

**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.





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# 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.



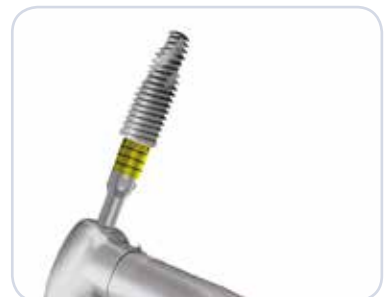
To secure the implant, grip both sides of the implant carrier.



While gripping the implant carrier, 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.

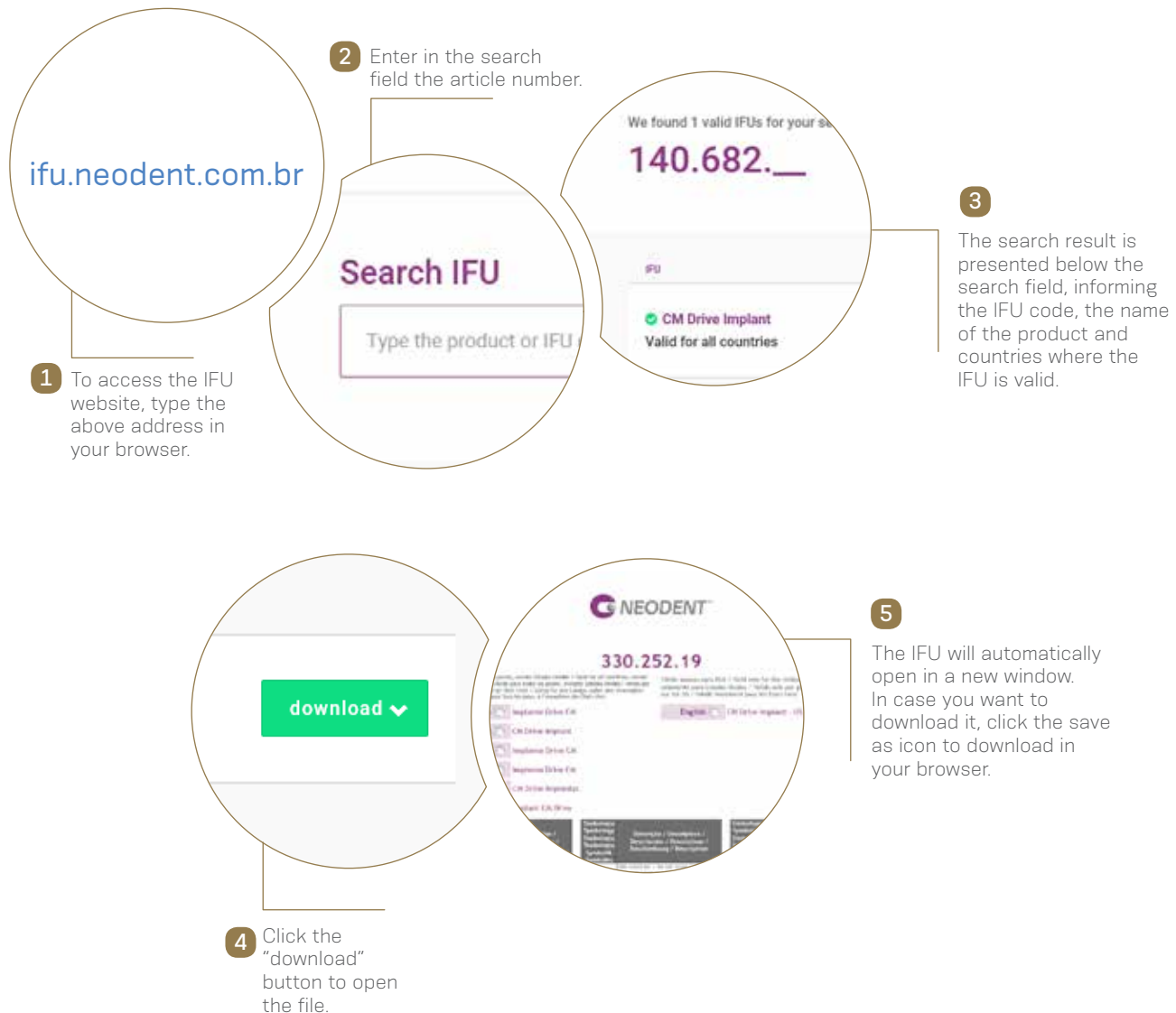
## e-IFU – Electronic Instructions For Use

**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](http://ifu.neodent.com.br)

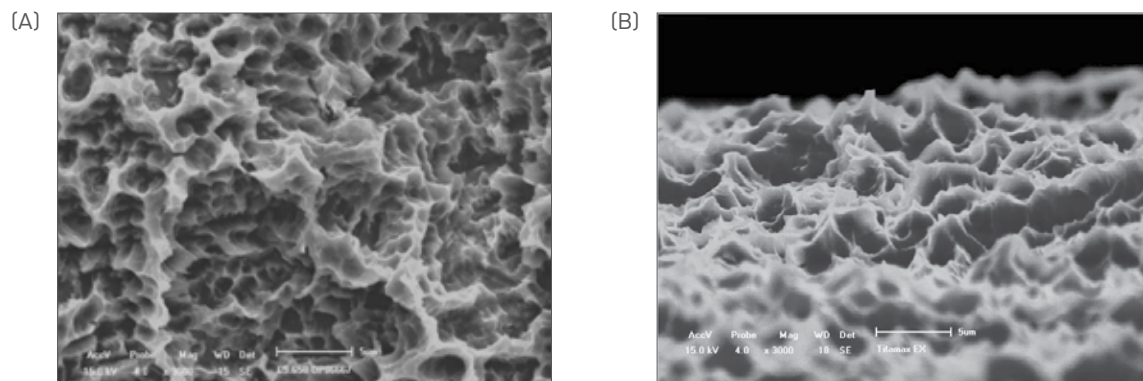


# NeoPoros

## 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.



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

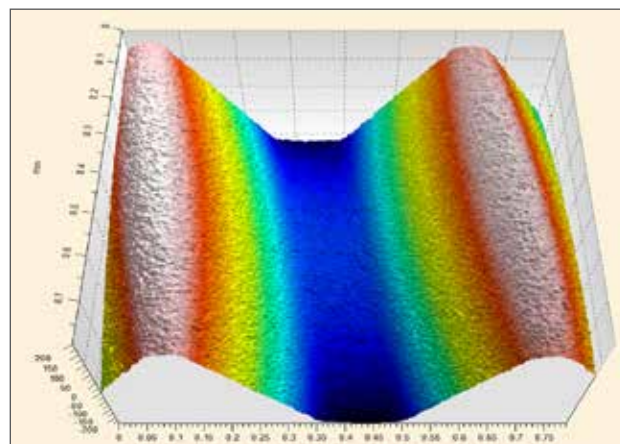


Image taken by confocal microscopy.  
Roughness and Microtopography.  
(Sa= 1,4 - 1,8 µm; Sz= 15 µm).





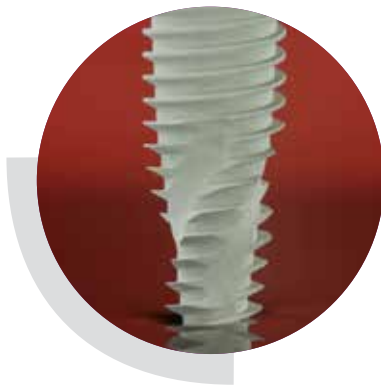
Surface  
concept evolution

## The Acqua Hydrophilic Surface is designed for high treatment predictability

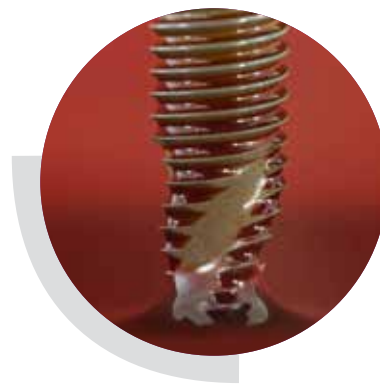
The Neodent® Acqua hydrophilic surface is the next level of the highly successful S.L.A. type of **NeoPoros** surface developed to achieve successful outcomes even in challenging situations, such as soft bone or immediate protocols<sup>(1-4)</sup>

### 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.<sup>(2)</sup>



GRAND MORSE™

# Grand Morse™ Connection

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



①

## Internal Index

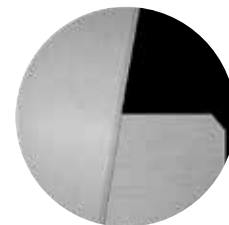
Precise abutment positioning, protection against rotation and easy handling.



②

## Platform Switching

Abutment design with a narrower diameter than the implant coronal area, enabling the platform switching concept.<sup>(5-9)</sup>



③

## Deep Connection

Allowing a large contact area between the abutment and the implant.



④

## 16° Morse Taper connection

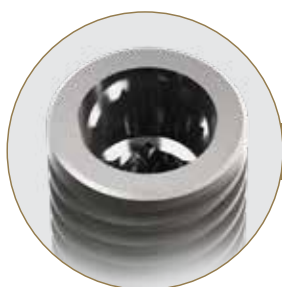
Designed to ensure tight fit for an optimal connection sealing.



# 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



012

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

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

# Grand Morse™ Abutments

					
Pro-Peek Abutment	Titanium Base	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.



## Drill Sequence

	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

## Helix™ GM Implants

Bone types III and IV

		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 117.021  
2 mm 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.

# 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.





## 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 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.
































## 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 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

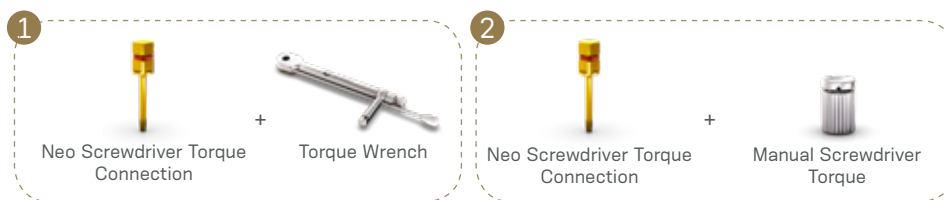
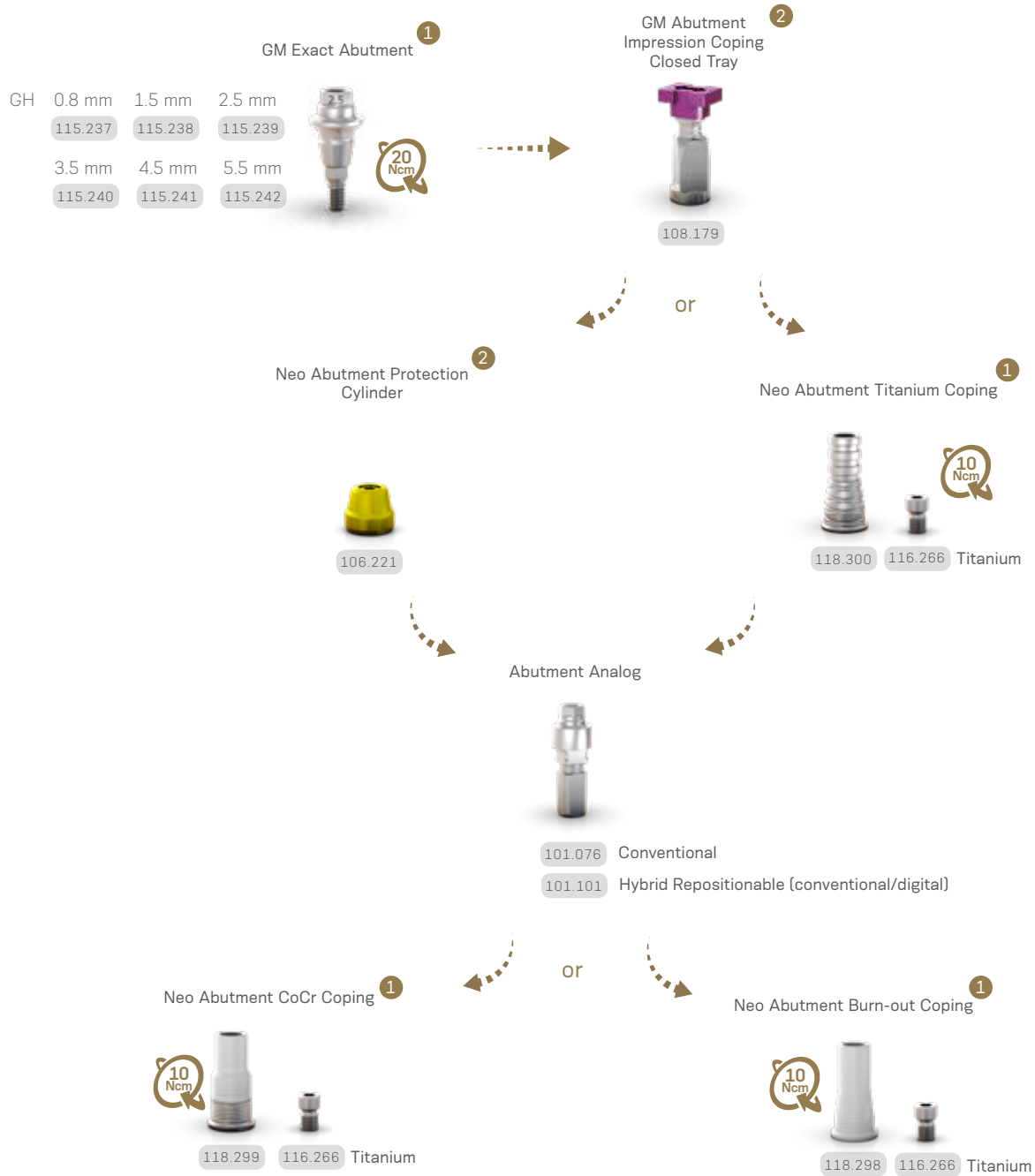


Single-unit  
screw-retained  
prosthesis

Recommended in posterior area.



# Installation Sequence



# GM Mini Conical Abutment



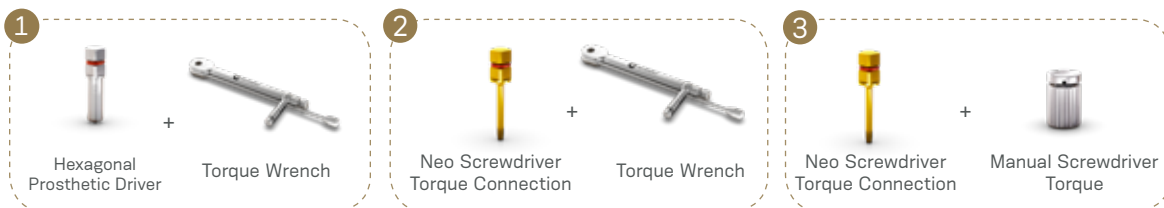
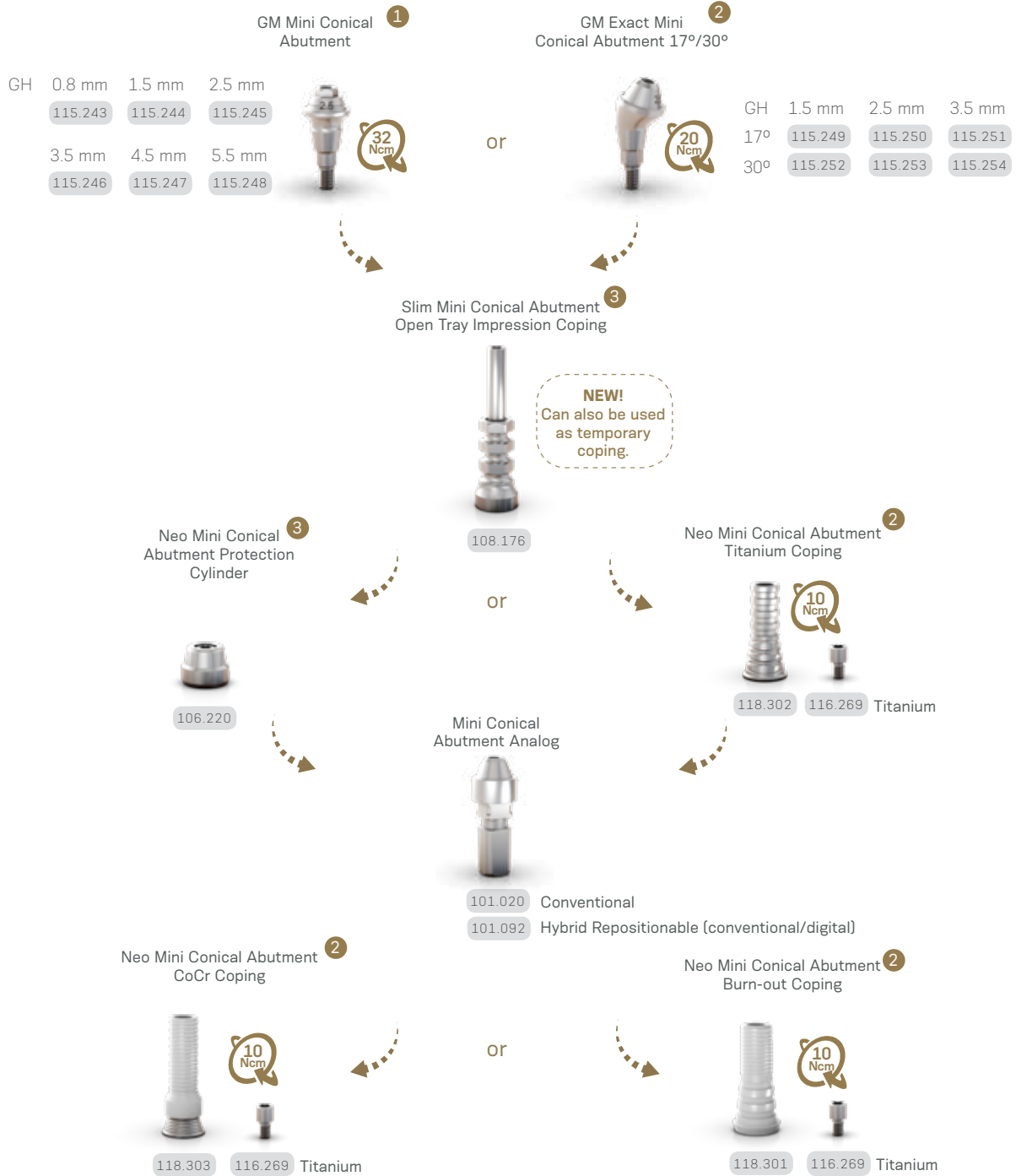
## ► Accessories

Mini Conical Abutment  
Polishing Protector



123.008

# Installation Sequence



# GM Micro Abutment

Recommended for limited spaces and narrow inter-dental spaces.



Single-unit  
screw-retained  
prosthesis



OR  
Multiple-unit  
screw-retained  
prosthesis



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## ► Accessories

Micro Abutment  
Polishing Protector



Bridge 123.015



# Installation Sequence

**1**  
GM Micro Abutment

GH	0.8 mm	1.5 mm	2.5 mm
	115.255	115.256	115.257
	3.5 mm	4.5 mm	5.5 mm
	115.258	115.259	115.260

32 Ncm

**3**  
Micro Abutment Impression Coping

Slim Closed Tray for single-unit prosthesis 108.182

or

Open Tray for multiple-unit prosthesis 108.178

**3**  
Neo Micro Abutment Protection Cylinder



**2**  
Neo Micro Abutment Titanium Coping

10 Ncm

Bridge 118.297 116.269 Titanium

Crown 118.317

Micro Abutment Analog



101.078 for Crown (conventional)  
101.091 Hybrid Repositionable (conventional/digital)

**2**  
Neo Micro Abutment CoCr Coping

10 Ncm

Bridge 118.296 116.269 Titanium

Crown 118.316

**2**  
Neo Micro Abutment Burn-out Coping

10 Ncm

Bridge 118.295 116.269 Titanium

Crown 118.315

**1**

Hexagonal Prosthetic Driver + Torque Wrench

**2**

Neo Screwdriver Torque Connection + Torque Wrench

**3**

Neo Screwdriver Torque Connection + Manual Screwdriver Torque

# GM Universal Abutment



Single-unit  
cement-retained  
prosthesis

026



# Installation Sequence

1  
GM Exact Click  
Universal Abutment



20 Ncm

1  
GM Exact Click  
Universal Abutment 17°



20 Ncm

1  
GM Exact Click  
Universal Abutment 30°



20 Ncm

	GH	0.8 mm	1.5 mm	2.5 mm	3.5 mm	4.5 mm	5.5 mm		1.5 mm	2.5 mm	3.5 mm		1.5 mm	2.5 mm	3.5 mm
4 mm	Ø3.3	114.566	114.567	114.568	114.569	114.570	114.571		114.542	114.543	114.544		114.554	114.555	114.556
	Ø4.5	114.578	114.579	114.580	114.581	114.582	114.583		114.548	114.549	114.550		114.560	114.561	114.562
6 mm	Ø3.3	114.572	114.573	114.574	114.575	114.576	114.577		114.545	114.546	114.547		114.557	114.558	114.559
	Ø4.5	114.584	114.585	114.586	114.587	114.588	114.589		114.551	114.552	114.553		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

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

1

Neo Screwdriver  
Torque Connection

+

Torque Wrench

# GM Titanium Base



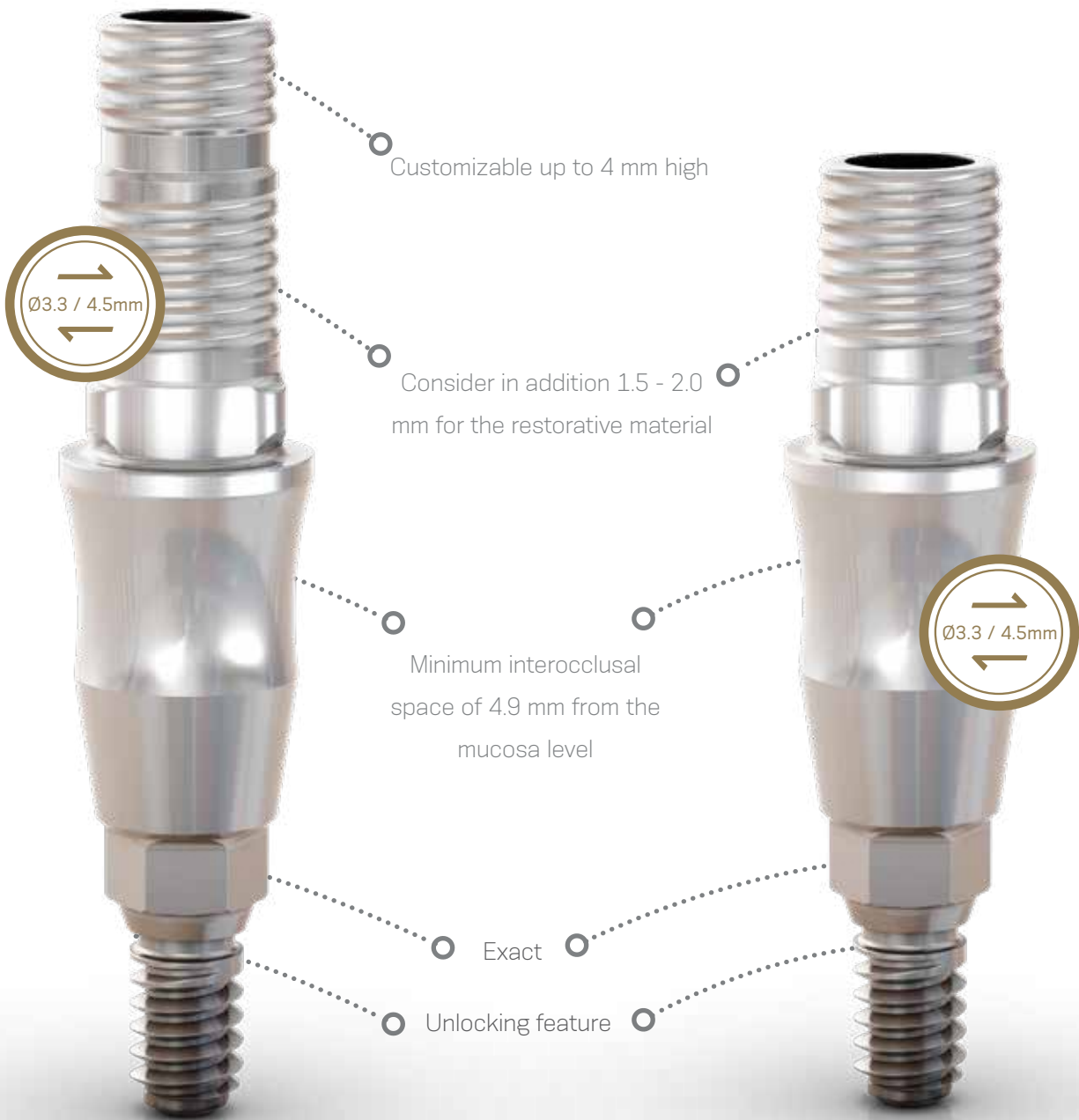
Single-unit  
screw-retained  
prosthesis

OR



Single-unit  
cement-retained  
prosthesis

028



Customizable up to 4 mm high

Ø3.3 / 4.5mm

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

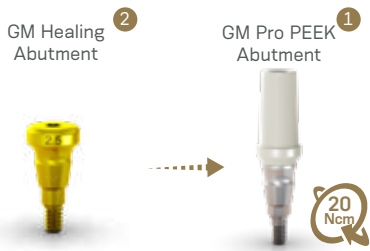
Ø3.3 / 4.5mm

# Workflow Options

## ► Intraoral

## ► Model Scanning

## ► Conventional

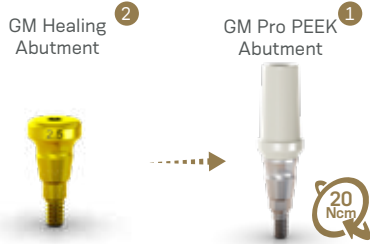


GM Implant Intraoral Scanbody



GM Implant Analog

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



GM Implant Exact Impression Coping Closed and Open Tray



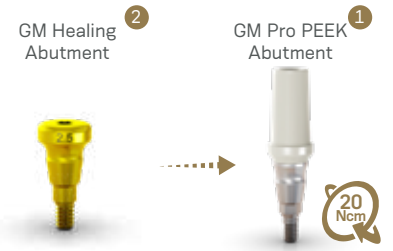
Regular	108.160	108.162	Regular
Long	108.161	108.163	Long

GM Implant Analog



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

GM Exact Implant Scanbody



GM Implant Exact Impression Coping Closed and Open Tray



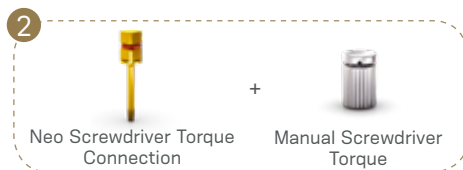
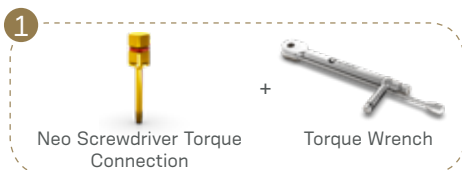
Regular	108.160	108.162	Regular
Long	108.161	108.163	Long

GM Implant Analog



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

GH 0.8 mm			1.5 mm	2.5 mm	4 mm	20 Ncm	GM Exact Titanium Base			6 mm	20 Ncm	0.8 mm	1.5 mm	2.5 mm	GH
Ø3.5	135.202	135.203	135.204	Ø3.5			135.208	135.209	135.210			Ø3.5			
Ø4.5	135.214	135.215	135.216	Ø4.5			135.220	135.221	135.222			Ø4.5			
Ø5.5	135.235	135.236	135.237	Ø5.5	135.241	135.242	135.243	Ø5.5							
3.5 mm			4.5 mm	5.5 mm	4 mm	20 Ncm	GM Exact Titanium Base			6 mm	20 Ncm	3.5 mm	4.5 mm	5.5 mm	GH
Ø3.5	135.205	135.206	135.207	Ø3.5			135.211	135.212	135.213			Ø3.5			
Ø4.5	135.217	135.218	135.219	Ø4.5			135.223	135.224	135.225			Ø4.5			
Ø5.5	135.238	135.239	135.240	Ø5.5			135.244	135.245	135.246			Ø5.5			



GM Titanium Base Burn-out Coping



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

# GM Pro PEEK Abutment



Temporary  
prosthesis

Biocompatible PEEK for easy customization.

030



## ► Installation Sequence

GM Pro PEEK Abutment <sup>1</sup>



	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

<sup>1</sup>



Neo Screwdriver  
Torque Connection

+



Torque Wrench

# Measurements GM Mini Conical Abutment

## ► 17°



115.249



115.250



115.251

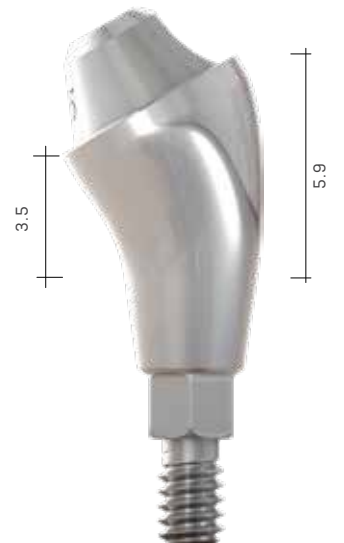
## ► 30°



115.252



115.253



115.254





# Measurements GM 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°



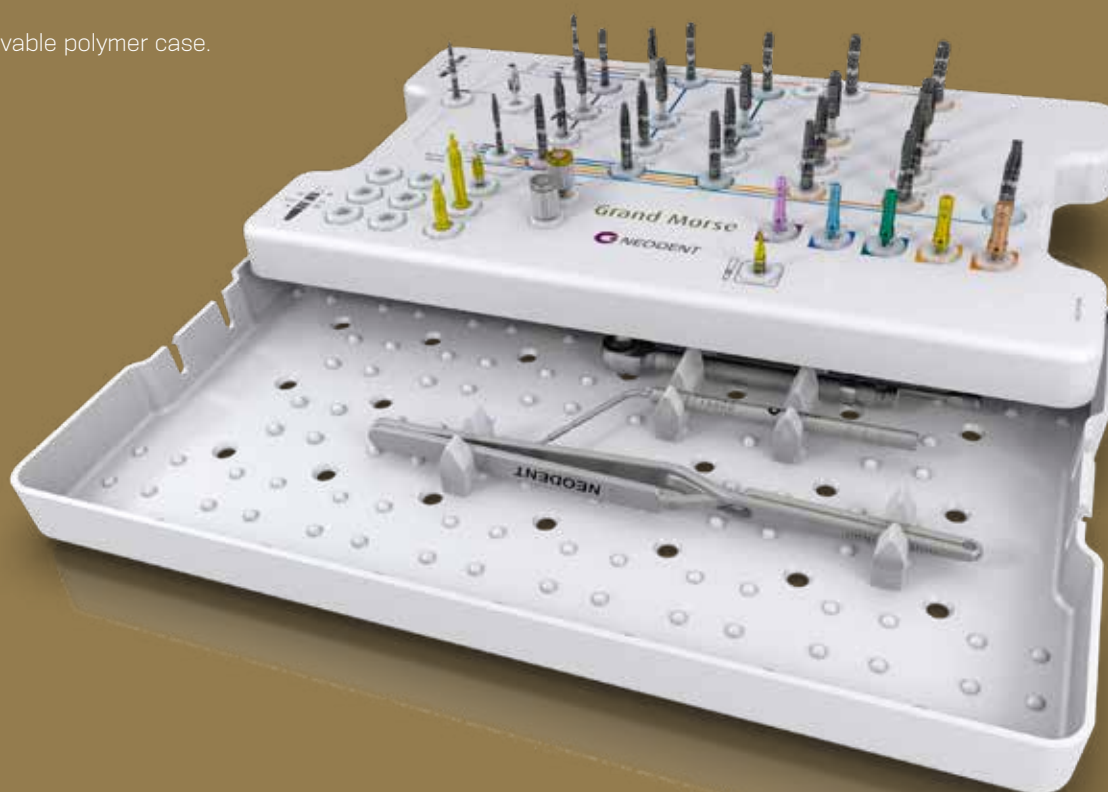
114.563

114.564

114.565

# Grand Morse™ Surgical Kit

Autoclavable polymer case.



## Articles

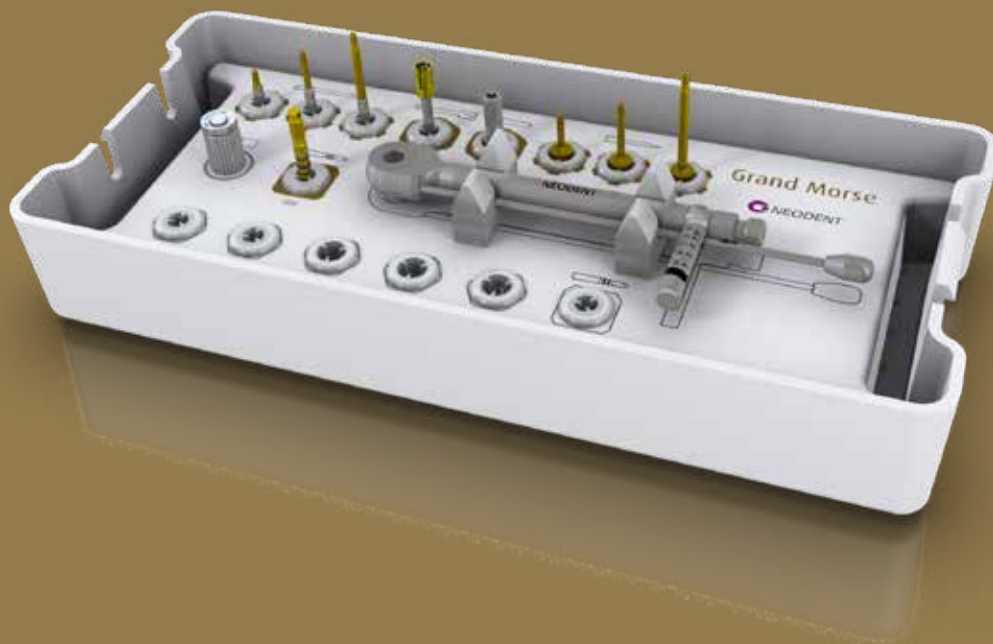
- 103.162 Twist Drill 2.0 Plus
- 103.213 Pilot Drill 2.0/3.0 Plus
- 103.164 Twist Drill 3.0 Plus
- 103.166 Twist Drill 3.3 Plus
- 103.167 Twist Drill 3.8 Plus
- 103.168 Twist Drill 4.3 Plus
- 103.163 Twist Drill 2.8 Plus
- 103.170 Initial Drill Plus
- 103.414 Pilot Drill GM 2.8/3.5
- 103.415 Pilot Drill 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

# Grand Morse™ Try-In Kit

Autoclavable polymer case.



## Articles

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

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

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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	

040



### 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

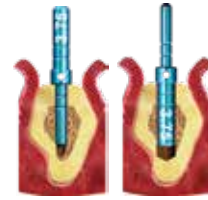
128.019

128.020

128.021

128.022

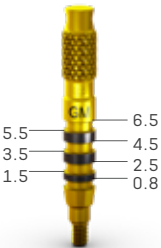
128.023



### 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

5.5 — 6.5  
3.5 — 4.5  
1.5 — 2.5  
0.8



### 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

105.129

Long  
30 mm

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

104.028

Torque Wrench Connections

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

105.133

Medium  
25 mm

105.132

Long  
38 mm

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

104.058

Medium  
25 mm

104.060

Long  
38 mm

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

105.146

Short  
20 mm

105.135

Medium  
25 mm

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

105.137

Contra-angle

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

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#### Torque Wrench

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

104.050





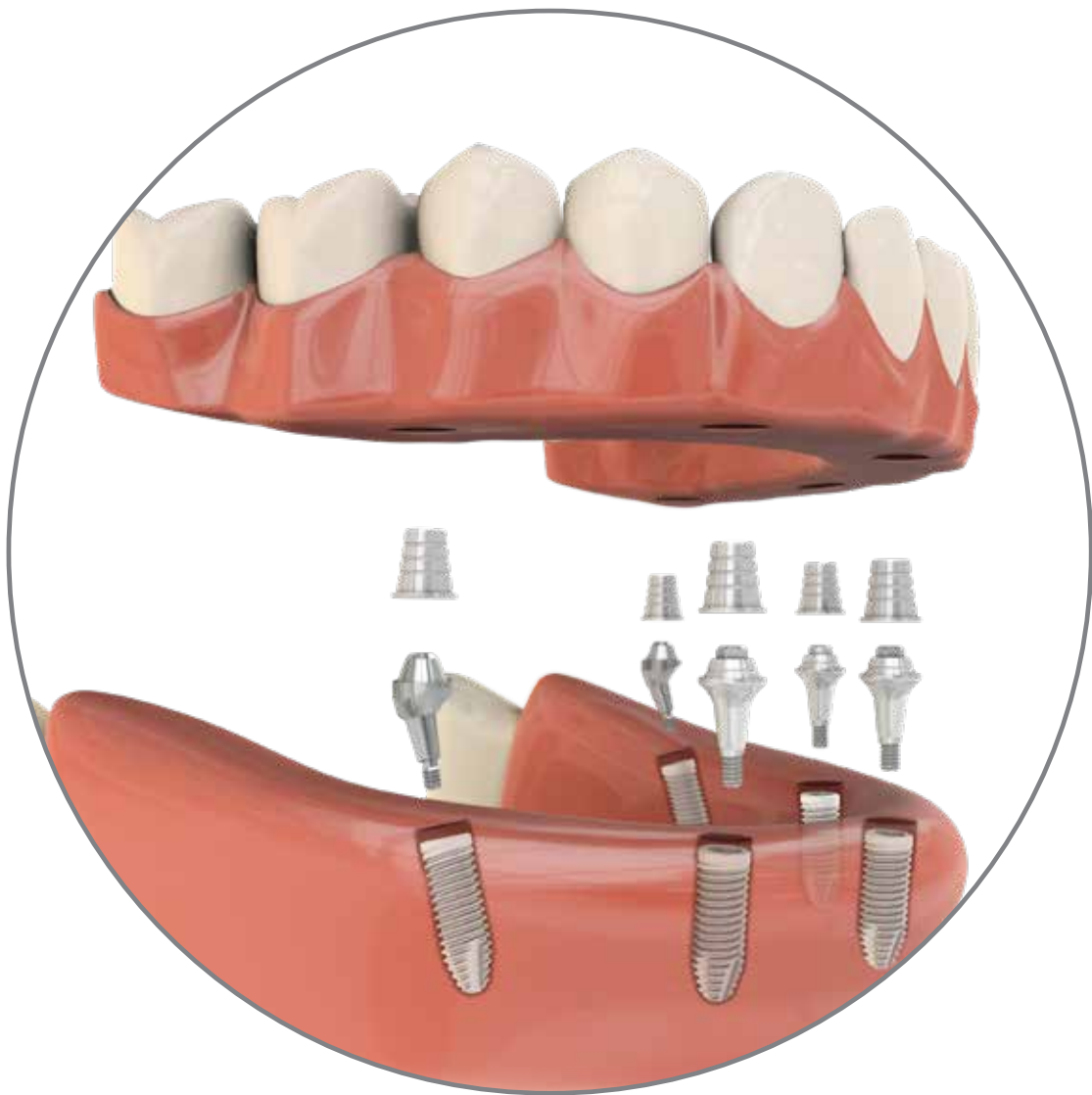
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NEODENT®  
TECHNIQUES

# 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



1 Normalization of alveolar flaps.



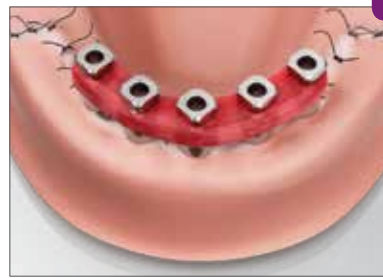
2 Surgical drilling completed, obtaining adequate distance from distal implant in relation to the mental foramen with 7 mm flag.



3 Placement of 5 implants.



4 Placement of Mini Conical Abutments.



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



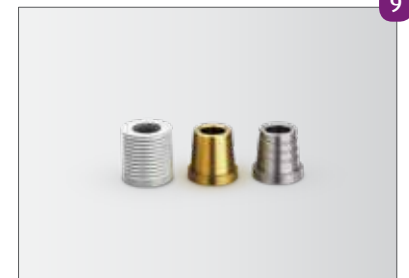
6 Positioning of multifunctional guide to obtain intermaxillary ratios. Joining transfers with acrylic resin. After splinting, soft silicone is injected to take the soft tissue impression



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



8 Working model with artificial gum.



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





10

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



11

Castable ring with waxed framework.



12

Cast framework.



13

Adapting the framework over model.



14

Please note cementing area.



15

Cement the structure over the Titanium copings with Panavia.



16

Final view.

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



050



#### 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

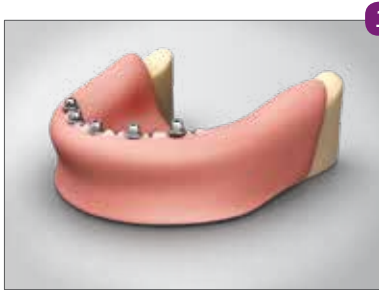


#### Polishing Protector

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

123.008

## ► Demonstration Sequence



**1** Abutments placed.



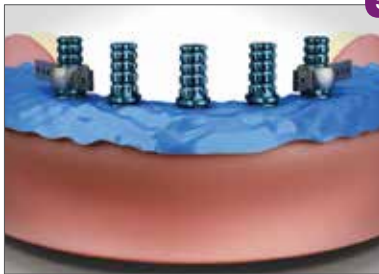
**2** Prostheses wearing, keeping posterior region integrity.



**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.



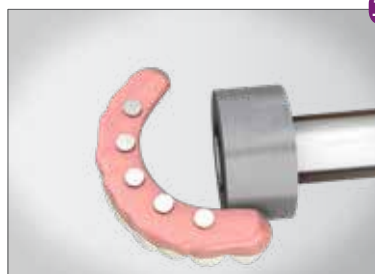
**7** Applying acrylic resin between copings.



**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.



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# DIGITAL SOLUTIONS



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\*



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# GENERAL INSTRUMENTS

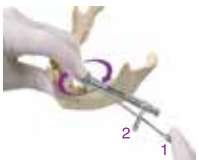


## Torque Wrench

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



## 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

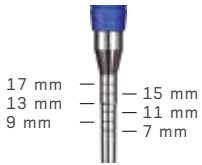
### Bivers Handle

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



129.002

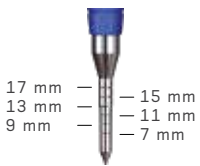
### Concave Osteotome



- :: 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.

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



0.35 mm

### 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

103.092

Pin

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

107.003

Sieve

107.008



### Handle Implant Driver

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

104.047



### Analog Handle

- :: Used for tightening  
analog 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 optimize bone block locking during use;
- :: Please avoid the use of bone originating from tissue banks;
- :: Bone Mill Teflon Ring (127.013) can be acquired.

127.011



Bovine bone block with volume = 1.76 cm<sup>3</sup>



Magnified particles



After partiling, volume gain was about 7 times.









## REFERENCES

- 1 Novellino MM, Sesma N, Zanardi PR, Laganá DC. Resonance frequency analysis of dental implants placed at the posterior maxilla varying the surface treatment only: A randomized clinical trial. *Clin Implant Dent Relat Res*. 2017 Jun 20. doi: 10.1111/cid.12510. [Epub ahead of print]
- 2 Sartoretto SC, Alves AT, Resende RF, et al. Early osseointegration driven by the surface chemistry and wettability of dental implants. *J Appl Oral Sci*. 2015 May-Jun;23(3):279-87.
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