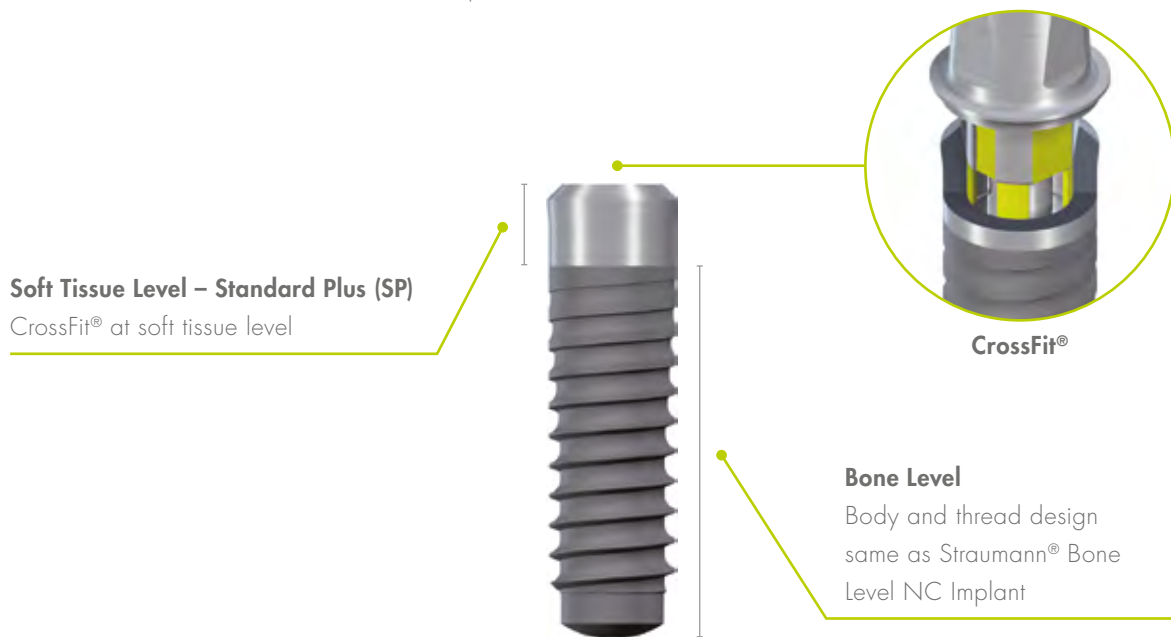
Color coding

● yellow	Endosteal implant diameter 3.3 mm
● red	Endosteal implant diameter 4.1 mm
● green	Endosteal implant diameter 4.8 mm

1.2 SPECIFIC DESIGN FEATURES

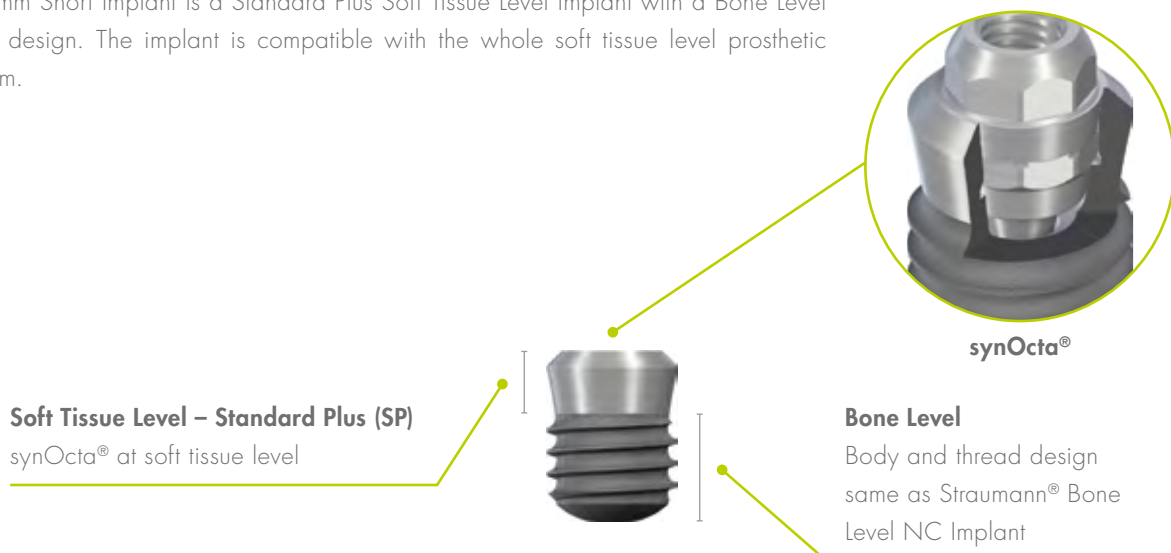
1.2.1 NARROW NECK CrossFit®

The Narrow Neck CrossFit® (NNC) Implant is a 3.3 mm diameter implant with a narrow prosthetic platform. The NNC Implant is a Standard Plus (SP) Soft Tissue Level Implant with a machined neck of 1.8 mm in height. The implant body and thread design is the same as the Straumann® 3.3 mm Bone Level NC Implant.



1.2.2 4 MM SHORT IMPLANT (4SI)

The 4mm Short Implant is a Standard Plus Soft Tissue Level Implant with a Bone Level thread design. The implant is compatible with the whole soft tissue level prosthetic platform.





1.2.3 LOXIM™ – THE NEW TRANSFER PIECE

The Straumann® Roxolid® Implants will be delivered with the Loxim™, which is not screw-retained, but connected to the implant with a snap-in mounting. After insertion of the implant, the Loxim™ can be released by hand or with the help of tweezers. Counter-maneuvering with the Straumann® Holding Key is no longer needed. Loxim™ can be used as an alignment pin to indicate the implant position and angulation for a parallel placement of the neighboring implants.

2. SURGICAL PROCEDURE

2.1 INDICATIONS AND CONTRAINDICATIONS

To obtain more information about indications or contraindications related to each implant, please refer to the corresponding instructions for use.

2.2 IMPLANT-BED PREPARATION

The implant diameter, implant type, position and number of implants should be selected individually taking the anatomy and spatial circumstances into account. The specific measurements should be regarded as minimum guidelines and are further specified in the brochure *Basic Information on the Surgical Procedure – Straumann® Dental Implant System*.

STEPS	INSTRUMENTATION
1. Basic implant-bed preparation	
Ridge preparation	Round bur (fall implants)
Twist drilling	Pilot drill 1 (2.2 mm) Alignment pin Pilot drill 2 (2.8 mm) Depth gauge
2. Fine implant-bed preparation	
Profile drilling	SP/4SI profile drill BL/NNC profile drill TE profile drill
Tapping	S/SP Tap 4SI/BL/TE/NNC Tap

Basic implant-bed preparation involves ridge preparation and twist drilling. For twist drilling, the endosteal diameter of the implant (3.3/4.1/4.8 mm) – not the implant type or the bone class – determines which instruments have to be used.

Fine implant-bed preparation involves profile drilling and tapping. For tapping, the implant type (S/SP/TE/BL) and the bone class determine which instruments have to be used, with exception of the NNC and 4 mm Short Implants that require a BL tap.

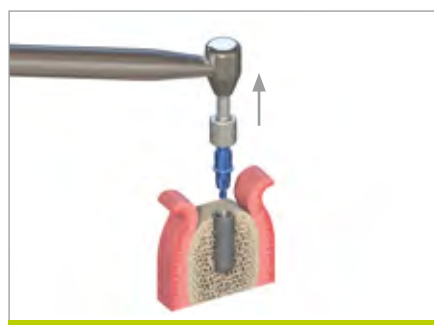
Please note: Narrow Neck CrossFit® and 4 mm Short Implants have a Standard Plus design, but both implant types require a Bone Level tapping.

All Straumann dental implants are placed using one instrument kit – the Straumann® Surgical cassette. The implant-bed preparation covers two main steps.

2.3 IMPLANT PLACEMENT

Implant placement with handpiece

Implant placement with ratchet



After insertion, the Loxim™ is detached with the adapter.

Remove the ratchet while holding the adapter at the bottom, and then detach the adapter-transfer piece assembly.

Step 1 – Attach the handpiece adapter

Hold the enclosed part of the implant carrier. Attach the handpiece or the ratchet adapter to the Loxim™. A click will be heard when the adapter is attached correctly.

Step 2 – Remove the implant from the carrier

Simultaneously, pull down the implant carrier and lift the implant out of the implant carrier (keep your arms steady).

Step 3 – Place the implant

Place the implant with the handpiece or the ratchet into the implant bed. Move the implant into its final position with a maximum of 15 rpm turning it clockwise.

⚠ Caution!

Vertical position corrections using reverse rotations (counterclockwise) may lead to a decrease in primary stability.

Step 4 – Remove the instruments

Loxim™ can easily be re-inserted to finish an uncompleted implant placement until the implant is fully inserted. If the implant needs to be removed during implantation surgery, Loxim™ allows for counterclockwise turns.

2.4 ADDITIONAL INFORMATION



Release aid for the Loxim™ Transfer piece

For situations in which any removal force is to be avoided, a release aid for the Loxim™ can be used. Place the release aid onto the implant shoulder and hold it in place while detaching the adapter with the Loxim™.

Important additional information

An insertion torque of 35 Ncm is recommended. If 35 Ncm are achieved before the implant has reached its final position, make sure the implant-bed preparation is correct to avoid bone overcompression.



⚠ Warning!

In case the implant has to be removed after implant placement, the retention of the Loxim™ in the implant may be reduced. Always secure the implant against aspiration when removing the implant.

The Loxim™ is provided with a pre-determined breaking point to prevent the implant's inner configuration from damage, thus ensuring the integrity of the interface to mount the prosthesis. If the Loxim™ breaks during implant insertion, one part remains in the adapter and the other part in the implant. Both parts can be removed with tweezers.



To extract the implant after the pre-determined breaking point broke, simply take out the broken part of the Loxim™ from the adapter and re-insert the adapter on the Loxim™ part remaining in the implant. Counterclockwise turns will remove the implant.





The part of the Loxim™ below the pre-determined breaking point is not secured in the adapter and, additionally, needs to be secured against aspiration when taking out the implant.










⚠ Caution!




The broken part of the Loxim™ no longer protects against high torque. Therefore, it is not to be used to advance the placement of the implant.




OVERVIEW ROXOLID® IMPLANTS


Standard Implants		RN	RN	RN	WN
		Ø 4.8 mm	Ø 4.8 mm	Ø 4.8 mm	Ø 6.5 mm
	2.8 mm				
		Ø 3.3 mm	Ø 4.1 mm	Ø 4.8 mm	Ø 4.8 mm
SLActive®		S Ø 3.3 RN	S Ø 4.1 RN	S Ø 4.8 RN	S Ø 4.8 WN
6 mm		—	033.530S	033.580S	033.600S
8 mm		033.501S	033.531S	033.581S	033.601S
10 mm		033.502S	033.532S	033.582S	033.602S
12 mm		033.503S	033.533S	033.583S	033.603S
14 mm		033.504S	033.534S	033.584S	—
16 mm		033.505S	033.535S	—	—


Standard Plus Implants	NNC	RN	RN	RN	WN
	Ø 3.5 mm	Ø 4.8 mm	Ø 4.8 mm	Ø 4.8 mm	Ø 6.5 mm
	1.8 mm				
	Ø 3.3 mm	Ø 3.3 mm	Ø 4.1 mm	Ø 4.8 mm	Ø 4.8 mm
SLActive®	SP Ø 3.3 NNC	SP Ø 3.3 RN	SP Ø 4.1 RN	SP Ø 4.8 RN	SP Ø 4.8 WN
6 mm	—	—	033.560S	033.590S	033.610S
8 mm	033.416S	033.511S	033.561S	033.591S	033.611S
10 mm	033.417S	033.512S	033.562S	033.592S	033.612S
12 mm	033.418S	033.513S	033.563S	033.593S	033.613S
14 mm	033.419S	033.514S	033.564S	033.594S	—

4 mm Implants		RN	RN	WN
		Ø 4.8 mm	Ø 4.8 mm	Ø 6.5 mm
	1.8 mm			
		Ø 4.1 mm	Ø 4.8 mm	Ø 4.8 mm
SLActive®		SP Ø 4.1 RN	SP Ø 4.8 RN	SP Ø 4.8 WN
4 mm		033.043S	033.044S	033.045S

Tapered Effect Implants		RN	RN		WN
		Ø 4.8 mm	Ø 4.8 mm		Ø 6.5 mm
	1.8 mm				
		Ø 3.3 mm	Ø 4.1 mm		Ø 4.8 mm
SLActive®		TE Ø 3.3 RN	TE Ø 4.1 RN		TE Ø 4.8 WN
8 mm		033.521S	033.571S		—
10 mm		033.522S	033.572S		033.622S
12 mm		033.523S	033.573S		033.623S
14 mm		033.524S	033.574S		033.624S

Bone Level Implants		NC	RC	RC	
		Ø 3.3 mm	Ø 4.1 mm	Ø 4.8 mm	
					
		Ø 3.3 mm	Ø 4.1 mm	Ø 4.8 mm	
SLActive®		BL Ø 3.3 NC	BL Ø 4.1 RC	BL Ø 4.8 RC	
8 mm		021.2308	021.4308	021.6308	
10 mm		021.2310	021.4310	021.6310	
12 mm		021.2312	021.4312	021.6312	
14 mm		021.2314	021.4314	021.6314	

Release aid N for Loxim™ (for NNC and NC)	
026.2558	

Release aid R/W for Loxim™ (for RC, RN and WN)	
026.4558	

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