GRAND MORSE™

CATALOG
2018

NEODENT®
A Straumann Group Brand

NEW SMILES EVERY DAY

Neodent® provides you with a complete range of products and services that are designed and produced by a team of professionals who truly love what they do. Just like you, we live to give people new reasons to smile. New ways to enjoy everything life has to offer. Every day.

TECHNICAL GUIDELINES

Innovative and easy to use

Neodent® Packaging

Neodent® implant packaging has been updated to a concept that provides convenience through all steps of the procedure, from storage to the placement of the implant.

The new packaging aids in identification of both the implant model as well as its diameter and length, regardless of its storage position.

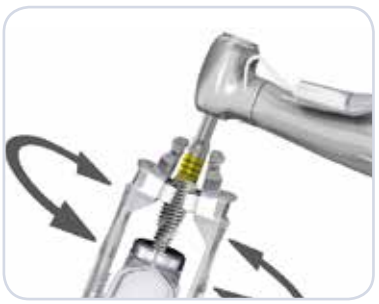
Package instruction of use

After breaking the sterility seal on the blister, hold the primary package (vial) and twist the lid to open it.

To remove the implant from the vial lift the cap up, which has the stand and implant attached to it.

To secure the implant, grip both sides of the implant carrier.

While gripping the implant carrirer, remove the lid.



To capture the implant with the contra-angle handpiece attachment, grip the implant carrier while placing the attachment into the implant chamber.

The implant can now be transported to the surgical site.

e-IFU – Electronic Instructions For Use

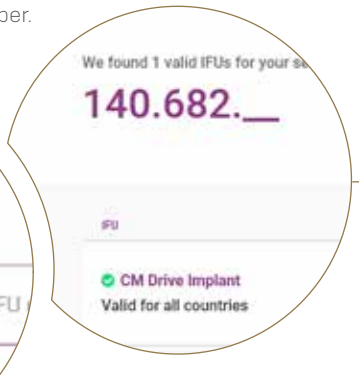
Neodent® innovates once more, providing an on-line platform designed to provide quick and practical use of its own product instructions: the e-IFU (Instructions For Use) website.

To facilitate access, have the article number, which can be found on the external packaging of the product, in this catalog or with your local distributor. Once the article number is entered in the website, the clinician will have access to relevant information for this product, such as description, indication for use, contraindications, handling, traceability and other features.

Web adress: ifu.neodent.com.br

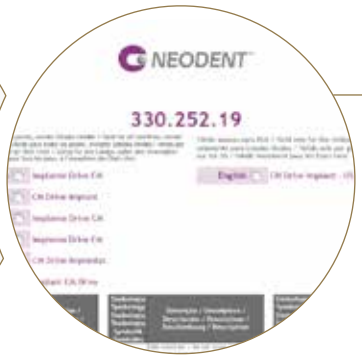
1 To access the IFU website, type the above address in your browser.

2 Enter in the search field the article number.



3 The search result is presented below the search field, informing the IFU code, the name of the product and countries where the IFU is valid.

4 Click the "download" button to open the file.



5 The IFU will automatically open in a new window. In case you want to download it, click the save as icon to download in your browser.

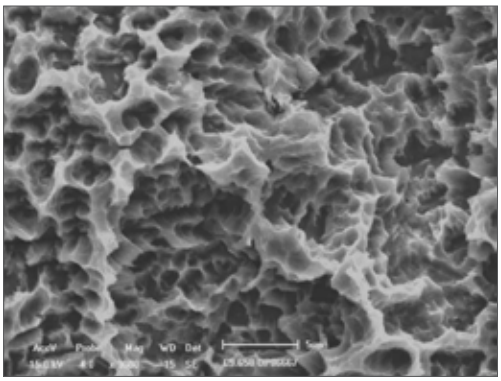
NeoPoros

Constant evolution

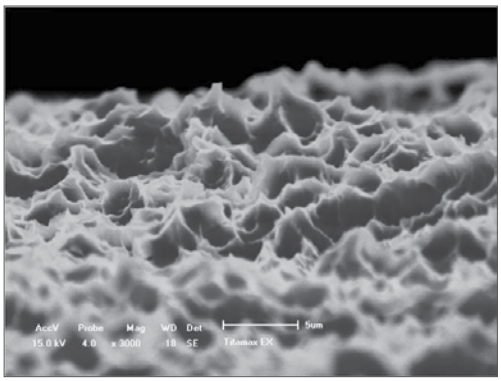
Based on the abrasive sandblasting concept followed by acid etching, the **NeoPoros** surface promotes, by using controlled grain oxides, cavities on the implant surface that then are uniformed with the acid etching technique.

The whole process of obtaining this surface is guaranteed due to automated time, speed, pressure and particle size control.

(A)



(B)



Controlled roughness on all implant surface.
Scanning electron microscopy (A) shows macro (15-30µm) and
(B) microtopography (0,3 - 1,3µm).

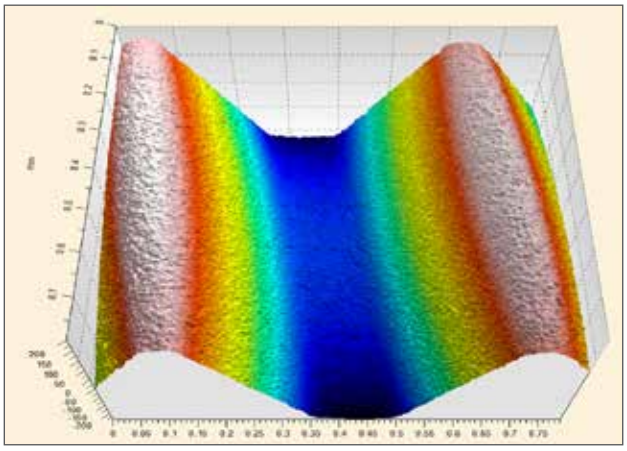


Image taken by confocal microscopy.
Roughness and Microtopography.
(Sa= 1,4 – 1,8 µm; Sz= 15 µm).

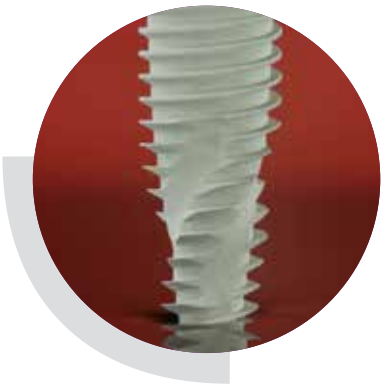
Surface
concept evolution

The Acqua Hydrophilic Surface is designed for high treatment predictability

The Neodent® Acqua hydrophilic surface is the next level of the highly successful S.L.A. type of **NeoPoros** surface developed to achieve successful outcomes even in challenging situations, such as soft bone or immediate protocols[1-4]

Surface comparison*

*Lab generated images.



NeoPoros surface

Acqua Hydrophilic Surface

Hydrophilicity

The hydrophilic surface presents a smaller contact angle when in contact with hydrophilic liquids. This provides greater accessibility of organic fluids to Acqua implant surface.[2]

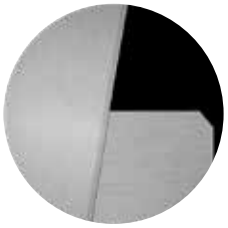
GRAND MORSE™

Grand Morse™ Connection

The Neodent® Grand Morse™ connection offers a unique combination is based on proven concepts: a platform switch associated with a deep 16º Morse Taper including an internal indexation for a strong and stable connection designed to achieve long-lasting results.

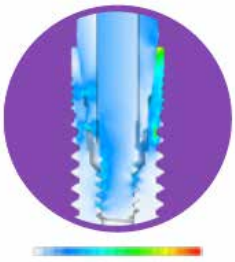
1
Internal Index
Precise abutment positioning, protection against rotation and easy handling.

2
Platform Switching
Abutment design with a narrower diameter than the implant coronal area, enabling the platform switching concept.[5-9]



3
Deep Connection
Allowing a large contact area between the abutment and the implant.

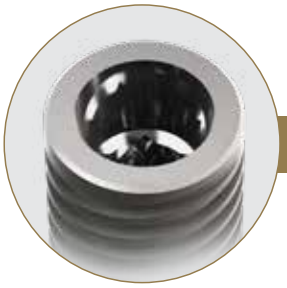
4
16º Morse Taper connection
Designed to ensure tight fit for an optimal connection sealing.



Grand Morse™ Implants

The Neodent® Grand Morse™ implants provide a complete range of treatment options to create the optimal tooth replacement outcomes for all indications, from single tooth to fully edentulous:

- Helix™ Grand Morse™ is an innovative hybrid implant design maximizing treatment options in all bone types.
- Drive Grand Morse™ is a tapered implant developed to achieve high primary stability in challenging bone situations such as soft bone and extraction sockets.
- Titamax Grand Morse™ is a cylindrical implant indicated for bone types I and II and allowing vertical placement flexibility.



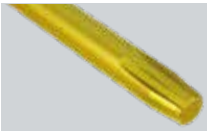
One Grand Morse™ connection for all Grand Morse™ implants

Bone type	Helix GM	Drive GM	Titamax GM
I	✓		✓
II	✓		✓
III	✓	✓	
IV	✓	✓	

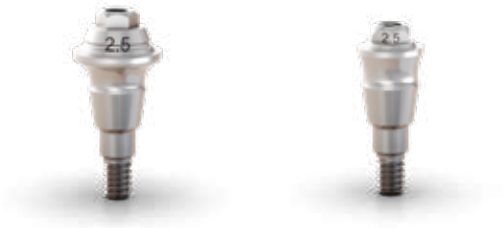
Indication table according to Lekholm and Zarb bone classification (1985).

Grand Morse™ Abutments

Pro-Peek Abutment	Titanium Base	Titanium Base C	Titanium Block	CoCr Abutment	Angled Universal Abutment	Universal Abutment (straight or angled)	Abutment	Angled Mini Conical Abutment
Temporary Single-unit	Single-unit							Multiple-unit
Screw/Cement-retained prosthesis					Cement-retained prosthesis		Screw-retained prosthesis	



Neo Screwdriver 20 Ncm



Mini Conical Abutment	Micro Abutment
Multiple-unit	Single/Multiple-unit
Screw-retained prosthesis	

Hexagonal Prosthetic Driver - 32 Ncm

Helix **GM**

PRODUCT FEATURES:

Implants Description:

- Full dual tapered implant;
- Hybrid contour with a cylindrical coronal part and conical on the apical area;
- Active apex including a soft rounded small tip and helicoidal flutes;
- Dynamic progressive thread design: from compressing trapezoidal threads on the coronal area to self-tapping V-shape threads on the apical part;
- Double lead threaded implant;
- Grand Morse™ connection.

Indications:

- Indicated for all types of bone density and implant immediate placement post extraction.

Drilling features:

- Contour drill is required in bone types I and II;
- Final pilot drills are highly recommended in bone types I and II;
- Implant should be positioned 1-2 mm below bone level;
- Drilling speed: 800-1200 rpm for bone type I and II;
- Drilling speed: 500-800 rpm for bone type III and IV;
- Implant insertion speed: 30 rpm;
- Maximum torque for implant placement: 60 Ncm.

acqua®

Drill Sequence

	Initial	Ø2.0	Ø3.5	Ø3.5+	Ø2.8/3.5	Ø3.75	Ø3.75+	Ø3.0/3.75	Ø4.0	Ø4.0+	Ø3.3/4.0	Ø4.3	Ø4.3+	Ø3.6/4.3	Ø5.0	Ø5.0+	Ø4.3/5.0	Ø6.0
	103.170	103.425	103.399	103.419	103.414	103.402	103.420	103.415	103.405	103.421	103.416	103.408	103.422	103.417	103.411	103.423	103.418	103.427
Ø3.5	Optional	✓		✓	✓													
Ø3.75	Optional	✓	✓				✓	✓										
Ø4.0	Optional	✓	✓			✓				✓	✓							
Ø4.3	Optional	✓	✓			✓			✓				✓	✓				
Ø5.0	Optional	✓	✓			✓			Optional			✓				✓	✓	

Bone types I and II

Ø3.5	Optional	✓	✓															
Ø3.75	Optional	✓	✓			Optional												
Ø4.0	Optional	✓	✓						Optional									
Ø4.3	Optional	✓	✓			✓						Optional						
Ø5.0	Optional	✓	✓									✓			Optional			
Ø6.0	Optional	✓	✓			✓						✓			✓			Optional

Bone types III and IV

Helix™ **GM** Implants

		8.0 mm	10.0 mm	11.5 mm	13.0 mm	16.0 mm	18.0 mm
Ø3.5	Acqua	140.943	140.944	140.945	140.946	140.947	140.988
	NeoPoros	109.943	109.944	109.945	109.946	109.947	109.988
Ø3.75	Acqua	140.976	140.977	140.978	140.979	140.980	140.981
	NeoPoros	109.976	109.977	109.978	109.979	109.980	109.981
Ø4.0	Acqua	140.982	140.983	140.984	140.985	140.986	140.987
	NeoPoros	109.982	109.983	109.984	109.985	109.986	109.987
Ø4.3	Acqua	140.948	140.949	140.950	140.951	140.952	140.989
	NeoPoros	109.948	109.949	109.950	109.951	109.952	109.989
Ø5.0	Acqua	140.953	140.954	140.955	140.956	140.957	140.990
	NeoPoros	109.953	109.954	109.955	109.956	109.957	109.990
Ø6.0	Acqua	140.1009	140.1010	140.1011	140.1012		
	NeoPoros	109.1009	109.1010	109.1011	109.1012		

GM Cover Screw

0 mm	2 mm
117.021	117.022

:: Use the manual Neo Screwdriver (104.060);
:: Do not exceed the insertion torque of 10 Ncm.

GM Healing Abutment

GH	0.8 mm	1.5 mm	2.5 mm	3.5 mm	4.5 mm	5.5 mm
Ø3.3	106.207	106.208	106.209	106.210	106.211	106.212
Ø4.5	106.213	106.214	106.215	106.216	106.217	106.218

:: Use the manual Neo Screwdriver (104.060);
:: Do not exceed the insertion torque of 10 Ncm.

GM Customizable Healing Abutments

GH	1.5 mm	2.5 mm	3.5 mm	4.5 mm	5.5 mm	6.5 mm
Ø5.5	106.223	106.224	106.225	106.226	106.227	
Ø7.0		106.228	106.229	106.230	106.231	106.232

Drive **GM**

PRODUCT FEATURES:

Implants Description:

- Tapered implant;
- Square shape threads;
- Double threaded implant;
- Reverse cutting chambers distributed across the implant body;
- Rounded apex with a sharp edge;
- Grand Morse™ connection.

Indications:

- Indicated for bone types III and IV and implant immediate placement post-extraction;

Drilling features:

- Final pilot drill is optional in bone types III and IV;
- Implant should be positioned 1-2 mm below bone level;
- Drilling speed: 500-800 rpm;
- Implant insertion speed: 30 rpm;
- Maximum torque for implant placement: 60 Ncm.

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Drill Sequence

	Initial	Ø2.0	Ø3.5	Ø2.8/3.5	Ø4.3	Ø3.6/4.3	Ø5.0	Ø4.3/5.0
	103.170	103.425	103.399	103.414	103.408	103.417	103.411	103.418
Ø3.5 mm	✓	✓	✓	Optional				
Ø4.3 mm	✓	✓	✓		✓	Optional		
Ø5.0 mm	✓	✓	✓		✓		✓	Optional

Bone types III and IV

Drive **GM** Implants

		8.0 mm	10.0 mm	11.5 mm	13.0 mm	16.0 mm	18.0 mm
Ø3.5	Acqua	140.958	140.959	140.960	140.961	140.962	140.963
	NeoPoros	109.958	109.959	109.960	109.961	109.962	109.963
Ø4.3	Acqua	140.964	140.965	140.966	140.967	140.968	140.969
	NeoPoros	109.964	109.965	109.966	109.967	109.968	109.969
Ø5.0	Acqua	140.970	140.971	140.972	140.973	140.974	140.975
	NeoPoros	109.970	109.971	109.972	109.973	109.974	109.975

GM Healing Abutment

GH	0.8 mm	1.5 mm	2.5 mm	3.5 mm	4.5 mm	5.5 mm
Ø3.3	106.207	106.208	106.209	106.210	106.211	106.212
Ø4.5	106.213	106.214	106.215	106.216	106.217	106.218

:: Use the manual Neo Screwdriver (104.060);
:: Do not exceed the insertion torque of 10 Ncm.

GM Customizable Healing Abutments

GH	1.5 mm	2.5 mm	3.5 mm	4.5 mm	5.5 mm	6.5 mm
Ø5.5	106.223	106.224	106.225	106.226	106.227	
Ø7.0		106.228	106.229	106.230	106.231	106.232

GM Cover Screw

0 mm	2 mm
117.021	117.022

:: Use the manual Neo Screwdriver (104.060);
:: Do not exceed the insertion torque of 10 Ncm.

Titamax **GM**

PRODUCT FEATURES:

Implants Description:

- Cylindrical implant (parallel walls);
- V-shape threads;
- Double threaded implant;
- Self tapping apex;
- Grand Morse™ connection.

Indications:

- Indicated for bone types I and II or grafted areas such as bone block.

Drilling features:

- Final pilot drill is highly recommended in bone types I and II;
- Implant should be positioned 1-2 mm below bone level;
- Self tapping implant which doesn't require the use of bone tap or contour drill;
- Drilling speed: 800-1200 rpm;
- Implant insertion speed: 30 rpm;
- Maximum torque for implant placement: 60 Ncm.

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Drill Sequence

	Initial	Ø2.0	Ø2/3	Ø2.8	Ø3.0	Ø2.8/3.5	Ø3.3	Ø3.0/3.75	Ø3.3/4.0	Ø3.8	Ø4.3	Ø4.3/5.0
	103.170	103.162	103.213	103.163	103.164	103.414	103.166	103.415	103.416	103.167	103.168	103.418
Ø3.5 mm	✓	✓		✓		✓						
Ø3.75 mm	✓	✓	✓		✓			✓				
Ø4.0 mm	✓	✓	✓		✓		✓		✓			
Ø5.0 mm	✓	✓	✓		✓			✓		✓	✓	✓

Bone types I and II

Titamax **GM** Implants

		7.0 mm	8.0 mm	9.0 mm	11.0 mm	13.0 mm	15.0 mm	17.0 mm
Ø3.5	Acqua	140.906	140.907	140.908	140.909	140.910	140.911	140.912
	NeoPoros	109.906	109.907	109.908	109.909	109.910	109.911	109.912
Ø3.75	Acqua	140.899	140.900	140.901	140.902	140.903	140.904	140.905
	NeoPoros	109.899	109.900	109.901	109.902	109.903	109.904	109.905
Ø4.0	Acqua	140.913	140.914	140.915	140.916	140.917	140.918	140.919
	NeoPoros	109.913	109.914	109.915	109.916	109.917	109.918	109.919
Ø5.0	Acqua	140.920	140.921	140.922	140.923	140.924		
	NeoPoros	109.920	109.921	109.922	109.923	109.924		

GM Healing Abutment

GH	0.8 mm	1.5 mm	2.5 mm	3.5 mm	4.5 mm	5.5 mm
Ø3.3	106.207	106.208	106.209	106.210	106.211	106.212
Ø4.5	106.213	106.214	106.215	106.216	106.217	106.218

:: Use the manual Neo Screwdriver (104.060);
:: Do not exceed the insertion torque of 10 Ncm.

GM Customizable Healing Abutments

GH	1.5 mm	2.5 mm	3.5 mm	4.5 mm	5.5 mm	6.5 mm
Ø5.5	106.223	106.224	106.225	106.226	106.227	
Ø7.0		106.228	106.229	106.230	106.231	106.232

GM Cover Screw

0 mm	2 mm
117.021	117.022

:: Use the manual Neo Screwdriver (104.060);
:: Do not exceed the insertion torque of 10 Ncm.

GM Abutment

Recommended in posterior area.

Single-unit screw-retained prosthesis

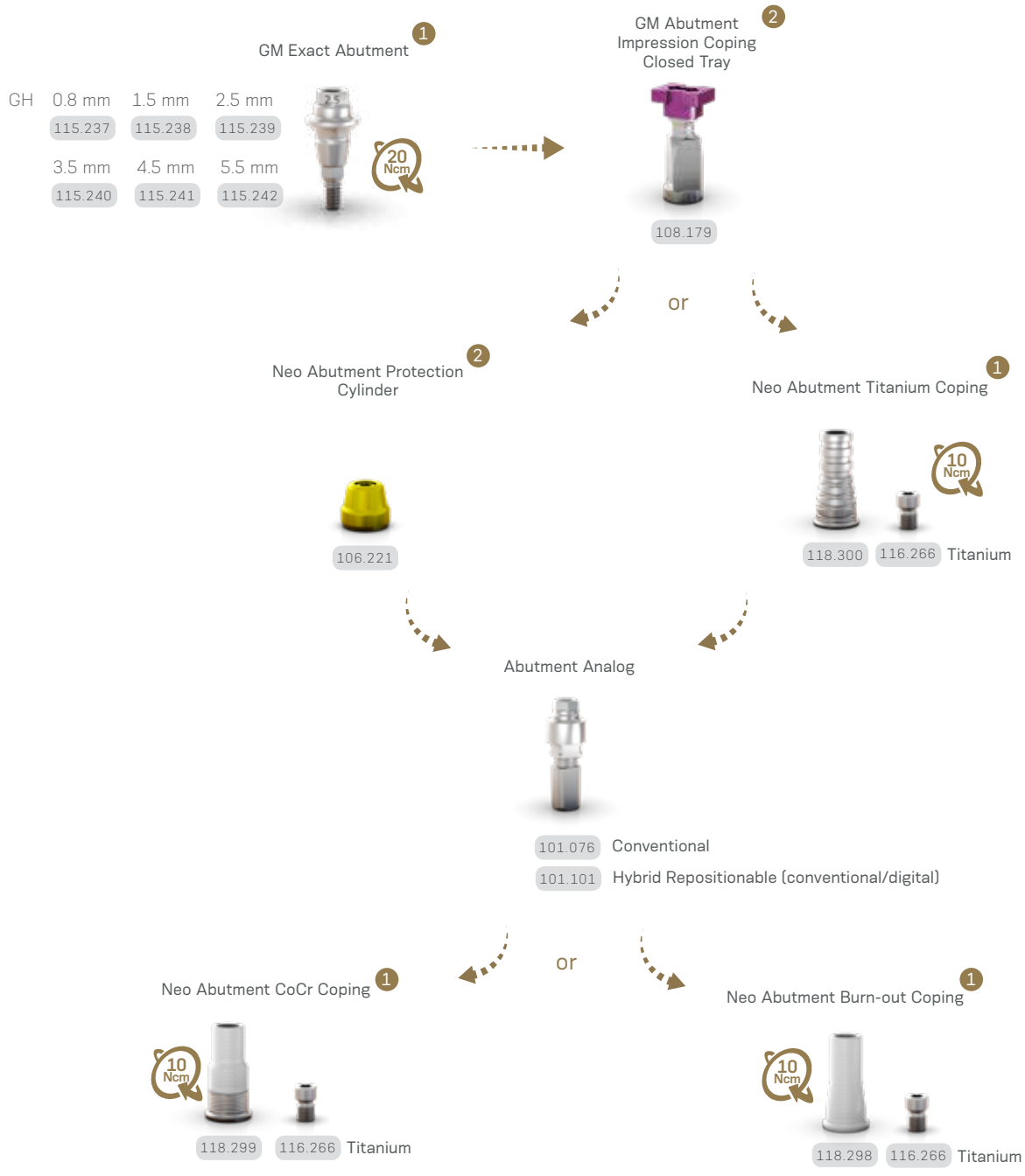
Consider in addition 1.5 - 2.0 mm for the restorative material.

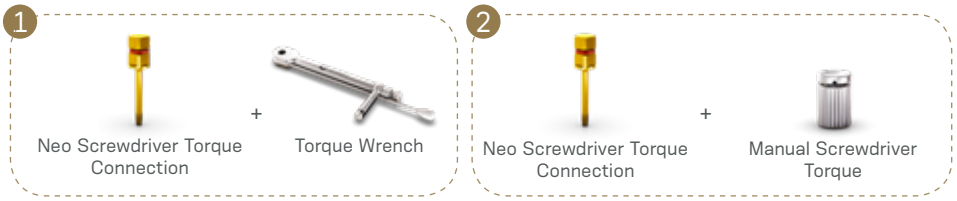
Minimum interocclusal space of 4.9 mm from the mucosa level.

Exact

Unlocking feature

Installation Sequence





GM Mini Conical Abutment

Multiple-unit screw-retained prosthesis

Accessories

Mini Conical Abutment Polishing Protector

123.008

Installation Sequence

GM Mini Conical Abutment ①

GH	0.8 mm	1.5 mm	2.5 mm
	115.243	115.244	115.245
	3.5 mm	4.5 mm	5.5 mm
	115.246	115.247	115.248

or

GM Exact Mini Conical Abutment 17°/30° ②

GH	1.5 mm	2.5 mm	3.5 mm
17°	115.249	115.250	115.251
30°	115.252	115.253	115.254

Slim Mini Conical Abutment Open Tray Impression Coping ③

NEW! Can also be used as temporary coping.

108.176

Neo Mini Conical Abutment Protection Cylinder ③

106.220

or

Neo Mini Conical Abutment Titanium Coping ②

118.302 116.269 Titanium

Mini Conical Abutment Analog

101.020 Conventional

101.092 Hybrid Repositionable (conventional/digital)

Neo Mini Conical Abutment CoCr Coping ②

118.303 116.269 Titanium

or

Neo Mini Conical Abutment Burn-out Coping ②

118.301 116.269 Titanium

① Hexagonal Prosthetic Driver + Torque Wrench

② Neo Screwdriver Torque Connection + Torque Wrench

③ Neo Screwdriver Torque Connection + Manual Screwdriver Torque

GM Micro Abutment

Recommended for limited spaces and narrow inter-dental spaces.

Single-unit screw-retained prosthesis

OR

Multiple-unit screw-retained prosthesis

Minimum interocclusal space of 3.5 mm from the mucosa level

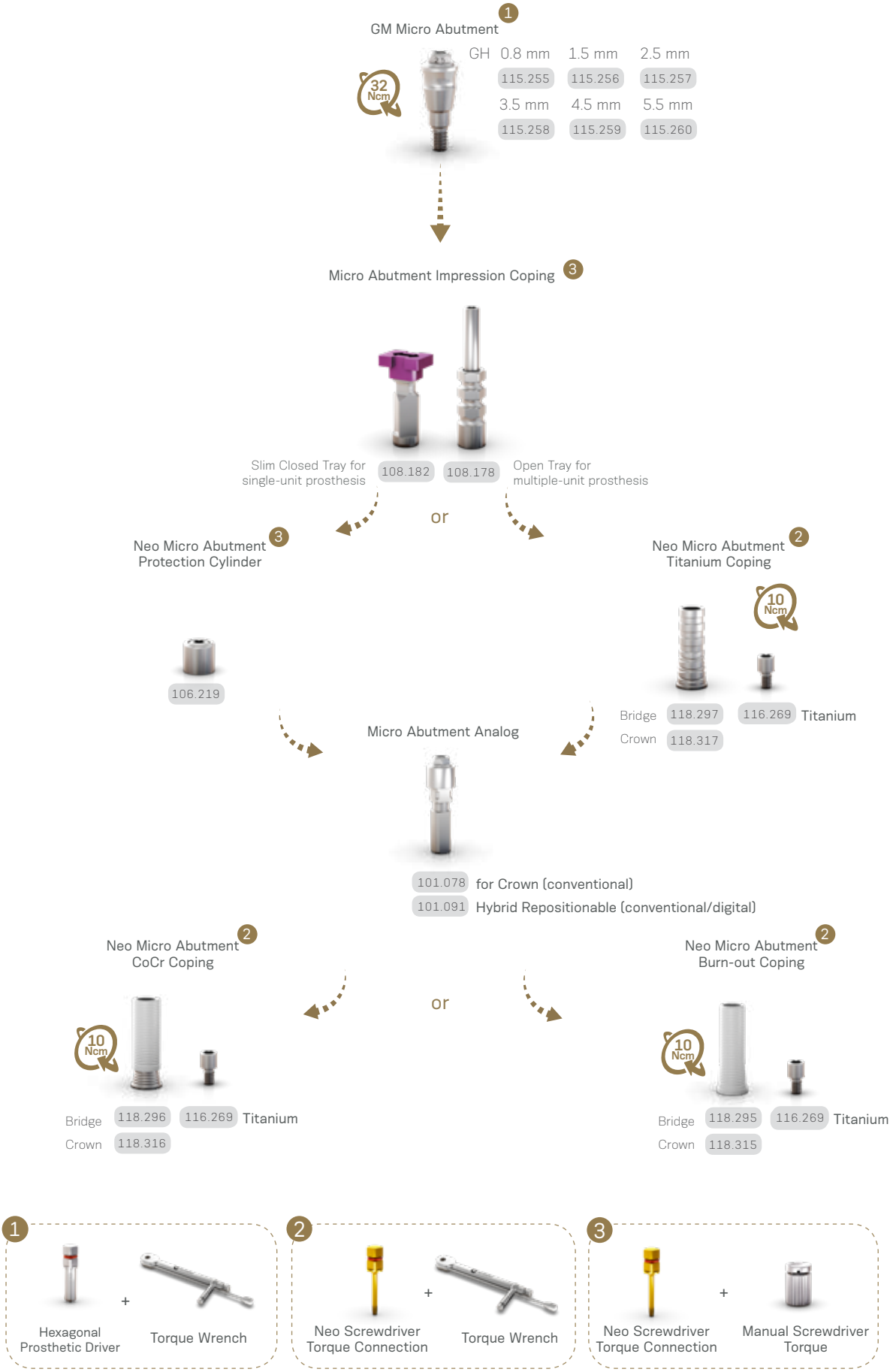
Consider in addition 1.5 - 2.0 mm for the restorative material

Accessories

Micro Abutment
Polishing Protector

Bridge 123.015

Installation Sequence



GM Anatomic Abutment

Single-unit cement-retained prosthesis

Recommended for anterior region.

Consider in addition 1.5 - 2.0 mm for the restorative material

Minimum interocclusal space of 4.9 mm from the mucosa level

Installation Sequence

GM Exact Click Anatomic Abutment 1

1.5 mm 114.752 | 2.5 mm 114.753 | 3.5 mm 114.754

or

GM Exact Click Anatomic Abutment 17° 1

1.5 mm 114.755 | 2.5 mm 114.756 | 3.5 mm 114.757

or

GM Exact Click Narrow Anatomic Abutment 1

1.5 mm 114.758 | 2.5 mm 114.759 | 3.5 mm 114.760

or

GM Exact Click Narrow Anatomic Abutment 17° 1

1.5 mm 114.761 | 2.5 mm 114.762 | 3.5 mm 114.763

GM Implant Exact Impression Coping Closed and Open Tray 2

Regular 108.160 | 108.162 Regular
Long 108.161 | 108.163 Long

GM Implant Analog

Ø5.0/6.0
101.074 | 101.075 Conventional

Ø3.5/3.75 | Ø4.0/4.3 | Ø5.0/6.0
101.089 | 101.103 | 101.090 Hybrid Repositionable (conventional/digital)

Lab stage

Finalized prosthesis

1

Neo Screwdriver Torque Connection

+

Torque Wrench

2

Neo Screwdriver Torque Connection

+

Manual Screwdriver Torque

GM Universal Abutment

Single-unit cement-retained prosthesis

Installation Sequence

1

GM Exact Click
Universal Abutment

or

1

GM Exact Click
Universal Abutment 17º

or

1

GM Exact Click
Universal Abutment 30º

	GH	0.8 mm	1.5 mm	2.5 mm	3.5 mm	4.5 mm	5.5 mm
4 mm	Ø3.3	114.566	114.567	114.568	114.569	114.570	114.571
	Ø4.5	114.578	114.579	114.580	114.581	114.582	114.583
6 mm	Ø3.3	114.572	114.573	114.574	114.575	114.576	114.577
	Ø4.5	114.584	114.585	114.586	114.587	114.588	114.589

		1.5 mm	2.5 mm	3.5 mm
4 mm	Ø3.3	114.542	114.543	114.544
	Ø4.5	114.548	114.549	114.550
6 mm	Ø3.3	114.545	114.546	114.547
	Ø4.5	114.551	114.552	114.553

		1.5 mm	2.5 mm	3.5 mm
4 mm	Ø3.3	114.554	114.555	114.556
	Ø4.5	114.560	114.561	114.562
6 mm	Ø3.3	114.557	114.558	114.559
	Ø4.5	114.563	114.564	114.565

Click Universal Abutment
Impression Coping

4 mm	Ø3.3	108.172
	Ø4.5	108.174
6 mm	Ø3.3	108.173
	Ø4.5	108.175

Click Universal Abutment
Provisional Coping

4 mm	Ø3.3	118.304
	Ø4.5	118.306
6 mm	Ø3.3	118.305
	Ø4.5	118.307

1

Neo Screwdriver
Torque Connection

+

Torque Wrench

Universal Abutment Analog

4 mm	Ø3.3	101.070	6 mm	Ø3.3	101.071	Click (conventional)
	Ø4.5	101.072		Ø4.5	101.073	
4 mm	Ø3.3	101.097	6 mm	Ø3.3	101.098	Hybrid Repositionable (conventional/digital)
	Ø4.5	101.099		Ø4.5	101.100	

Universal Abutment
Burn-out Coping

4 mm	Ø3.3	118.181
	Ø4.5	118.183
6 mm	Ø3.3	118.182
	Ø4.5	118.184

GM Titanium Base

Single-unit screw-retained prosthesis

OR

Single-unit cement-retained prosthesis

Workflow Options

Intraoral

GM Healing Abutment (2)

GM Pro PEEK Abutment (1)

GM Implant Intraoral Scanbody (2)

108.183

GM Implant Analog

	Ø3.5/3.75	Ø4.0/4.3	Ø5.0/6.0	
			101.074	101.075	Conventional
	101.089	101.103	101.090	Hybrid Repositionable (conventional/digital)

Model Scanning

GM Healing Abutment (2)

GM Pro PEEK Abutment (1)

GM Implant Exact Impression Coping Closed and Open Tray (2)

Regular	108.160	108.162	Regular
Long	108.161	108.163	Long

GM Implant Analog

	Ø3.5/3.75	Ø4.0/4.3	Ø5.0/6.0	
			101.074	101.075	Conventional
	101.089	101.103	101.090	Hybrid Repositionable (conventional/digital)

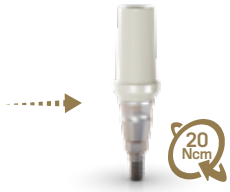
GM Exact Implant Scanbody (2)

108.181

Conventional

GM Healing Abutment (2)

GM Pro PEEK Abutment (1)



GM Implant Exact Impression Coping Closed and Open Tray (2)

Regular	108.160	108.162	Regular
Long	108.161	108.163	Long

GM Implant Analog

	Ø3.5/3.75	Ø4.0/4.3	Ø5.0/6.0	
			101.074	101.075	Conventional
	101.089	101.103	101.090	Hybrid Repositionable (conventional/digital)

GM Exact Titanium Base (1)

GH	0.8 mm	1.5 mm	2.5 mm	
Ø3.5	135.202	135.203	135.204	
Ø4.5	135.214	135.215	135.216	
Ø5.5	135.235	135.236	135.237	

	3.5 mm	4.5 mm	5.5 mm
Ø3.5	135.205	135.206	135.207
Ø4.5	135.217	135.218	135.219
Ø5.5	135.238	135.239	135.240

4 mm

6 mm

0.8 mm	1.5 mm	2.5 mm	GH	
135.208	135.209	135.210	Ø3.5	
135.220	135.221	135.222	Ø4.5	
135.241	135.242	135.243	Ø5.5	

3.5 mm	4.5 mm	5.5 mm	
135.211	135.212	135.213	Ø3.5
135.223	135.224	135.225	Ø4.5
135.244	135.245	135.246	Ø5.5

GM Titanium Base Burn-out Coping

Ø3.5	Ø4.5	Ø5.5	
118.322	118.325	118.329	4 mm
118.323	118.327	118.342	6 mm

(1)

Neo Screwdriver Torque Connection

+

Torque Wrench

(2)

Neo Screwdriver Torque Connection

+

Manual Screwdriver Torque

Titanium Base C for GM

Single-unit screw-retained prosthesis

OR

Single-unit cement-retained prosthesis

Installation Sequence

	0.8 mm	1.5 mm	2.5 mm
Ø4.65	135.229	135.230	135.231
	3.5 mm	4.5 mm	5.5 mm
	135.232	135.233	135.234

Titanium Base C for GM Exact

1

Intraoral Scanning with scanbodies provided by Dentsply Sirona

Finalized Prosthesis

1

Neo Screwdriver Torque Connection

+

Torque Wrench

Workflow

Step 1

Gingiva height selection and ordering.

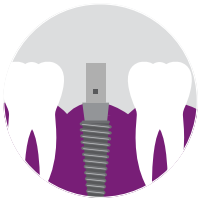
Select the Titanium Base C for GM Exact gingival height.

Order the Titanium Base C for GM Exact.

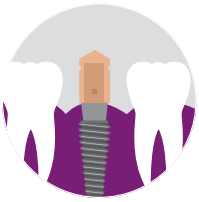
Please note that the scanbody has to be purchased directy from equipment manufacturer.

Step 2

Intra-oral scanning.



Insert the Titanium Base C for GM Exact in the Neodent implant.



Insert scanbody on the Titanium Base C for GM Exact.

Step 3

Design and milling.

Select in the CAD software the comparable third-party Ti-base and perform the digital design.

Mill the digital design.

CEREC digital library compatibility

Library	*Sirona's Products*				*Compatible with implant System*	
Ti-base	Scanbody	REF Scanbody Omnicam	REF Scanbody Bluecam / Ineos	Griding block	Implant manufacturer	Implant system
NBB 3.4 L	L	6431311	6431295	inCoris ZI meso L	Neodent	GM, CM, HE, IIPluss
NB A 4.5 L						
SSO 3.5 L						
S BL 3.3 L						
S BL 4.1 L						
BO 3.4 L						

Step 4

Finalization and fixation.

- Check the fit of milled restoration in the patient's mouth and adapt it, if needed.
- Cement the restoration on the Titanium Base C for GM Exact and insert it into the patient's mouth.

GM Titanium Block

Single-unit screw-retained prosthesis

OR

Single-unit cement-retained prosthesis

Complete Digital Workflow

GM Implant Intraoral Scanbody 2

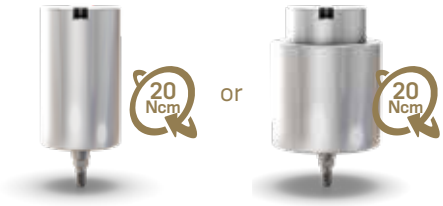
108.183

GM Implant Analog

Ø5.0/6.0		
101.074	101.075	Conventional

Ø3.5/3.75	Ø4.0/4.3	Ø5.0/6.0	
101.089	101.103	101.090	Hybrid Repositionable (conventional/digital)

GM Exact Titanium Block 1



Medentika Holder

Ø11.5 mm	Ø15.8 mm
135.252	135.253

Finalized Prosthesis with CADCAM process

Semi Digital Workflow

GM Exact Implant Impression Coping 2
Closed and Open Tray

Regular	108.162	108.160
Long	108.163	108.161

GM Implant Analog

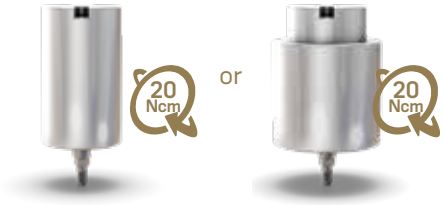
Ø5.0/6.0		
101.074	101.075	Conventional

Ø3.5/3.75	Ø4.0/4.3	Ø5.0/6.0	
101.089	101.103	101.090	Hybrid Repositionable (conventional/digital)

GM Implant Scanbody 2

108.181

GM Exact Titanium Block 1



Medentika Holder

Ø11.5 mm	Ø15.8 mm
135.252	135.253

1

Neo Screwdriver Torque Connection + Torque Wrench

2

Neo Screwdriver Torque Connection + Manual Screwdriver Torque

Finalized Prosthesis with all digitally designed abutments must be milled at a validated Straumann milling center.

GM CoCr Abutment

The set includes one GM CoCr Abutment, one Titanium Screw and one GM Implant Analog.

Interocclusal height of 12.0 mm. Customizable up to 5.0 mm.

Single-unit screw-retained prosthesis

OR

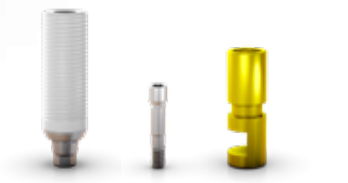
Single-unit cement-retained prosthesis

GM CoCr Abutment

Consider in addition 1.5 - 2.0 mm for the restorative material

Exact

GM CoCr Abutment Set



Ø3.5 / 3.75	Ø4.0 / 4.3	Ø5.0 / 6.0
118.309	118.310	118.311

Installation Sequence

GM Implant Exact Impression Coping 2
Closed and Open Tray

Regular 108.160
Long 108.161

108.162 Regular
108.163 Long

or

GM Pro PEEK Abutment 1

GM Healing Abutment 2

GM Implant Analog

GM Exact CoCr Abutment 1

1

Neo Screwdriver Torque Connection
+

Torque Wrench

2

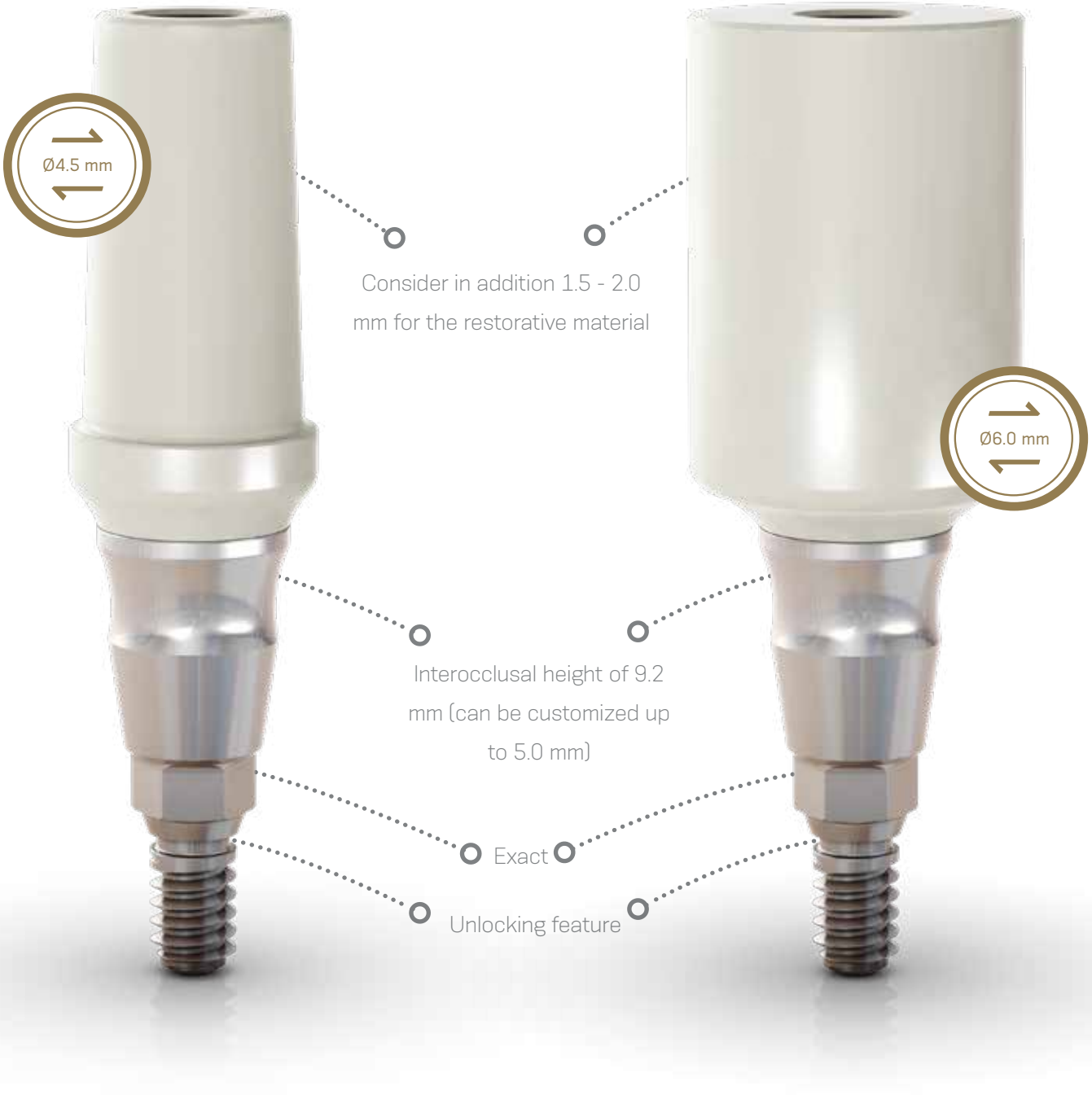
Neo Screwdriver Torque Connection
+

Manual Screwdriver Torque

GM Pro PEEK Abutment

Temporary prosthesis

Biocompatible PEEK for easy customization.



Installation Sequence

1 GM Pro PEEK Abutment

	0.8 mm	1.5 mm	2.5 mm	3.5 mm	4.5 mm	5.5 mm
Ø4.5	114.738	114.739	114.740	114.741	114.742	114.743
Ø6.0	114.744	114.745	114.746	114.747	114.748	114.749

In mouth customization

1

Neo Screwdriver
Torque Connection

+

Torque Wrench

Measurements GM Mini Conical Abutment

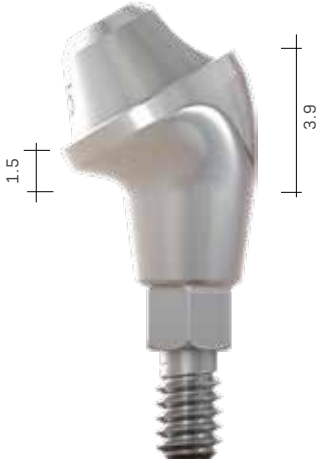
17°

115.249

115.250

115.251

30°



115.252

115.253

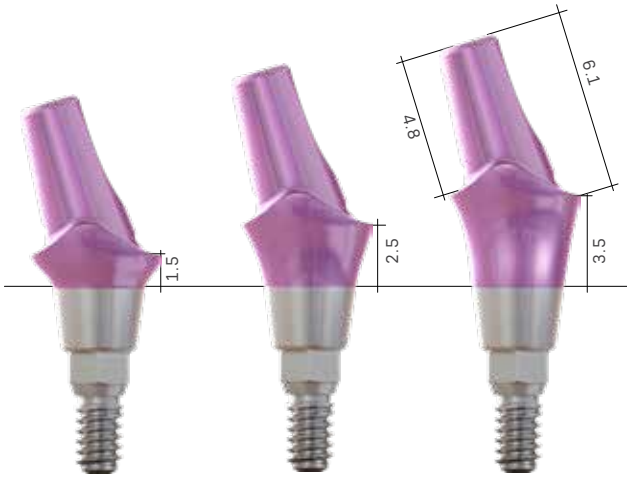
115.254

Measurements GM Anatomic Abutment

Narrow Anatomic Abutment

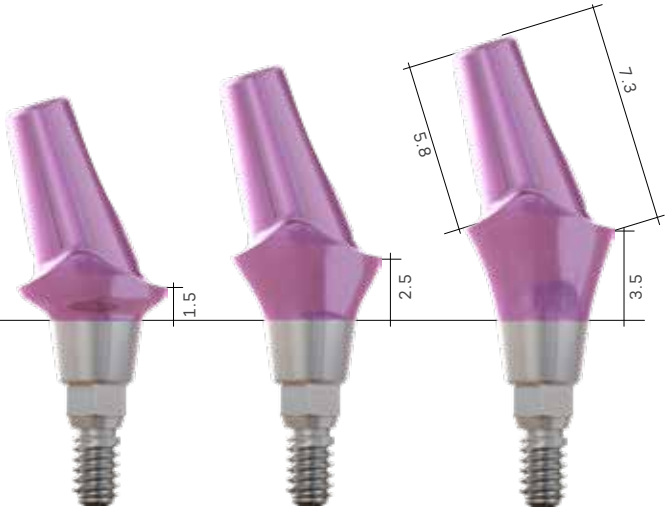
Anatomic Abutment

Narrow Anatomic Abutment 17°



114.761 114.762 114.763

Anatomic Abutment 17°



114.755 114.756 114.757

Measurements GM Universal Abutment

17°

4 mm chimney height

Ø3.3 / 17°

114.542 114.543 114.544

4 mm chimney height

Ø4.5 / 17°

114.548 114.549 114.550

6 mm chimney height

Ø3.3 / 17°

114.545 114.546 114.547

6 mm chimney height

Ø4.5 / 17°

114.551 114.552 114.553

30°

4 mm chimney height

Ø3.3 / 30°

114.554 114.555 114.556

4 mm chimney height

Ø4.5 / 30°

114.560 114.561 114.562

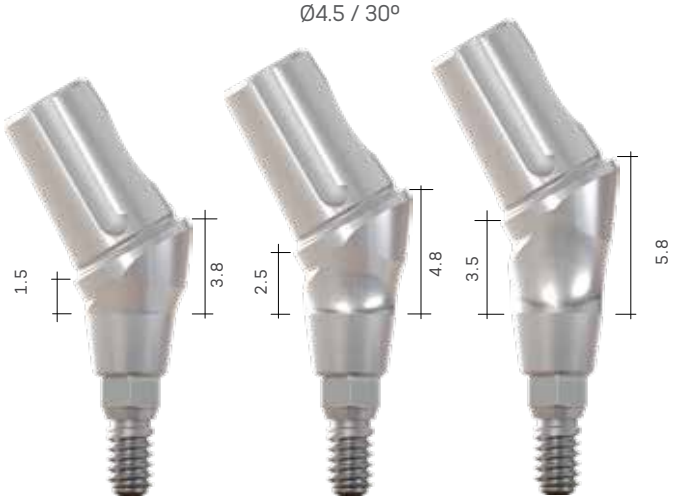
6 mm chimney height

Ø3.3 / 30°

114.557 114.558 114.559

6 mm chimney height

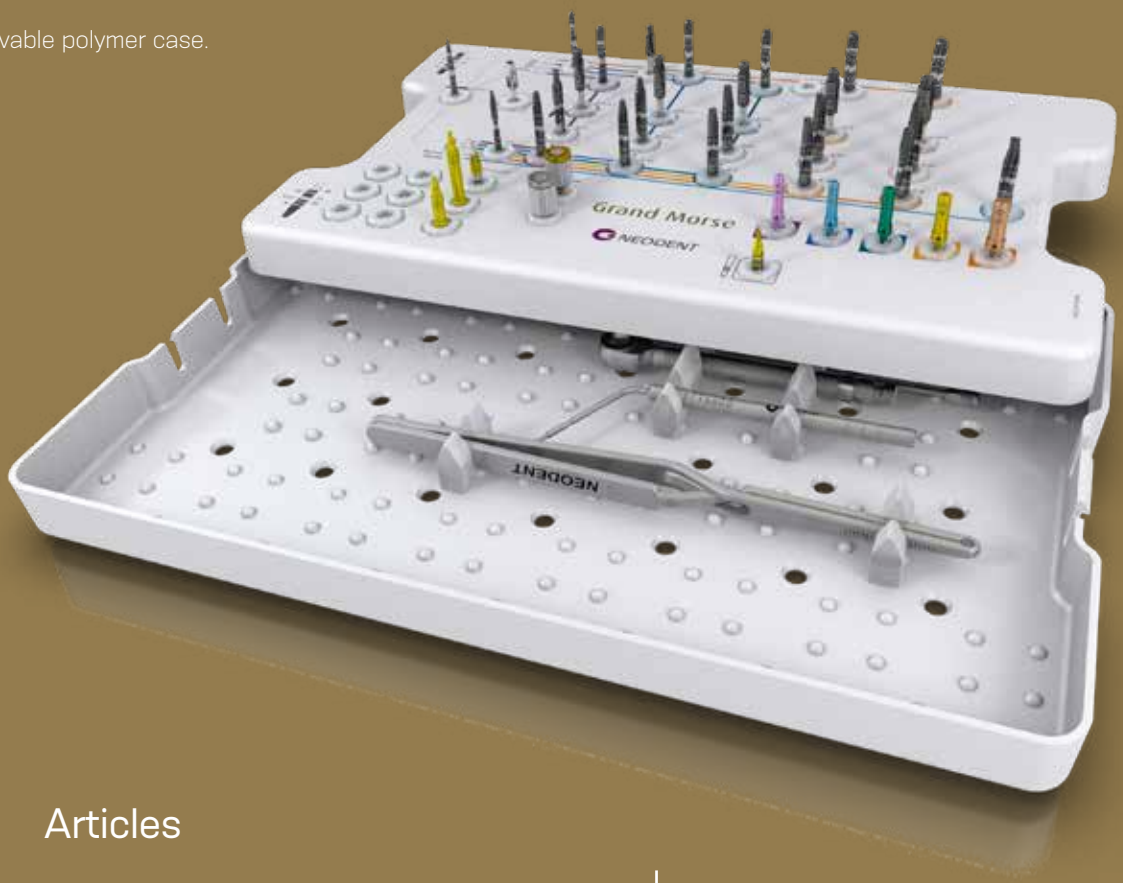
Ø4.5 / 30°



114.563 114.564 114.565

Grand Morse™ Surgical Kit

Autoclavable polymer case.



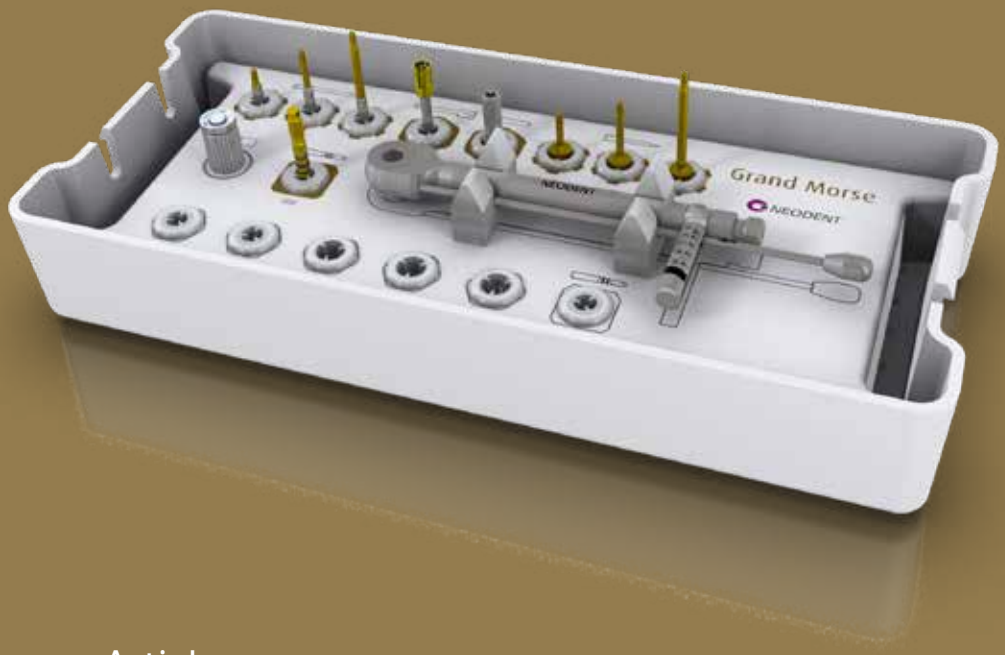
Articles

103.162	Twist Drill 2.0 Plus
103.213	Pilot Dril 2.0/3.0 Plus
103.164	Twist Drill 3.0 Plus
103.166	Twist Drill 3.3 Plus
103.167	Twist Drill 3.8 Plus
103.168	Twist Drill 4.3 Plus
103.163	Twist Drill 2.8 Plus
103.170	Initial Drill Plus
103.414	Pilot Drill GM 2.8/3.5
103.415	Pilot Drill GM 3.0/3.75
103.416	Pilot Drill GM 3.3/4.0
103.417	Pilot Drill GM 4.3
103.418	Pilot Drill GM 4.3/5.0
103.419	Tapered Contour Drill 3.5
103.420	Tapered Contour Drill 3.75
103.421	Tapered Contour Drill 4.0
103.422	Tapered Contour Drill 4.3
103.423	Tapered Contour Drill 5.0
103.425	Tapered Drill 2.0
103.399	Tapered Drill 3.5
103.402	Tapered Drill 3.75
103.405	Tapered Drill 4.0
103.408	Tapered Drill 4.3
103.411	Tapered Drill 5.0
103.427	Tapered Drill 6.0
105.131	GM Implant Driver - Contra-Angle
104.060	Neo Screwdriver (Medium)
105.130	GM Implant Driver - Torque Wrench (Long)
104.028	Manual Implant Driver - Contra-Angle
105.129	GM Implant Driver - Torque Wrench (Short)
128.019	Direction Indicator 2.8/3.5
128.020	Direction Indicator 3.0/3.75
128.021	Direction Indicator 3.3/4.0
128.022	Direction Indicator 3.6/4.3
128.023	Direction Indicator 4.3/5.0
128.028	Height Measurer GM
129.004	Depth Probe
129.001	Titanium Tweezers
104.050	Torque Wrench

Note: Items that compose Neodent® Kits are sold separately.

Grand Morse™ Prosthetic Kit

Autoclavable polymer case.



Articles

105.146	Neo Screwdriver Torque Connection - Contra-angle (Extra-short)
105.135	Neo Screwdriver Torque Connection - Contra-angle (Short)
105.136	Neo Screwdriver Torque Connection - Contra-angle (Medium)
105.138	Hexagonal Prosthetic Driver - Contra-angle
105.137	Hexagonal Prosthetic Driver - Torque Wrench
105.133	Neo Screwdriver Torque Connection (Short) - Torque Wrench
105.132	Neo Screwdriver Torque Connection (Medium) - Torque Wrench
105.134	Neo Screwdriver Torque Connection (Long) - Torque Wrench
104.005	Manual Screwdriver Torque
128.028	GM Height Measurer
104.050	Torque Wrench

Note: Items that compose Neodent® Kits are sold separately.

Grand Morse™ Try-In Kit

Autoclavable polymer case.

Articles

114.772	GM Abutment Try-In 3.3X6X0.8
114.773	GM Abutment Try-In 3.3X6X1.5
114.774	GM Abutment Try-In 3.3X6X2.5
114.775	GM Abutment Try-In 3.3X6X3.5
114.776	GM Abutment Try-In 3.3X6X4.5
114.777	GM Abutment Try-In 3.3X6X5.5
114.778	GM Abutment Try-In 4.5X6X0.8
114.779	GM Abutment Try-In 4.5X6X1.5
114.780	GM Abutment Try-In 4.5X6X2.5
114.781	GM Abutment Try-In 4.5X6X3.5
114.782	GM Abutment Try-In 4.5X6X4.5
114.783	GM Abutment Try-In 4.5X6X5.5
114.784	GM Abutment Try-In 17° 3.3X6X1.5
114.785	GM Abutment Try-In 17° 3.3X6X2.5
114.786	GM Abutment Try-In 17° 3.3X6X3.5
114.787	GM Abutment Try-In 17° 4.5X6X1.5
114.788	GM Abutment Try-In 17° 4.5X6X2.5
114.789	GM Abutment Try-In 17° 4.5X6X3.5
114.790	GM Abutment Try-In 30° 3.3X6X1.5
114.791	GM Abutment Try-In 30° 3.3X6X2.5
114.792	GM Abutment Try-In 30° 3.3X6X3.5
114.793	GM Abutment Try-In 30° 4.5X6X1.5
114.794	GM Abutment Try-In 30° 4.5X6X2.5
114.795	GM Abutment Try-In 30° 4.5X6X3.5
114.796	GM Anatomic Abutment Try-In 1.5
114.797	GM Anatomic Abutment Try-In 2.5
114.798	GM Anatomic Abutment Try-In 3.5
114.799	GM Lateral Anatomic Abutment Try-In 1.5
114.800	GM Lateral Anatomic Abutment Try-In 2.5
114.801	GM Lateral Anatomic Abutment Try-In 3.5
104.058	Neo Manual Screwdriver (Short)
128.028	GM Height Measurer

Note: Items that compose Neodent® Kits are sold separately.

GRAND MORSE™ INSTRUMENTS

Initial Drill

:: Available in surgical steel;
:: 2.0 mm diameter.

103.170

Tapered Drills

:: Available in surgical steel;
:: Drill sequence for Helix GM and Drive GM Implants.

	Ø2.0	Ø3.5	Ø3.75	Ø4.0	Ø4.3	Ø5.0	Ø6.0
Short 31 mm		103.400	103.403	103.406	103.409	103.412	103.427
Regular 35 mm	103.425	103.399	103.402	103.405	103.408	103.411	
Long 43 mm		103.401	103.404	103.407	103.410	103.413	

GM Tapered Contour Drills

:: For preparing the implant bed in bone types I and II for Helix GM Implants.

Ø3.5+	Ø3.75+	Ø4.0+	Ø4.3+	Ø5.0+
103.419	103.420	103.421	103.422	103.423

Pilot Drills

:: Available in surgical steel;
:: Increasing the surgical alveolus diameter ridge, easing the penetration of the next drill or the implant.

2.0/3.0	2.8/3.5	3.0/3.75	3.3/4.0	3.6/4.3
103.213	103.414	103.415	103.416	103.417

4.3/5.0	3.8/4.3	4.3/5.3	5.3/6.0
103.418	103.214	103.215	103.221

Twist Drills

:: Available in surgical steel;
:: Drill sequence for Titamax GM Implants.

	Ø2.0	Ø2.8	Ø3.0	Ø3.3	Ø3.8	Ø4.3
Short 31 mm	103.222	103.223	103.224	103.225	103.226	103.227
Regular 35 mm	103.162	103.163	103.164	103.166	103.167	103.168
Long 43 mm	103.228	103.229	103.230	103.231		

Direction Indicators

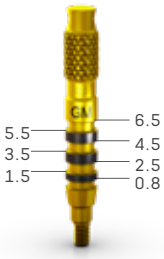
:: Available in titanium;
:: Instrument to guide the implant position;
:: Diameter of central band corresponds to GM Implant diameter;
:: Smaller side to be used after Ø2.0 mm drill;
:: Larger side to be used after the last drill before implant installation.

2.8/3.5	3.0/3.75	3.3/4.0	3.6/4.3	4.3/5.0
128.019	128.020	128.021	128.022	128.023

Drill Extension

:: Available in surgical steel;
:: Fit the drill directly into the Drill Extension.

103.426



GM Height Measure

:: Available in titanium;
:: For selecting GM prosthetic abutments;
:: Marks corresponding to transmucosa heights.
:: Can be used as X-Ray Positioner.

128.028

GM Implant Driver - Contra-Angle

:: To capture the implant directly from the packaging;
:: To place GM Implants with contra-angle, or attached to a manual driver for contra-angle connections (104.028) for hand placement;
:: With six dimples to indicate the hex index face position;
:: The laser marks indicate the depth of implant placement, bone level, 1 and 2 mm infra-bone and last marking (3 mm) biological space;
:: Maximum torque 35 Ncm.

105.131

GM Implant Driver - Torque Wrench

:: To place GM Implants with the Torque Wrench (104.050);
:: With six marks to indicate the hex index face position;
:: The laser marks indicate the depth of implant placement, bone level, 1 and 2 mm infra-bone and last marking (3 mm) biological space;
:: Maximum torque: 60 Ncm.

Short 22 mm	Long 30 mm
105.129	105.130

Manual Implant Drivers

:: Available in surgical steel;
:: For Contra-angle connections: connected to GM Implant Driver, it becomes a manual driver for implant placement.
:: For Torque Wrench connections: connected to screwdrivers, it provides manual torque.

Contra-angle Connections	Torque Wrench Connections
104.028	104.005

Neo Screwdriver Torque Connection - Torque Wrench

:: Available in surgical steel;
:: Yellow color for line identification.
:: Long Neo Screwdriver Torque Connection - Wrench (105.134) recommended for Impression Copings and Copings for screw-retained prostheses.

Short 20 mm	Medium 25 mm	Long 38 mm
105.133	105.132	105.134

Neo Screwdriver

:: Available in surgical steel;
:: Yellow color for line identification.
:: Long Neo Manual Screwdriver (104.059) recommended for Impression Copings and Copings for screw-retained prostheses.

Short 20 mm	Medium 25 mm	Long 38 mm
104.058	104.060	104.059

Neo Screwdriver Torque Connection - Contra-angle

:: Available in surgical steel;
:: Yellow color for line identification;
:: Medium Neo Screwdriver Torque Connection - Contra-angle (105.136) recommended for Impression Copings and Copings for screw-retained prostheses.
:: Extra Short Neo Screwdriver Torque Connection - Contra-angle (105.146) recommended for Impression Copings, Cover Screws and Healing Abutments.

Extra Short	Short 20 mm	Medium 25 mm
105.146	105.135	105.136

Hexagonal Prosthetic Driver

:: Available in surgical steel;
:: To install and apply torque over straight GM Mini Conical Abutments and GM Micro Abutments;
:: Yellow color for line identification;
:: Hexagonal Prosthetic Driver for Contra-angle: to install GM Mini Conical Abutment (straight).

Torque Wrench	Contra-angle
105.137	105.138

GM Bone Profile Drill with Guide

:: Available in surgical steel;
:: Used in the surgical second step;
:: Conforms the bone around the implant platform, preparing the emergence profile to be suitable to prosthetic components.

103.424

Torque Wrench

:: Available in surgical steel;
:: Fitting for square connections;
:: Collapsible Wrench that allows for proper assembly cleaning;

104.050

NEODENT® TECHNIQUES

One Step Hybrid Technique

Technique that allows passive fitting, with no need for welding as the titanium coping is cemented to the substructure.

Used for multiple prostheses and reduces laboratory work times.

Neo Mini Conical Abutment One Step Hybrid Copings

:: For installation, use the Neo Torque Connection (105.132);
:: For torque control, use Torque Wrench (104.050).

Burn-out	Brass	Titanium
118.340	118.331	118.330

Neo Micro Conical Abutment One Step Hybrid Copings

:: For installation, use the Neo Torque Connection (105.132);
:: For torque control, use Torque Wrench (104.050).

Burn-out	Brass	Titanium
118.341	118.333	118.332

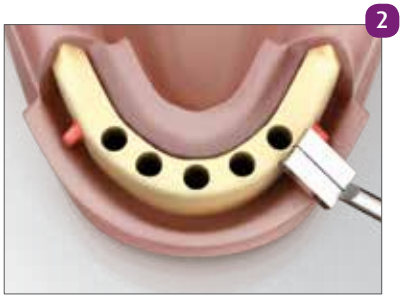
Neo Working Screw One Step Hybrid

:: For laboratory use.

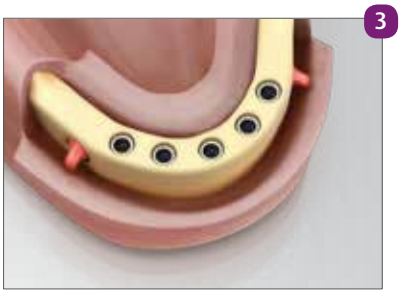
116.271

Demonstration Sequence

Normalization of alveolar flaps.



Surgical drilling completed, obtaining adequate distance from distal implant in relation to the mental foramen with 7 mm flag.



Placement of 5 implants.

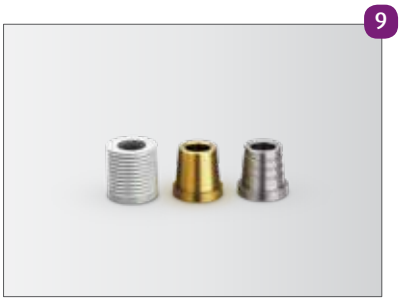
Placement of Mini Conical Abutments.

Placement of square transfers, replaced by short screws (Mini Conical Abutment cylinder screw) and impression copings splinted with acrylic resin.

Positioning of multifunctional guide to obtain intermaxillary ratios. Joining transfers with acrylic resin. After splinting, soft silicone is injected to take the soft tissue impression

Removal of multifuncional guide and placement of Mini Conical Abutment analogs to the impression copings.

Working model with artificial gum.



Castable One Step Hybrid Coping, Brass One Step Hybrid Coping, grooved Titanium One Step Hybrid Coping with lower dimension than the brass

Brass Copings are placed over analogs, Then Castable Brass Copings are placed over analogs. Then Castable Copings are fixed by working screws

Castable ring with waxed framework.

Cast framework.

Adapting the framework over model.

Please note cementing area.

Cement the structure over the Titanium copings with Panavia.

Final view.

Technique used to ease mandible rehabilitation, through a provisional hybrid type prostheses supported by implants.

Neo Distal Bar Coping

:: Available in titanium;
:: Retainers to ease joining with acrylic resin;
:: Recommended torque: 10 Ncm;
:: For torque, use Neo Screwdriver (105.132)

118.308

Neo Distal Bar

:: Recommended for distal Implants to reinforce the cantilever.

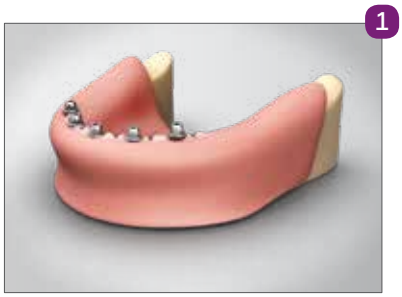
125.116

Polishing Protector

:: Available in surgical steel;
:: Protection for the lab polishing.

123.008

Demonstration Sequence

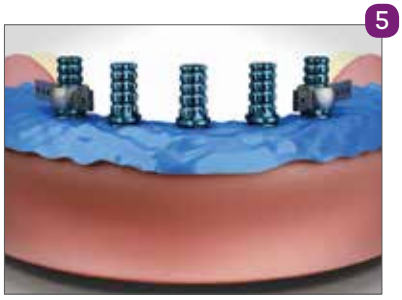


1 Abutments placed.

2 Prostheses wearing, keeping posterior region integrity.

3 Placing of copings to central Implants and Distal Bar to distal Implants.

4 Proof of inferior prostheses wearing (centered occlusion position, no interference on copings).



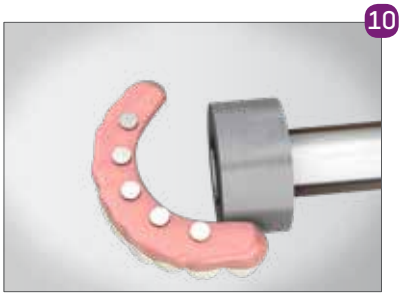
5 Placement of rubber dam over copings to protect soft tissue.

6 Applying self-polymerizing acrylic resin on copings.

7 Applying acrylic resin between copings.

8 Applying to worn area in lower prostheses, repositioning inside mouth, patient in occlusion until total polymerization.

9 Removal of inferior prostheses after resin is polymerized, copings already captured.



10 Wearing, finishing and polishing inferior prostheses with polishing protectors.

11 Provisional implant supported prostheses completed.

12 Final posterior view.

DIGITAL SOLUTIONS

Neodent® Digital Libraries

Visit http://en.neodent.com.br/libraries-cadcam to download the digital files to work with Neodent® Titanium Bases, Titanium Blocks, Abutments, Mini Conical Abutments, Micro Abutments, Universal Abutments, One Step Hybrid Copings, Scanbodies and Hybrid Repositionable Analogs. Libraries are available for the following software: exocad GmbH, Amann Girrbach AG Inc, Dental Wings Inc and 3Shape A/S.

Scanbody Impression Coping

Neodent® Scanbodies can be used for scanning and digitalization of the model providing accuracy in determining the analog position.

Intraoral

108.183	GM Exact Implant Intraoral Scanbody
108.137	Mini Conical Abutment Intraoral Scanbody*
108.140	Micro Abutment Intraoral Scanbody*
108.143	3.3x4 Universal Abutment Intraoral Scanbody*
108.144	3.3x6 Universal Abutment Intraoral Scanbody*
108.145	4.5x4 Universal Abutment Intraoral Scanbody*
108.146	4.5x6 Universal Abutment Intraoral Scanbody*

For Model

108.181	GM Exact Implant Scanbody
108.094	Mini Conical Abutment Scanbody*
108.102	Micro Abutment Scanbody*

*Use 1.2 Manual Screwdriver (104.007)

Hybrid Repositionable Analog

Neodent® Hybrid Repositionable Analogs can be used in prototyped models, produced by 3D printers, or conventional plaster models.

101.089	GM Hybrid Repositionable Analog 3.5/3.75
101.103	GM Hybrid Repositionable Analog 4.0/4.3
101.090	GM Hybrid Repositionable Analog 5.0/6.0
101.091	Micro Abutment Hybrid Repositionable Analog
101.092	Mini Conical Abutment Hybrid Repositionable Analog
101.097	Universal Abutment Hybrid Repositionable Analog 3.3X4
101.098	Universal Abutment Hybrid Repositionable Analog 3.3X6
101.099	Universal Abutment Hybrid Repositionable Analog 4.5X4
101.100	Universal Abutment Hybrid Repositionable Analog 4.5X6
101.101	GM Abutment Hybrid Repositionable Analog

GM Exact Titanium Blocks

Titanium blocks that allow customization in CAD/CAM systems.
:: Provides Neodent® Original Connections;
:: Screw is included.

135.252	GM Exact Titanium Block Ø11.5mm - Medentika Holder
135.253	GM Exact Titanium Block Ø15.8mm - Medentika Holder

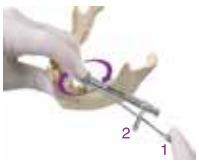
GENERAL INSTRUMENTS

Torque Wrench

:: Available in surgical steel;
:: Extremely accurate (lower than 5% variation);
:: Fitting for square connections;
:: Collapsible Wrench that allows for proper assembly cleaning.

104.050

Operation Instructions



The Neodent® Torque Wrench was designed to allow the necessary torque to be applied and simultaneous verification of that torque with the same Instrument.

All that is needed is to apply force to the wrench handle **1** (never the wrench body) until the value marked on the LATERAL SCALE **2** corresponds to the desired torque

The Neodent® Torque Wrench comes with pre-calibrated torques.

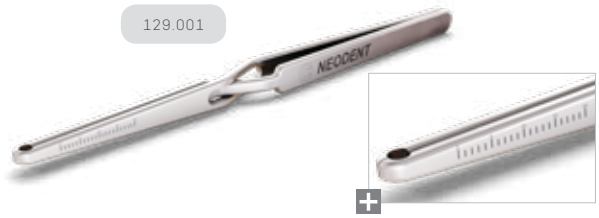
The wrench function works in both directions, by simply pulling and turning the driver's pin 180°. However, the torque measurements work only clockwise.

•WARNING: When inverting the torque direction, the gear may come loose from the driver body and fall. Therefore, this inversion should only be done with the driver connected to a part or outside the patient's mouth.

Titanium Tweezers

:: To handle implants;
::: Millimeter scale for checking during procedures;
:: Self-locking.

129.001



Depth Probe

:: Available in titanium;
:: To probe preparations and analyze depth;
:: Millimeter scale for checking during procedures.

129.004

7 and 9 mm Space Planning Instrument

:: Available in surgical steel;
:: Recommended for prosthetic/ surgical planning.
:: 7 and 9 mm marks.

128.026

Surgical Labial Retractor

:: Available in surgical steel;
:: Rounded edges to minimize surgical trauma.

124.001

Columbia Retractor

:: Available in surgical steel;
:: Rounded edges to minimize surgical trauma.

124.003

Scapel Handle

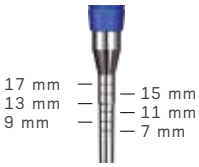
:: Available in surgical steel;
:: For standard scalpel blade use;
:: Blade not included.

129.008

Bivers Handle

:: Available in surgical steel;
:: Non-traumatic extraction for implant placement;
:: Similar to a periotome.

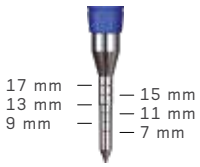
129.002



Concave Osteotome

:: Available in surgical steel;
:: Concave active cutting bit for nontraumatic lifting the floor of the maxillary sinus;
:: Used to prepare the surgical alveolus for Implant placement in the posterior maxillary region with low bone height;
:: Marks from 7 to 17 mm.

1.8 mm	2.5 mm	3.0 mm	3.5 mm	4.0 mm	4.5 mm
110.154	110.155	110.156	110.157	110.158	110.159



Convex Osteotome

:: Available in surgical steel;
:: Convex active bit;
:: Used when the bone width is insufficient, demanding bone compression and expansion before placing the implant;
:: Marks from 7 to 17 mm.

1.8 mm	2.5 mm	3.0 mm	3.5 mm
110.160	110.161	110.162	110.163

Osteotomes Kit Case

:: Available in polymer;
:: Autoclavable;
:: Osteotomes sold separately.

110.262

Surgical Hammer

:: Available in surgical steel;
:: Polymer active bit;
:: Used in compactors and expanders;
:: Weight: 130g.

126.001

Trephine Bur

:: Available in surgical steel;
:: Collecting bone cylinder;
:: Implant removal.

0.35 mm

Ø3.3	Ø4.1	Ø4.3	Ø5.0	Ø8.0
103.051	103.026	103.087	103.027	103.028

Sinus Lift Curette

:: Available in surgical steel;
:: Used to displace the Sinusal Membrane.

1	3	4	5	7
				
126.008	126.009	126.010	126.011	126.012

Prosthetic Surgical Guide

:: Available in titanium;
:: Abutments to prepare the surgical guide;
:: Prosthetic guide inner diameter 2 mm
:: Heights 6 and 10 mm;
:: Surgical Guide: package with 10 units (5 units of 10 mm and 5 units of 6 mm);
:: Surgical Guide Pin: package with 5 units

Guide	Pin
103.092	103.093

Disposable Bone Scraper

:: Used to remove autogenous bone;
:: Single use;
:: Supplied sterile.

127.023

Disposable Bone Collector

:: Available in polymer;
:: To collect autogenous bone;
:: Single use;
:: Adaptable to vacuum pump;
:: Includes two disposable sieves;
:: Use second tip for saliva suction (watch for contamination).

Collector	Sieve
107.003	107.008

Handle Implant Driver

:: Available in stainless steel;
:: Manual implant placement.

104.047

Analog Handle

:: Used for tightening analogs and milling prosthetic abutments.

104.036

Bone Mill

:: Available in surgical stainless steel;
:: Increases bone volume;
:: Blade comes with 3-year warranty, oxidation free;
:: Fitted with lever for easier use;
:: Bone mill pestle with slots to optmize bone block locking during use;
:: Please avoid the use of bone originating from tissue banks;
:: Bone Mill Teflon Ring (127.013) can be acquired.

Bovine bone block with volume = 1.76 cm^3

Magnified particles

After particling, volume gain was about 7 times.

127.011

Notes

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