# **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.

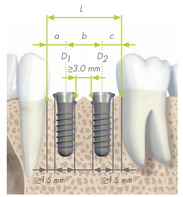
## **MESIODISTAL** IMPLANT POSITION

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.

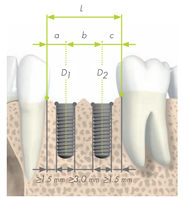
**Rule 2:** **Distance to adjacent implants at bone level:**
A minimal distance of 3.0 mm between two adjacent implant shoulders (mesiodistal) is required.

### S/SP/TE IMPLANTS




| 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 (NN) | Ø 3.5 (NN) | 3.0 | 6.5 | 3.0 | 12.5 |
| Ø 3.5 (NN) | Ø 4.8 (RN) | 3.0 | 7.0 | 4.0 | 14.0 |
| Ø 3.5 (NN) | 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 |

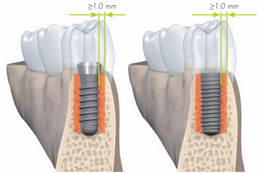
### BL IMPLANTS




| Implant diameter $D_1$ (mm) | Implant 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 procedure with the Straumann Dental Implant System" (USLIT100).**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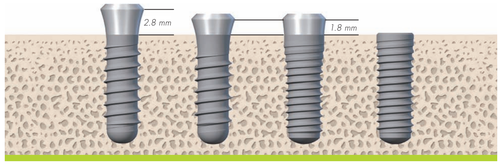
straumann®

# **STRAUMANN® DENTAL IMPLANT SYSTEM**
## IMPLANT SELECTION GUIDE

COMMITTED TO
**SIMPLY DOING MORE**
FOR DENTAL PROFESSIONALS℠

## **STRAUMANN'S IMPLANT PORTFOLIO**

The Straumann® Dental Implant System offers four 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 (S) | Standard Plus (SP) | Tapered Effect (TE) | Bone Level (BL)

### **STANDARD**
**Classic soft tissue level implant**

Straumann® Standard implants 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 consist of a smooth neck section of 1.8 mm in height that allows flexible coronoapical implant placement in combination with trans- or subgingival healing.

### **TAPERED EFFECT**
**For immediate placement**

Straumann® Tapered Effect implants 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 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.

## **STRAUMANN'S TRADITION OF INNOVATION**

Straumann is the pioneer of innovative solutions for implant dentistry, including the introduction of the SLA® surface in 1994, the revolutionary SLActive® surface in 2006, and the technologically-advanced Roxolid® implant material in 2009.

### **SLA** IMPLANT SURFACE

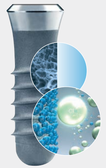
With unique characteristics such as double roughness treatment for greater bone-to-implant contact, the SLA surface is designed to allow loading in just six weeks after implant placement in healthy patients with sufficient bone quality and quantity.

### **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 developed specifically for the needs of dental implantology. This unique material has higher tensile strength than pure titanium. Roxolid features higher fatigue strength and osseointegration when compared to Straumann SLActive titanium implants. Roxolid is available for Straumann implants with an endosseous diameter of 3.3 mm except NN, and offers greater confidence when placing small diameter implants.



*compared to SLA in an animal model

# RECOMMENDED APPLICATIONS FOR STRAUMANN IMPLANTS

| Implant type | | Applications and distinctive features | Minimal ridge width* | Minimal site width** |
|---|---|---|---|---|
| **Straumann® Standard and Standard Plus implants** | | | | |
| **Standard** | **Standard Plus** | | | |
| | SP Ø 3.3 mm NN  | ■ Small diameter implant for narrow interdental spaces and ridges<br>⚠ **Caution:** Placement in the molar region is not recommended for Ø 3.3 mm implants | 5.5 mm | 5.5 mm |
| S Ø 3.3 mm RN  | SP Ø 3.3 mm RN  | ■ Alternative in the case of a restricted ridge width<br>■ In view of their lower mechanical strength compared to the Ø 4.1 mm implants, these implants should be used exclusively for the following situations:<br>– Edentulous jaw: 4 implants S/SP Ø 3.3 RN in conjunction with a bar construction<br>– Partially edentulous jaw: In the case of fixed reconstruction, combined with Ø 4.1 mm implants and splinted with a superstructure<br>⚠ **Caution:** Placement in the molar region is not recommended for Ø 3.3 mm implants | 5.5 mm | 7.0 mm |
| S Ø 3.3 mm RN Roxolid  | SP Ø 3.3 mm RN Roxolid  | ■ Designed for cases with a restricted ridge width<br>⚠ **Caution:** Placement in the molar region is not recommended for Ø 3.3 mm implants | 5.5 mm | 7.0 mm |
| S Ø 4.1 mm RN  | SP Ø 4.1 mm RN  | ■ 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  | ■ For oral endosteal implant placement in the maxilla and mandible, for functional and esthetic rehabilitation of edentulous and partially edentulous patients<br>■ 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  | ■ For oral endosteal implant placement in the maxilla and mandible, for functional and esthetic rehabilitation of edentulous and partially edentulous patients<br>■ The S/SP Ø 4.8 mm implants are especially suited for wider interdental spaces and ridges<br>■ S/SP implants with a WN platform are designed for the reconstruction of teeth with a greater neck diameter | 7.0 mm | 8.5 mm |

***S** = Standard Implant, **SP** = Standard Plus Implant, **NN** = Narrow Neck Ø 3.5 mm, **RN** = Regular Neck Ø 4.8 mm, **WN** = Wide Neck Ø 6.5 mm*

| Implant type | Applications and distinctive features | Minimal ridge width* | Minimal site width** |
|---|---|---|---|
| **Straumann® Tapered Effect implants** | | | |
| TE Ø 3.3 mm RN  TE Ø 3.3 mm RN Roxolid  | ■ For oral endosteal implant placement in the maxilla and mandible, for functional and esthetic rehabilitation of edentulous and partially edentulous patients<br>■ Alternative in dental gaps where the roots of adjacent teeth are close together, where implants with a greater endosteal diameter are contraindicated<br>⚠ **Caution:** Placement in the molar region is not recommended for Ø 3.3 mm implants | 7.0 mm | 7.0 mm |
| TE Ø 4.1 mm RN  | ■ 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  | ■ For oral endosteal implant placement in the maxilla and mandible, for functional and esthetic rehabilitation of edentulous and partially edentulous patients<br>■ The TE Ø 4.8 mm implants are especially suited for wider interdental spaces and ridges | 8.5 mm | 8.5 mm |
| **Straumann® Bone Level implants** | | | |
| BL Ø 3.3 mm NC  BL Ø 3.3 mm NC Roxolid  | ■ Small diameter implant for narrow interdental spaces and ridges<br>⚠ **Caution:** Placement in the molar region is not recommended for Ø 3.3 mm implants | 5.5 mm | 5.5 mm |
| BL Ø 4.1 mm RC  | ■ 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  | ■ For oral endosteal implant placement in the maxilla and mandible, for functional and esthetic rehabilitation of edentulous and partially edentulous patients<br>■ The BL Ø 4.8 mm implants are especially suited for wider interdental spaces and ridges | 7.0 mm | 7.0 mm |

***TE** = Tapered Effect Implant, **RN** = Regular Neck Ø 4.8 mm, **WN** = Wide Neck Ø 6.5 mm*
***BL** = Bone Level Implant, **NC** = Narrow CrossFit® Connection, **RC** = Regular CrossFit® Connection*

*¹ Sterile pack of 4*
** 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*



## IMPLANT RANGE

| Implant overview | | Straumann® Standard Implant | | | | Straumann® Standard Plus Implant | | | | | Straumann® Tapered Effect Implant | | | Straumann® Bone Level Implant | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | S Ø 3.3 RN | S Ø 4.1 RN | S Ø 4.8 RN | S Ø 4.8 WN | SP Ø 3.3 NN | SP Ø 3.3 RN | SP Ø 4.1 RN | SP Ø 4.8 RN | SP Ø 4.8 WN | 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 |
| Neck diameter | | Ø 4.8 mm | Ø 4.8 mm | Ø 4.8 mm | Ø 6.5 mm | Ø 3.5 mm | Ø 4.8 mm | Ø 4.8 mm | Ø 4.8 mm | Ø 6.5 mm | Ø 4.8 mm | Ø 4.8 mm | Ø 6.5 mm | Ø 3.3 mm | Ø 4.1 mm | Ø 4.8 mm |
| Endosteal diameter | | Ø 3.3 mm | Ø 4.1 mm | Ø 4.8 mm | Ø 4.8 mm | Ø 3.3 mm | Ø 3.3 mm | Ø 4.1 mm | Ø 4.8 mm | Ø 4.8 mm | 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® | 6 mm | | 033.030S | 033.230S | 033.630S | | | 033.050S | 033.250S | 033.650S | | | | | | |
| | 8 mm | 033.131S | 033.031S | 033.231S | 033.631S | 033.951S | 033.151S | 033.051S | 033.251S | 033.651S | 033.721S | 033.761S | | 021.2108 | 021.4108 | 021.6108 |
| | 10 mm | 033.132S | 033.032S | 033.232S | 033.632S | 033.952S | 033.152S | 033.052S | 033.252S | 033.652S | 033.722S | 033.762S | 033.712S | 021.2110 | 021.4110 | 021.6110 |
| | 12 mm | 033.133S | 033.033S | 033.233S | 033.633S | 033.953S | 033.153S | 033.053S | 033.253S | 033.653S | 033.723S | 033.763S | 033.713S | 021.2112 | 021.4112 | 021.6112 |
| | 14 mm | 033.134S | 033.034S | 033.234S | | 033.954S | 033.154S | 033.054S | 033.254S | | 033.724S | 033.764S | 033.714S | 021.2114 | 021.4114 | 021.6114 |
| | 16 mm | 033.135S | 033.035S | | | | | | | | | | | | | |
| SLA® | 6 mm | | 043.030S | 043.230S | 043.630S | | | 043.050S | 043.250S | 043.650S | | | | | | |
| | 8 mm | 043.131S | 043.031S | 043.231S | 043.631S | 042.930S | 043.151S | 043.051S | 043.251S | 043.651S | 043.721S | 043.761S | | 021.2408 | 021.4408 | 021.6408 |
| | 10 mm | 043.132S | 043.032S | 043.232S | 043.632S | 042.931S | 043.152S | 043.052S | 043.252S | 043.652S | 043.722S | 043.762S | 043.712S | 021.2410 | 021.4410 | 021.6410 |
| | 12 mm | 043.133S | 043.033S | 043.233S | 043.633S | 042.932S | 043.153S | 043.053S | 043.253S | 043.653S | 043.723S | 043.763S | 043.713S | 021.2412 | 021.4412 | 021.6412 |
| | 14 mm | 043.134S | 043.034S | 043.234S | | 042.933S | 043.154S | 043.054S | 043.254S | | 043.724S | 043.764S | 043.714S | 021.2414 | 021.4414 | 021.6414 |
| | 16 mm | 043.135S | 043.035S | | | | | | | | | | | | | |
| Roxolid® | 6 mm | | | | | | | | | | | | | | | |
| | 8 mm | 033.431S | | | | | 033.451S | | | | 033.751S | | | 021.2208 | | |
| | 10 mm | 033.432S | | | | | 033.452S | | | | 033.752S | | | 021.2210 | | |
| | 12 mm | 033.433S | | | | | 033.453S | | | | 033.753S | | | 021.2212 | | |
| | 14 mm | 033.434S | | | | | 033.454S | | | | 033.754S | | | 021.2214 | | |
| | 16 mm | 033.435S | | | | | | | | | | | | | | |

## CLOSURE SCREWS AND HEALING ABUTMENTS

### FOR TISSUE LEVEL IMPLANTS

| Used with NN implants | | Used with RN implants | | Used with WN implants | |
|---|---|---|---|---|---|
| 048.374 | NN closure screw | 048.371V4 | RN closure screw, small | 048.375 | WN closure screw |
| 048.043 | NN healing cap | 048.373V4 | RN closure screw, large | 048.038 | WN healing cap, 2.0 mm |
| 048.050 | NN protective cap | 048.033 | RN healing cap, 2.0 mm | 048.039 | WN healing cap, 3.0 mm |
| | | 048.034 | RN healing cap, 3.0 mm | 048.053 | WN healing cap, 4.5 mm |
| | | 048.037 | RN healing cap, 4.5 mm | 048.030 | WN healing cap, beveled |
| | | 048.028 | RN healing cap, beveled, small | | |
| | | 048.029 | RN healing cap, beveled, large | | |

### FOR BONE LEVEL IMPLANTS

| | | | |
|---|---|---|---|
| 024.2100-04[1] | NC Closure Screw, H 0.0 mm | 024.4100-04[1] | RC Closure Screw, H 0.0 mm |
| 024.2105-04[1] | NC Closure Screw, H 0.5 mm | 024.4105-04[1] | RC Closure Screw, H 0.5 mm |
| 024.2222 | NC Healing Abutment, conical, D 3.6 mm H 2.0 mm | 024.4222 | RC Healing Abutment, conical, D 4.5 mm H 2.0 mm |
| 024.2224 | NC Healing Abutment, conical, D 3.6 mm H 3.5 mm | 024.4224 | RC Healing Abutment, conical, D 4.5 mm H 4.0 mm |
| 024.2226 | NC Healing Abutment, conical, D 3.6 mm H 5.0 mm | 024.4226 | RC Healing Abutment, conical, D 4.5 mm H 6.0 mm |
| 024.2242 | NC Healing Abutment, conical, D 4.8 mm H 2.0 mm | 024.4242 | RC Healing Abutment, conical, D 6.0 mm H 2.0 mm |
| 024.2244 | NC Healing Abutment, conical, D 4.8 mm H 3.5 mm | 024.4244 | RC Healing Abutment, conical, D 6.0 mm H 4.0 mm |
| 024.2246 | NC Healing Abutment, conical, D 4.8 mm H 5.0 mm | 024.4246 | RC Healing Abutment, conical, D 6.0 mm H 6.0 mm |
| 024.2234 | NC Healing Abutment, bottle shape, D 3.3 mm H 3.5 mm | 024.4234 | RC Healing Abutment, bottle shape, D 4.4 mm H 4.0 mm |
| 024.2236 | NC Healing Abutment, bottle shape, D 3.3 mm H 5.0 mm | 024.4236 | RC Healing Abutment, bottle shape, D 4.7 mm H 6.0 mm |
| 024.2270 | NC Healing Abutment, customizable, D 5.0 mm | 024.4270 | RC Healing Abutment, customizable, D 7.0 mm |

***D** = Diameter, **H** = Height*