

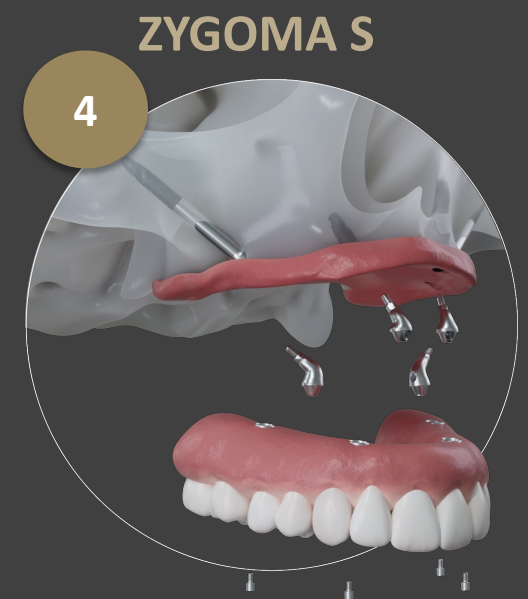
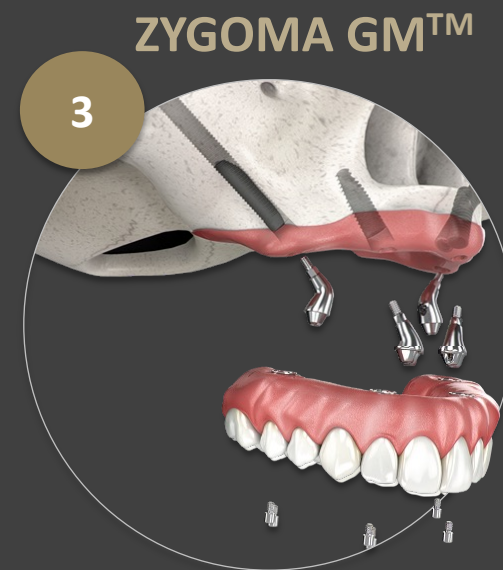
4

ZYGOMA-S GM[®]



NEODENT® NEOARCH® Solutions for all clinical needs

The Neodent implant system offers® solutions developed for immediate and predictable treatments in all types of bone density, even with different degrees of resorption of the alveolar bone.



Neodent® GM Zygoma-S

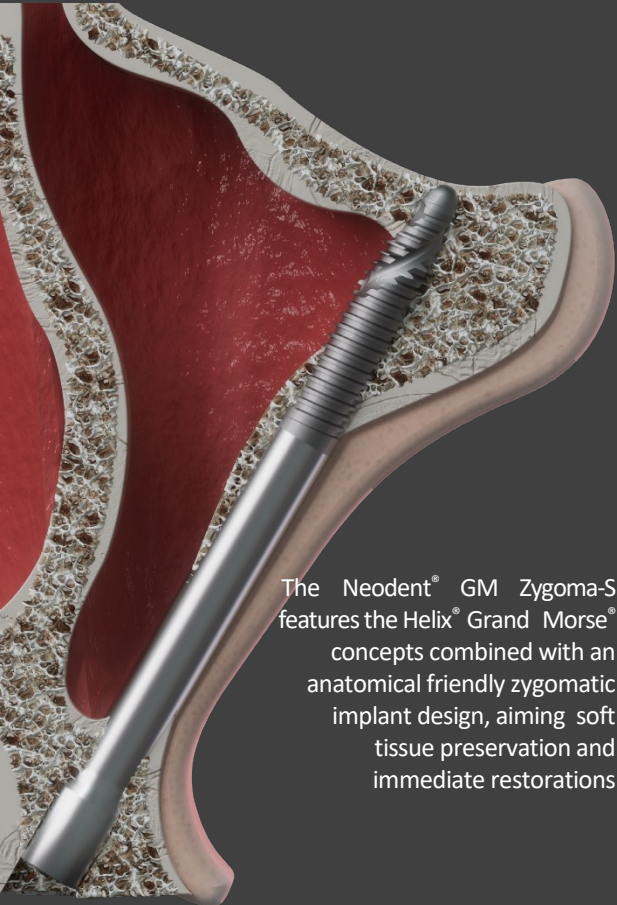
Greatness in severe atrophic maxilla cases.

The Neodent® Zygoma-S provides an immediate solution as an alternative for bone grafting procedures designed to deliver treatment predictability and precision.

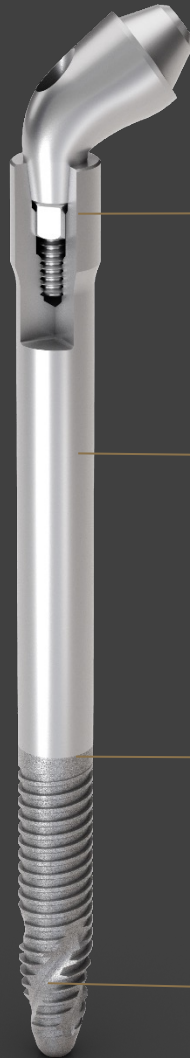
Zygoma-S and its protocol are designed to achieve immediate loading, through efficient drilling protocols: new tools for the initial osteotomy to avoid implant deviation, increasing the surgery predictability.

The immediate aesthetic allied to the predictability is the purpose of the Zygoma-S' new smooth surface: better soft tissue relation with the implant system especially in exteriorized implants techniques

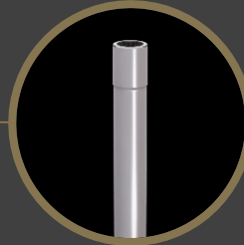
GM Zygoma-S



The Neodent® GM Zygoma-S features the Helix® Grand Morse® concepts combined with an anatomical friendly zygomatic implant design, aiming soft tissue preservation and immediate restorations

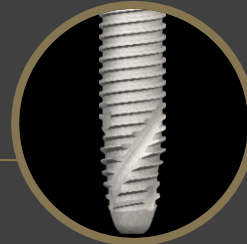


GM CONNECTION



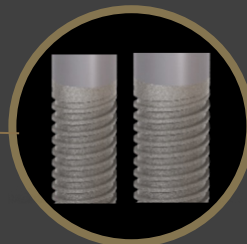
IMPLANT SURFACE:

Smooth surface > from median to coronal portion
Neoporos > Threaded portion



IMPLANT DESIGN:

Parallel wall > from median to coronal portion
Hybrid Design > implant body to maximize treatment options and efficiency.



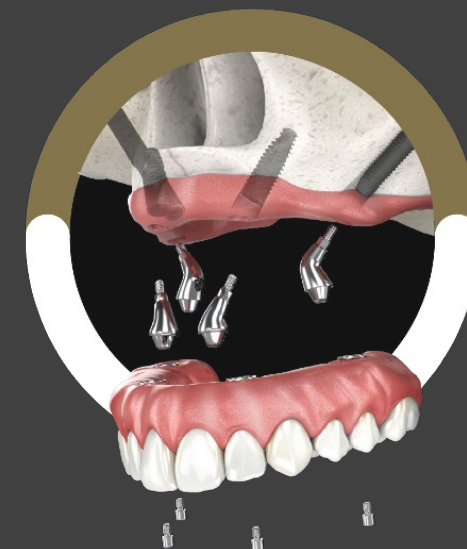
IMPLANT DIAMETER: 3.5 | 3.75

The anatomy of the Zygomatic has a restricted space, so implants with smaller diameters give more versatility for installation.

ZYGOMA-S INTEGRATES NEOARCH 2.0: THE NEXT LEVEL OF IMMEDIATE FIXED FULL-ARCH

Technologies designed to enhance immediate full-arch rehabilitation:

- Grand Morse Stability
- Acqua surface predictability
- Optimized Mini Conical abutment shape and new angles to facilitate Prosthetic resolutions



0°

17°

30°

45°*

52°*

60°*

GINGIVAL HEIGHTS

2.5 / 3.5 / 5.5mm

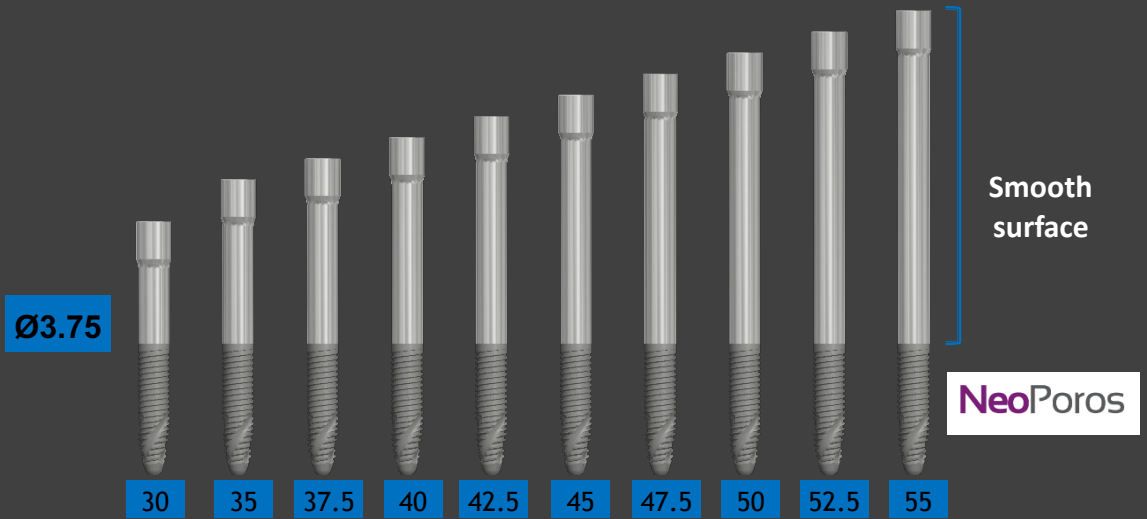
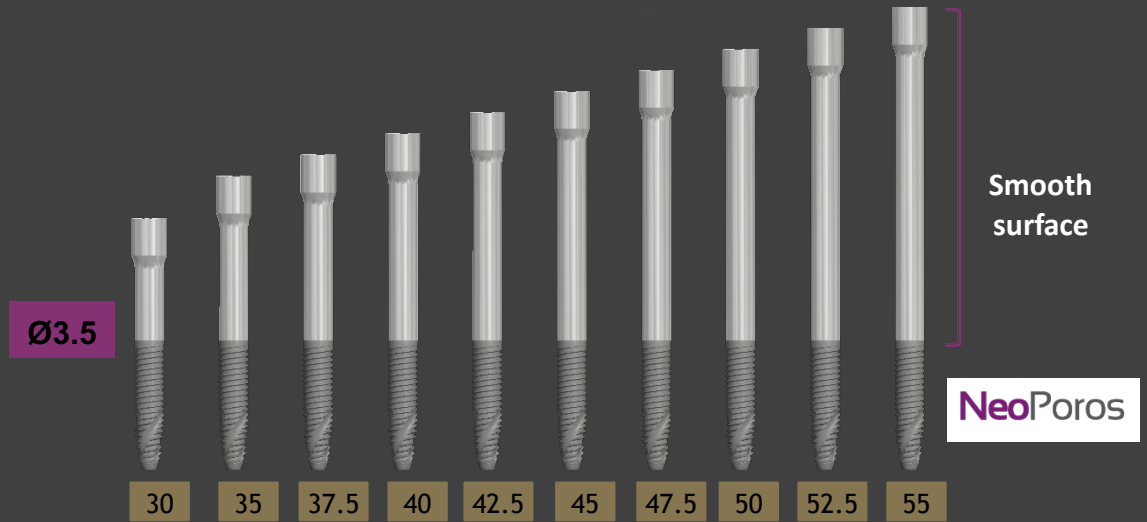
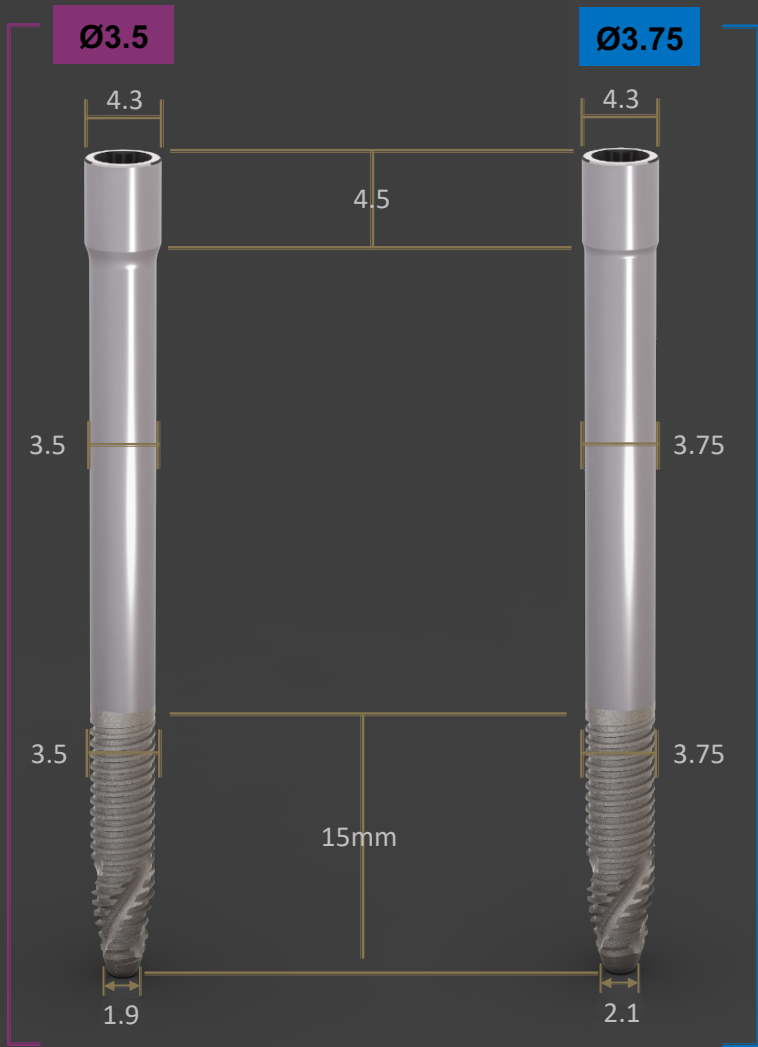
1.5 / 2.5 / 3.5 mm

1.5 / 2.5 / 3.5 mm

1.5 / 2.5 mm

1.5 / 2.5 mm

1.5 / 2.5 mm



PREDICTABLE SURGICAL RESULTS

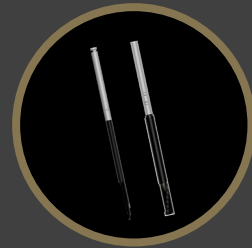
Intuitiveness and efficiency in all surgical steps.

- Predictable surgical results
- Drills are designed to achieve maximum protocol precision
- Functional and intuitive surgical cassette enables surgical efficiency



DRILL LENGTHS :

3.5 and 3.75 have Two different lengths of color-coded drills options, to adapt well to diverse anatomical structures:



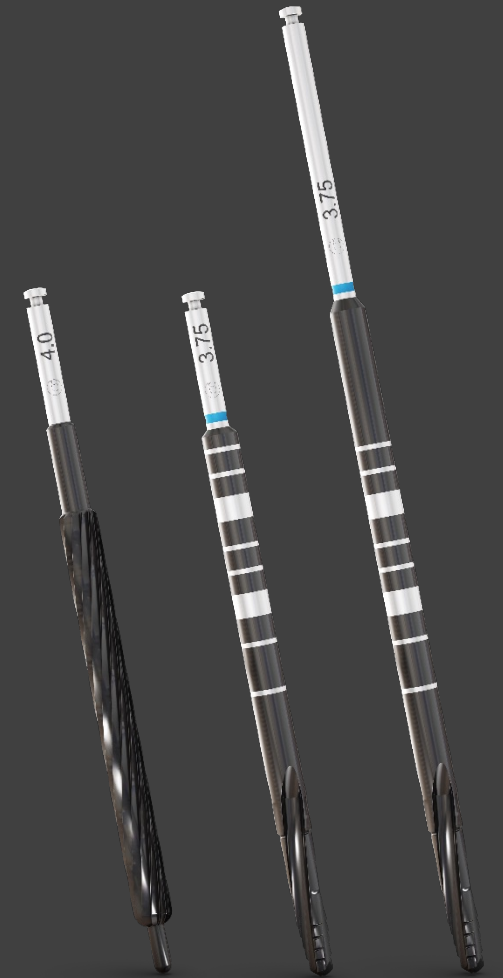
MORE PRECISION FOR INITIAL SURGICAL PREPARATION:

- A Spade drill and A new initial lateral cutting drill: More precision for the initial osteotomy.



LATERAL CUTTING DRILL :

- More suited to cutting through cortical bone



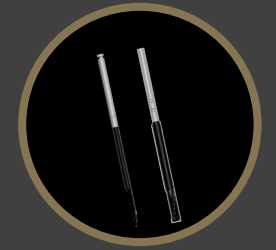
Confidence to predictable surgical results

The Neodent® GM Zygoma-S system provides predictability and builds confidence with its straightforward surgical protocol, designed to overcome challenging procedures, from extra maxillary to intra sinus placement, enabling efficiency in all surgical steps.



PREDICTABLE SURGICAL RESULTS

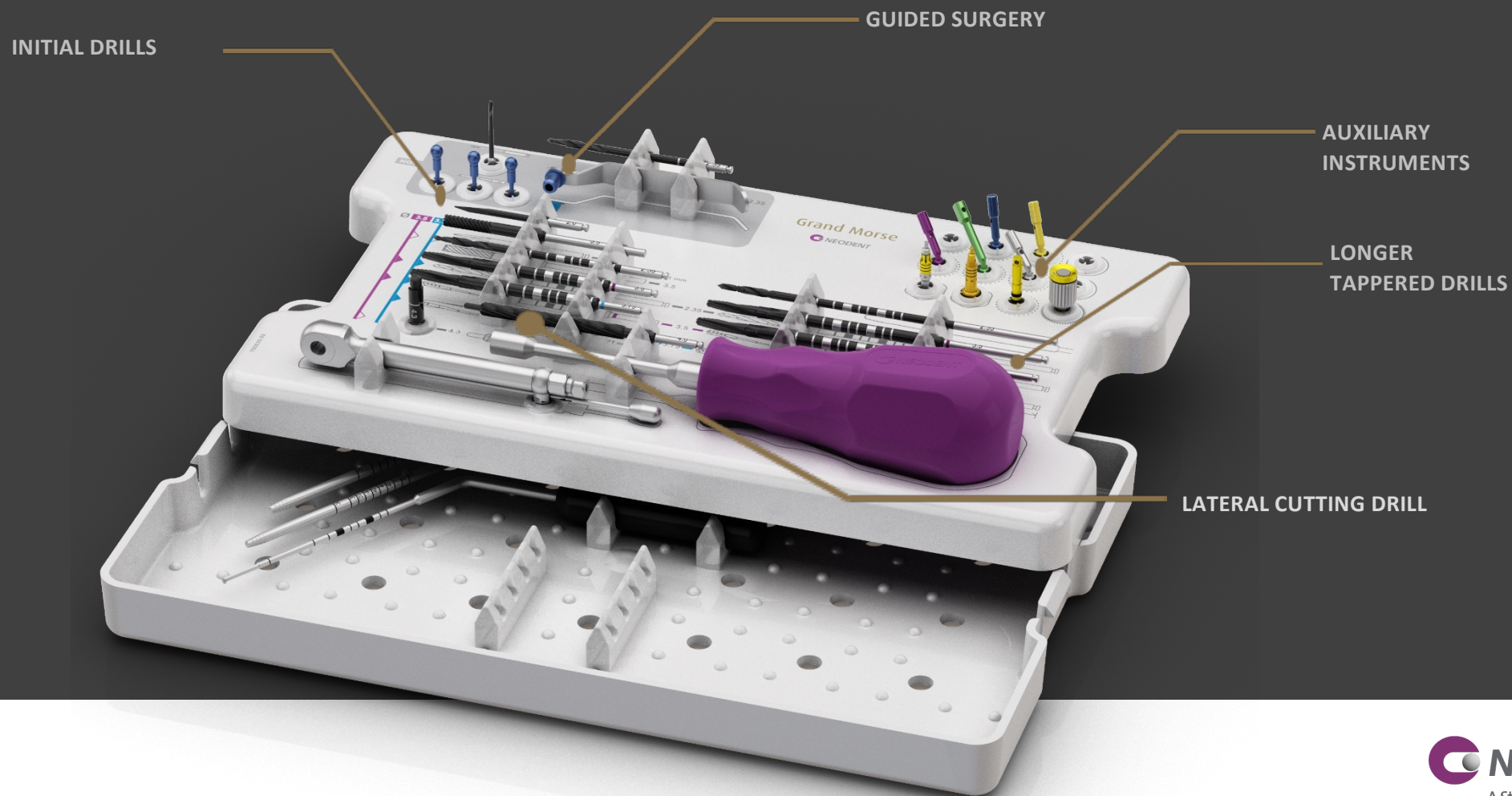
Innovation: New Initial Lateral cutting drill



Unique drills designed for a more accurate osteotomy from the surgical beginning, bringing a maximum level of confidence to the surgery by precise initial drilling, preserving anatomical structures, contributing to the accuracy in the implant positioning, regardless of the demanding indications and anatomy

GM Zygoma-S Surgical Kit

Functional and intuitive surgical cassette enables surgical efficiency: The Neodent® GM Zygoma-S system features an intuitive protocol, potentializing surgical predictability and efficiency, simplifying the drilling sequence and includes an Initial Guided procedure.



Surgical Instruments and Protocols

Zygoma-S GM Packaging



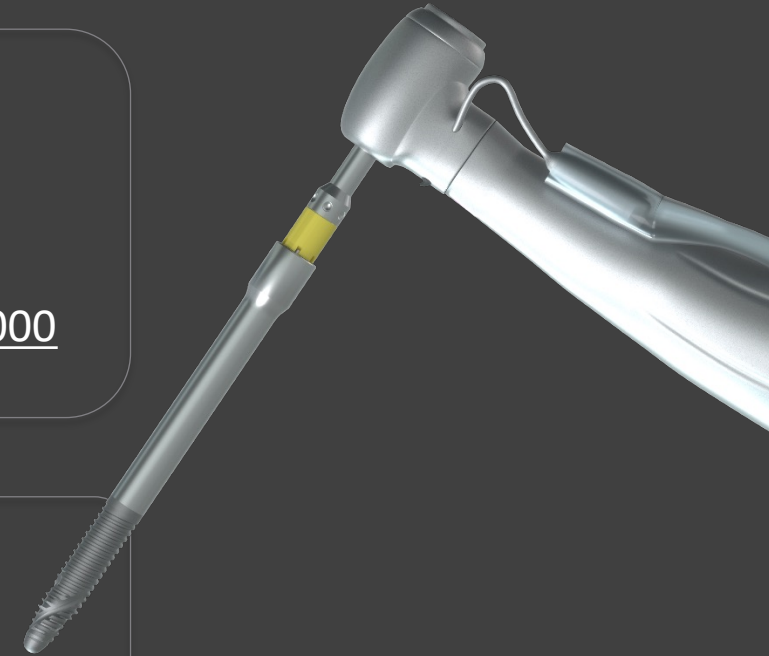
General Features

Drilling features:
Drilling speed: 800-1200 rpm;

- Lateral Direction Drill speed: 600-800 rpm;
- Initial Lateral Cutting Drill (Straight Piece) speed: 20000 rpm

- Implant insertion speed:
30 rpm;

Maximum torque:
60 N.cm



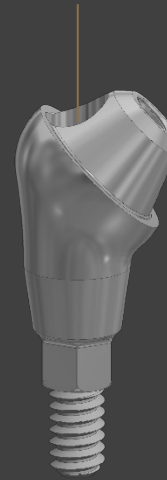
Mini Conical Abut. 45° Slim

An innovative design to 45°: Considering that 45° is our main multi unit abutment for NeoArch, we are changing the screw position to bring more prosthetic predictability and simplicity.

Screw access:
Current version:



New position: ease of access

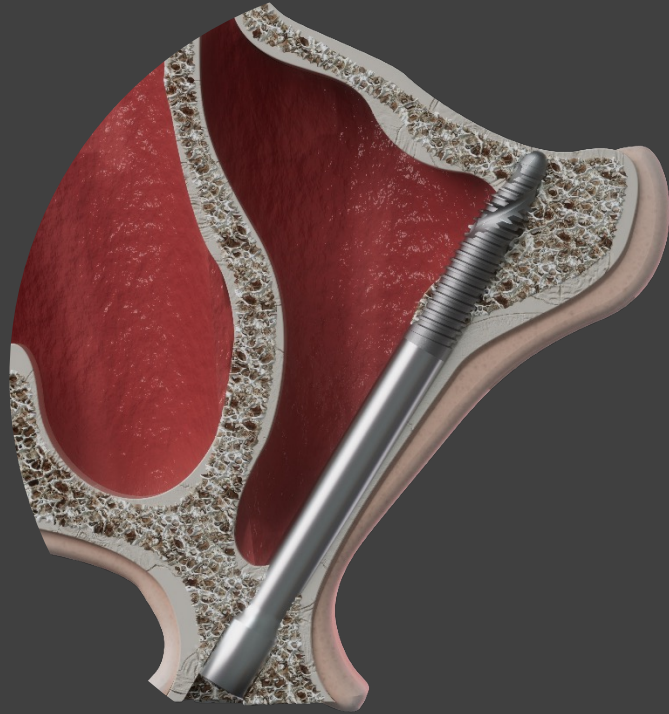


GH 1.5

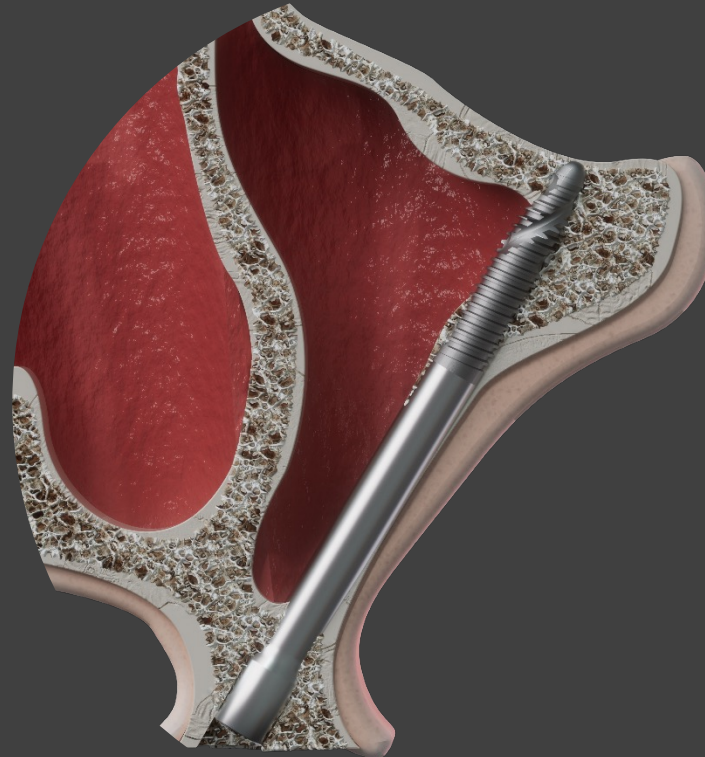
GH 2.5

ZYGOMA-S GM™

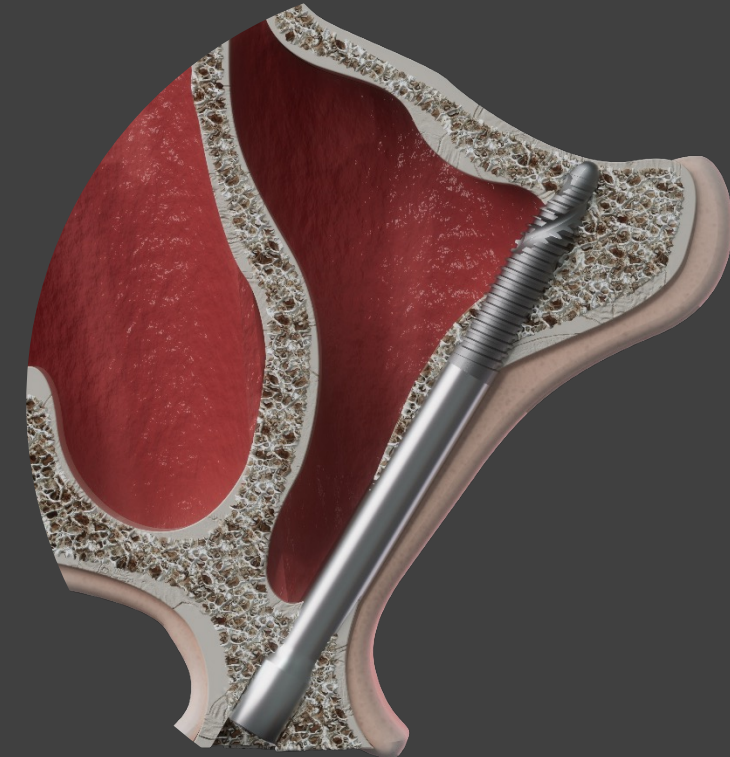
ZAGA classification



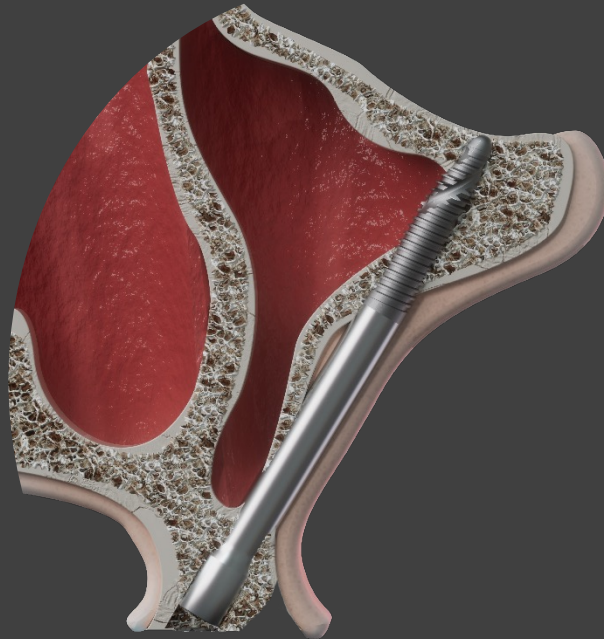
ZAGA-0



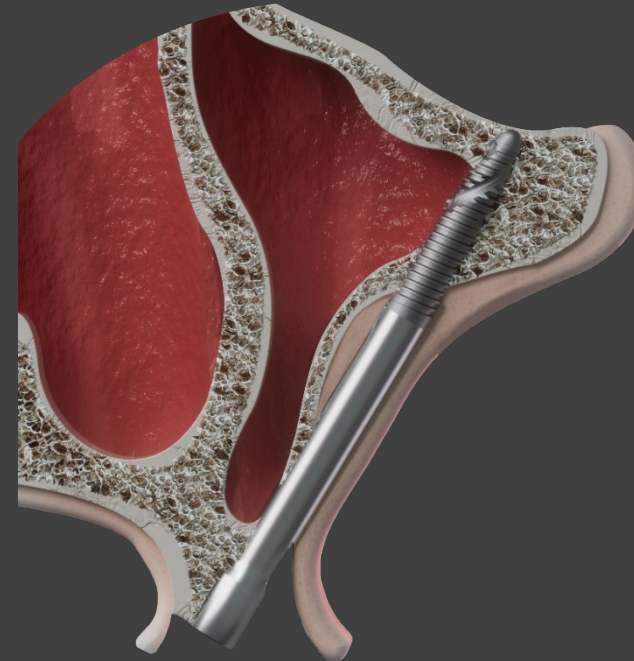
ZAGA-1



ZAGA-2



ZAGA-3



ZAGA-4

ZYGOMA-S GM™

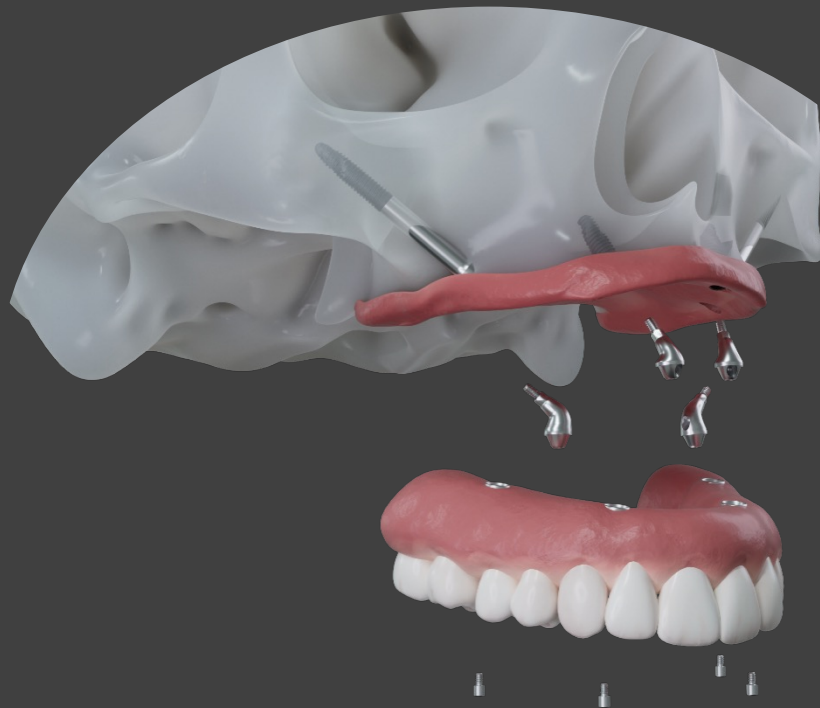
Indications



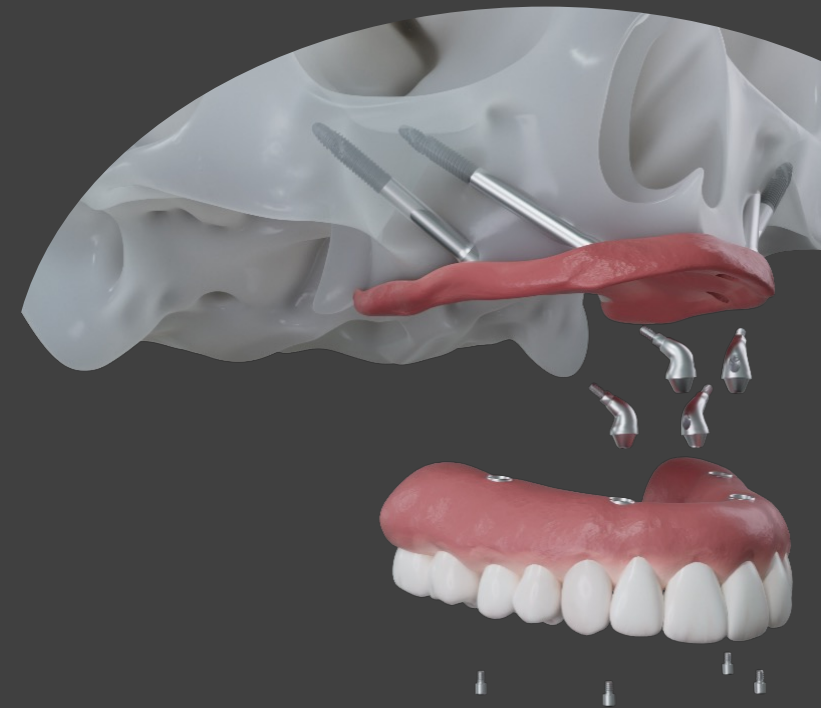
- ✓ It is indicated for multiple prostheses in cases of severe maxilla re-absorption and total edentulism
- ✓ It can be used in immediate loading processes when there is good primary stability and adequate occlusal load.

ZYGOMA-S GM™

Indications



Classic



Quad-Z

Available measures

30.0 mm

35.0 mm

37.5 mm

40.0 mm

42.5 mm

45.0 mm

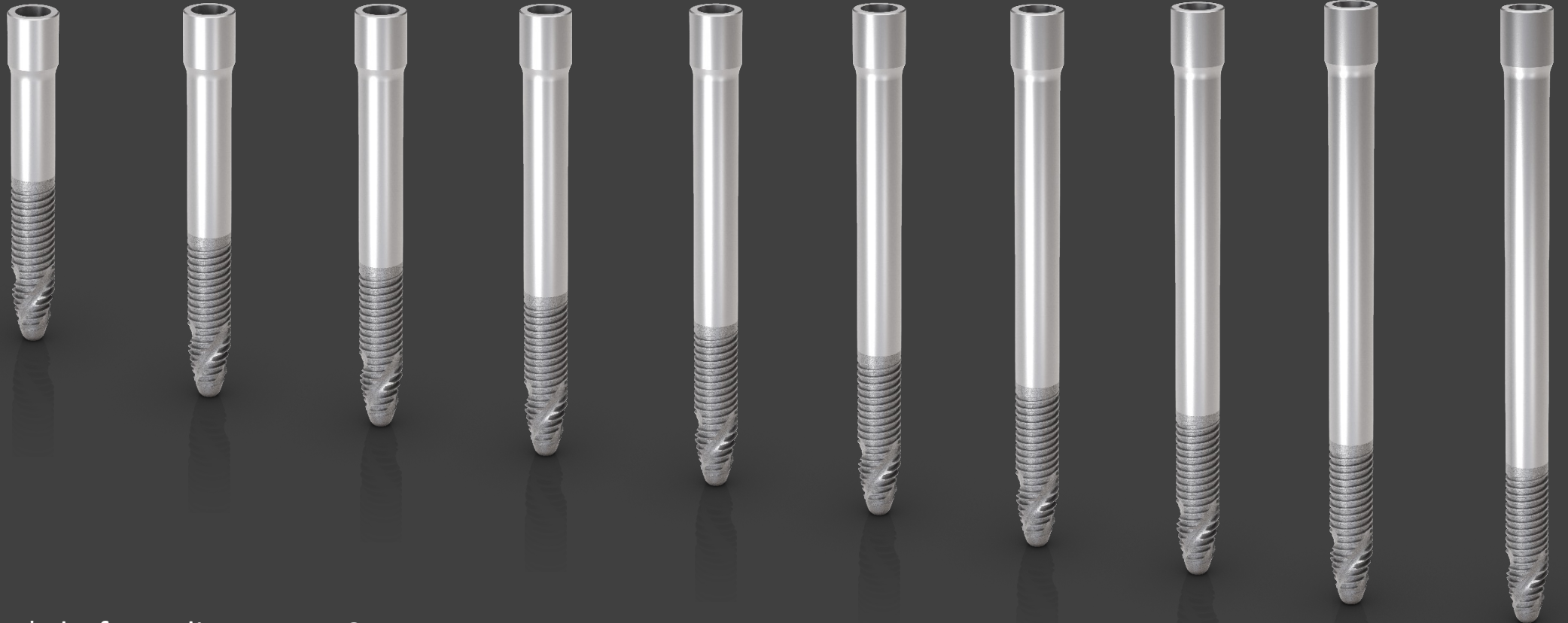
47.5 mm

50.0 mm

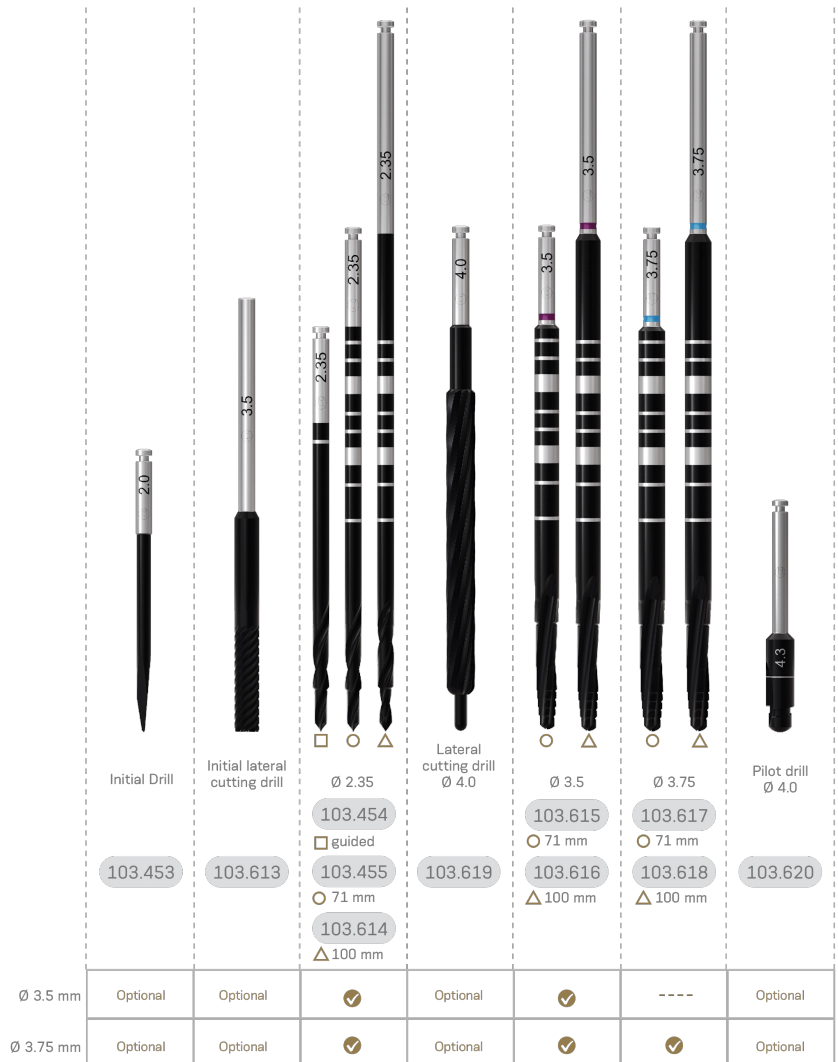
52.5 mm

55.0 mm

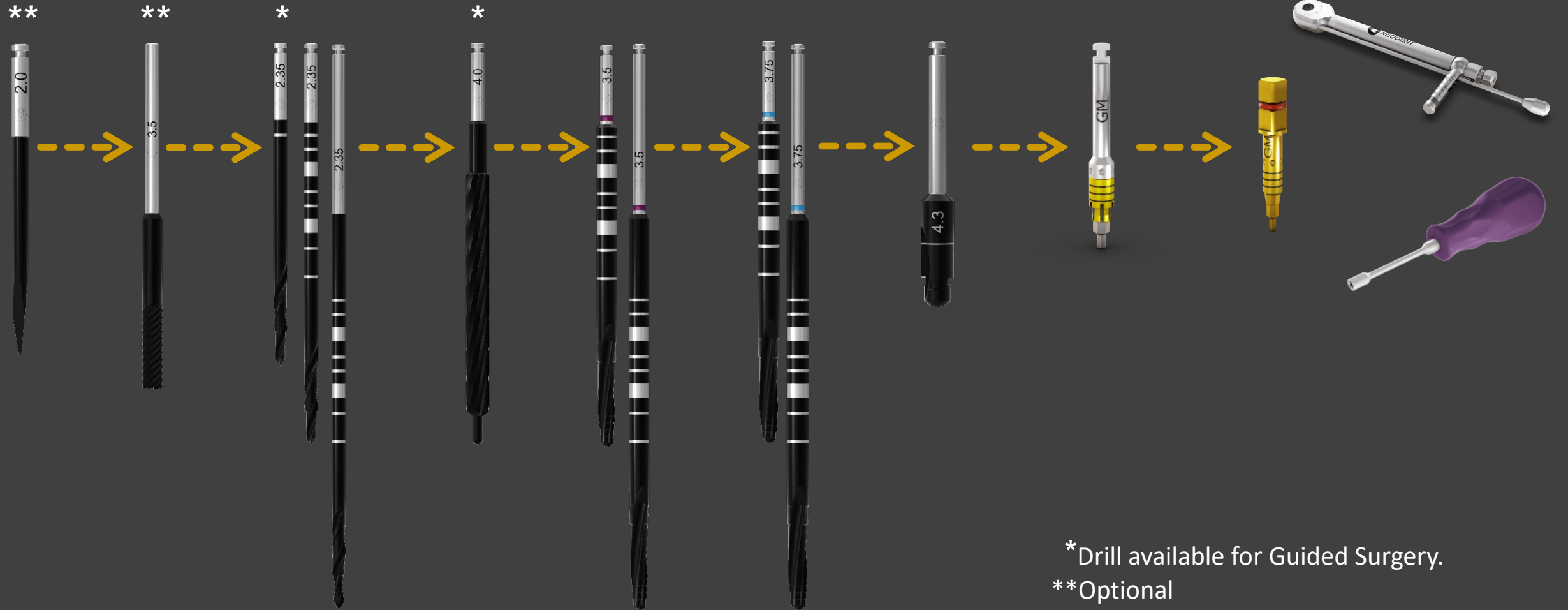
Ø3.5 and 3.75 mm



*Platform diameter 4.3 mm



Zygoma-S GM™ 3.75



* Drill available for Guided Surgery.
** Optional

Important



- ✓ **Zygoma GM™ Drill Guide for Guided Surgery:** instrument with the purpose of initiating the guided surgical procedure.
- ✓ GUIDED SURGERY DRILL 1.3:
- ✓ **Zygoma GM™ Drill for Guided Surgery 2.35:** after drilling the first drill, the surgical guide should be removed, and the drill sequence becomes conventional.

Angled GM Exact Mini Conical



- ✓ Rotational;
- ✓ Indicated for screwed multiple prosthesis;
- ✓ Consider 1.5 to 2.0 mm more for restorative material.
- ✓ Angled 17°, 30°, 45°**, 45° Slim, 52° and 60°***.



*considering the presence of the screw

**The Mini Conical 45° is indicated for use only with Helix® GM Long and Zygoma GM™ implants.

*** The Mini Conical 60° is indicated for use only with Zygoma GM™ implants.

Prosthesis Interface	Temporary Single	Single Screw retained	Multi Screw retained	Single Cemented	Neodent Digital
Grand Morse					
Driver					
Torque			20 N.cm		

Neo screw (screwed prosthesis): 10 N.cm

Step-by-Step Zygoma-S GM™

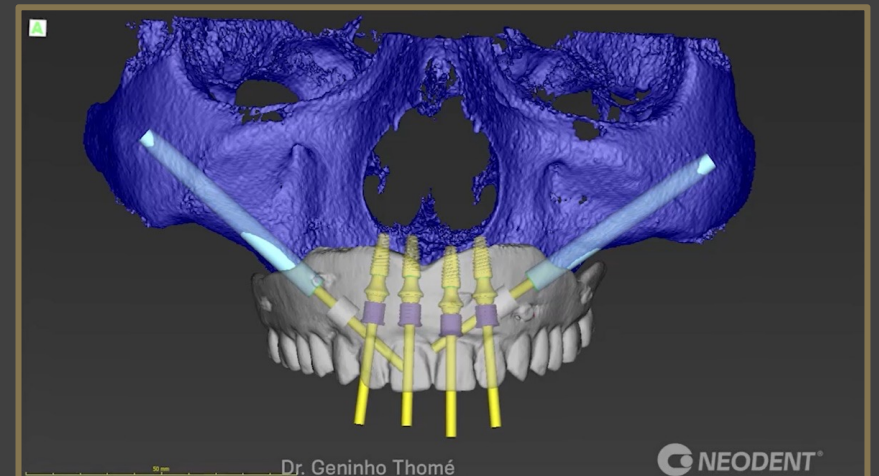
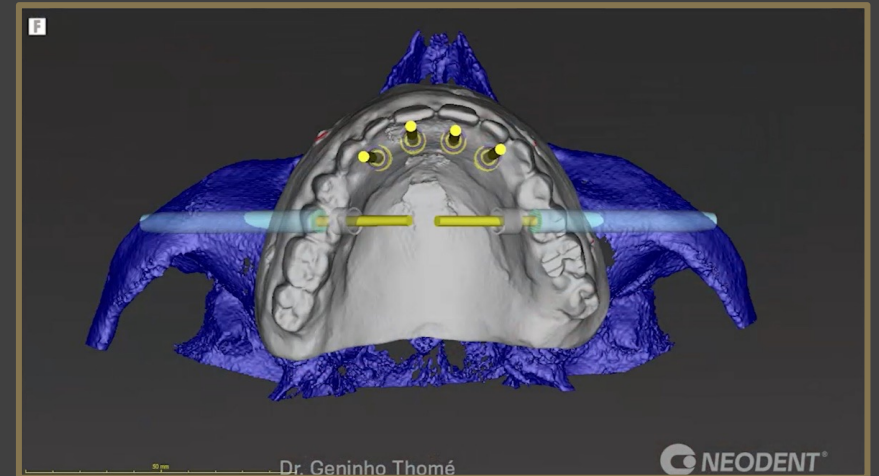
Pre-Surgical Evaluation

- The model, diameter, length, position, quantity of implants and technique must be selected for each clinical case

- Consider the anatomy, quality and quantity of bone and space available.

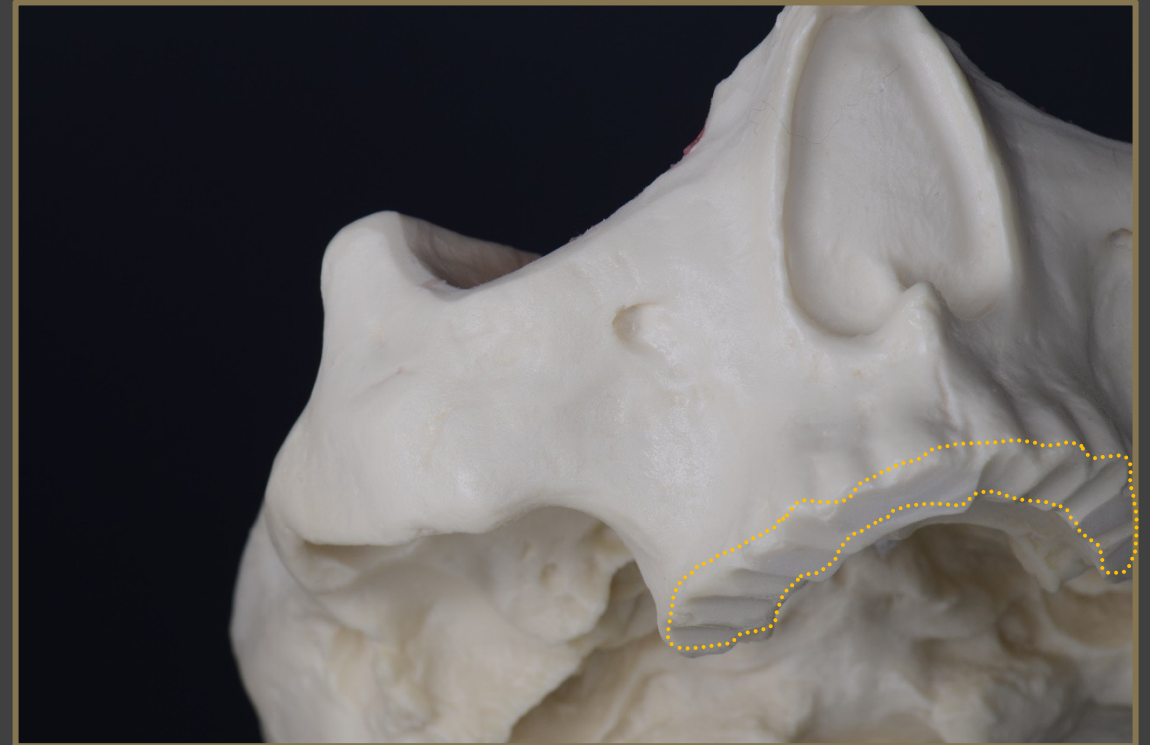
- When necessary, execute the wax-up diagnostic of the patient.

- In situations in which there are relatively high loads, special care must be taken to ensure the suitable alignment of the implants, abutments and prosthesis.



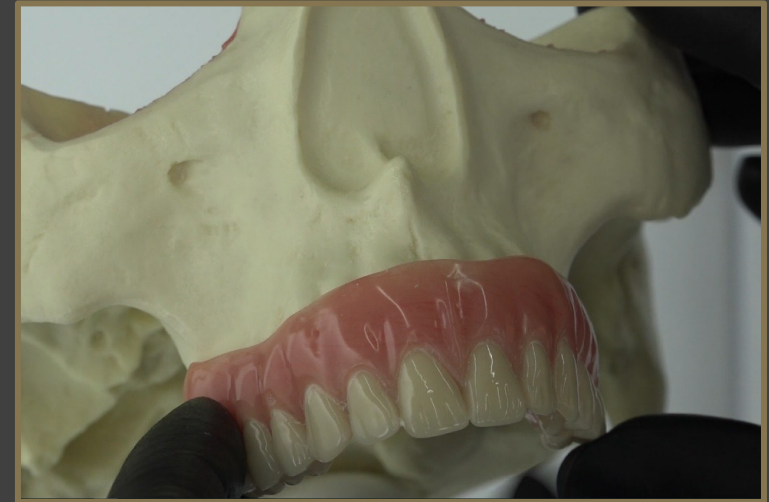
Step 1: Extractions and Alveolar Crest Regularization

- After extracting the teeth, make the planned osteotomy
- Alveolar crest regularization (Plateau)



Step 2: Checking VDO

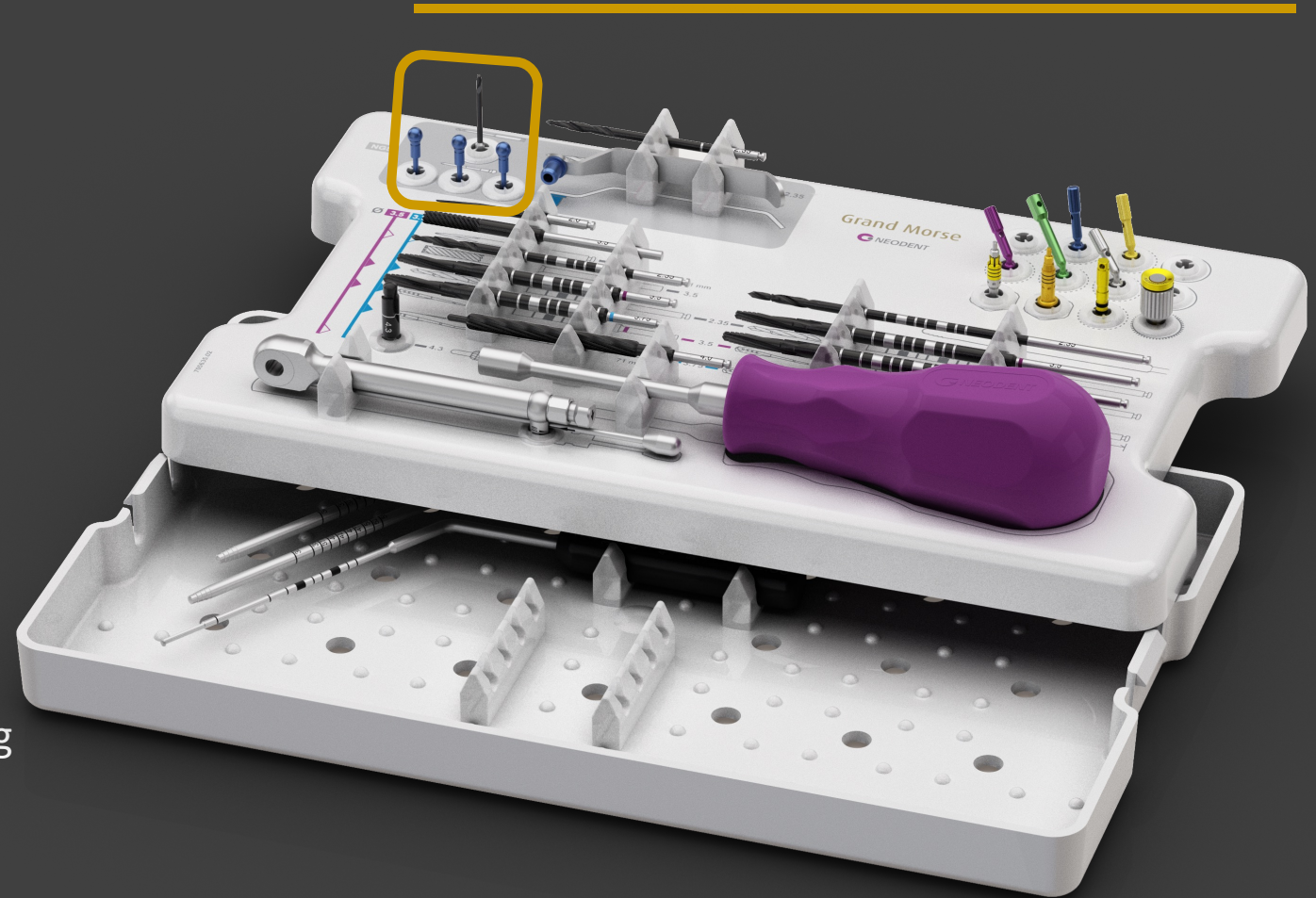
- In most of the cases, patients requiring rehabilitation with zygomatic implants are users of total prostheses
- If this total prosthesis is well adapted and with proper VDO it is possible to use it as the immediate provisional prostheses right after surgery
- The multifunctional guide will be used as a guide to install the implants for a good positioning and distribution, avoiding gross cantilevers.



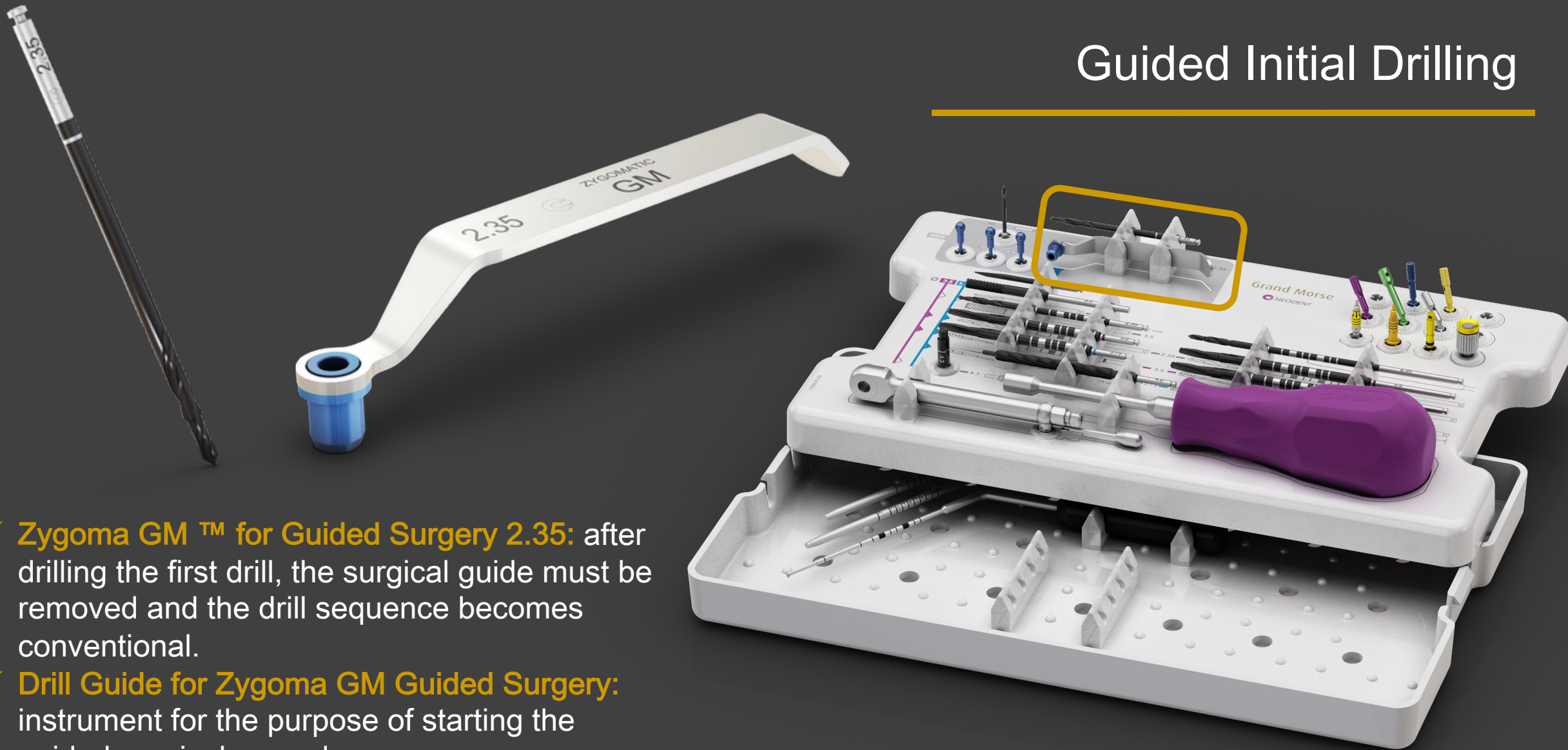
Guided Initial Drilling



- ✓ **Guided Surgery Drill 1.3mm:** drilling in the fixing sleeves of the surgical guide.
- ✓ **Guide Surgery Fixator:** pin to fix the prototyped surgical guide on the alveolar ridge.



Guided Initial Drilling



- ✓ **Zygoma GM™ for Guided Surgery 2.35:** after drilling the first drill, the surgical guide must be removed and the drill sequence becomes conventional.
- ✓ **Drill Guide for Zygoma GM Guided Surgery:** instrument for the purpose of starting the guided surgical procedure.

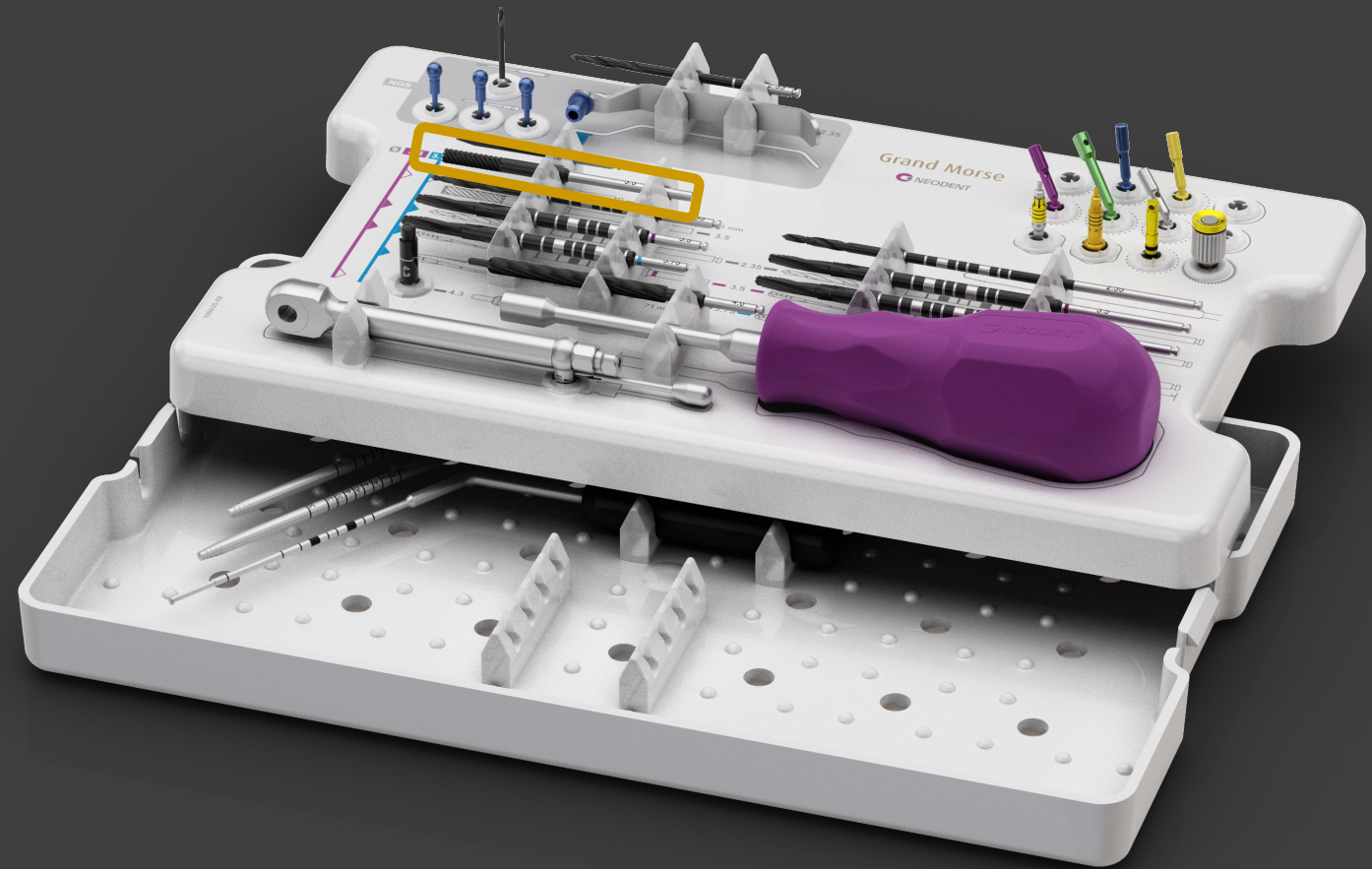
Step 3: Drilling Protocol – Initial Drill (optional)

- Set up the motor with:
 - 20:1 ratio
 - 50N.cm of torque
 - 600-1200 rpm
 - Under abundant irrigation.
- The initial drill could be used to start the bone bed preparation, at the alveolar crest:
Initial Drill (103.453)
According to the implant's length.



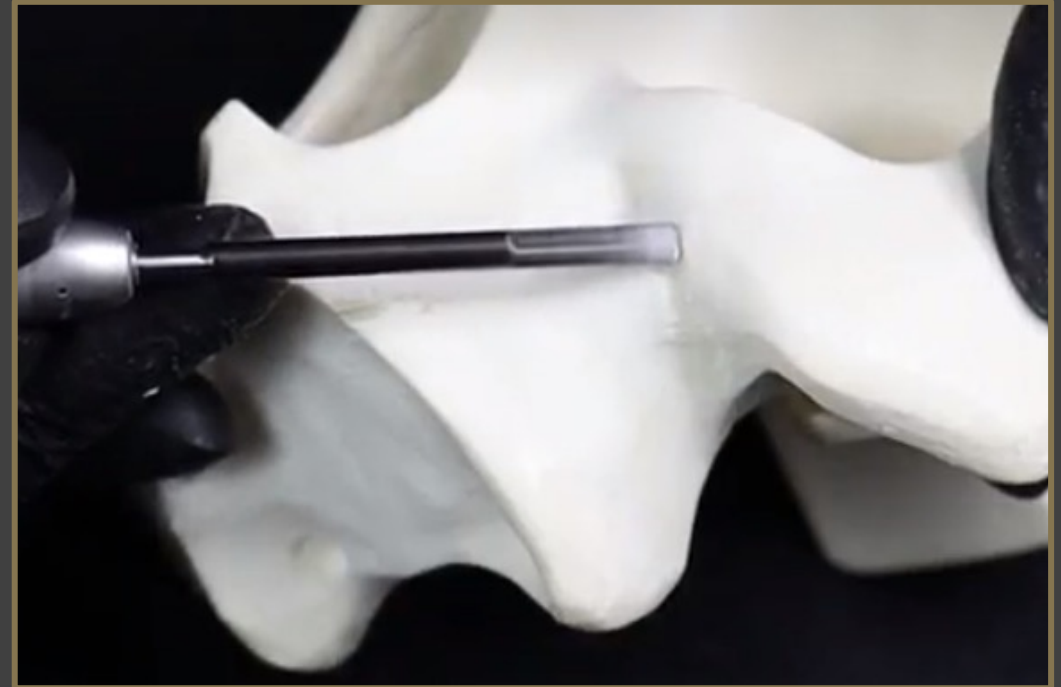


- ✓ **INITIAL LATERAL CUTTING DRILL FOR ZYGOMA-S:** indicated for facilitating the entry and for preventing slides from the following drill thanks to their inclined plane in relation to the drill axis.



Step 3: Drilling Protocol – Initial Drill (optional)

- Set up the motor with:
 - 1:1 ratio
 - 50N.cm of torque
 - 20000 rpm
 - Under abundant irrigation.
 - Straight Piece
- The Initial Lateral Cutting Drill is used for initiating the drilling on the zygomatic bone during surgeries with the extra sinus technique:
INITIAL LATERAL CUTTING DRILL (103.613)
According to the implant's position and insertion on the Zygomatic bone.



* Optional

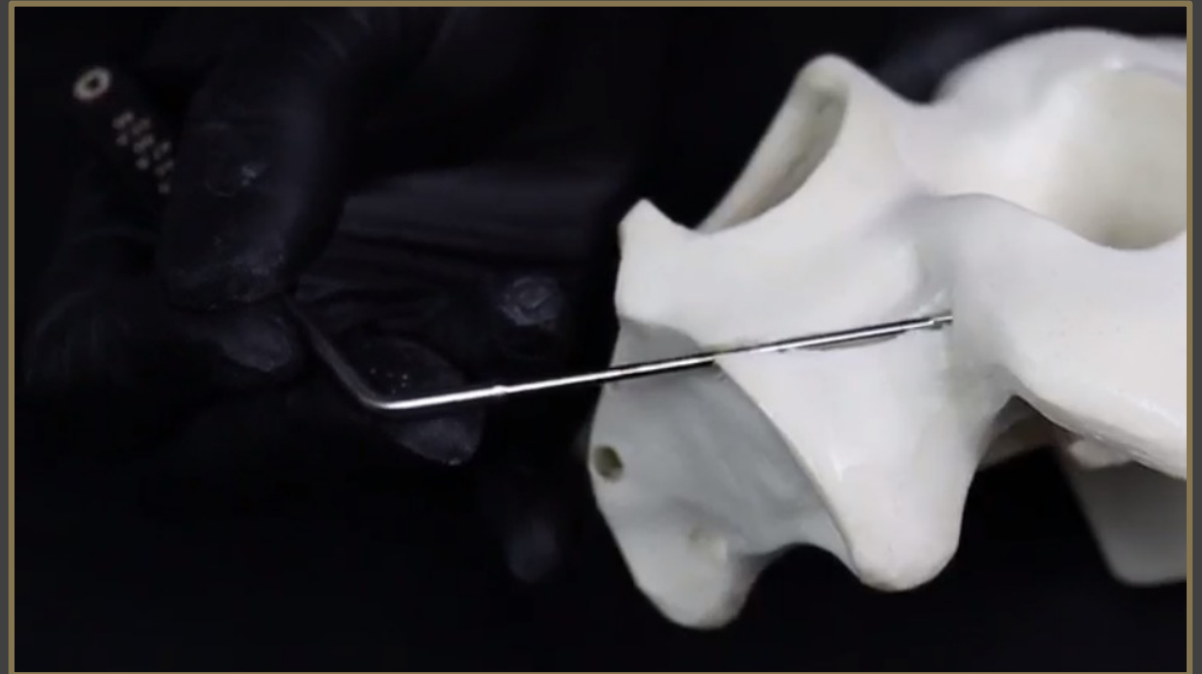
Step 3: Drilling Protocol – Initial Drill (optional)

- Set up the motor with:
 - 20:1 ratio
 - 50N.cm of torque
 - 600-1200 rpm
 - Under abundant irrigation.
- Starting the perforation with:
Twist Drill For Zygora GM™ 2.35mm (103.455)
According to the implant's length.

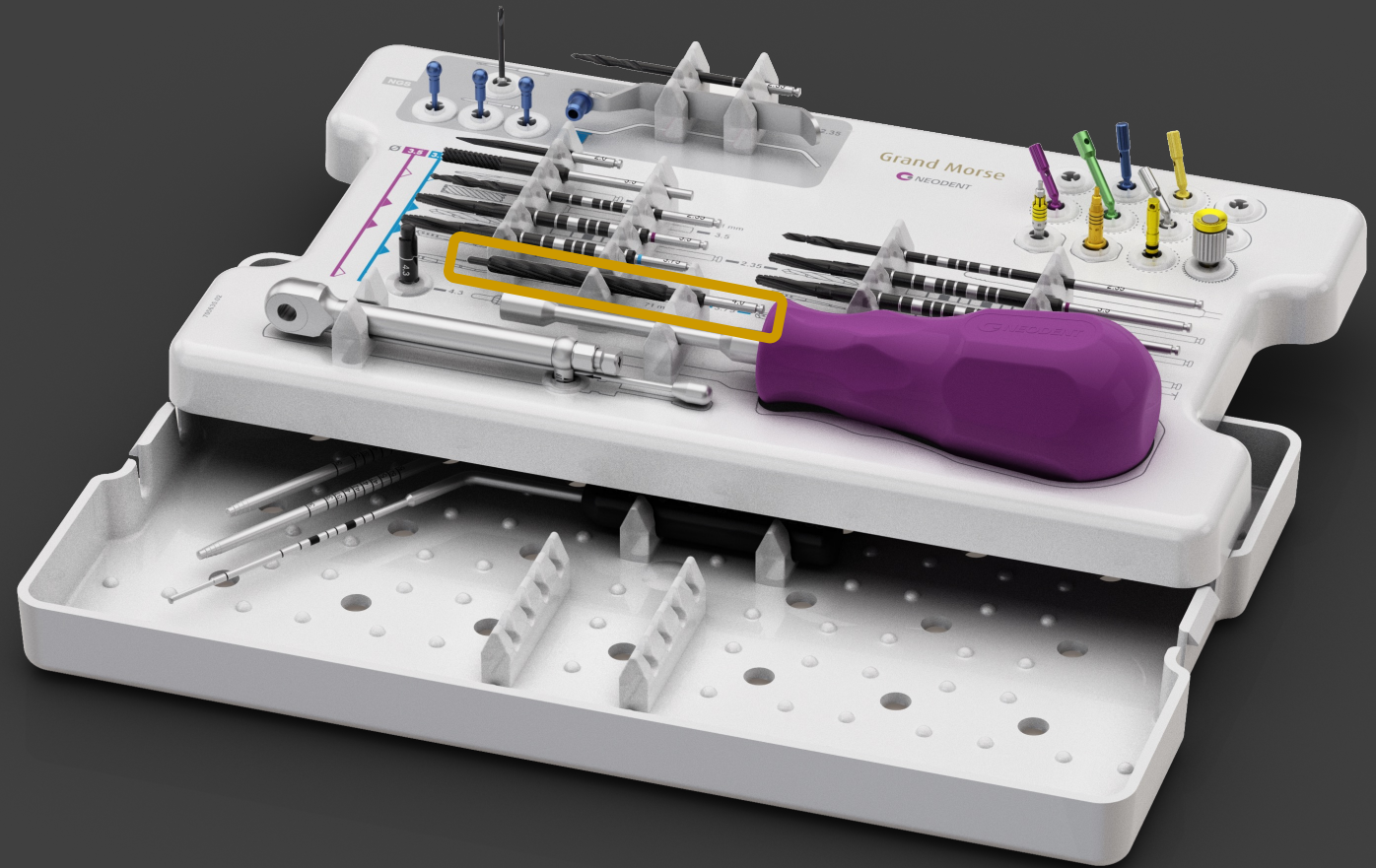


Step 3: Drilling Protocol

- 2.35 Probe for Zygomax-S (129.037)
- Use the probe to check perforation length and direction.



Externalized technique



- ✓ **LATERAL CUTTING DRILL FOR ZYGOMA-S 4.0 mm:** spherical tip and with guide pin and helicoidal blades for cavity preparation and implant installation by externalized technique.



Step 3: Drilling Protocol

- LATERAL CUTTING DRILL FOR ZYGOMA-S 4.0 mm (103.619)
- Preparation of the cavity without damaging soft tissue or sinus membrane to receive the implant
- Exteriorized technique for Zygoma-S GM™ implant installation
- Rotation between 600 and 800 rpm.

* Optional



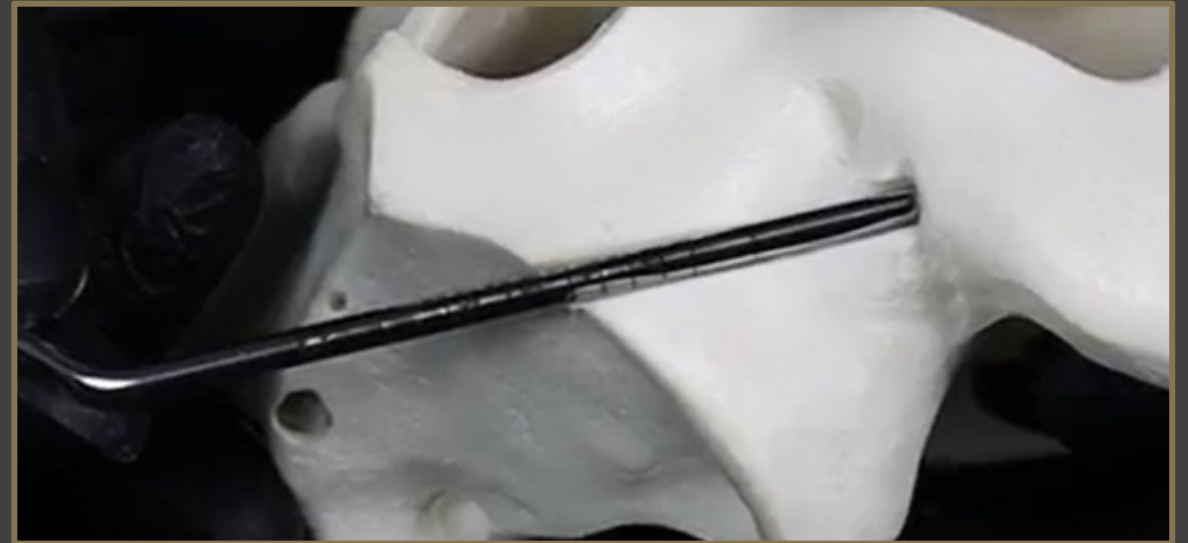
Step 3: Drilling Protocol

- TAPERED DRILL FOR ZYGOMA-S 3.5 mm (103.615)
- Last tapered drill for 3.5 implant diameter.
- The insertion depth must be in accordance with the planning for the final position of the implant.

* Optional

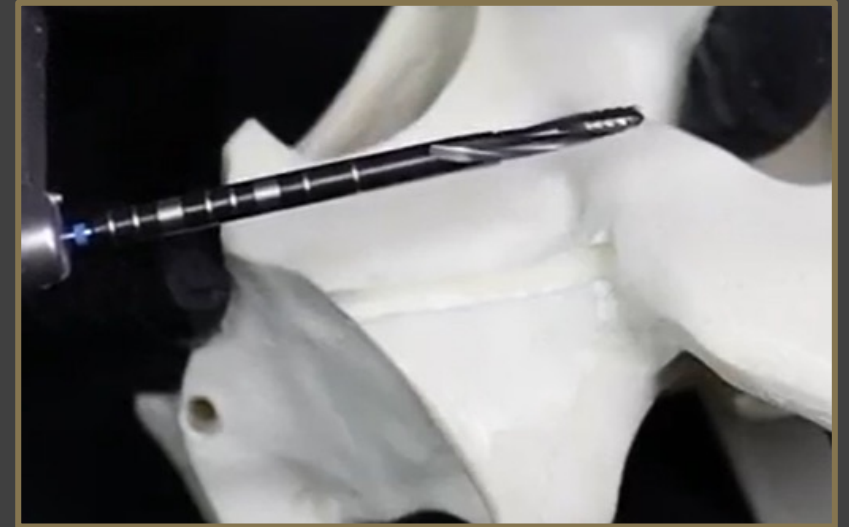


- GM ZYGOMA-S DEPTH PROBE 3.5 mm (129.038)
- Used to check the final perforation length and direction
- Marks on the probe according to Zygoma-S GM™ implant lengths.

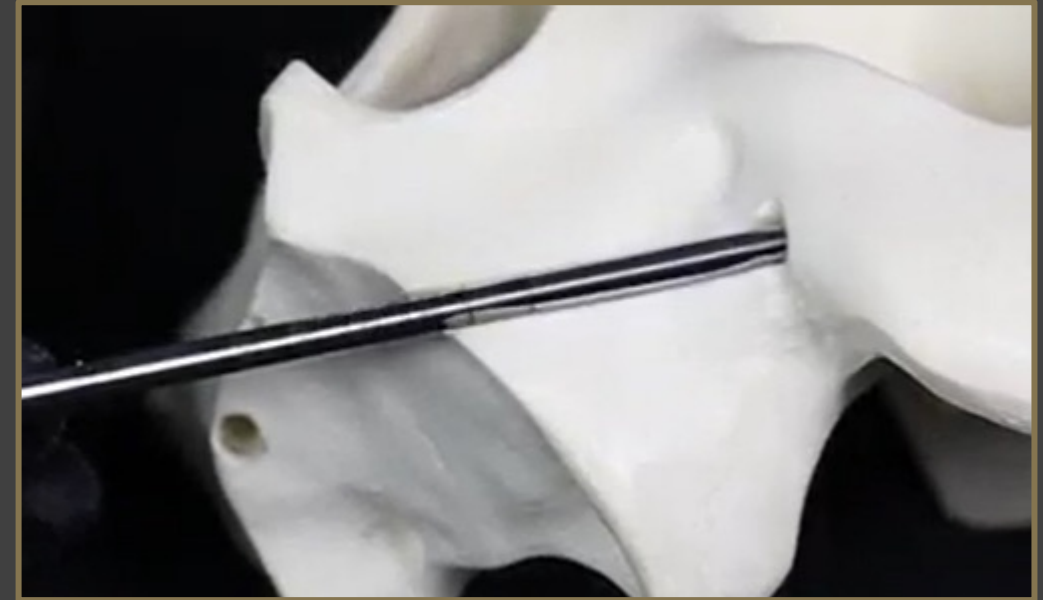


Step 3: Drilling Protocol

- TAPERED DRILL FOR ZYGOMA-S 3.75 mm (103.617)
- Following the indicated drilling sequence, complete the perforation until the implant's length.
- Last tapered drill for 3.75 implant diameter.



- GM ZYGOMA-S DEPTH PROBE 3.75 mm (129.039)
- Used to check the final perforation length and direction
- Marks on the probe according to Zygoma-S GM™ implant lengths.



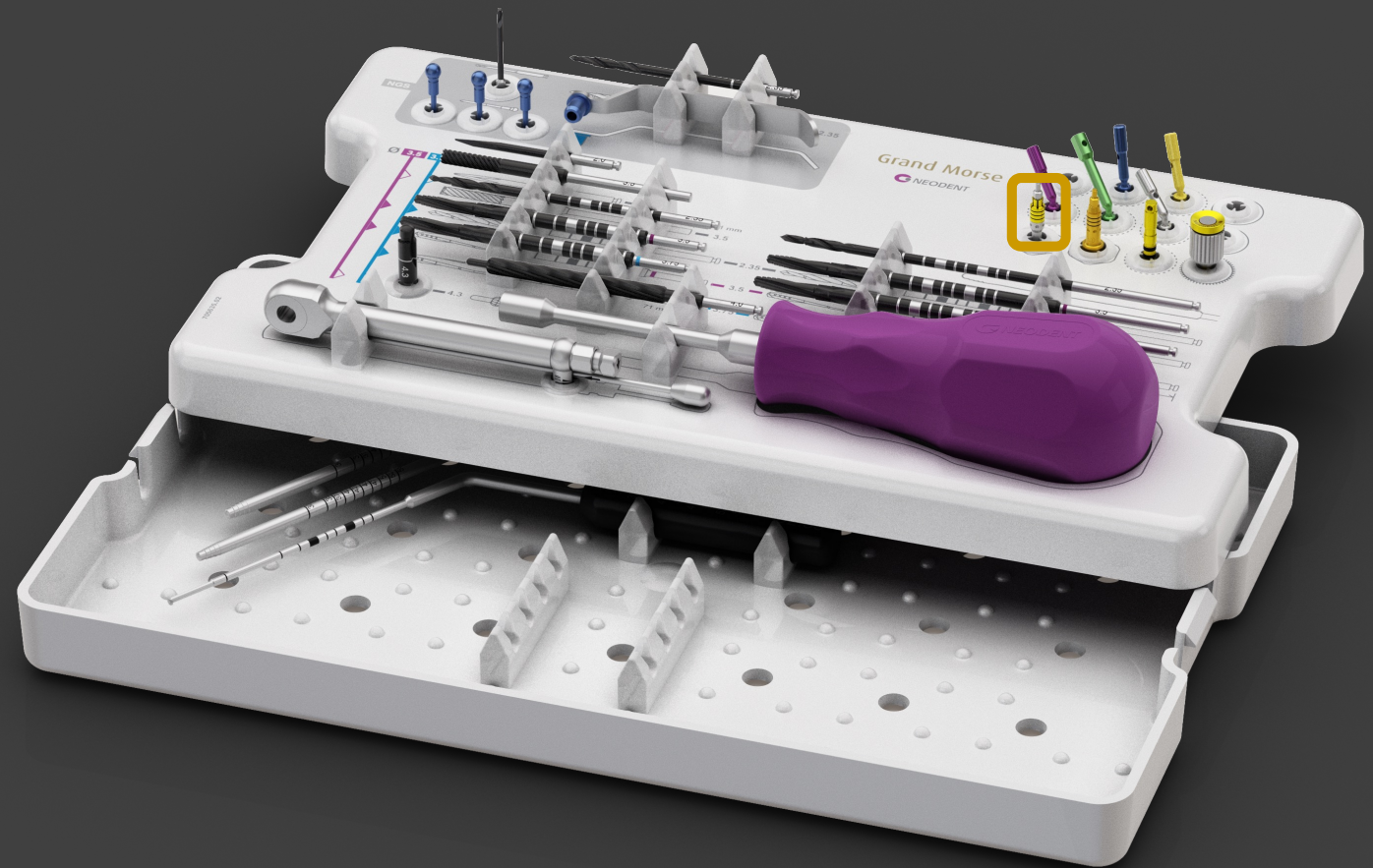
Step 3: Drilling Protocol

- PILOT DRILL FOR ZYGOMA-S 4.3 mm (103.620)
- Osteotomy in the alveolar crest for the cervical region of the implant.
- Last Drill before implant placement.

* Optional



Initial installation



- ✓ GM Implant Driver - Contra-Angle : capture, transport and installation of the implant.

Step 4: Implant Placement

- GM Implant Driver - Contra-Angle (105.131)
- Connect the GM Driver to the contra-angle
 - Set up the motor with:
 - 20:1 ratio
 - 35N.cm of torque
 - 30 rpm



Step 4: Implant Placement

- Open the implant package
- Unscrew the top of the blister
- Hold the lid of the blister with the implant attached.



Step 4: Implant Placement

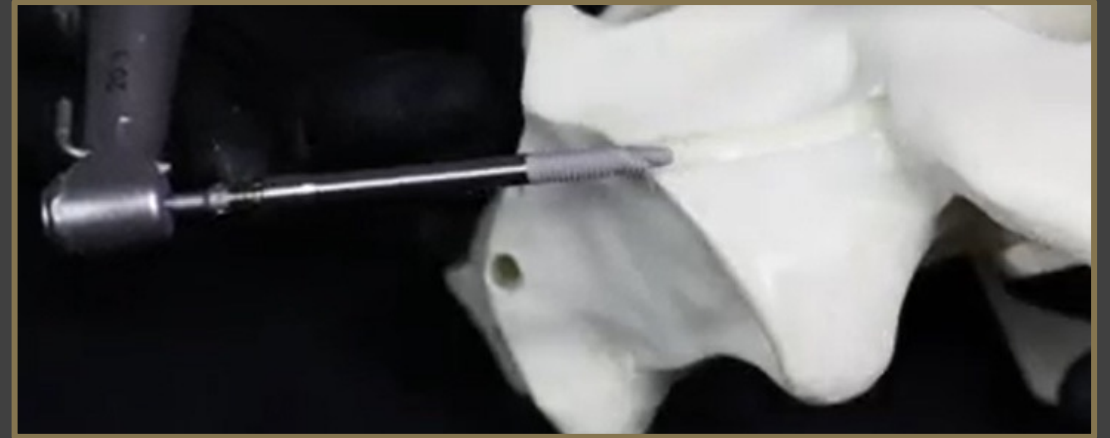
- Connect the driver to the implant
- Rotate it contour clockwise to break the lid and release the implant
- With the implant connected to the driver take it to the surgical bed.



Step 4: Implant Placement

- Once the implant is positioned on the bone crest at the entrance of the perforation
- Start the implant placement, the surgical motor must be programmed to lock up to:

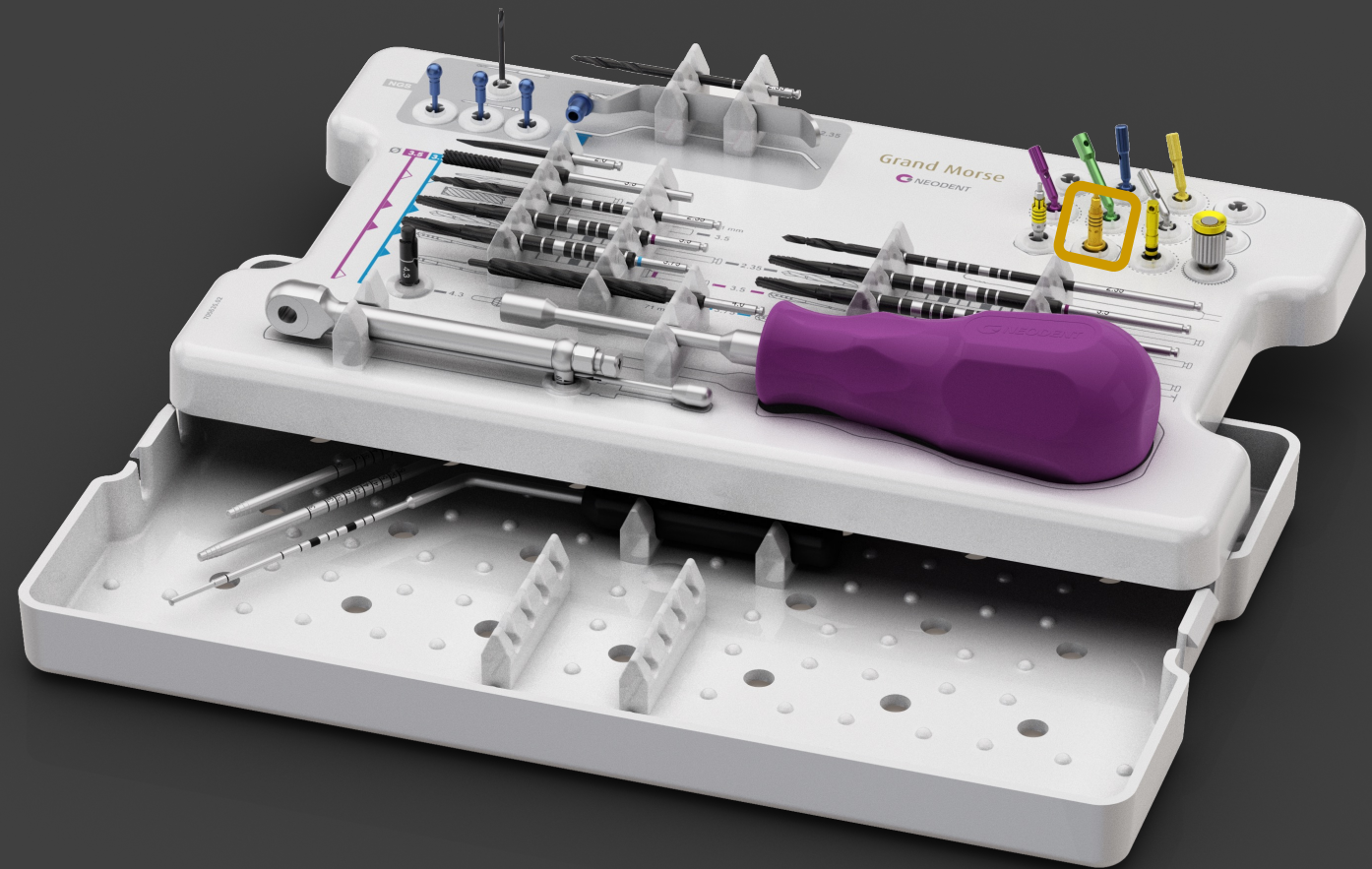
35 N.cm.



Final installation



Short



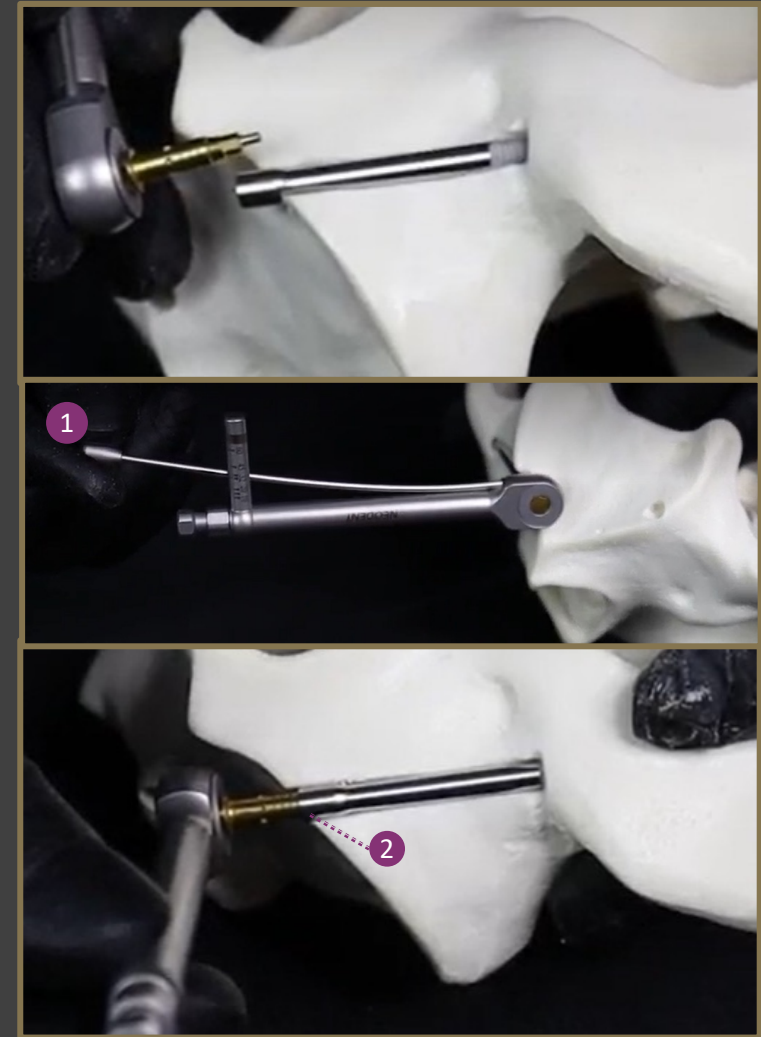
- ✓ GM Implant Driver GM : installation of GM implants with the Torque Wrench.

Step 4: Implant Placement

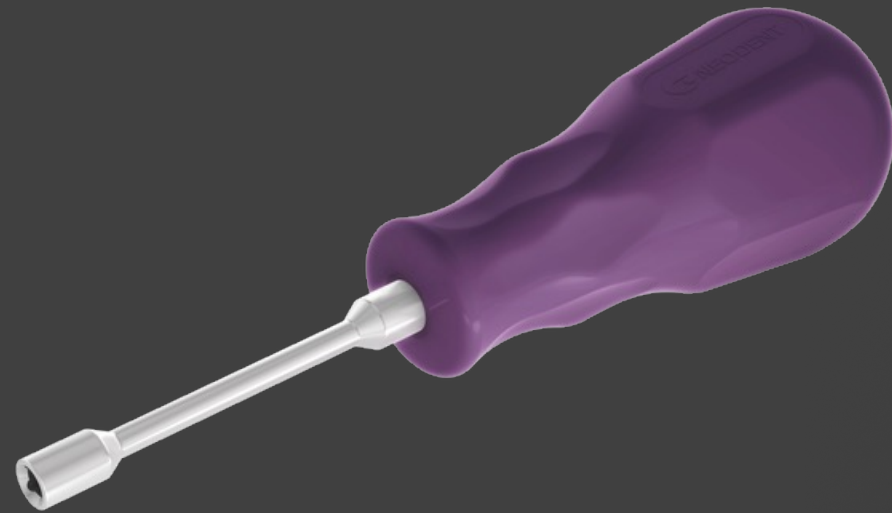
- After locking up in 35N.cm, it is suggested finishing the implant placement with:
- GM Implant Driver GM - Torque Wrench
Short (105.129) / Long (105.130)

Implant placement with Torque Wrench should be respected:

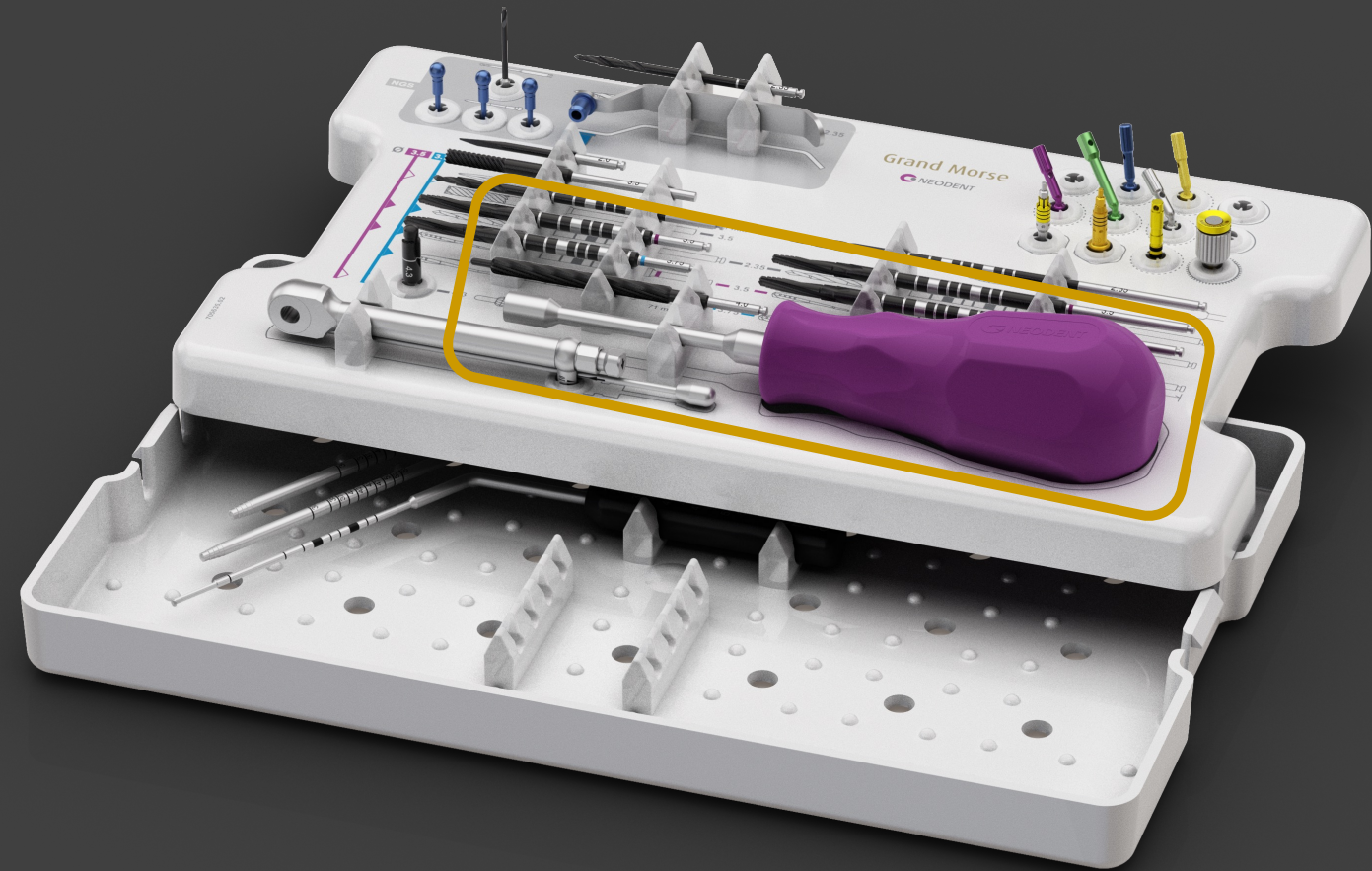
1. Implant's maximum Torque: 60 N.cm
2. Based on the bone crest, place the implant at bone level (Posterior part)



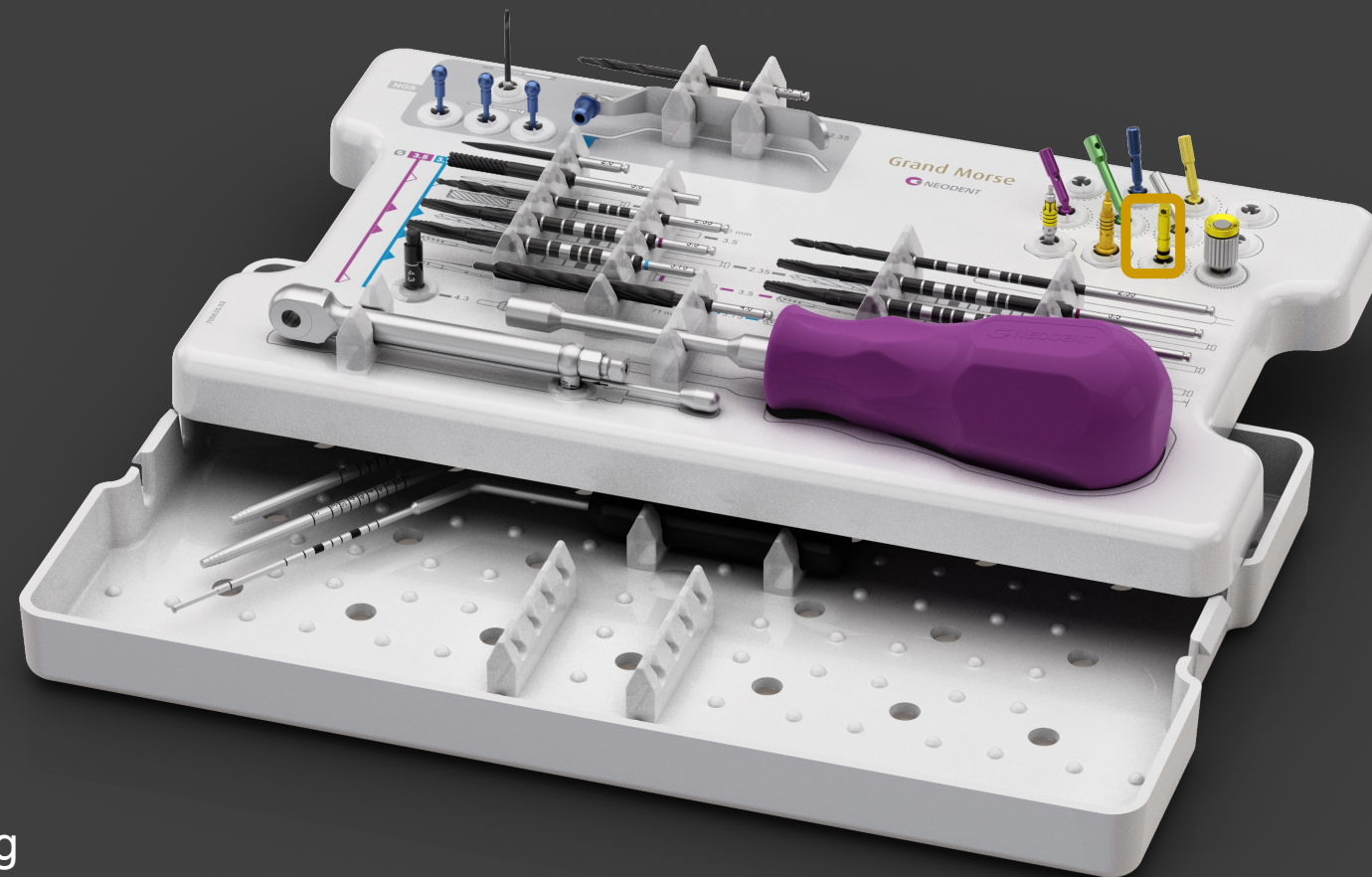
Final installation



- ✓ Zygoma GM™ Installation Driver: an optional instrument for manual torque application.



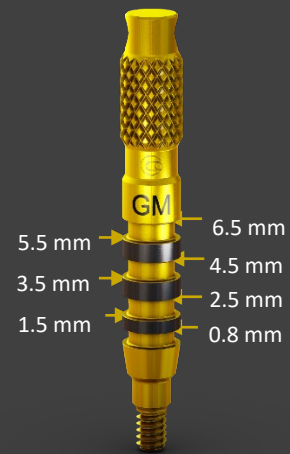
Selection



- ✓ GM Height Measure : markings corresponding to the heights of transmucosa.

Step 5: Abutment's selection

- After implant's placement, its necessary to measure the gingival height to select the best abutment for each case
- Use the GM Height Measure (128.028)

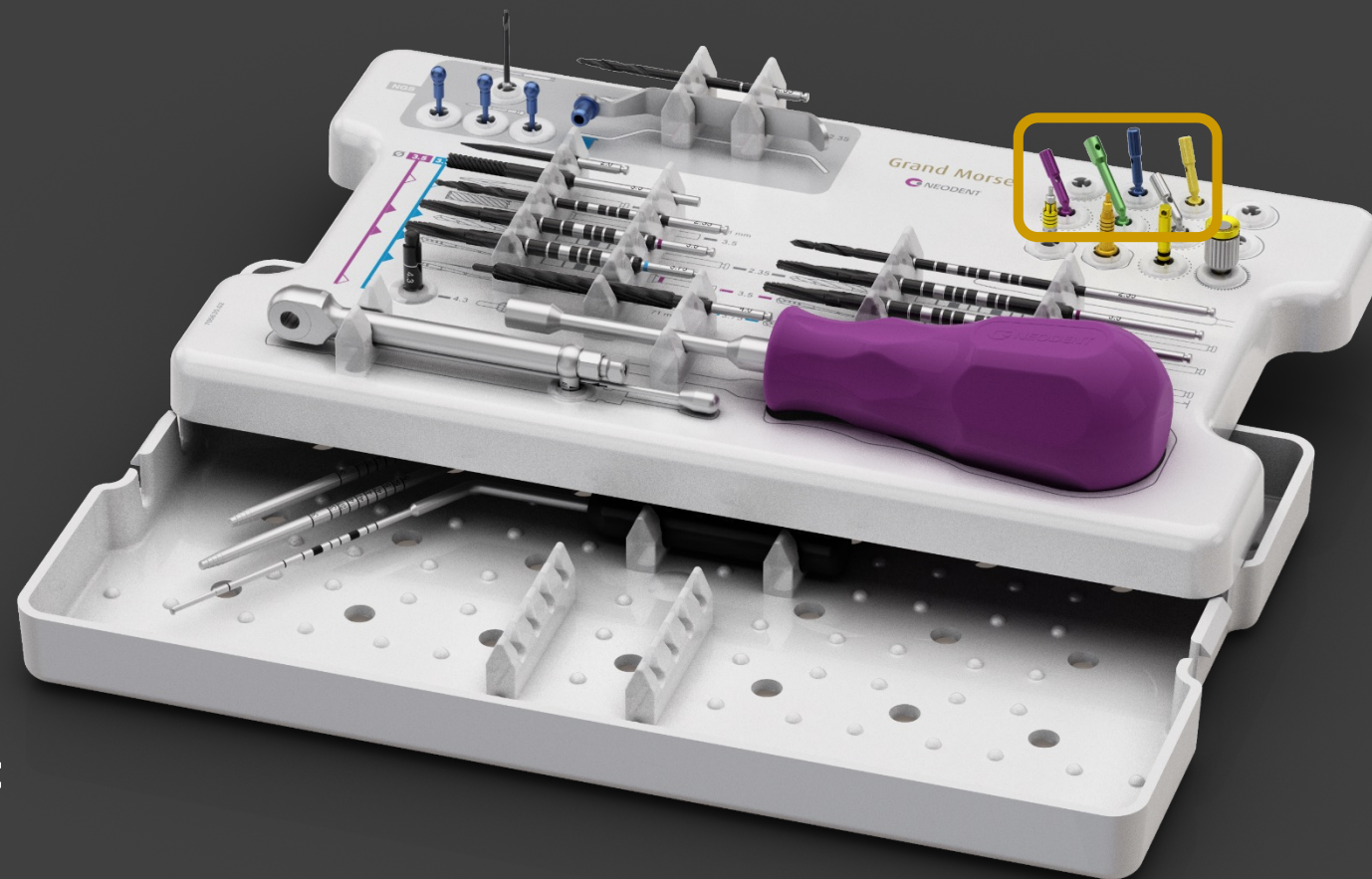


- For selecting GM prosthetic abutments;
- Marks corresponding to transmucosa heights.
- Can be used as X-Ray Positioner.

Selection

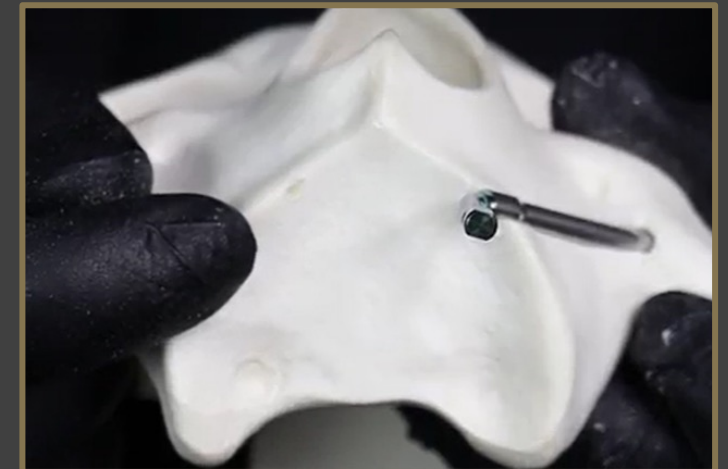


- ✓ GM Angle Measures 17°, 30°, 45°, 52° and 60°: to select and plan the angle of the abutment during the prosthetic phase.



Step 5: Abutment's selection

- After measuring the gingival height, its necessary to select the abutment's angulation and also check internal index positioning (EXACT)
- Use the GM Angle Measures:

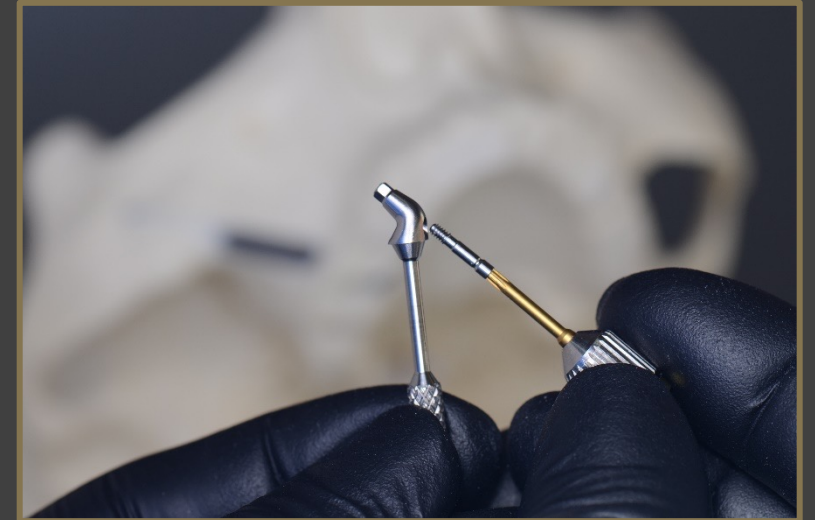


Step 6: M Abutment's installation

- With gingival height and angulation selected, the ideal abutment will be installed

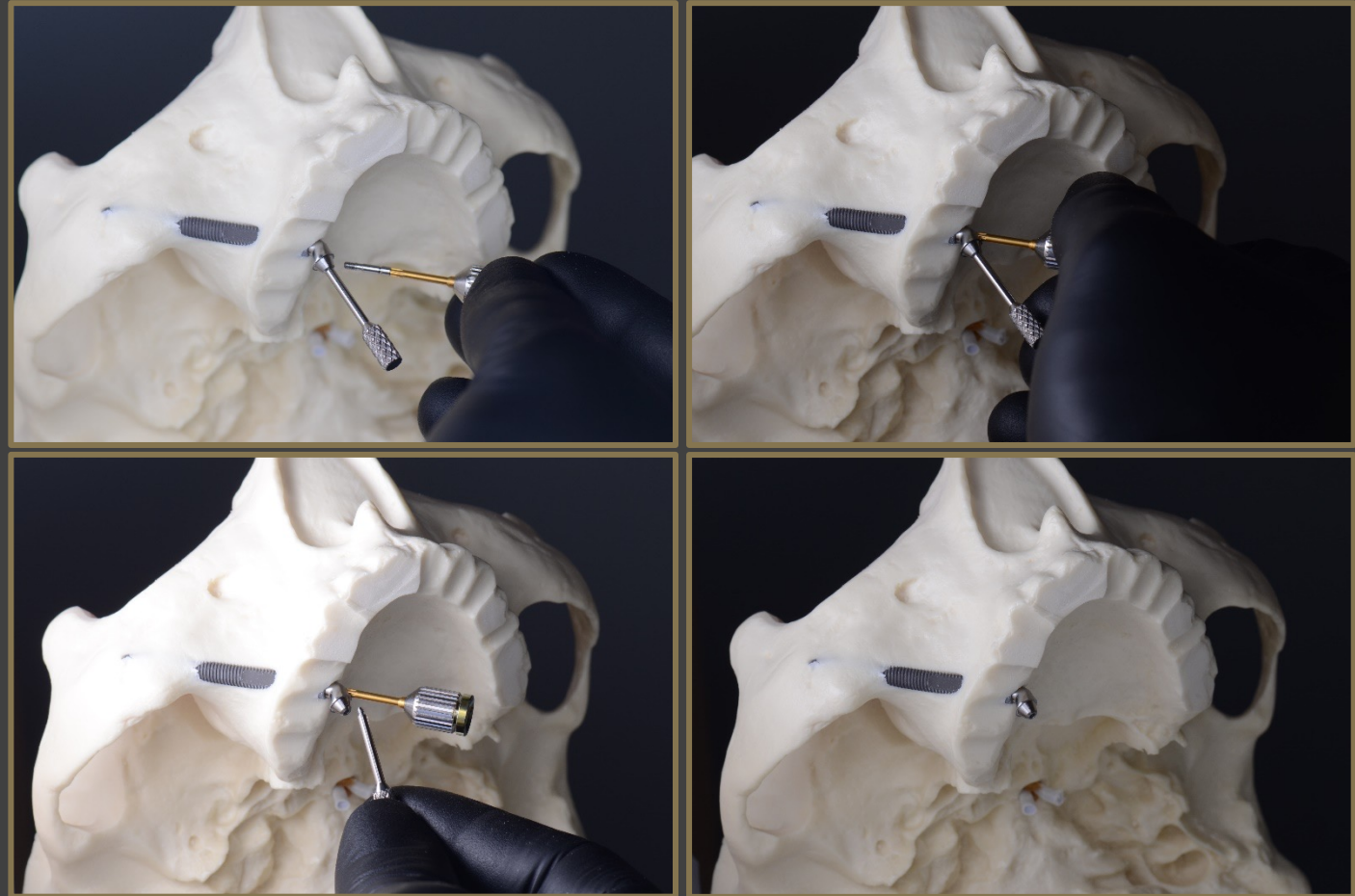
For this demonstrative case:

- GM Mini Conical Abutment 45° with 1.5 mm Gingival Height (115.267)
- It comes with a removable screw and a supporting cable to find the Index positioning.



Step 6: Abutment's installation

- First find the index (EXACT) positioning with supporting cable, then with:
- Neo Manual Screwdriver (104.060) start to screw until achieves some resistance
- To finish the Mini Conical abutment installation its necessary to achieve 20N.cm.
- To measure the torque you have two options:

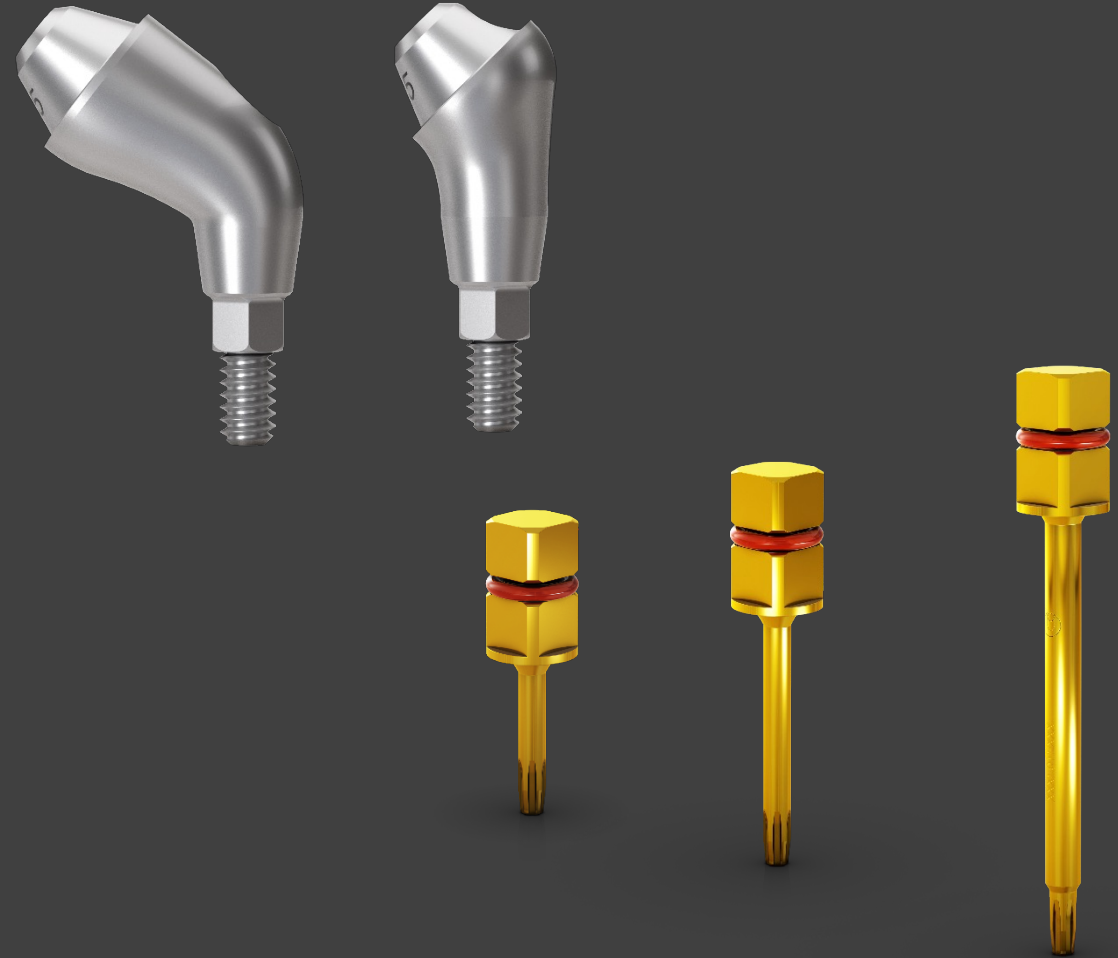


Prosthetic Workflow for NeoArch[®]

Step 6: Abutment's installation

- Install the Angled Mini Conical Abutment with:
- Neo Screwdriver Torque Connection for Torque Wrench
(Short: 105.133 / Medium: 105.132 / Long: 105.134)
- Respecting the indicated Torque:

20 N.cm.



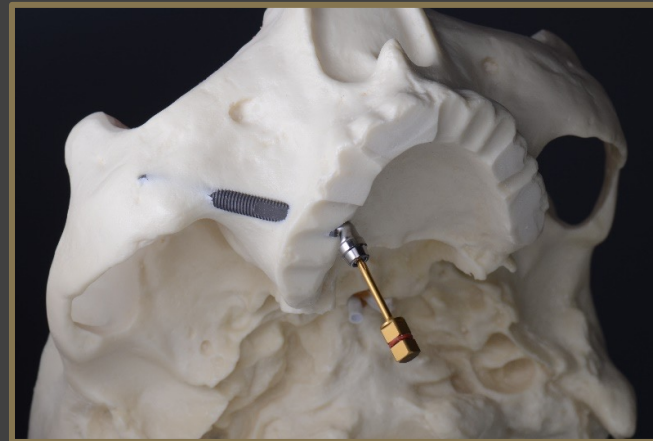
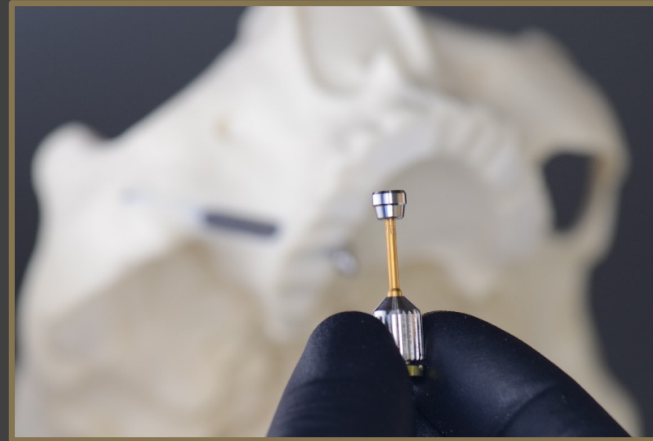
Step 6: Abutment's installation

- Install the Angled Mini Conical Abutment with:
- Neo Screwdriver Torque Connection for Contra angle
(Extra-Short: 105.146 / Short: 105.135 / Medium: 105.136)
- Set-up the motor with:
 - 20:1 ratio
 - 20N.cm of torque
 - 30 rpm



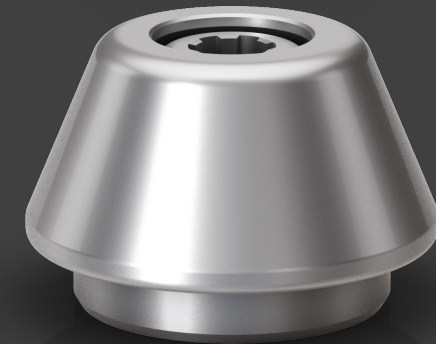
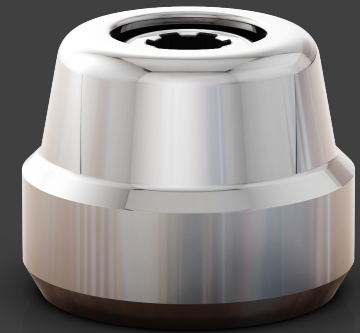
Step 6: Abutment's installation

- After abutment's installation, if the doctor won't do an immediate loading the abutment should be protected with:
- Neo Mini Conical Abutment Protection Cylinder (106.220)
- Screw with:
- Neo Screwdriver Torque Connection for Torque Wrench
(Short: 105.133 / Medium: 105.132 / Long: 105.134)



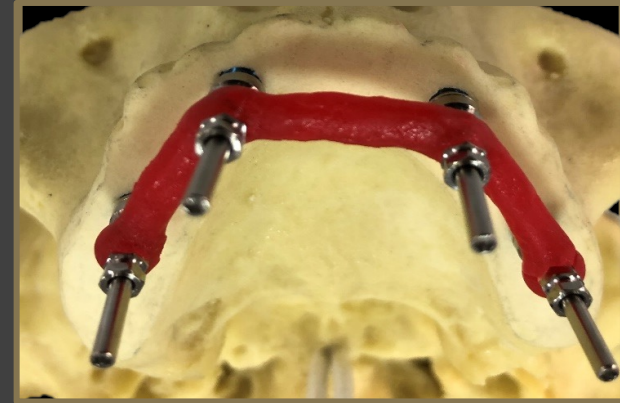
Step 6: Abutment's installation

- Other option is to install the Neo Mini Conical Abutment Protection Cylinder (106.220)
- WIDE MINI CONICAL ABUTMENT PROTECTION CYLINDER (106.278)
- With Contra-angle connected with NeoScrewdriver Torque Connection
(Extra-Short: 105.146 / Short: 105.135 / Medium: 105.136)
- Set-up the motor with:
 - 20:1 ratio
 - 10N.cm of torque
 - 30 rpm



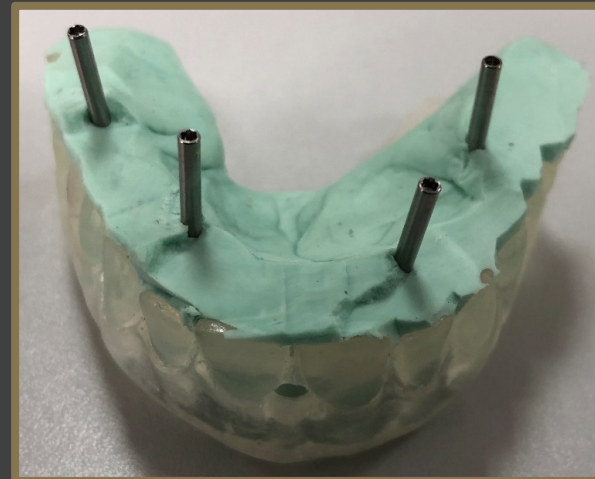
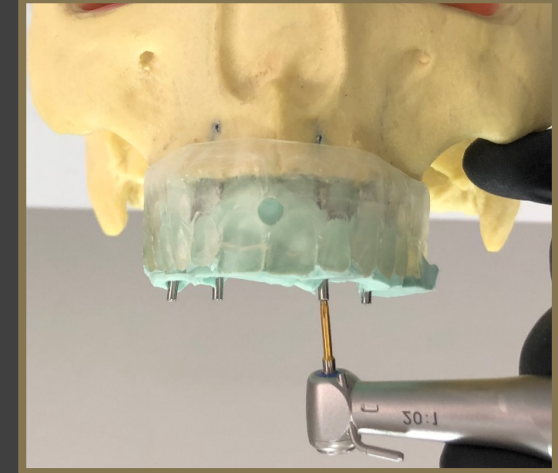
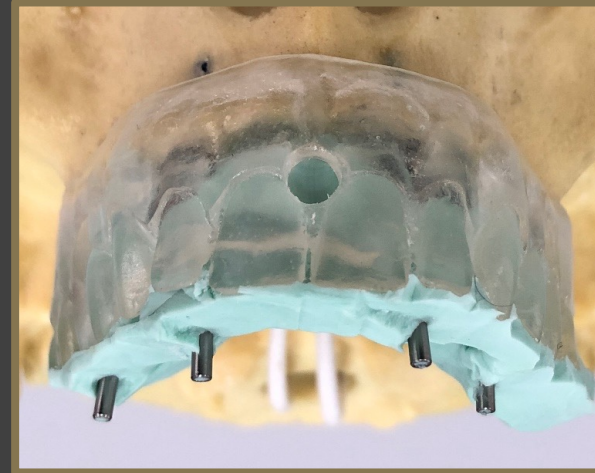
Step 7: Impression Taking

- For the impression taking, put in position all the:
Slim Mini Conical Abutment Open Tray Impression Coping (108.176) with
Neo Screwdriver with 10N.cm of torque
- Link all the transfers with aid of a brush and acrylic resin, avoiding
contact with the platform in contact with the screw (avoiding screw
interference)
- Put in position the multi functional guide and check if the transfers are
not interfering with the positioning of the guide.



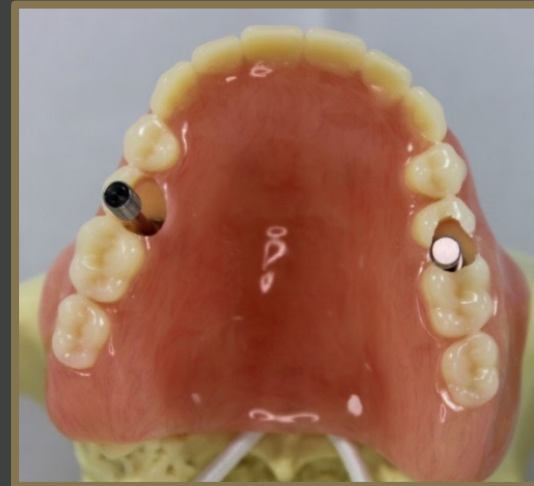
Step 7: Impression Taking

- Place with medium body material first and for more precisely impression add the soft body material in the holes of the multifunctional guide
- After the materials takes prey, unscrew all the transfers and remove the transfers with the material and multifunctional guide
- Multifunctional guide with the impression material and transfer out of the model



Step 8: Denture Set Up

- Using a round bur and a straight handpiece, make a hole where the Mini Conical abutments are located
- Check in the model if there is any interference.



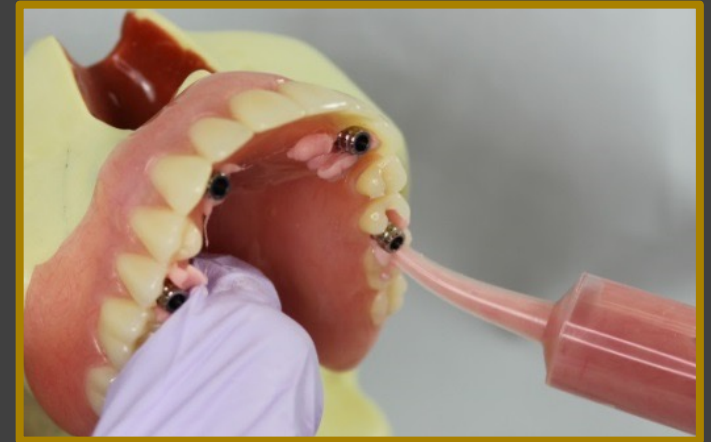
Step 8: Denture Set Up

- Check if the Titanium Coping interferes on Provisional prosthesis fitting
- If yes wear more on the Titanium Coping holes.



Step 8: Denture Set Up

- Put in position a rubber dam around the temporary coping and make sure that the rubber is located in the right place.
- Hold the denture in the right position
- Fill the spaces in the hole with acrylic using a syringe make sure that the acrylic is not going inside the chimney of the coping.



Step 8: Denture Set Up

- Remove the excess of acrylic and cut the titanium coping if needed
- Put the polishing protector for Mini Conical abutment in the bottom of the temporary coping using a Manual Neo Screwdriver
- Remove and/or add acrylic from the bottom of the prosthesis and make the final polish procedure
- Finishing and Polishing the Complete Denture



Step 9: Immediate Provisional Prosthesis

1. Put the temporary prosthesis over the Mini Conical Abutment and torque it with 10N.cm using the:

- Neo Screwdriver Torque Connection for Torque Wrench
(Short: 105.133 / Medium: 105.132 / Long: 105.134)

2. Close the chimney with a temporary composite using a syringe.



Mini Conical Titanium Coping Base



Reliable sealing plastic pin:

- Protect screw head during cementing process

Improved tapered design:

- Easier fitting on the bar
- Excellent attachment to zircônia framework

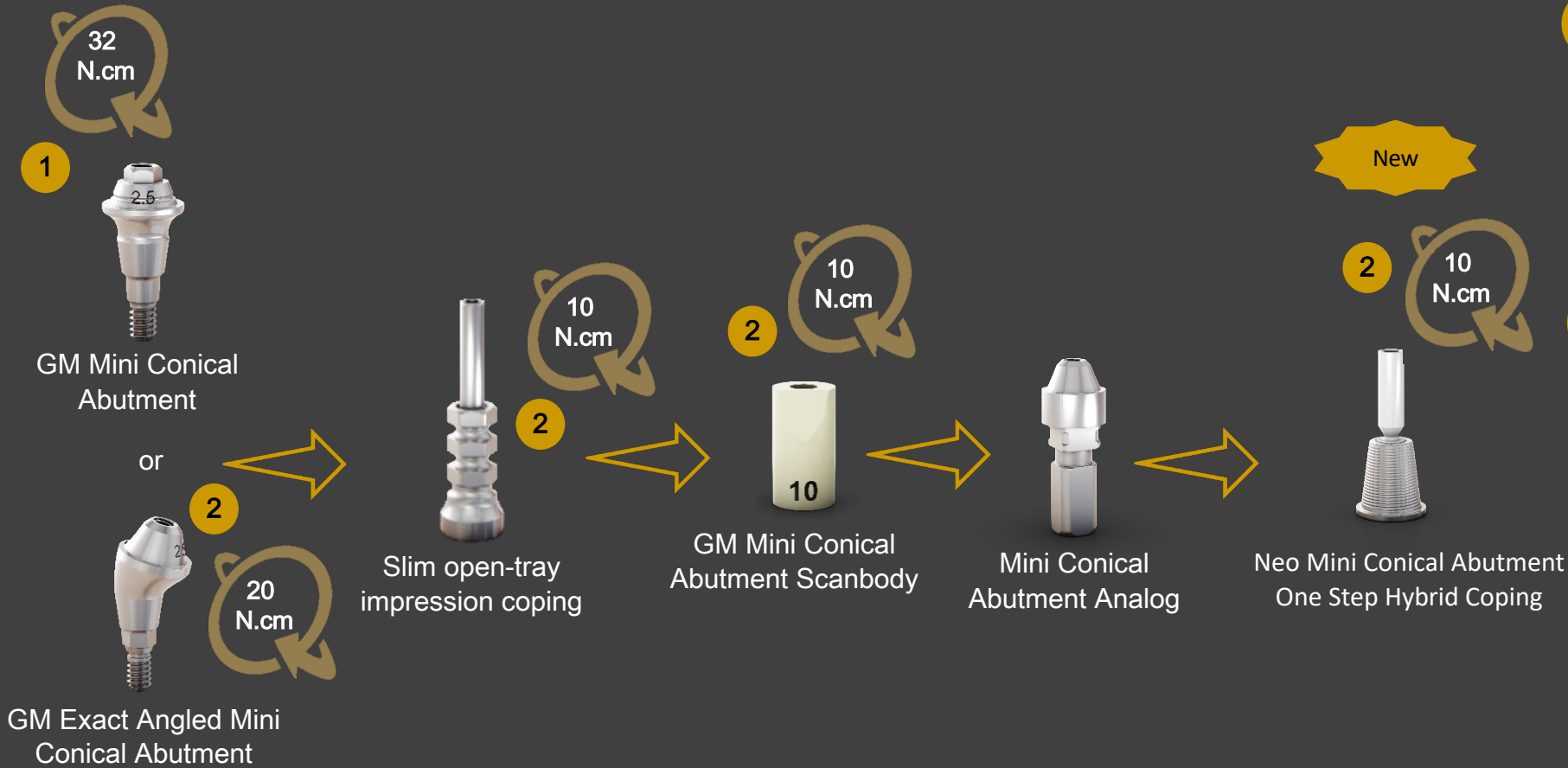
Multi groves design

- Highly Retentive design
- Optimize cementation
- Frameworks safely retained

New design

Available for conventional and digital workflow

Workflow – Model Scanning



1

Hexagonal Prosthetic Driver

Torque Wrench

2

Neo Screwdriver Torque Connection

Torque Wrench

Manual Implant Driver for Torque Connections

Neo Screwdriver Torque Connection

Option for manual tightening of impression coping and Protection Cylinder..



Thank you