Implants, by Anthogyr

AXIOM®, THE NEW GENERATION IMPLANT

Axiom®’s characteristics represent the perfect synthesis of all scientific and clinical data most recently acquired in the field of dental implantology.

- quick and predictable healing of the bone,
- periodontal environment, comparable to that observed on natural teeth,
- low-invasive protocols and simplified restoration steps,
- comprehensive implant and prosthesis ranges.

Research & development

Axiom® is the result of Anthogyr’s 20 years of experience in the design and manufacturing of implantology products.

The product development has benefited from external support from dentists and implantologists, thus guaranteeing ergonomics, practicality and durability.

Axiom® features is a synthesis of all scientific and clinical data most recently acquired in dental implantology.
Integration within the bone: optimised anchoring and biocompatibility

The optimal use of the implant’s surface is essential in order to obtain efficient anchoring in the bone at all stages of the healing process, until complete and perfect osseointegration of the implant. The quality of the anchoring thus obtained will then allow the use of small-format implants to be optimised. As a matter of fact, the use of low-invasive implants has a number of advantages: simplicity of drilling protocols, ease of three-dimensional positioning of the implant, increased presence of peri-implant bone tissue, freeing from some bone grafts, costly and cumbersome for the patient, and increased safety of flap-free surgical procedures.

SIGNIFICANT PRIMARY STABILITY

Progressive threading
- Gradual compression of the bone as the implant is being screwed in.
- Apical threads well-suited to cancellous bone.
- Reduced height of self-tapping vents for more thread caught in the bone tissue.
- Effective in all bone types.

EFFECTIVE ANCHORING IN THE BONE

Asymmetrical threading (pitch: 0.8 mm)
- Optimal exploitation of actual surface area of threading.
- Stress concentration reduced at tip of thread.
- Optimal transformation of occlusal loads into compression forces.
- Promotes bone growth.

MEDICAL TITANIUM: A CHOICE MATERIAL

Grade V titanium alloy
- Biocompatible material.
- Material largely used in the fields of orthopaedics and dental implantology.
- ADA* approved.

OSSEO-CONDUCTIVE SURFACE STATE

BCP surface treatment
- Proven « sand-blasting-etching » process.
- BCP : ultra-clean sand-blasting medium.
- High wettability of surface.
- Contact osteogenesis within 6 weeks.
- BIC greater than 70%.

*ADA – American Dental Association Scientific Council 2003
Periodontal integration: tissular stability

The Axiom® implant is designed with the aim of perfectly preserving the integrity of the peri-implant biological space. This features an essential condition for preventing epithelium apicalisation, the key for crater-free bone healing. Indeed, the preservation of this tissue capital enhances both the long-term biomechanical behaviour of the restoration and the aesthetic durability of the result.

BIOLOGICAL CONNECTION: LONG-LIVED STABILITY, SEALING AND SUPPORT

**Sealed connection**
- Peripheral sealing.
- No bacterial infiltration.
- Integrity of the biological space respected.

**Stable connection**
- Prosthetic micro-movements totally precluded.
- Periodontal pseudo-attachment maintained.
- Epithelium stabilized over time.

**Dual Cone Assembly**
- Absence of stress concentration.
- Perfect fastness whatever the working axis of the occlusal loads.
- No unwanted unscrewing of restoration.
- No unexpected rupture of the periodontal integration.
PERIODONTAL CRIMPING: BONE GROWTH AND GINGIVAL STABILITY

Integrated « platform-switching »
- Subcrestal positioning of the implant.
- Cervical bone growth.
- Optimal preservation of inter-implants bone.

Peripheral gingival arrangement
- Vertical stabilisation of epithelium: gingival O’ring.
- Increased thickness of vestibular mucosa.
- Reduced risk of anaesthetic greyish reflections.

ANATOMICAL PROSTHETIC RANGE: COMFORT AND CONFIDENCE

Consistent emergence profile
- Prosthetic handling without tension of soft tissue.
- Improved predictibility of results.
- Most demanding patients satisfied.

«Immediate & unique connection» abutment
- Single trans-gingival manipulation of the prosthesis.
- Preservation of the periodontal pseudo-attachment.
- Integrity of the biological space respected.

RETENTIVE NECK: ANCHORING AND STRENGTH

Threaded and sand-blasted neck
- Cortical bone apposition.
- Optimized biomechanical behaviour.
- Reinforced connection strength.
- Optimal primary anchoring.
Integration within the oral cavity: mechanical resistance to occlusal loads

The oral integration of the implant requires that its mechanical strength is able to withstand the various occlusal loads in the long term.

Guaranteeing mechanical strength is also an important requirement when using low-invasive implant formats. The restorations should be able to withstand the most unfavourable cases, such as described in the ISO 14801 standard, i.e. 30° single restoration, with an 8 mm prosthetic arm and 3 mm hypothetical bone loss.

GRADE V MEDICAL TITANIUM: THE MATERIAL OF CHOICE

Mechanical properties

<table>
<thead>
<tr>
<th>Breaking limit</th>
<th>Grade I</th>
<th>Grade II</th>
<th>Grade III</th>
<th>Grade IV</th>
<th>Grade V</th>
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<tr>
<td>240 MPa</td>
<td>345 MPa</td>
<td>450 MPa</td>
<td>550 MPa</td>
<td>860 MPa</td>
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</table>

Strong alloy
- Exceptional mechanical properties as compared to Grades I-IV.
- Fracture resistance over 3 times greater than Grade I titanium.
- Fracture resistance nearly twice as great as Grade IV.

A PROVEN CONNECTION

A steadfast dual connection
- No concentration of stress.
- Compatible with titanium and zircon components.
- Over 5 millions cycles with a 50 kg load (10/sec): equivalent to a life-long resistance.
- Maximum insertion torque 235 N.cm with the 4mm dia. implant.
Smart product line

IMPLANTS FOR ALL SITUATIONS

Implant dia 3.4mm
Ultra-resistant implant which may be used in most situations.

Short implant, 8.0 & 6.5mm in length
For posterior implantations with limited bone height.

Implant dia. 5.2mm
For post-extraction implantations.

AN ABUTMENT FOR EACH TOOTH

<table>
<thead>
<tr>
<th>Dents</th>
<th>Dia collet</th>
<th>Mini</th>
<th>Maxi</th>
<th>ø 3.4</th>
<th>ø 4.0</th>
<th>ø 5.0</th>
<th>ø 6.5</th>
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<tbody>
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<td>Mandibular incisor</td>
<td>Més-Dist</td>
<td>2.9</td>
<td>4.1</td>
<td>●</td>
<td>●</td>
<td></td>
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<tr>
<td>Central maxillar incisor</td>
<td>Més-Dist</td>
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<td>7.6</td>
<td></td>
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<tr>
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<td>Més-Dist</td>
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<td>5.2</td>
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<td>●</td>
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<tr>
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<td>Més-Dist</td>
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<td>6.4</td>
<td></td>
<td>●</td>
<td>●</td>
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<tr>
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<td>Més-Dist</td>
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<td>6</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
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<td>Més-Dist</td>
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<td>9</td>
<td></td>
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<td></td>
<td>●</td>
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<td>Maxillar 1st premolar</td>
<td>Més-Dist</td>
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<td>5.5</td>
<td></td>
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Anatomical emergence profiles

→ 4 prosthetic emergence profiles.
→ Shoulder heights from 1 to 3 mm.
WIDE CHOICE OF PROSTHETIC COMPONENTS
FOR ANY TYPE OF RESTORATION

Single restoration

Cemented

- Standard titanium abutment
- Esthetic titanium abutment
- Zircon abutment
- Cast-on abutment
- Reworkable abutment

Screw retained

- Cast-on abutment

Cemented

Multiple restoration

- Standard titanium abutment
- Esthetic titanium abutment
- Cast-on abutment
- Reworkable abutment
Prosthetic options

- Full arch restoration
  - Screw retained
    - Conical abutment
  - Bar overdenture
    - Conical abutment
  - Attachment
    - Locator
Your serenity partner

Axiom® offers pragmatic solutions to satisfy the needs of implantologists’ everyday practice, whichever their level.

Thus, simplicity of protocols and procedures is central in all our designs.

ANATOMICAL IMPLANT WITH GUIDING INSERTION

Cylindrical-conical body

- Facilitates pre-positioning and start of screwing.
- Implant naturally guided along the drilling axis.

Self-tapping profile

- Time saved in most cases.

Atraumatic rounded apex

- Ideal for uplifted sinusual membrane flaps.

SIMPLE SURGICAL PROTOCOL

Unambiguous

- Few drills.
- No countersink.
- Drilling protocol identical for all types of bone.

Subcrestal positioning of the implant

- Better aesthetic management of restorations.
- Promotes the preservation of inter-implant alveolar bone.

One step or twostep surgery

- Surgical flexibility.
- Time-saving.
- Increased comfort for the patient.
INTUITIVE CONNECTION

Self-guiding connection, depth 3mm
- Unambiguous three-lobed indexation.
- Natural placement of abutment during insertion.
- Shorter prosthetic manipulations.

One connection for all diameters
- Implant diameter and restoration profile totally independent.
- Separate management of bone volume and size of tooth to be restored.
- Less constraints, more flexibility.

EASY-TO-USE INSTRUMENTS

Variable cutting geometry drills
- Ultra-high cutting performance.
- Stable when drilling is started.
- No risk of ovalisation.
- Bee-color® markings.

A convenient kit
- Colour coding.
- Intuitive reading of protocols.
- Tiltable panel for improved legibility.

A unique compact kit
- Few instruments.
- Pictograms for each instrument.
- Reliable support of instruments with silicone seals.

SMALL « PLUSSES »

Direct grip without implant holder
- Convenient package
- Less manipulations
- Placement with contra-angle or torque wrench
- Integrated marking of gingival heights

Unambiguous coding
- Logical cross-referencing of associated components
- Facilitated location

Component | Profile diameter | Gingival height | Crown height
--- | --- | --- | ---
0 | P | S | T
4 | 2 | 4
ANTHOGYR, SERVICE INCLUDED

Further information, advice, contacts: our marketing, sales and R&D departments will be happy to answer all your enquiries.

Let’s meet!

With thanks to the Anthogyr Scientific Committee.