



Impianti XCN® Tapered Series

small but strong

TRADITION MEETS THE FUTURE

The implant system that redefines the standards of strength and reliability thanks to its self-locking Morse taper connection



High mechanical stability



No leakage thanks to the sealing connection



Platform Switching for soft tissue management





Impianti XCN®

Tapered Series



Why XCN® Tapered implants with self-locking Morse taper connection?

Maintains intact peri-implant tissue health in the long term



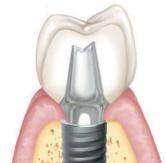
Maximizes mechanical stability



Effectively seals against bacterial leakage



Optimizes soft tissue management with Platform Switching





Impianti XCN® Tapered

The implants of the Tapered Series share several features designed to improve clinical performance.

Minimally invasive approach and preservation of the crestal bone

The **cylindrical coronal portion** allows for a minimally invasive approach that promotes the preservation of the crestal bone.



High primary stability even in poor bone quality

The **cylindrical-conical geometry** promotes compaction of underprepared bone, ensuring good primary stability even in unfavourable bone conditions.



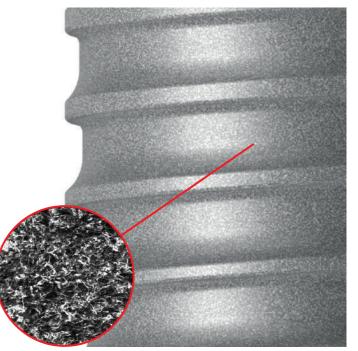
Optimal management of immediate post-extraction implant placement and immediate loading

The **fine thread pitch with increasing height** generates progressive torque, facilitating the management of immediate post-extraction implant placement and immediate loading.



Improved osseointegration

The micro-sandblasted High Rutile Surface (HRS) creates a thin layer of pure titanium oxide (TiO2) with controlled roughness, reducing surface tension and promoting osseointegration processes.



Ideal solution for limited spaces and complex anatomies

The **slim apex** is particularly suitable for narrow ridges and narrow interdental spaces, buccal concavities, and converging roots.







XCN® Narrow 2.9 Tapered Implant



Minimal invasiveness, maximal reliability

Small, but strong

With a **maximum diameter of only 2.9 mm**, this implant represents a simple, safe, and effective clinical solution for **extremely narrow interdental spaces or severely atrophied bone ridges**. Allows to avoid advanced surgery, thus **reducing complications**, **time**, **and costs**.

Beyond anatomical limits, without compromises

Successfully used since 2017 by thousands of professionals, this implant has proven to be reliable not only for **single-tooth replacement in the lower anterior region**, but also for **multi-unit and full-arch restorations in severely resorbed ridges**.

High mechanical performance

Designed without abutment screw, it offers superior stability and aresistance to masticatory loads than any other narrow diameter implant available on the market*.



*Alberti A, Corbella S, Francetti L, Mechanical resistance of a 2.9-mm-diameter dental implant with a Morse-Taper implant-abutment connection, J Oral Implantol 2023;49(3):323-329







XCN® Narrow 2.9 Tapered Implant

Simplified surgical protocol

The micro and macro design of the Narrow 2.9 implant facilitates the achievement of optimal primary stability in all bone types by simply modulating the use of the D 2.8 twist drill; the individualization of the surgical procedure can also allow immediate loading.

Medium density bone (D2/D3)

In the case of medium density bone, after using the pilot drill, it is recommended to use the Ø 2.8 twist drill up to the first 6.5 mm mark, regardless of the length of the chosen implant.







Hard bone (D1)

In the case of particularly hard bone (D1) after the pilot drill, we recommend using the Ø 2.8 twist drill with a depth related to the length of the chosen implant (2 mm less than the total length).







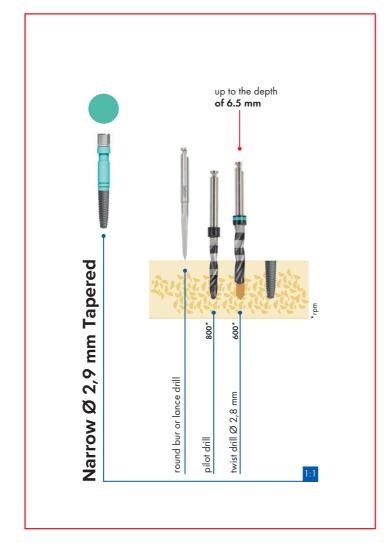
Very soft bone (D4)

In very soft bone, the implant can be inserted right after pilot drilling to promote primary stability.





New XCN 3.8 **Tapered Implant**









One for all

Small, but strong

Only 3.8 mm in diameter, perfect for narrow ridges and all areas of the mouth, from the anterior to the posterior regions.

Overall adaptability

It is indicated for all edentulous sites and supports all types of prosthetic solutions, from single to multi-unit or full-arch restorations, thanks to the micro and macro design of the fixture and the efficiency of the yellow Morse connection, tested for over 25 years in thousands of clinical cases.

Functional and aesthetic excellence

The self-locking implant-abutment connection, which does not require a screw, guarantees long-term stability and high-level aesthetic results thanks to the Platform Switching design, the effectiveness of the microbiological seal, and the absence of micro-movements.



*Sannino G, Barlattani A, Mechanical evaluation of an implant-abutment self-locking taper connection: finite element analysis and experimental tests, Int J Oral Maxillofac Implants 2013;28(1): e17-26

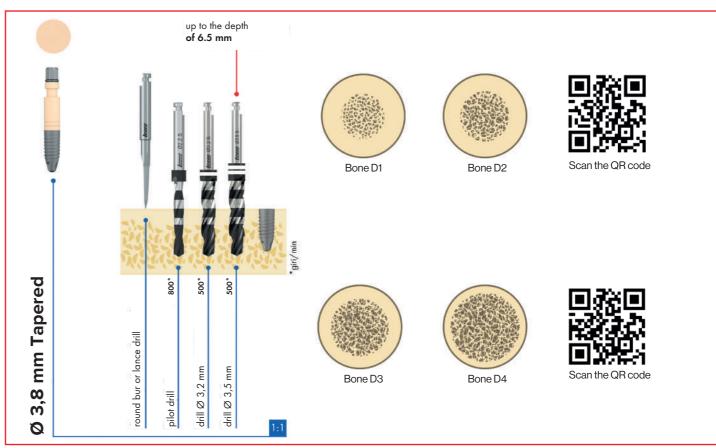


XCN® 3.8 Tapered Implant

Simplified surgical protocol

The specially designed shaped drills for the 3.8 Tapered implant ensure precise preparation of the implant site, promoting optimal primary stability in all bone types. The apical portion with a diameter of 2.8 mm in both drills allows them to be used immediately after the pilot drill, reducing both surgical time and the possibility of errors.

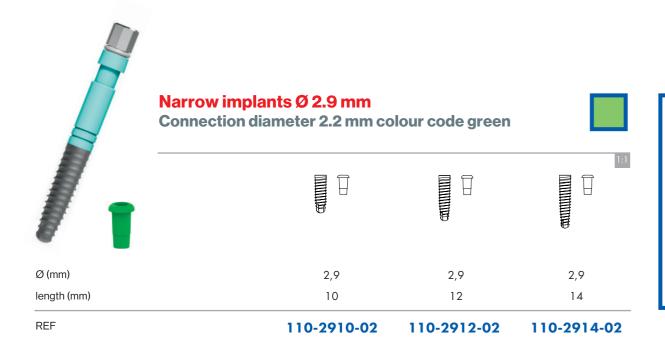


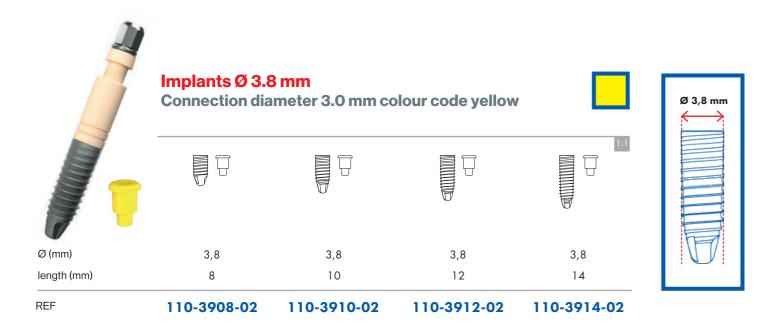






XCN® Tapered Implant Series





Bibliography on Tapered Implants

Alberti A, Corbella S, Francetti L, Mechanical resistance of a 2.9-mm-diameter dental implant with a Morse-Taper implant-abutment connection, J Oral Implantol 2023;49(3):323-329 Azzola F, Barbaro BF, Corbella S, Riabilitazione di mascellare atrofico con barra su impianti Narrow, Italian Dental Journal 2023; XVIII (5):26

Dell'Innocenti F, Riabilitazione di arcata superiore con Toronto a carico immediato, Italian Dental Journal 2022;XVII(1):26

Dell'Innocenti F, Toronto a carico immediato: un nuovo modo di interpretare vecchi concetti ottenendo il massimo da ognuno di essi, Implant Tribune Italian Edition 2022; XVII(3):1,7-8 Zanotti G, Luciano U, Montagna P, Pardo A, Zerman N, Modena N, Poscolere A, Magi M, Zambotti T, Alberti C, Donadello D, Zarantonello M, Iurlaro A, Giuliani D, Cominziolli A, Balliu F, De Santis D, Mini-invasive rehabilitation with removable total prosthesis with mixed conometric connection on 1.4-1.5-2.2 (2.9 mm) implant abutments and 1.6-2.3-2.4 dental abutments: a two year follow-up, J Biol Regul Homeost Agents 2021;35(no.5 S1):23-32

Guerra D, Palazzo L, Riabilitazione di mascellare atrofico con Toronto conometrico. Igiene a due anni, Italian Dental Journal 2021; XVI (8):29

Russo N, Coppola G, Montisci D, Palazzo L, Lenzo A, Ciaravolo M, Mascolo A, Complex maxillary prosthetic restoration with titanium bar and small diameter implants, SunText Rev Dental

Musiello G, Riabilitazione di una edentulia totale con due Toronto conometriche, Italian Dental Journal 2020; XV (5):19

Russo N, Trattamento implanto-protesico di agenesia bilaterale con impianti Narrow, Italian Dental Journal 2020; XV (8):3

Zanotti G, Gelpi F, Sinigaglia S, Croce S, Tacchino U, Perozeni G, Luciano U, De Santis D, Agenesis: pilot case report by 2.9 mm implant, J Biol Regul Homeost Agents 2019;33 (Suppl 1):61-65 Russo N, Coppola G, Montisci D, Ciaravolo M, Mascolo A, Immediate load small diameter implant: could represent a simplified fixed solution in lateral incisor agenesis? EC Dental Science

Argentino F, Riabilitazione a carico immediato di incisivo inferiore con impianto di diametro 2,9 mm, Italian Dental Journal 2018; XIII (1):25

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Surgical kit

for XCN® Tapered Implant

The surgical kit contains all the necessary tools for inserting XCN® Tapered implants, organized in a compact kit with a simple and intuitive design, matching the colour codes of Narrow 2.9 Tapered and 3.8 Tapered implants.

- made of PPSU plastic material
- entirely autoclavable



Kit content:

1pz	151-1930-02	lance drill
1pz	151-2216-52	pilot drill short
1pz	151-2816-53	twist drill short Ø2,8mm
1pz	151-3216-55	shaped drill short Ø3,2mm for 3.8 Tapered implants
1pz	151-3516-55	shaped drill short Ø3,5 mm for hard bone for 3.8 Tapered implants
1pz	156-1033-00	driver high torque for connection 2.2
1pz	156-1041-00	driver high torque for connection 3.0
1pz	156-1002-01	handpiece adapter
1pz	156-1019-00	drill extension
107	156-1002-00	ovtonsion for instruments

156-1002-00 extension for instruments

156-1001-01 surgical hand screwdriver

156-1003-00 instrument for cover caps 156-1006-00 hex head extractor

156-1014-00 ratchet

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Maximum prosthetic versatility

Innovative prosthetic components for a wide range of solutions unique on the market

Cement-retained prosthesis

The abutments for cement-retained prostheses, which have no screw channel, are fully customizable, easy to prepare, more aesthetic and resistant.

The range includes solutions compatible with analog and digital workflows.



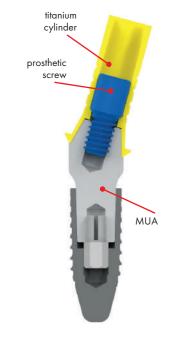
Single-unit screw-retained prosthesis with ExaConnect®

With the possibility of managing angulations up to 25° and transmucosal heights up to 5 mm, the ExaConnect® connector allows for a simplified workflow, by shifting the prosthetic connection to the soft tissue level. In combination with the dedicated Ti-Base, it is possible to obtain a range of abutments with variable angulations and gingival heights, ideal for One-Abutment-One-Time approaches.



Screw-retained prostheses for bridges and full-arch restorations

The absence of a connecting screw between the fixture and the abutment makes Leone MUAs extremely efficient, as they require the management of only one screw, the prosthetic screw. This greatly simplifies the clinical procedures. Leone MUA abutments offer the widest range on the market, with angulations up to 35° and gingival heights up to 7 mm. Accessories dedicated to different prosthetic techniques are also available, such as CAD-CAM interfaces and bonding cylinders.



Fixed and removable conometric-retained prosthesis

With a semi-angle of 5°, the conometric abutments ensure the retention of the prosthetic structure by means of preformed PEEK caps through conometric friction fit. This solution, which does not require screws or cement, guarantees high stability and an effective prosthetic seal, while allowing for easy removal for check-ups and oral hygiene. Four types of caps with different retention forces are available, suitable for all prosthetic configurations.



Attachment-retained prosthesis

Thanks to the Morse taper connection, Leone ball head abutments have no holes or cavities, making daily oral hygiene easier. Available in both straight and 15° angled versions with three different gingival heights, they offer a choice of different types of housings to suit clinical needs.



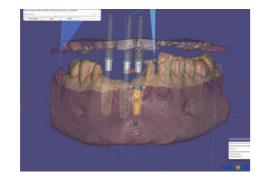




Clinical cases

Digital prosthetic workflow

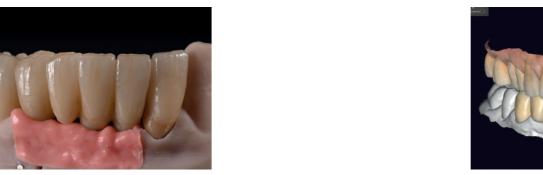
The Leone implant system integrates perfectly into the digital workflow, offering smooth and comprehensive prosthetic management from single crowns to full arch restorations. Thanks to dedicated components and full compatibility with CAD-CAM workflows, precision, speed, and customization can be guaranteed at every stage of treatment, optimizing clinical times and aesthetic and functional results.

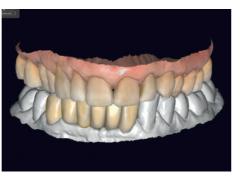


















Immediate restoration of atrophic interforaminal ridges with XCN® Narrow 2.9 Tapered implants

Dr. Andrea Ricci

Placement of three Narrow 2.9 Tapered implants with flapless guided surgery and immediate loading with a screw-retained temporary PMMA prosthesis. Subsequently, digital impression taken on MUAs for CAD-CAM design and production of the final zirconia screw-retained prosthesis.













Restoration of atrophic maxilla with XCN® Narrow 2.9 Tapered implants

Dr. Francesco Azzola, Dr. Bruno Francesco Barbaro, Prof. Stefano Corbella

Placement of four Narrow 2.9 Tapered implants and simultaneous guided bone regeneration. After submerged healing, prosthetic restoration with removable prosthesis retained by a bar screwed onto MUAs.

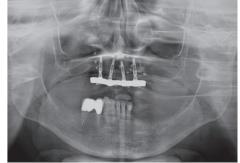














Clinical cases

Immediate replacement of an upper central incisor with an XCN® 3.8 Tapered implant

Dr. Salvatore Belcastro, Dr. Alessio Natali

Immediate post-extraction placement with flapless approach of a 3.8 Tapered implant and simultaneous guided bone regeneration. Subsequent fully digital prosthetic procedure with customized Ti-Base abutment and zirconia crown.













Immediate replacement of two upper lateral deciduous incisors with XCN 3.8 Tapered implants

Dr. Domenico Guerra, Dr. Giovanni Guerra

Immediate post-extraction placement of two 3.8 Tapered implants and immediate provisional restorations with temporary abutments. After orthodontic treatment, final prosthesis with extra-orally cemented zirconia crowns.

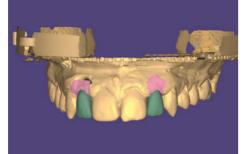
















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A team of professionals at your disposal to meet your new professional needs

Discover the XCN® Team



