

Straumann® Dental Implant System.
Implant Selection Guide.



STRAUMANN'S IMPLANT PORTFOLIO

The Straumann® Dental Implant System offers two implant lines with diverse body and neck designs ranging from the classic soft tissue level to the bone level implant. All implants can be placed with one surgical kit and use similar surgical procedures.



STANDARD

Classic soft tissue level implant

Straumann® Standard implants with the synOcta® connection feature a smooth neck section of 2.8 mm in height and are particularly well-suited for single-stage procedures, where the implant is placed at the soft tissue level and not covered with the soft tissue during the healing phase.

STANDARD PLUS

For flexible placement

Straumann® Standard Plus implants with the synOcta connection feature a smooth neck section of 1.8 mm in height that allows flexible coronapical implant placement in combination with trans- or subgingival healing. The Ø 3.3 mm Narrow Neck CrossFit® (NNC) has a Ø 3.5 mm prosthetic platform with internal connection and combines the innovations of the Roxolid® material and the SLActive® surface technology. NNC is designed to give you more confidence when placing small diameter implants.

TAPERED EFFECT

For immediate placement

Straumann® Tapered Effect implants with the synOcta connection have a special anatomical design, which combines a cylindrical shape in its apical region and a conical shape in the coronal region, making this implant particularly suitable for immediate or early implantation following extraction or loss of natural teeth.

BONE LEVEL

Expertise at bone level

Straumann® Bone Level implants with the CrossFit® connection are suitable for bone level treatments in combination with trans- or subgingival healing. The implant's rough surface extends to the top of the implant and the connection is shifted inwards. The selection of healing components and temporary abutments available for the Bone Level implant are used to shape the soft tissues above the top of the implant, which is flush with the crestal bone.

The Straumann Bone Level Tapered implants enable placement in under prepared sites & helps avoid anatomical restrictions.

STRAUMANN'S TRADITION OF INNOVATION

Straumann is a pioneer of innovation solutions for implant dentistry, including the introduction of the SLA® surface in 1998, the revolutionary SLActive surface in 2006, the internal CrossFit connection in 2007 and the technologically-advanced Roxolid implant material in 2009.

SLA implant surface

With characteristics such as double roughness treatment for greater bone-to-implant contact, the SLA surface is designed to allow loading in just six weeks after implant placement in healthy patients with sufficient bone quality and quantity.

SLActive implant surface

The SLActive surface takes the topography of the SLA surface to the next level through its enhanced surface chemistry. With the unique properties of hydrophilicity and chemical activity, SLActive accelerates the osseointegration process, allowing for shorter healing times of 3 - 4 weeks in appropriate clinical circumstances.*

Roxolid implant material












Roxolid is the first Titanium-Zirconium alloy material designed specifically for dental implants. With higher tensile¹ and fatigue² strengths when compared to Straumann Titanium implants, Roxolid is designed to offer more confidence when placing small diameter implants, the flexibility of having more treatment options and may help to increase patient acceptance of implant treatment. The hydrophilic SLActive surface with excellent osseointegration properties have been demonstrated in various pre-clinical³ and clinical studies.^{4,5}

CrossFit Connection

The CrossFit connection, which is used in Straumann's Bone Level range as well as the Soft Tissue Level Narrow Neck CrossFit implant, was specifically designed to prevent anti-rotational forces in both ceramic and titanium abutments. The connection guides the abutment precisely into the correct position and enables the user to literally "feel the fit" and deliver a secure, precise restorative solution for the patient.

*compared to SLA





RECOMMENDED APPLICATIONS FOR STRAUMANN® IMPLANTS











Standard	Standard Plus	Applications and distinctive features	Minimal ridge width*	Minimal site width**
	SP Ø 3.3 mm NNC 	<ul style="list-style-type: none"> Small diameter implant for narrow interdental spaces and ridges <p>⚠ Caution Small diameter implants not recommended for the molar region</p>	5.5 mm	5.5 mm
S Ø 3.3 mm RN 	SP Ø 3.3 mm RN 	<ul style="list-style-type: none"> Designed for cases with a restricted ridge width <p>⚠ Caution Placement in the molar region is not recommended for Ø 3.3 mm implants</p>	5.5 mm	5.5 mm
S Ø 3.3 mm RN Roxolid® 	SP Ø 3.3 mm RN Roxolid 			
S Ø 4.1 mm RN Roxolid 	SP Ø 4.1 mm RN Roxolid 	<ul style="list-style-type: none"> For oral endosteal implant placement in the maxilla and mandible, for functional and esthetic rehabilitation of edentulous and partially edentulous patients 	6.0 mm	7.0 mm
S Ø 4.8 mm RN 	SP Ø 4.8 mm RN 	<ul style="list-style-type: none"> For oral endosteal implant placement in the maxilla and mandible, for functional and esthetic rehabilitation of edentulous and partially edentulous patients The S/SP Ø 4.8 mm implants are especially suited for wider interdental spaces and ridges 	7.0 mm	7.0 mm
S Ø 4.8 mm WN 	SP Ø 4.8 mm WN 	<ul style="list-style-type: none"> For oral endosteal implant placement in the maxilla and mandible, for functional and esthetic rehabilitation of edentulous and partially edentulous patients The S/SP Ø 4.8 mm implants are especially suited for wider interdental spaces and ridges 	7.0 mm	8.5 mm

S = Standard Implant
 SP = Standard Plus Implant
 RN = Regular Neck Ø 4.8 mm
 WN = Wide Neck Ø 6.5 mm
 TE = Tapered Effect Implant
 BL = Bone Level Implant
 BLT = Bone Level Tapered Implant
 NNC = Narrow Neck CrossFit® Connection
 RC = Regular CrossFit® Connection

* Minimal ridge width: Minimal orofacial ridge width, rounded off to 0.5 mm

** Minimal site width: Minimal mesial-distal site width for a single tooth restoration, between adjacent teeth, rounded off to 0.5 mm

Tapered Effect Implants		Applications and distinctive features	Minimal ridge width*	Minimal site width**
TE Ø 3.3 mm RN 	TE Ø 3.3 mm RN Roxolid® 	<ul style="list-style-type: none"> For oral endosteal implant placement in the maxilla and mandible, for functional and esthetic rehabilitation of edentulous and partially edentulous patients Alternative in dental gaps where the roots of adjacent teeth are close together, where implants with a greater endosteal diameter are contraindicated <p>⚠ Caution Placement in the molar region is not recommended for Ø 3.3 mm implants</p>	7.0 mm	7.0 mm
TE Ø 4.1 mm RN 		<ul style="list-style-type: none"> For oral endosteal implant placement in the maxilla and mandible, for functional and esthetic rehabilitation of edentulous and partially edentulous patients 	7.0 mm	7.0 mm
TE Ø 4.8 mm WN 		<ul style="list-style-type: none"> For oral endosteal implant placement in the maxilla and mandible, for functional and esthetic rehabilitation of edentulous and partially edentulous patients The TE Ø 4.8 mm implants are especially suited for wider interdental spaces and ridges 	8.5 mm	7.0 mm

Bone Level	Bone Level Tapered	Applications and distinctive features	Minimal ridge width*	Minimal site width**		
BL Ø 3.3 mm NC 	BL Ø 3.3 mm NC Roxolid 	BLT Ø 3.3 mm NC 	BLT Ø 3.3 mm NC Roxolid 	<ul style="list-style-type: none"> Small diameter implant for narrow interdental spaces and ridges <p>⚠ Caution Placement in the molar region is not recommended for Ø 3.3 mm implants</p>	5.5 mm	5.5 mm
BL Ø 4.1 mm RC 		BLT Ø 4.1 mm RC 	BLT Ø 4.1 mm RC Roxolid 	<ul style="list-style-type: none"> For oral endosteal implant placement in the maxilla and mandible, for functional and esthetic rehabilitation of edentulous and partially edentulous patients 	6.0 mm	6.0 mm
BL Ø 4.8 mm RC 		BLT Ø 4.8 mm NC 	BLT Ø 4.8 mm NC Roxolid 	<ul style="list-style-type: none"> For oral endosteal implant placement in the maxilla and mandible, for functional and esthetic rehabilitation of edentulous and partially edentulous patients The BL Ø 4.8 mm implants are especially suited for wider interdental spaces and ridges 	7.0 mm	7.0 mm





STRAUMANN® DENTAL IMPLANT SYSTEM

Straumann® Tapered Effect Implant			Straumann® Bone Level Implant			Straumann® Bone Level Tapered Implant		
TE Ø 3.3 RN	TE Ø 4.1 RN	TE Ø 4.8 WN	BL Ø 3.3 NC	BL Ø 4.1 RC	BL Ø 4.8 RC	BLT Ø 3.3 NC	BLT Ø 4.1 RC	BLT Ø 4.8 RC
<p>Ø 4.8 mm</p> <p>Ø 3.3 mm</p>	<p>Ø 4.8 mm</p> <p>Ø 4.1 mm</p>	<p>Ø 6.5 mm</p> <p>Ø 4.8 mm</p> <p>1.8 mm</p>	<p>Ø 3.3 mm</p> <p>Ø 3.3 mm</p>	<p>Ø 4.1 mm</p> <p>Ø 4.1 mm</p>	<p>Ø 4.8 mm</p> <p>Ø 4.8 mm</p>	<p>Ø 3.3 mm</p> <p>Ø 1.1 mm</p>	<p>Ø 4.1 mm</p> <p>Ø 1.8 mm</p>	<p>Ø 4.8 mm</p> <p>Ø 2.3 mm</p>
033.521S	033.571S		021.2308	021.4308	021.6308	021.3308	021.5308	021.7308
033.522S	033.572S	033.622S	021.2310	021.4310	021.6310	021.3310	021.5310	021.7310
033.523S	033.573S	033.623S	021.2312	021.4312	021.6312	021.3312	021.5312	021.7312
033.524S	033.574S	033.624S	021.2314	021.4314	021.6314	021.3314	021.5314	021.7314
						021.3316	021.5316	021.7316
						021.3318*	021.5318*	021.7318*
043.264S	043.166S		021.2508	021.4508	021.6508	021.3508	021.5508	021.7508
043.265S	043.167S	043.660S	021.2510	021.4510	021.6510	021.3510	021.5510	021.7510
043.266S	043.168S	043.661S	021.2512	021.4512	021.6512	021.3512	021.5512	021.7512
043.267S	043.169S	043.662S	021.2514	021.4514	021.6514	021.3514	021.5514	021.7514
						021.3516	021.5516	021.7516
						021.3418*	021.5418*	021.7418*


CLOSURE SCREWS AND HEALING ABUTMENTS

For Tissue Level Implants






Used with NNC implants

048.071S 048.074S		NNC Healing cap, reduced h., H 3.0 NNC Healing cap, regular h., H 4.5
048.082S		NNC Healing cap, labial, H 2.0
048.324S 048.324SV4		NNC Closure cap, H 0 NNC Closure cap, H 0 (pack of 4)
048.325S 048.325SV4		NNC Closure cap, H 1.5 NNC Closure cap, H 1.5 (pack of 4)

Used with RN implants












048.371SV4 048.371S		RN Closure cap, small, (pack of 4) RN Closure cap, small
048.373SV4 048.373S		RN Closure cap, large, H 1.5 (pack of 4) RN Closure cap, large, H 1.5
048.028S		RN Healing cap, labial, H 2.0, Ti
048.029S		RN Healing cap, labial, H 3.5, Ti
048.033S		RN Healing cap, H 2.0, Ti
048.034S		RN Healing cap, H 3.0, Ti
048.037S		RN Healing cap, H 4.5, Ti


















Used with WN implants

048.030S		WN Healing cap, labial, H 2.0, Ti
048.038S		WN Healing cap, H 2.0, Ti
048.039S		WN Healing cap, H 3.0, Ti
048.053S		WN Healing cap, H 4.5, Ti
048.375S		WN Closure cap, Ti

D = Diameter
H = Height

For Bone Level Implants

NC		
024.2100S 024.2100S-04		NC Closure cap, H 0 NC Closure cap, H 0 (pack of 4)
024.2105S 024.2105S-04		NC Closure cap, H 0.5 NC Closure cap, H 0.5 (pack of 4)
024.2222S		NC Healing Abt., conical, D 3.6, H 2.0
024.2224S		NC Healing Abt., conical, D 3.6, H 3.5
024.2226S		NC Healing Abt., conical, D 3.6, H 5.0
024.2234S		NC Healing Abt., bottle, D 3.3, H 3.5
024.2236S		NC Healing Abt., bottle, D 3.3, H 5.0
024.2242S		NC Healing Abt., conical, D 4.8, H 2.0
024.2244S		NC Healing Abt., conical, D 4.8, H 3.5
024.2246S		NC Healing Abt., conical, D 4.8, H 5.0
024.2270S		NC Healing Abt., custom, D 5.0

RC		
024.4100S 024.4100S-04		RC Closure cap, H 0 RC Closure cap, H 0 (pack of 4)
024.4105S 024.4105S-04		RC Closure cap, H 0.5 RC Closure cap, H 0.5 (pack of 4)
024.0000S		RC Healing Abt., conical, D 4.5, H 2.0
024.0001S		RC Healing Abt., conical, D 4.5, H 4.0
024.0002S		RC Healing Abt., conical, D 4.5, H 6.0
024.0003S		RC Healing Abt., conical, D 6.0, H 2.0
024.0004S		RC Healing Abt., conical, D 6.0, H 4.0
024.0005S		RC Healing Abt., conical, D 6.0, H 6.0
024.4222S		RC Healing Abt., conical, D 5.0, H 2.0
024.4224S		RC Healing Abt., conical, D 5.0, H 4.0
024.4226S		RC Healing Abt., conical, D 5.0, H 6.0
024.4234S		RC Healing Abt., bottle, D 4.4, H 4.0
024.4236S		RC Healing Abt., bottle, D 4.7, H 6.0
024.4242S		RC Healing Abt., conical, D 6.5, H 2.0
024.4244S		RC Healing Abt., conical, D 6.5, H 4.0
024.4246S		RC Healing Abt., conical, D 6.5, H 6.0
024.4270S		RC Healing Abt., custom, D 7.0

RECOMMENDED GUIDELINES FOR PLACING STRAUMANN® IMPLANTS

The position, size and number of implants are determined by the prosthetic requirements and anatomic considerations. If crowding of implants occurs, bone resorption and/or loss of interproximal tissues can occur. The need for careful planning is critical and cannot be overemphasized.

MESIODISTAL IMPLANT POSITION

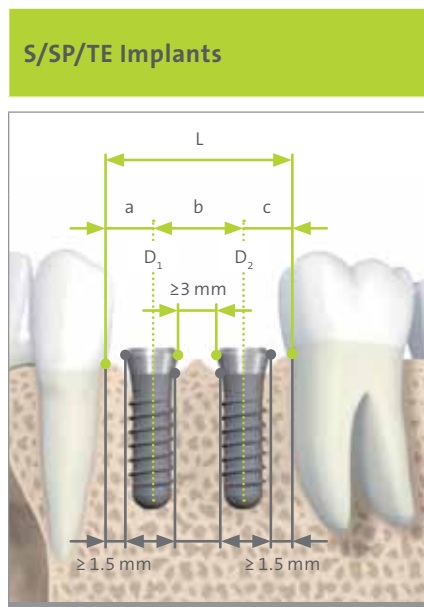
The point of reference for measuring mesiodistal distances is always the implant shoulder, as it is the widest part of the implant. **Note that all distances given in this flyer are rounded off to the 0.5 mm.** The following basic rules must be applied:

Rule 1: The distance to adjacent tooth at bone level:

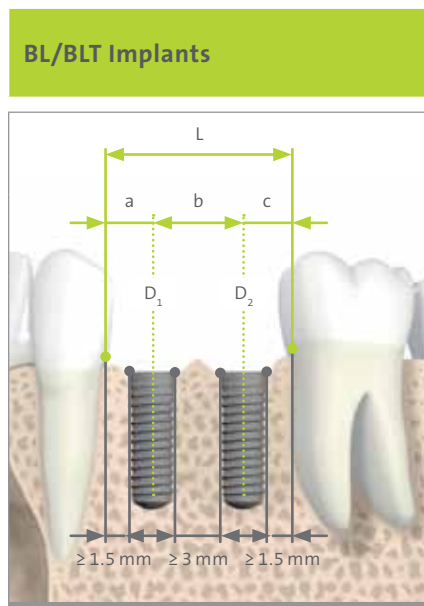
A minimal distance of 1.5 mm from the implant shoulder to the adjacent tooth at bone level (mesial and distal) is required.

Rule 2: Distance to adjacent implants at bone level:

A minimal distance of 3.0 mm between two adjacent implant shoulders (mesiodistal) is required.



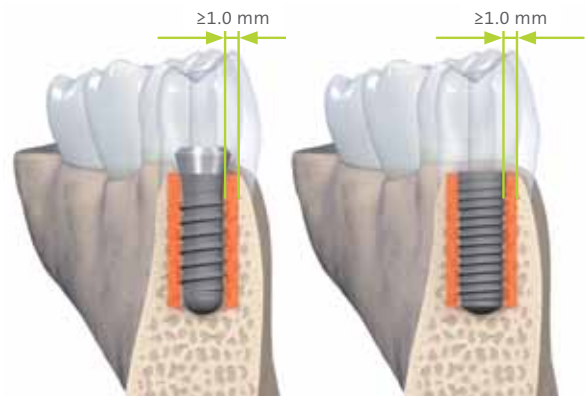
Shoulder diameter D ₁ (mm)	Shoulder diameter D ₂ (mm)	a _{min} (mm)	b _{min} (mm)	c _{min} (mm)	L _{min} (mm)
Ø 3.5 (NNC)	Ø 3.5 (NNC)	3.0	6.5	3.0	12.5
Ø 3.5 (NNC)	Ø 4.8 (RN)	3.0	7.0	4.0	14.0
Ø 3.5 (NNC)	Ø 6.5 (WN)	3.0	8.0	5.0	16.0
Ø 4.8 (RN)	Ø 4.8 (RN)	4.0	8.0	4.0	16.0
Ø 4.8 (RN)	Ø 6.5 (WN)	4.0	8.5	5.0	17.5
Ø 6.5 (WN)	Ø 6.5 (WN)	5.0	9.5	5.0	19.5



Shoulder diameter D ₁ (mm)	Shoulder diameter D ₂ (mm)	a _{min} (mm)	b _{min} (mm)	c _{min} (mm)	L _{min} (mm)
BL Ø 3.3	BL Ø 3.3	3.0	6.5	3.0	12.5
BL Ø 3.3	BL Ø 4.1	3.0	7.0	3.5	13.5
BL Ø 3.3	BL Ø 4.8	3.0	7.0	4.0	14.0
BL Ø 4.1	BL Ø 4.1	3.5	7.0	3.5	14.0
BL Ø 4.1	BL Ø 4.8	3.5	7.5	4.0	15.0
BL Ø 4.8	BL Ø 4.8	4.0	7.5	4.0	15.5

OROFACIAL IMPLANT POSITION

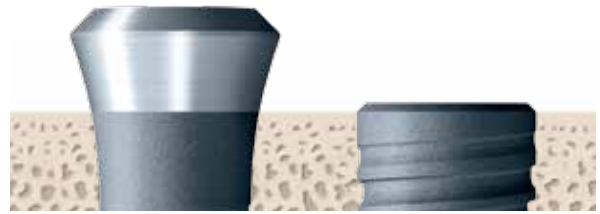
The facial and palatal bone layer must be at least 1.0 mm thick in order to ensure stable hard and soft tissue conditions. The minimal orofacial ridge widths for individual implant types are given in the indication tables featured inside this flyer. An augmentation procedure is indicated where the orofacial bone wall is less than 1.0 mm or missing on one or more sides.



Bone layer at least 1.0 mm in thickness

CORONOAPICAL IMPLANT POSITION

The following illustration shows the coronoapical implant position for each of Straumann's implant lines.



For more information regarding the surgical placement of Straumann® implants, please refer to the brochure – *Basic information on the Surgical procedures* (NAMLIT 1017).

1 Norm ASTM F67 (states min. tensile strength of annealed titanium)

2 Data on file

3 Gottlow J, et al. Evaluation of a new titanium-zirconium dental implant: a biomechanical and histological comparative study in the mini pig. Clin Imp Dent Relat Res. 2012. Aug;14(4);538-545.

4 Müller F. Academy of Osseointegration 26th Annual Meeting, Washington DC, March 2011; oral presentation.

5 Barter S, Stone P, Brägger U. A pilot study to evaluate the success and survival rate of Titanium-Zirconium implants in partially edentulous patients: Results after 24 months of follow-up. Clin. Oral Implants Res. 23, 2012; 873-881.

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