

# NEODENT® GRAND MORSE™ IMPLANT SYSTEM

### GREATNESS IS AN ACHIEVEMENT.

The Neodent® Grand Morse™ Implant System is the achievement of more than 20 years of experience in implant dentistry, and shared experiences with clinicians worldwide. Continuing with a unique purpose to always deliver high quality treatment options that changes patients' lives, the Grand Morse Implant System is the next generation in Neodent's evolution. Anchor within our philosophy of respecting mechanical and biological principles, this makes it THE implant of choice in dental implant therapy.



#### Global brand

Among the top 3 implant providers worldwide. Available in more than 50 countries.



**Progressive treatment concepts**Modern and reliable solutions.



Founded by dentists for dentists
A legacy of more than 25 years
focused ease of use.



Therapy access and affordability Accessibility to proven and affordable solutions.

The Grand Morse implant system was developed based on the inside out concept, starting from the core of the implant: the prosthetic interface. The result is a solution that combines mechanical strength and versatile prosthetic solutions - from single-unit to multi-unit and from conventional to digital. A complete system that offers several benefits designed to make your work even more efficient.

\*Data on file



# GRAND BENEFITS

bone types.



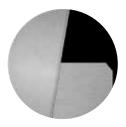


## A stable and strong foundation designed for long term success.

The implant-abutment interface is crucial for a successful long term functional and esthetic result. The Neodent® Grand Morse™ connection offers a unique combination based on proven concepts: platform switching associated with a deep 16° Morse Taper including an internal indexation for a strong and stable connection designed to achieve long-lasting results.



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



Platform Switching
Abutment design with a narrower diameter than the implant coronal area, enabling the platform switching concept<sup>(1-5)</sup>.



(3

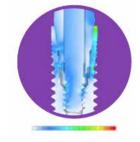
Deep Connection

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



(4

16° Morse Taper Connection
Designed to ensure a tight
fit for an optimal connection
sealing.



# GRAND STABILITY

### Designed for predictable immediate treatments in all bone types.

The increasing expectations for shortened treatment duration represent a significant challenge for dental professionals. The Neodent® Grand Morse™ system offers three implant designs all featuring the innovative Acqua hydrophilic surface designed to maximize primary stability and predictability in immediate protocols.

#### OPTIMAL IMPLANT PORTFOLIO DESIGNED TO ACHIEVE HIGH PRIMARY STABILITY.

- Helix™ Grand Morse™ is an innovative hybrid implant design maximizing treatment options and efficiency in all bone types;
- Drive™ Grand Morse™ implant is a fully 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 allows for vertical placement flexibility.







# ACQUA® HYDROPHILIC SURFACE DESIGNED FOR HIGH TREATMENT PREDICTABILITY.

The Neodent® Acqua® hydrophilic surface is the next level of the highly successful NeoPoros surface developed to achieve successful outcomes even in challenging situations, such as soft bone or immediate protocols. [6-9]

#### SURFACE COMPARISON

Lab generated image



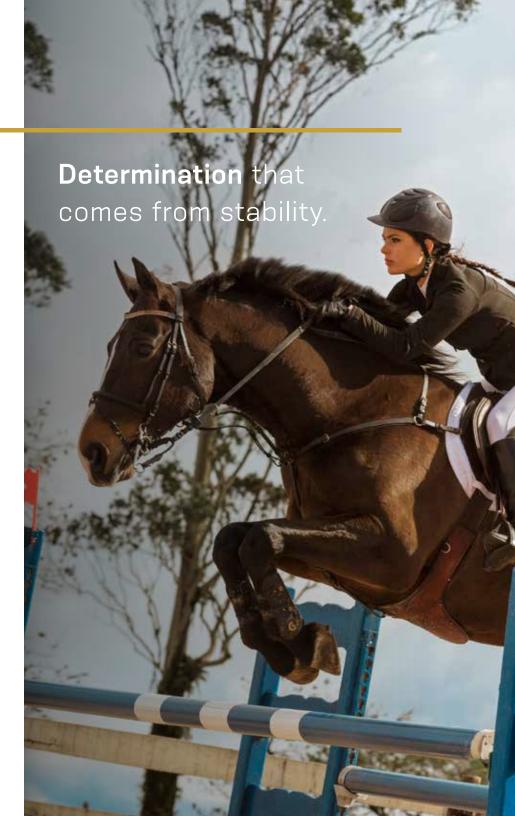
NeoPoros Hydrophobio



Acque Hydrophilic Surface

#### Hydrophilicity

The hydrophilic surface presents a smaller contact angle when in contact with liquids. This provides greater accessibility of organic fluids to the Acqua implant surface.<sup>(7)</sup>







#### Fase of use at its best.

Implant therapy has become an integral part of clinical dentistry, with ever increasing numbers of patients seeking such treatment. The Neodent® Grand Morse™ Implant System is smartly engineered providing efficiency and simplicity within the dental treatment network for both surgical to restoratives steps.

#### ONE PROSTHETIC PLATFORM

All Neodent® Grand Morse™ implants feature the unique Grand Morse™ connection regardless of the implant diameter.



#### ONE SCREWDRIVER

The new Neo Screwdriver has a star attachment offering reliability and durability compatible with all Neodent® Grand Morse™ healing abutments and restorative screws.

#### ONE SURGICAL KIT

All Neodent® Grand Morse™ implants can be placed using the intuitive, and functional surgical kit.

# ONE IMPLANT DRIVER The new Neodent® implant

driver allows an easy and reliable implant pick up and placement.







### Deliver immediate natural-looking esthetics.

Nowadays, patients expect both short treatment times and esthetic results. The Neodent® Grand Morse™ restorative portfolio offers flexibility to simplify soft tissue management respecting the biological distances for achieving immediate function and esthetics.

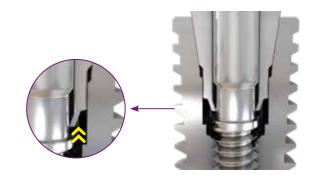
# NEXT LEVEL OF IMMEDIATE FIXED FULL-ARCH TREATMENT

The new Neodent® Grand Morse™ Mini Conical abutment has been designed to improve fixed full-arch treatment by optimizing the abutment emergence profile reducing the need of invasive procedures.



# PEACE OF MIND WITH THE UNLOCKING FEATURE

Neodent® has developed a unique feature allowing a simple and reliable abutment removal for a user friendly experience.



#### COMPREHENSIVE PROSTHETIC PORTFOLIO FOR OPTIMIZED ESTHETIC RESULTS

The Neodent® Grand Morse™ implant system has a wide range of restorative options covering:

- All indications: single to edentulous
- All treatment protocols: immediate to delayed loading
- All workflows: conventional to digital.





# GRAND MORSE™

### UNBEATABLE VERSATILITY

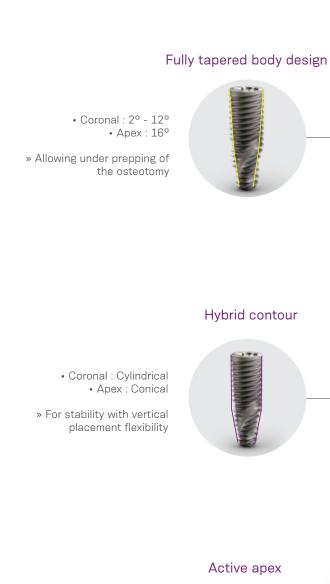
Enjoy more treatment flexibility for your patients to create the optimal tooth replacement outcomes for all indications, from single tooth to fully edentulous. The new Helix™ Grand Morse™ allows for tailored treatment options according to the specific clinical situation, taking into account the biological principles and with respect to the fundamentals of implant dentistry.

#### HYBRID DUAL TAPERED IMPLANT DESIGN FOR ESTHETIC EXCELLENCE

The new Helix™ Grand Morse™ is an innovative implant design combining a full dual tapered body design and a hybrid outer contour: cylindrical on coronal area and conical on the apical part. This allows for vertical implant placement flexibility in combination with under-preparation of the osteotomy helping to preserve important peri-implant bone structures in the crestal area which is an important prerequisite to optimize the outcomes in esthetic sites.

#### HIGH PRIMARY STABILITY EVEN IN CHALLENGING SITUATIONS

The new Helix™ Grand Morse™ has a unique progressive dynamic thread design in combination with a small tip and flutes allowing immediate engagement. These features help to adapt the drilling sequence and primary stability to the clinical situations even in demanding cases, such as soft bone, fresh extraction sockets, converging root tips or to the treatment protocols with immediate implant placement and immediate loading.







#### Dynamic progressive thread design

- Coronal : Trapezoidal > compressing
- Apex : V-Shape > Self-tapping
- » For high primary stability in all bone types



Soft rounded small tip
 Helicoidal flutes

» Enabling immediate loading



# CLINICAL CASE



Initial x-ray of #9 with extraction indication



Tooth 9 extraction



Grand Morse™ Implant Helix™ Acqua 3.75x16mm



Immediate implant placement post extraction



Grand Morse™ Titanium Base immediately inserted after implant placement



Grand Morse™ Titanium Base with customized zirconia abutment



View of the provisional prosthesis with immediate load under occlusion



5 months follow up after implant placement



Final ceramic crown installed 5 months after surgery



CB(CT) image on the day of implant placement



CB(CT) image 5 months after implant placement



X-ray on the day of implant placement



X-ray 8 months after implant placement

#### REFERENCES

- (1) Al-Nsour MM, Chan HL, Wang HL. Effect of the platform-switching technique on preservation of peri-implant marginal bone: a systematic review. Int J Oral Maxillofac Implants. 2012 Jan-Feb:27(1):138-45.
- (2) Annibali S, Bignozzi I, Cristalli MP, et al. Peri-implant marginal bone level: a systematic review and meta-analysis of studies comparing platform switching versus conventionally restored implants. J Clin Periodontol. 2012 Nov;39(11):1097-113.
- (3) Hsu YT, Lin GH, Wang HL. Effects of Platform-Switching on Peri-implant Soft and Hard Tissue Outcomes: A Systematic Review and Meta-analysis. Int J Oral Maxillofac Implants. 2017;32(1):e9-e24.
- (4) Lazzara RJ, Porter SS. Platform switching: a new concept in implant dentistry for controlling postrestorative crestal bone levels. Int J Periodontics Restorative Dentistry. 2006 Feb;26(1):9-17
- (5) Rocha S, Wagner W, Wiltfang J, Nicolau P, Moergel M, Messias A, Behrens E, Guerra F. Effect of platform switching on crestal bone levels around implants in the posterior mandible: 3 years results from a multicentre randomized clinical trial. J Clin Periodontol. 2016 Apr;43(4):374-82.
- (6) 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]
- (7) 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.
- [8] Sartoretto SC, Alves AT, Zarranz L, et al. Hydrophilic surface of Ti6Al4V-ELI alloy improves the early bone apposition of sheep tibia. Clin Oral Implants Res. 2016 Jun 17. doi: 10.1111/clr.12894. [Epub ahead of print]
- (9) Val JE, Gómez-Moreno G, Ruiz-Linares M, et al. Effects of Surface Treatment Modification and Implant Design in Implants Placed Crestal and Subcrestally Applying Delayed Loading Protocol. J Craniofac Surg. 2017 Mar;28(2):552-558.

© Neodent® 2018. All rights reserved. Neodent® and/or other trademarks and logos from Neodent® that are mentioned herein are the trademarks or registered trademarks of Straumann Holding AG and/or its affiliates. All rights reserved.

ifu.neodent.com.br/en
www.neodent.us • www.neodent.ca



Straumann North American Headquarters Straumann USA, LLC 60 Minuteman Road

Andover, MA 01810

Phone 800/448 8168 (US) • 800/363 4024 (CA)

Fax 978/747 2490

www.straumann.us • www.straumann.ca

CALIT.2004 9/19 V3 PMR

