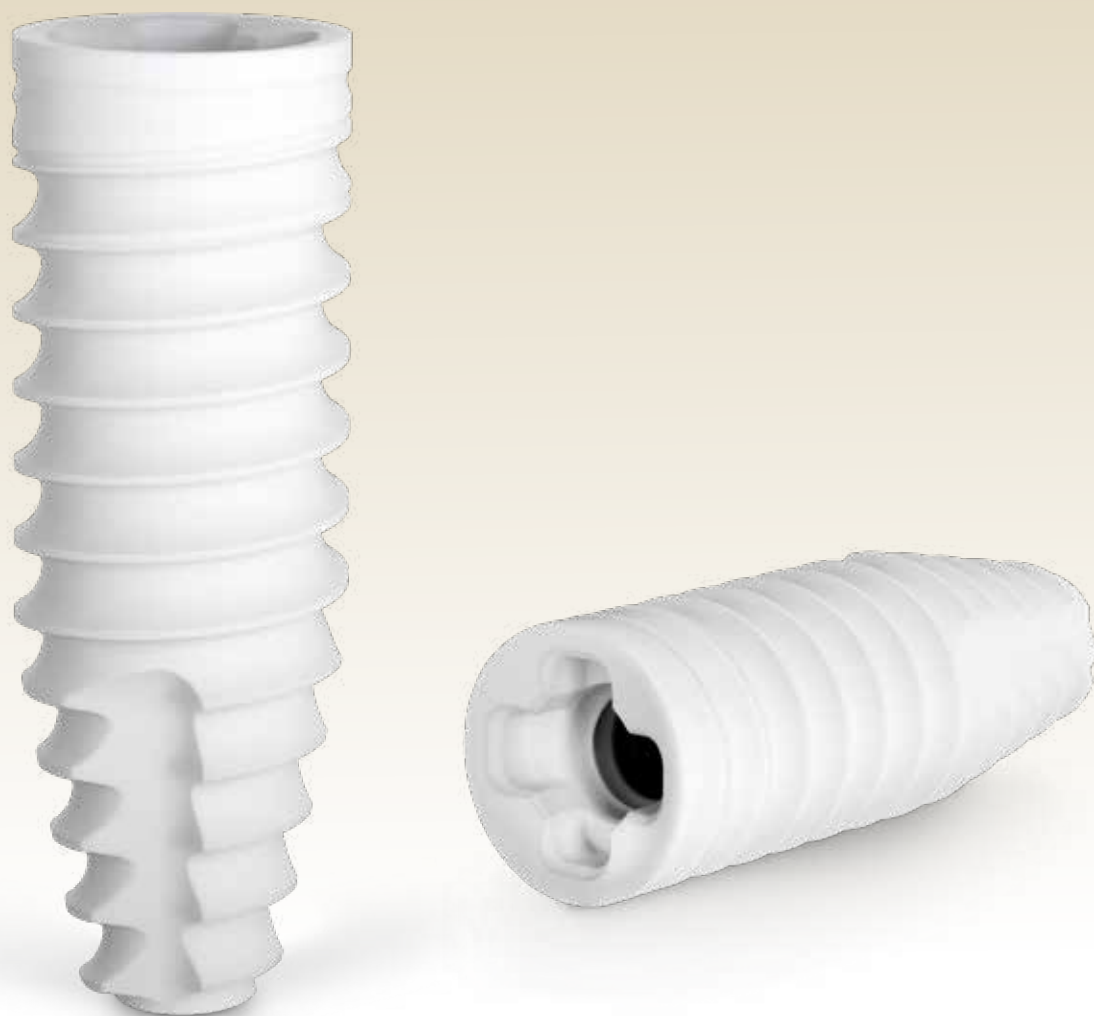




CERALOG® PROGRESSIVE-LINE
Ceramic implantology
reimagined

CERALOG PROGRESSIVE-LINE Implant System

Ceramic implantology reimaged

Metal-free zirconia implants are becoming increasingly popular in implant dentistry thanks to their superior esthetics, optimal tissue integration and outstanding durability. At BioHorizons Camlog Group, we are committed to innovative implant dentistry solutions that offer our customers simplicity, flexibility, and performance.

We are pleased to release CERALOG PROGRESSIVE-LINE, our revolutionary next-generation ceramic implant system, which combines the simplicity and flexibility of titanium implants with the exceptional performance of ceramic implants.

Inspired by the PROGRESSIVE-LINE implant design and optimized for ceramic materials, the CERALOG PROGRESSIVE-LINE implants offer the simplicity of the PROGRESSIVE-LINE Flex surgical protocol and the flexibility of a modern cylindrical-conical design.

The two-piece system offers a comprehensive range of implant and prosthetic options covering a wide variety of indications – from single-tooth to full-arch restorations.

The metal-free implant system is based on the high-performance material ATZ-HIP, which displays high load-bearing capacity and biocompatibility. The proven implant surface promotes reliable osseointegration. In addition, the 'Bolt-in-Tube' connection and the unique Vicarbo® screw are specially adapted to the properties of the ceramic material. This ensures that no tensile or shear forces are transferred to the ceramic at the implant-abutment interface.

Ceramic implantology reimaged



Simplicity – Flexibility – Performance

Maximum flexibility

Comprehensive range of prosthetic components to cover a wide range of indications.

Four interlocks

For secure positioning and anti-rotation stability. These engage in the four cross-shaped chambers of the implant's inner connection.

"Bolt-in-Tube" connection

The "Bolt-in-Tube" connection prevents tensile and shear forces from being exerted on the ceramic. These forces are absorbed by the Vicarbo® screw which functions as a bolt.

Vicarbo® screw

The core of the implant-abutment connection is made of carbon fiber-reinforced high-performance PEEK and is metal-free.

Hassle-Free surgical protocol

Surgical procedure based on the PROGRESSIVE-LINE Flex protocol.

High-performance zirconia dioxide (ATZ-HIP)

Innovative biocompatible material for use under high load conditions.

Modern implant design

Cylindrical-conical implant shape with a progressive thread design for achieving optimal stability in bone.

Proven Implant surface

Excellent osseointegration thanks to the blasted, etched, and hydrophilic surface.¹

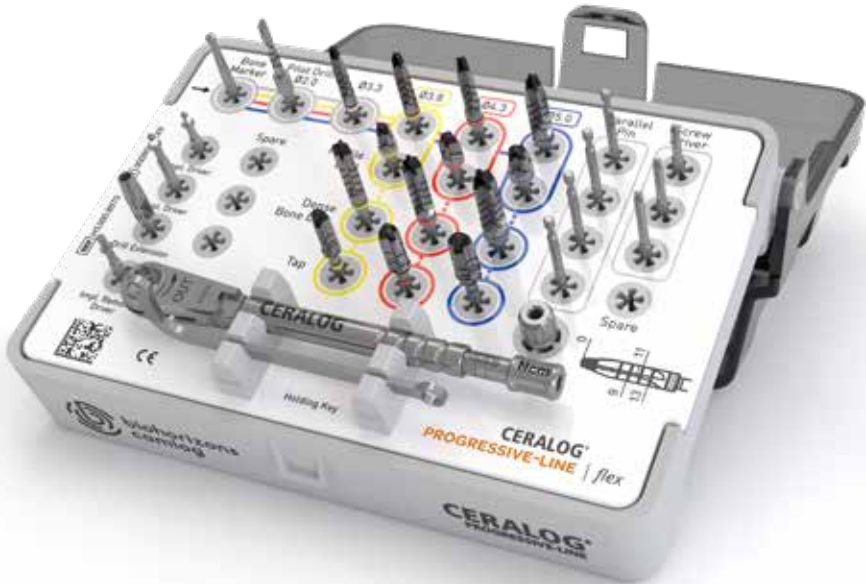
¹ Jank S, Hochgatterer G. Success Rate of Two-Piece Zirconia Implants: A Retrospective Statistical Analysis. 2016 Apr;25(2):193-8. doi: 10.1097/ID.0000000000000365.

CERALOG PROGRESSIVE-LINE Surgery

High functionality and flexibility

The CERALOG PROGRESSIVE-LINE implants are available in lengths of 9, 11 and 13 mm and diameters of 3.8, 4.3 and 5.0 mm. They can be placed using the CERALOG PROGRESSIVE-LINE Flex surgery set, which is based on the established PROGRESSIVE-LINE Flex drilling protocol. With fewer drills/instruments required and a compact tray, the CERALOG PROGRESSIVE-LINE Flex surgery set ensures an efficient and optimized drilling process.

The same proven surgical instruments are used to prepare the implant site for both titanium and ceramic implants, allowing clinicians to continue using the established PROGRESSIVE-LINE surgery set. Only a small number of additional instruments are required for final implant insertion.



Optimum bone stability

Ceramic-optimized insertion torque

Zirconia offers greater tensile strength than titanium but has lower elasticity. To support successful osseointegration, ceramic implants should therefore be placed using controlled insertion torque and minimal pressure.

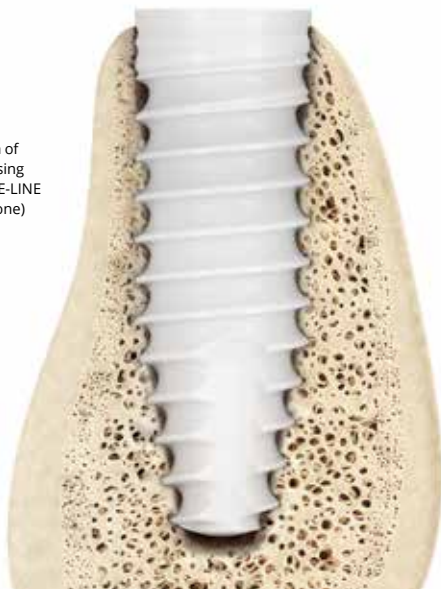
The implant body geometry and thread design support precise, positionally stable placement. During healing, bone growth onto the micro-rough surface promotes optimal secondary stability.

A flexible drilling protocol enables ceramic-compatible implant placement by reducing the risk of overheating and excessive compression in dense bone while achieving adequate primary stability in cancellous bone.

Schematic representation of osteotomy preparation using the PROGRESSIVE-LINE Flex profile drill and PROGRESSIVE-LINE dense bone drill (D1/D2 bone)



Schematic representation of osteotomy preparation using the drill and PROGRESSIVE-LINE Flex profile drill (D3/D4 bone)



High-performance material with a proven surface

For reliable osseointegration

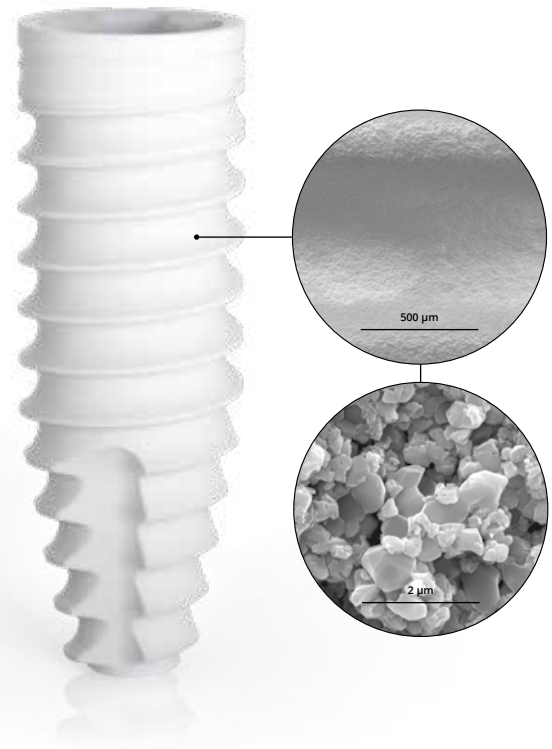
CERLOG PROGRESSIVE-LINE implants feature a micro-rough surface texture to promote tissue integration. The texture is comparable to the Camlog Promote® titanium surface.

The material properties of modern zirconia implants are clinically recognized. CERLOG PROGRESSIVE-LINE ceramic implants are milled from sintered blanks made of high-performance ATZ-HIP (= hot isostatic post-compaction) material.

These are then surface-treated. The microstructured implant surface supports osteoblast formation and enables reliable osseointegration.¹

Surface texture

- Blasted
- Etched
- Hydrophilic



“Bolt-in-Tube” connection

Optimized connection for ceramic implants

A stable implant-abutment connection is crucial for the long-term stability and success of the restoration. The “Bolt-in-Tube” connection, which was specially developed for the ceramic material, prevents tensile and shear forces from being transferred to the ceramic. A stable connection is formed in combination with the Vicarbo screw.

Enhanced user safety

- Fast and reliable abutment insertion
- The four interlocks on the abutment have a reduced number of contact points with the implant.

High precision fit through minimal rotational freedom

- Optimum force transmission
- The interlocks provide anti-rotation protection.

Metal-free Vicarbo screw

- Core component of the implant-abutment connection
- Carbon-fiber-reinforced high-performance PEEK



Flexibility

A comprehensive prosthetic portfolio

The two-piece CERALOG PROGRESSIVE-LINE implant can be used for many indications. The sophisticated design, screw-retained abutments and optimally coordinated surgical instruments simplify the surgical and prosthetic use of CERALOG PROGRESSIVE-LINE implants. The aim is optimal pink-white esthetics based on the model of the natural tooth.

Prosthetic restoration is performed with single crowns, bridges or full dentures. Depending on the indication, fixed or removable restorations are also possible. The temporary abutment made of PEEK allows temporary restoration. The soft tissue can be contoured using gingiva formers, which are available in two heights, thus achieving pink-white esthetics.

The CERALOG PROGRESSIVE-LINE implant system features straight and angled zirconia dioxide abutments (ATZ-HIP), and CERALOG PL Docklocs®, a prefabricated attachment system for retaining implant-supported overdentures.



Clinical case studies

Modern treatment concept in the esthetic zone

Dr. Stefan Röhling, Munich



Due to the deep crown fracture in the post-retained crown in region 22, fabricated elsewhere several years earlier, the residual root was removed atraumatically following careful clinical and radiographic evaluation, risk assessment, and subsequent implant planning.



Prior to surgery, an orientation template was fabricated to define the vestibular boundary of the esthetic window. The implant bed was prepared according to the surgical protocol for the CERALOG PROGRESSIVE-LINE implant (Ø 3.8 mm / L 13 mm).



The implant was inserted gently at approx. 15 rpm. The implant shoulder was placed at crestal level. Since there was adequate primary stability in this case and a temporary non-occlusal crown was to be placed, a digital impression was taken using a scan post.



Up until placement of the temporary resin crown, fabricated on a ceramic bonding base, the soft tissue was supported using a gingiva former. The follow-up radiograph confirmed correct positioning of the implant shoulder.



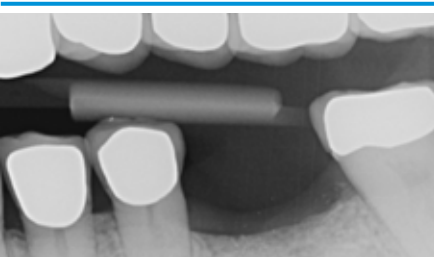
At the recall appointment three months after implant placement, a stable, well-contoured soft-tissue cuff was evident. During this appointment, implant stability was checked once again and the patient was referred back to her regular dentist for further treatment.



Four months after implant placement, the definitive restoration was fitted by the patient's regular dentist, Dr. Max Mühlhaus, in Munich. At the follow-up appointment one month later, the final result was aesthetically pleasing.

Posterior restoration in augmented alveolar bone

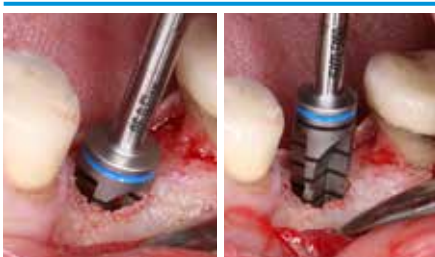
Dr. Frederic Hermann, M.Sc., Zug (Switzerland)



After regeneration of the augmented jaw in region 36, the treatment team met the patient's request for treatment with a ceramic implant.



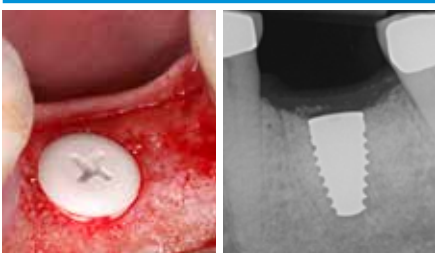
The implant position was marked using a round bur, and the implant site was prepared according to the drilling protocol for a CERALOG PROGRESSIVE-LINE implant (Ø 5.0 mm / L 9 mm).



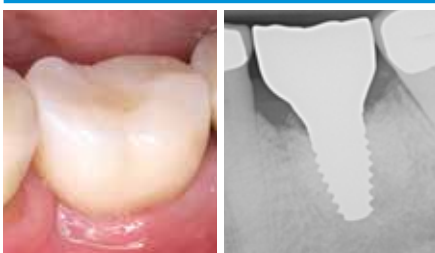
To avoid pressure on the crestal bone, the use of the profile drill shown on the left is essential. The dense bone drill is used in D1 and D2 bone types and enables positionally stable implant insertion.



The implant is removed from the sterile packaging using a direct pick-up and inserted at ≤ 15 rpm to prevent bone necrosis due to overheating. The implant is placed in the jawbone with an insertion torque of approx. 25 Ncm.



The smooth collar of the CERALOG PROGRESSIVE-LINE implants is positioned around 0.4 mm supracrestally. Crestal-level placement, as performed in this case study, is possible. The PEEK cover screw completely conceals the implant shoulder.



After uneventful healing, the final restoration was placed six months after implant placement. The concave design of the restoration in the submucosal region helps form a stable soft-tissue cuff. (Dental lab work: Nicola Lanfranconi AG, Zurich, Switzerland)

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Please refer to the respective product label for the manufacturer's identification.