PROSTHETIC OPTIONS
FOR NARROW NECK IMPLANTS

Straumann® Narrow Neck

COMMITTED TO
SIMPLY DOING MORE
FOR DENTAL PROFESSIONALS
Straumann is industrial partner of the ITI (International Team for Implantology) in the areas of research, development and education.
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INTRODUCTION

Patients’ expectations regarding the function and appearance of dental implants have risen steadily in recent years. The objective in the development of the Standard Plus implant Ø 3.3 mm Narrow Neck was to create ideal conditions for the treatment of small single-tooth gaps in the anterior upper and lower jaws.

The one-part Narrow Neck implant has a built-in octa abutment and a reduced shoulder width of 3.5 mm, which provides a solid base for narrow prosthetic copings. As part of the Standard Plus system, the Narrow Neck implant has a smooth collar height of 1.8 mm to meet high esthetic expectations.
## SYSTEM OVERVIEW

### Prosthetics

<table>
<thead>
<tr>
<th>Narrow Neck</th>
<th>Ø 3.5 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Narrow Neck Image" /></td>
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</table>

#### Transfer parts

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>048.016</td>
<td>CARES™</td>
</tr>
<tr>
<td>048.044/V20</td>
<td>CARES™</td>
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<tr>
<td>048.122V4</td>
<td>CARES™</td>
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<tr>
<td>048.130</td>
<td></td>
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</tbody>
</table>

#### Prosthetic restoration

- screw-retained or cemented

#### Case planning

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>048.935V4</td>
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<tr>
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<tr>
<td>048.937V4</td>
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</tbody>
</table>

#### Temporary restorations/Protective caps

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>048.669</td>
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<td>048.050</td>
<td></td>
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#### Titanium copings

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
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<td>CARES™</td>
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<tr>
<td>048.550</td>
<td>CARES™</td>
</tr>
<tr>
<td>048.551</td>
<td>CARES™</td>
</tr>
</tbody>
</table>

#### Ceramic copings

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<thead>
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<th>Part Number</th>
<th>Description</th>
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<tr>
<td>048.500</td>
<td>CARES™</td>
</tr>
<tr>
<td>048.635</td>
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</table>

#### Gold copings

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<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>048.351*</td>
<td>CARES™</td>
</tr>
<tr>
<td>049.177</td>
<td></td>
</tr>
</tbody>
</table>

#### Auxiliary parts/Screws

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>048.353*</td>
<td></td>
</tr>
<tr>
<td>049.177</td>
<td></td>
</tr>
</tbody>
</table>

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*For NN CARES ceramic copings only.

1) Straumann® CARES is only available at http://cares.straumann.com.
2) Scope of delivery Straumann® CARES: Customizable abutment, screw, Scanbody synOcta 1.5.

(RN CARES Ceramic Abutment only). Manufacturing at the Straumann® CARES production center.
**PRODUCT OVERVIEW**

**Transfer and cast fabrication**

<table>
<thead>
<tr>
<th>048.122V4</th>
<th>048.016</th>
<th>048.130</th>
</tr>
</thead>
</table>

**NN impression cap with snap-on fit, plastic**
Precise impression procedure, saves time, simple handling.

**SCS configuration**
Secure transfer to the implant.

**NN impression cap with integral screw, aluminum/titanium**
Secure transfer to the implant (for open tray).

**NN implant analog**
Stainless steel
Dimensionally stable, exact dimensions.

**Secured against rotation**
Secure anchorage in the model.
**Prosthetics**

<table>
<thead>
<tr>
<th>048.669</th>
<th>048.505</th>
<th>048.530/331</th>
<th>048.500</th>
<th>048.635</th>
<th>049.177</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>NN temporary coping</em></td>
<td><em>NN coping</em></td>
<td><em>NN coping, 15°/20° angled</em></td>
<td><em>NN framework blank</em></td>
<td>NN gold coping, cast on</td>
<td>NN occlusal screw</td>
</tr>
</tbody>
</table>

**Grade 4 titanium/white PEEK**

- Design: Can be modified.
  - For screw- or cement-retained temporary single-tooth and cement-retained temporary bridge restorations

For detailed instructions see:
- “Crown and Bridge Restorations with the Straumann® synOcta Prosthetic System”, Art. No. 152.255.

**Height 10 mm**

**Height 9 mm, with a 3 mm tissue cuff**

**Height 8.8 mm**

**Height 9 mm**

**Height 10 mm**

*NN= Narrow Neck

*Components can not be cast onto.

**New Indications**

The Standard Plus Implant Ø 3.3 mm Narrow Neck can now be used in a broader range of indications:

- Single tooth replacement
- Fixed partial denture (cement-retained only)
- Hybrid prosthetics - retentive anchor available as a custom-made product (art. no. 80498)

**Note**

- Estheticor® and Ceramicor® are registered trademarks of Cendres & Métaux SA (Biel-Bienne, Switzerland)
RESTORATIVE PROCEDURES FOR THE NARROW NECK IMPLANT

Fabrication of a temporary

Although the healing or protective cap can remain in place throughout the entire healing phase, most cases require placement of a custom temporary in order to achieve an esthetic gingival architecture. The temporary single-tooth or bridge restoration can be fabricated chair-side using the NN temporary coping.

The temporary is fabricated using standard techniques such as direct veneering (e.g. vacuum formed sheet technique as shown here) or temporary cementation of prefabricated crowns.

The temporary coping is customized individually on an NN analog and then placed on the implant. To make it easy to loosen the occlusal screw afterwards, the screw channel is sealed with cotton wool or wax prior to veneering.

Tip: New cross-toothed millers or heatless wheels are suitable for processing the temporary coping. To avoid smearing of the polymer, adjust the bur speed properly [low rpm number, only little pressure]. For optimal adhesion of temporary veneering material, we recommend inserting retentions in the resin or sandblasting the resin (covering the octagon).
A vacuum formed sheet is used for veneering.

The excess acrylic is removed, the screw channel reopened and the temporary restoration finished. Then the cleaned restoration is placed on the implant, the screw head is covered with cotton wool and the screw channel is sealed with composite.

**Note:** We recommend a tightening torque of between 15 and 35 Ncm. The temporary coping must not remain in situ for more than 6 months and the restoration must always be under-occluded in order to reduce lateral forces. Use temporary cement for cement-retained temporary restorations.
NN TITANIUM COPING

**Laboratory Procedure**

When the dental laboratory receives the impression from the doctor, the NN implant analog is secured onto the impression cap by screwing it into place with an SCS screwdriver (or it snaps into place if the plastic Snap on impression cap is used).

The working cast is fabricated in the usual way from resin stone, Type 4 (DIN 13911).

In this case the titanium coping for cement-retained restorations was used.

A flatwall must be made in the coping to ensure anti-rotation. The coping is modified and the restoration is fabricated using conventional laboratory procedures.

The appropriate coping is then chosen. For this, the plastic NN PLAN copings can be used as “try-ins” on the model to facilitate selection of prosthetic components. The NN PLAN copings are included in the Prosthetic planning set, Art. No. 048.901.

The model is poured in stone

NN titanium coping in place on the model

The coping is prepped

NN implant analog
(048.130)

NN PLAN coping
(048.935V4)

NN angled PLAN coping, 15°
(048.936V4)

NN angled PLAN coping, 20°
(048.937V4)
**Placement of Final Restoration**

An NN occlusal screw is used to secure the titanium coping onto the implant. It is then torqued to 3.5 Ncm with an SCS screwdriver (in combination with the ratchet 046.119 and torque control device 046.049).

The screw access hole is blocked out and the crown is cemented into place with permanent cement.

Clinical photos courtesy of Robert Vogel, DDS/USA

Also see the "Straumann® Dental Implant System – Prosthetics" DVD, Art. No. 150.538, "Cemented single tooth restoration with the angled NN Titanium abutment".
NN GOLD COPING, CAST-ON – LABORATORY PROCEDURE

The NN gold coping consists of a non-oxidizing, high-fusion alloy (Ceramicor: Au 60%, Pt 19%, Pd 20%, Ir 1%; fusion temperature range 1400°–1490 °C/2552°–2714 °F). With this coping, a modeling aid made of burn-out plastic is already attached. If required, the modeling aid can be individually shortened occlusally.

1. Initial situation for the fabrication of a PFM crown for tooth 32 (ADA 23). For optimal reproduction of the gingiva, we recommend fabricating a gingival mask on the plaster cast.

2. The cast is used to produce a waxup and silicone index, with which the spacing is later checked when modeling the crown, and which can assist the process of molding the porcelain veneer.

Tip: Never cast without a modeling aid, as otherwise the PFM alloy will flow out too thinly, or not at all, at the upper edge of the coping (screw seat on the coping) and there is a danger of crack formation in the ceramic material as a result of different heat expansion coefficients. The modeling aid also has the function of ensuring a cleanly finished screw channel with sharp edges.
3. The gold coping is screwed onto the analog with the occlusal screw.

4. The framework is modeled to the tooth shape with reduced dimensions, according to the rules of the veneering technique. As the prefabricated gold coping is made of a non-oxidizing alloy, it is important to ensure that the parts to which the porcelain veneer will later be applied are covered with a layer of wax at least 0.7 mm thick during modeling.

5. The silicone index fabricated with the help of the wax-up is used to check that the framework has been formed correctly.
6. Pins and base are applied to the finished framework. The use of investment materials designed for the rapid heating procedure (speed investment materials) is not recommended. Casting is performed with precious metal alloys.

7. Suitable means of devesting include ultrasound, a water jet, pickling or a glassfiber brush. Never use sandblasting for devestment! Sandblasting will damage the interior configuration (octagon) and coping edge, which causes a loss of precision in the form of inadequate accuracy of fit.

8. The framework is finished, taking care not to grind through the cast-on alloy, as the gold coping is made of a non-oxidizing alloy to which a porcelain veneer cannot be applied (the thickness of the cast-on alloy must be at least 0.5 mm).

**Note:**
Please also refer to the Straumann brochure, “Crowns and Bridges with the synOcta® Prosthetic System”, Art. No. 152.255 for detailed information about casting and instructions for use for the fabrication of a PFM crown with the aid of a cast-on gold coping.
9. Before veneering, the framework is checked on the cast, with the help of the silicone index, to ensure that the dimensions are optimal.

10. To prevent the veneering porcelain from cracking or chipping in the area of the cervical margin, the framework should be left unveneered around the circumference in this area (approximately 0.3 to 0.4 mm).

11. After final firing, the crown is ready for attachment. It is screwed tight on the implant with the NN occlusal screw, applying a torque of 35 Ncm with a screwdriver.
Disclaimer of liability

The Straumann dental implant is part of an overall concept and may only be used in conjunction with the associated original components and instruments according to Institut Straumann AG’s instructions and recommendations.

Use of products made by third parties in conjunction with the Straumann® Dental Implant System will void any warranty or other obligation, express or implied, of Institut Straumann AG.

Instructions as to application of our products take place verbally, in writing, by electronic media or in hands-on training corresponding to state of the art at the time of introduction of the product.

The user of Straumann products has the duty to determine whether or not any product is suitable for the particular patient and circumstances. Straumann disclaims any liability, express or implied, and shall have no responsibility for any direct, indirect, punitive or other damages, arising out of or in connection with any errors in professional judgment or practice in the use or installation of Straumann products.

The user is also obliged to study the latest developments of the Straumann® Dental Implant System and their applications regularly.

Please note

The descriptions contained in this document are not sufficient for immediate use of the Straumann® Dental Implant System. Knowledge of dental implantology and instruction in the handling of the Straumann® Dental Implant System provided by an operator with the relevant experience are always necessary.

Availability

Not all products listed in this brochure are available in all countries.

Validity

Upon publication of this brochure, all previous versions are superseded.

Caution

Our products must be secured against aspiration when used intraorally. Do not use damaged or blunt instruments.

Units per package

Unless stated otherwise, there is one unit in each package.

Documentation

You can obtain detailed instructions on the Straumann® Dental Implant System from your Straumann representative.

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Definition SLActive

Sand-blasted, large grit, Acid-etched, chemically active and hydrophilic

Definition SLA®

Sandblasted, Large grit, Acid-etched

Explanation of the symbols on labels and instruction leaflets

LOT

Lot/batch number

REF

Article number

STERILE R

Sterile by gamma irradiation

STERILE

Nonsterile

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Lower temperature limit

Upper temperature limit

Temperature limit

Rx only

Caution: Federal (USA) law restricts this product to sale by or on the order of a dentist or physician

Do not use on patients

Do not reuse

Refer to instructions for use

Use before expiry date

Protect from exposure to strong light or heat

CE

Straumann products carry the CE mark and fulfill the requirements of the Medical Devices Directive 93/42 EEC

Consult operating instructions

Colored warning labels

YELLOW = CAUTION

Indicates hazards or unsafe handling which might cause minor injury or damage to property

ORANGE = WARNING

Indicates hazards which might cause serious or fatal injury

RED = DANGER

Indicates hazards which might cause immediate serious or fatal injury