

PROSTHETIC OPTIONS

FOR NARROW NECK IMPLANTS



Narrow Neck



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.



**Standard Plus Implant Ø 3.3 mm
Narrow Neck**



SYSTEM OVERVIEW

Prosthetics	
	<p>Narrow Neck \varnothing 3.5 mm</p> 
Transfer parts	 048.016  048.122V4  048.130
Prosthetic restoration	screw-retained or cemented
Case planning	 048.935V4  048.936V4  048.937V4
Temporary restorations/ Protective caps	 048.043  048.050  048.374
Titanium copings	 048.505  048.550  048.551
Gold copings	 048.500  048.635
Auxiliary parts/Screws	 049.177

PRODUCT OVERVIEW

Transfer and cast fabrication



048.122V4



048.016



048.130

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



048.505

048.550/551

048.500

048.635

049.177

*NN Coping

Grade 4 titanium

Increased strength

Design

Shoulder and height can be modified.

- As a screw-retained base for cement-retained crowns.
- For the direct application of acrylic veneering materials (not suitable for ceramic veneering).

Height 9.0 mm with a 3.0 mm tissue cuff.

*NN Coping, 15°/20° angled

Grade 4 titanium

Increased strength.

Design

Shoulder and height can be modified.

- As a screw-retained base for cement-retained crowns.
- For the direct application of acrylic veneering materials (not suitable for ceramic veneering).

Internal 16 position design

For optimal positioning.

Height 8.8 mm

*NN framework blank

Metal ceramic alloy ESTETICOR COSMOR H

Can be trimmed for the direct application of ceramic materials.

Design

For screw-retained crowns.

Height 9.0 mm

NN gold coping, cast on

Cast-on alloy CERAMICOR/ burn-out plastic

Non-oxidizing, high-melting, for the cast-on technique with precious metal alloy.

For detailed instructions see "PROSTHETICS, Crown and Bridge Restorations with the synOcta® Prosthetic System", Art. No. 152.255.

Design

For screw-retained crowns.

Height 10.0 mm

NN occlusal screw, titanium alloy Ti-6Al-7Nb anodized

Tightening torque 35 Ncm

Provides for a stable connection.

Pale yellow color

Clear distinction from the standard occlusal screw.

Thread Ø 1.8 mm

NN = Narrow Neck

*Important note:

These components can not be cast onto.

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, some cases may require placement of a custom temporary in order to achieve an esthetic gingival architecture.

The modified coping is then secured onto an NN analog with an NN occlusal screw. A preformed acrylic tooth can be relined over the prepared coping.



Remove healing cap with an SCS screwdriver



The coping is prepped in the mouth

An acrylic temporary can be created and placed over the NN titanium abutment coping.

The screw access hole must be blocked out prior to using the relined material.



NN titanium coping
(048.505)

Secure the NN titanium coping with the yellow NN occlusal screw and modify it as necessary (in the mouth using copious water spray).



NN occlusal screw
(049.177)



Use temporary cement to secure the provisional crown on the prepped coping

Impression Procedure

Once the temporary is removed, it reveals the mature scalloped gingiva.



Temporary has been removed

An impression cap is chosen and then seated. In this case, an open tray technique was used. The NN metal impression cap (048.016) is screwed into place using an SCS screwdriver. A plastic NN snap-on impression cap (048.122V4) for a closed tray technique is also available.



Metal impression cap screwed into place

The impression is taken using an elastomeric impression material.



NN snap-on impression cap
(048.122V4)



The impression (with the impression cap picked up) is sent to the lab

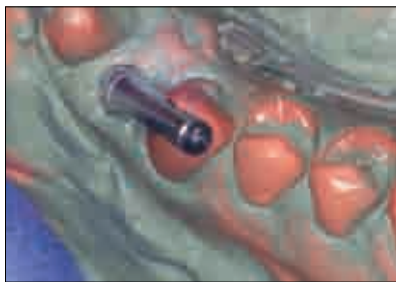


**NN impression cap with
integral screw**
(048.016)

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).



NN analog in place in the impression

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



The model is poured in stone

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



NN titanium coping in place on the model

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.

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.



NN implant analog
(048.130)



NN PLAN coping
(048.935V4)



NN angled PLAN coping, 15°
(048.936V4)



NN angled PLAN coping, 20°
(048.937V4)



The coping is prepped

Placement of Final Restoration

An NN occlusal screw is used to secure the titanium coping onto the implant. It is then torqued to 35 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.



The modified coping secured in the mouth



Final crown in place

Clinical photos courtesy of Robert Vogel, DDS/USA



NN occlusal screw
(049.177)



Also see the "Straumann® Dental Implant System – Prosthetics" CD-ROM, 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 wax-up 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.



**NN Cappetta in oro,
da sovrafusione**
048.635



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 glass-fiber 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, "PROSTHETICS, 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 NIN occlusal screw, applying a **torque of 35 Ncm** with a screwdriver.





IMPORTANT NOTES

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 trainings 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 previous descriptions are not sufficient enough to allow 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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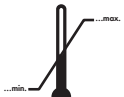






Definition SLActive

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

Definition SLA®

Sand-blasted, Large grit, Acid-etched

Explanation of the symbols on labels and instruction leaflets

	Lot/batch number
	Article number
	Sterile by gamma irradiation
	Nonsterile
	Lower limit of temperature
	Upper temperature limit
	Temperature limitation
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 expiration date
	Protect from exposure to strong light or heat
	Straumann products carry the CE mark and fulfill the requirements of the Medical Devices Directive 93/42 EEC.

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.

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STRAUMANN GUARANTEE

International Headquarters

Institut Straumann AG
Peter Merian-Weg 12
CH-4002 Basel, Switzerland
Phone +41 (0)61 965 11 11
Fax +41 (0)61 965 11 01