products are available in more than 25 countries worldwide

America
Canada, USA

Asia
China, Malaysia, Taiwan, Thailand, Philippines, Vietnam

Europe
Belgium, Bulgaria, France, Germany, Italy,
Luxembourg, Poland, Portugal, Roumania, Russia, Spain, Turkey, Ukraine

Middle-East and Africa
Algeria, Dubai, Jordan, Morocco
Zirconia Titanium Implants

The smile - architects
More than 20 years of clinical success and innovation

Founded over 20 years ago, the T.B.R.® Group develops, manufactures and distributes the T.B.R.® dental implant system, known for its Zirconia Titanium technology, its aesthetic advantages, easy-to-use design and security.

French leader in oral implantology, the T.B.R.® Group has an international presence in more than 25 countries. Its head offices are located in Toulouse, France, at the crossroads of leading edge technologies. This is Europe's space and aeronautical birthplace; home to Airbus industries, the Centre National d'Etudes Spatiales (CNES) and some of today's major research organizations in the biomedical and biomechanical fields.

Research & Development:
A step ahead

Built on solid technological ground, the T.B.R.® Group fosters values of excellence and innovation and considers its customers and collaborators to be partners in the interests of safety, quality and aesthetics.

Our mission is to meet the needs of the dental profession by producing the most innovative and aesthetic implant system through the use of the patented Zirconia Titanium technology.

Quality

Over the years the engineers at the T.B.R.® Group have successfully balanced innovation with quality.

With CE certified products and ISO 9001:2000 and ISO 13485:2003 accreditations, we are able to ensure a high level of security and safety of all our products and services.
Scientific and technical assistance

Committed to setting the standards in customer service, the T.B.R.® Group is devoted to providing the highest quality of product support. With the dedication of each department, we guarantee accurate technical and scientific assistance.

Our team of biomechanical engineers and technicians work alongside a network of high level practitioners in order to provide quick answers to your clinical and technical inquiries.

Training :
The International Implantology Center

Convinced of the fundamental values of training and clinical experience, the T.B.R.® Group established in 1990, the International Implantology Center (IIC), a training center entirely dedicated to oral implantology.

For over a decade, the IIC has trained more than 5000 surgeons, assistants and laboratory technicians worldwide.

In 2005, the center inaugurates their new state-of-the-art training facilities (1000 sq.m, 2 conference rooms, 5 surgical chairs, etc.), entering a new era in precision clinical training.
**CELLULAR SOLUTIONS**

Zirconia enhances the fibroblast and osteoblast cell adhesion and proliferation compared to titanium.

Following a two-year period, the marginal tissues are more stable around the zirconia than around the titanium. The T.B.R.® Z1 implants have provided a 100% success rate at 2 years.

**LOW BACTERIAL COLONIZATION**

Zirconia drastically reduces bacterial colonization at the T.B.R.® Z1 implant collar level.

**THE CREEPING ATTACHMENT OF THE GINGIVA: A PERFECT AESTHETIC RESULT**

Zirconia Titanium implants guarantee a more natural transparency through the soft tissues.

The coronal repositioning of the gingival margin and the spontaneous reconstruction of the gingival papilla are systematically observed around the zirconia surface of the T.B.R.® Z1 implant.

**ZIRCONNECTION: CREATES THE IDEAL BIOLOGICAL SPACE IN THE SOFT TISSUES**

The zirconconnection is the molecular union, by a nanometric biocompatible and insoluble film, patented between zircon and titanium which guarantees a complete imperviousness to the seepage of biologic fluids.

The lack of “micro-gap” between the zircon and titanium prevents any bacterial proliferation and provides an excellent biological space in the soft tissues.
Perio-Integration

Maximum resistance of the **T.B.R.® Z1** implants:
The **T.B.R.® Z1** implants are up to 3.5 times more resistant.

Observed under the worst case scenario (shortest implant, smallest implant diameter, 35° angulation), mean static values were established at 3820N for the **T.B.R.® Z1** implants, demonstrating exceptional mechanical resistance.

**TITANIUM BODY SURFACE**
The sandblasted acid-etched surface favors the osseointegration process.

Forces exceeding 200 kg applied to the **T.B.R.® Z1** implants did not alter the structure of the zirconia ring.

---

**Rate of success of the **T.B.R.®** implants: 98%**

With a 98% success rate, our achievements in technological and scientific research have contributed to optimising the **T.B.R.® ZIRCONIA TITANIUM** technology.

For over 20 years, our engineers and implantology specialists have integrated the notion of Osseointegration and Perio-Integration in the design and manufacturing of our systems, to produce the most clinically adapted product.

The Zirconia Titanium technology of the **T.B.R.® Z1** implant provides a signature to the concept of perio-integration.

---

**REFERENCES**


**MICRO THREADS**:
**distance of 0,35 mm**

- The micro threads are located on the implant neck:
  - improves bone stimulation while allowing a favorable uniform dispersion of the occlusal forces
  - serves as a scaffold for the hard tissues
  - provides more stability when anchoring the implant, while protecting the integrity of the hard tissues
  - additional cortical anchoring for sinus lift procedures

**MORSE TAPER**:
- features anti-unscrewing of the fixation screw for safety
- excellent permeability of the whole implant-abutment interface

**THREADS**:
**distance of 1.0 mm and diameter 0.5 mm**

- shape of the threads assures great bone penetration as well as an excellent primary stability during the placement

**CONIC SHAPE OF THE IMPLANT**:
- anatomical shape, similar to a dental root
- better primary stability thanks to a taper design
- the implant self-aligns itself by fitting into the prepared site prior to the clockwise insertion, providing ease of use for the clinician
- minimum bulk

**CRUCIFORM APEX**:
**anti-rotational system**

- when placing an implant during a sinus lift / osteotome procedure, the convex apex shape of the implant is designed to prevent the tearing of the sinus membrane
- optimal anti-rotational stabilization by engaging the cruciform base
- allows for greater resistance when the prosthetic components are torqued into the implant

**SWISSCLIP**:
*setting with a contra-angle*

**CONNECTION**:
*internal octagonal*
Z1-Connect Implant

**ZIRCONNECTION**: (union of Zircon and Titanium) creates the ideal biological space in the soft tissues

The zirconconnection is the molecular union, by a nanometric biocompatible and insoluble film, patent protected, between zircon and titanium which guarantees a complete imperviousness to the seepage of biologic fluids.

The lack of “micro-gap” between the zircon and titanium prevents any bacterial proliferation and provides an excellent biological space in the soft tissues.

**ZT-HYBRID SURFACE**: (Zirconia Titanium Hybrid)

- **Zircon** : Y-TZP ($\text{ZrO}_2$)
  - smooth, dense and ivory tinted surface
  - minimal bacterial colonization
  - optimal mechanical resistance High Isostatic Pressing treatment (HIP)
  - perfect periodontal health and esthetics

- **Titanium** : Ti
  - sandblast with corundum ($\text{Al}_2\text{O}_3$) giving a rough appearance on all over the implant surface (roughness index $R_a = 1.25 \mu m$)
  - is treated with fluorhydric acid in order to improve the surface energy and thus the bone regeneration

The association of these two treatments creates a micro-roughness and a macro-roughness helping the development of cells and proteins responsible for the osteosynthesis.

**SWISSCLIP**: setting with a contra-angle

- friction fits and clamps into the implant
- option of using a manual tool with the ratchet
- impression is simplified which now can be friction fit into the implant
- the SwissClip was designed to save you time

Aspect of the sandblast-ed acid-etched surface - enlargement x 633
Always striving to satisfy you and to propose state-of-the-art solutions, the T.B.R.® Group has invented an innovative, ergonomic and quality packaging.

The implants, sterilized by gamma rays, are packed in a double packaging with two thermosealed covered shell blisters that guarantees the sterility maintain.

- simplification of the surgical protocol and ergonomics
- versatility: the SwissClip technology allows implant setting with the contra-angle or manually with the ratchet wrench
- no digital contact
- cover screw supplied with the implant
- blister stability for more safety

SWISSCLIP

Implants and cover screw are designed to friction fit into the armamentarium:

1. Take off the cover of the first shell blister while holding the blister packaging

4. While holding onto the shell blister, remove the implant by clamping it with a screwtool mounted on the contra-angle or by hand using the manual screwtool

7. After the implant is completely inserted into the prepared site, take the cover screw with the screwdriver while maintaining the shell blister laid down flat on your surgical table
2. Take off the cover of the second shell blister by holding it laid down flat on your surgical table (sterile field)

3. Friction fit the SWISSCLIP screwtool into the implant

4. Take the implant out of its housing package

5. Maintain the implant apex pointing up while it is moved to the surgical site

6. Maintain the cover screw pointing up in the screwdriver up while it is moved to the surgical site

8. Take the cover screw out of its housing

9. Maintain the cover screw pointing up in the screwdriver up while it is moved to the surgical site

NOTE: Read Z1-Connect surgical protocol p.19 and Connect P. 33
MATERIAL : RADEL

It is a polymer that demonstrates an exposure to high temperatures, allowing a great number of sterilization cycles and can withstand daily use without bending or breaking.

SAFETY AND SIMPLICITY FOR THE DRILLING SEQUENCE

- Stop drills N°1 prevent the risk of violating important anatomic structures
- A maximum of 5 drills have to be used in order to set all the T.B.R.® conic implants
- Available with external or internal irrigation

VERY COMPLETE EQUIPMENT : VERSATILITY

- Double possibility: setting with a contra-angle or manual setting
- Complete range of included accessories (drill extension, drilling guide, etc)

Composition of the kit :

- Pilot drill, round
- Stop Drill N°1
- Drills with internal irrigation or external irrigation
- Screw tap
- Ratchet wrench
- Short screwtool for contra-angle and manual setting
- Long screwtool for contra-angle and manual setting
- Drill extension
- Drilling guide
- Parallelism gauge
- Short hexagonal screwdriver
- Long hexagonal screwdriver
- Scanora and X-ray template
## Contents

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### Z1-Connect System

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- Surgical protocol  
  - p 19
- Prosthetic components  
  - p 21
- Prosthetic accessories  
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### Connect System

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- Surgical protocol  
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- Prosthetic components  
  - p 35
- Prosthetic accessories  
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- Prosthetic protocol  
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Surgical Kit

| Surgical Kit - Internal irrigation | A-TCP005 |
| Surgical Kit - External irrigation | A-TCP006 |

Pilot drill, round - A-FA635

Drills with internal irrigation

| Drill n°1 for implants L 8 mm | Drill n°1 for implants L 10,5 mm | Drill n°1 for implants L 13 mm | Drill n°1 for implants L 15,5 mm |
| A-FBI080 | A-FBI105 | A-FBI130 | A-FBI155 |

Stop Drill n°1 :

| Drill n°2 | Drill n°3 Ø 3,5 mm | Drill n°4 Ø 4 mm | Drill n°5 Ø 5 mm |
| A-FC200 | A-FC300 | A-FC400 | A-FC500 |

Drills with external irrigation

| Drill n°1 for implants L 8 mm | Drill n°1 for implants L 10,5 mm | Drill n°1 for implants L 13 mm | Drill n°1 for implants L 15,5 mm |
| A-FBX080 | A-FBX105 | A-FBX130 | A-FBX155 |

Stop Drill n°1 :

| Drill n°2 | Drill n°3 Ø 3,5 mm | Drill n°4 Ø 4 mm | Drill n°5 Ø 5 mm |
| A-FCX200 | A-FCX300 | A-FCX400 | A-FCX500 |

NOTE: notice that the 1.0 mm drill point is not included in the implant length.
**Screw tap**

<table>
<thead>
<tr>
<th>Screw tap</th>
<th>For implants Ø 3.5 mm</th>
<th>For implants Ø 4 mm</th>
<th>For implants Ø 5 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-TAR302</td>
<td>A-TAR402</td>
<td>A-TAR502</td>
<td></td>
</tr>
</tbody>
</table>

**Drill extension** - A-PF660

**Ratchet wrench** - A-CL670

**Screwtool for contra-angle**

<table>
<thead>
<tr>
<th>Screwtool</th>
<th>Short</th>
<th>Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-MCA230</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-MCA325</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Screwtool for ratchet wrench**

<table>
<thead>
<tr>
<th>Screwtool</th>
<th>Short</th>
<th>Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-MCC163</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-MCC258</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Drilling guide** - A-PER210

**Parallelism gauge** - A-JAU355

**Screwdriver**

<table>
<thead>
<tr>
<th>Screwdriver</th>
<th>Hexagonal – Short</th>
<th>Hexagonal – Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-CHC216</td>
<td></td>
<td>A-CHL301</td>
</tr>
</tbody>
</table>

**Scanora and X-Ray template**

100% - 125% - A-TS302
Pilot drill, trephine

<table>
<thead>
<tr>
<th>Inner diameter</th>
<th>Pilot drill</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5 mm</td>
<td>A-TRE250</td>
</tr>
<tr>
<td>3.7 mm</td>
<td>A-TRE370</td>
</tr>
<tr>
<td>4.2 mm</td>
<td>A-TRE420</td>
</tr>
<tr>
<td>5.2 mm</td>
<td>A-TRE520</td>
</tr>
</tbody>
</table>

Circular surgical knife / tissue punch

<table>
<thead>
<tr>
<th>Inner diameter</th>
<th>Circular surgical</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5 mm</td>
<td>A-BC350</td>
</tr>
<tr>
<td>4.5 mm</td>
<td>A-BC450</td>
</tr>
</tbody>
</table>

Torque wrench - A-CD030

Torque strength: 30 newtons. cm

Torque screwtool - A-MDC001

30 Newtons. cm Must be used with ratchet wrench.

Hexagonal tip for torque wrench - A-ECD006

Tip for torque contra-angle - ET600

Angulation kit - KP201
**Prosthetic kit - A-TP001**

*Composition:*

- **Torque wrench** – Torque strength 30N.cm
- **Hexagonal tip** for torque wrench
- **Short hexagonal screwdriver**
- **Long hexagonal screwdriver**
- **Short hexagonal screw(tool)**
- **Long hexagonal screw(tool)**
- **0° abutment** angulation kit
- **15° abutment** angulation kit
- **25° abutment** angulation kit
- **Prosthetic box**

**Osteotome kit - A-TO001**

*Composition:*

- **Straight handle** for osteotome
- **Curved handle** for osteotome
- **Tip** for osteotome – Needle #1
- **Straight tip** for Ø 3.5 mm cylindrical implants
- **Straight tip** for Ø 4 mm cylindrical implants
- **Straight tip** for Ø 5 mm cylindrical implants
- **Curved tip** for Ø 3.5 mm conical implants
- **Curved tip** for Ø 4 mm conical implants
- **Curved tip** for Ø 5 mm conical implants
- **Box** for osteotomes
Titanium abutment 0°, 15°, 25°

Plastic castable or cast-to gold abutment

Direct or indirect transfer

Analog

Conical base or spherical base

Conical or spherical analog

Direct or indirect conical transfer

Conical base

Cemented crown and bridge prosthetic application

Fixed detachable prosthetic application

Overdenture prosthetic application
1 stage implant with zirconia-titanium collar - internal octagonal connection

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- Prosthetic accessories: p 23
- Prosthetic protocol: p 25
Z1-CONNECT SYSTEM
1 surgical stage implants - zirconia-titanium collar

Z1-Connect implant: diameter 3.5 mm – height of the trans-gingival collar: 1.5 mm

Z1-Connect implant: diameter 4 mm – height of the trans-gingival collar: 1.5 mm

Z1-Connect implant: diameter 5 mm – height of the trans-gingival collar: 1.5 mm

Cover cap

For implants Ø 3.5 and 4 mm

For implants Ø 5 mm

<table>
<thead>
<tr>
<th>Height 3 mm</th>
<th>Height 5 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZC-VT530</td>
<td>ZC-VT550</td>
</tr>
<tr>
<td>ZC-VT630</td>
<td>ZC-VT650</td>
</tr>
</tbody>
</table>
**Z1-Connect implant**: diameter 3.5 mm – height of the trans-gingival collar: 2.5 mm

- Ø 3.5 mm
  - L: 8 mm
  - L: 10.5 mm
  - L: 13 mm
  - L: 15.5 mm
  - ZHX308
  - ZHX310
  - ZHX313
  - ZHX315

**Z1-Connect implant**: diameter 4 mm – height of the trans-gingival collar: 2.5 mm

- Ø 4 mm
  - L: 8 mm
  - L: 10.5 mm
  - L: 13 mm
  - L: 15.5 mm
  - ZHX408
  - ZHX410
  - ZHX413
  - ZHX415

**Z1-Connect implant**: diameter 5 mm – height of the trans-gingival collar: 2.5 mm

- Ø 5 mm
  - L: 8 mm
  - L: 10.5 mm
  - L: 13 mm
  - L: 15.5 mm
  - ZHX508
  - ZHX510
  - ZHX513
  - ZHX515

**Comments**: ZT-Hybrid body surface: smooth zirconia collar
Every implant is delivered with a surgical healing screw (see list page 17)
**Surgical Protocol**

**Drilling protocol**

*Note*: The implant choice (diameter and length) will be done thanks to the T.B.R.® Zirconnect® scanora and X-ray template (notice of the 1.0 mm drills point when you are evaluating the available bone height).

1. Initiate crestal bone penetration with the round pilot drill
2. Use the stop drill #1 adapted to the implant length

**Contra-angle protocol**

6a - Take the screwtool for the contra-angle and clamp the implant inside its housing. Maintain the contra-angle up when the implant is moved to the surgical site
7a - Insert the implant into the prepared site until the end of the most coronal microthread
8a - Vertically remove the contra-angle and the contra-angle screwtool

**Ratchet wrench protocol**

6b - Take the screwtool and clamp the implant inside its housing. Maintain the screwtool up when the implant is moved to the surgical site
7b - Begin to manually insert the implant into the prepared site
8b - Complete the implant insertion with the ratchet wrench until the end of the most coronal microthread

---

**Drilling Protocol**

1. Initiate crestal bone penetration with the round pilot drill
2. Use the stop drill #1 adapted to the implant length

**Contra-angle protocol**

6a - Take the screwtool for the contra-angle and clamp the implant inside its housing. Maintain the contra-angle up when the implant is moved to the surgical site
7a - Insert the implant into the prepared site until the end of the most coronal microthread
8a - Vertically remove the contra-angle and the contra-angle screwtool

**Ratchet wrench protocol**

6b - Take the screwtool and clamp the implant inside its housing. Maintain the screwtool up when the implant is moved to the surgical site
7b - Begin to manually insert the implant into the prepared site
8b - Complete the implant insertion with the ratchet wrench until the end of the most coronal microthread
SURGICAL PROTOCOL

3 - Use drill #2 up to the required mark

4 - Use the drill:
#3 for Ø 3.5 implants
#3 then 4 for Ø 4 implants
#3, 4 then 5 for Ø 5 implants

5 - Use screw tap Ø 3.5 for Ø 3.5 implants
Use screw tap Ø 4 for Ø 4 implants
Use screw tap Ø 5 for Ø 5 implants

Note: If the implant insertion is not complete with the contra-angle, finalize the insertion with the ratchet wrench and its screw-tool.

9a - Take the cover screw out of its housing. Maintain the screwdriver up while the screw is moved to the surgical site. Seal the implant with the cover screw

10a - Suture the gingiva

9b - Remove the ratchet wrench and vertically remove the screw-tool

10b - Take the cover screw out of its housing. Maintain the screwdriver up while the screw is moved to the surgical site. Seal the implant with the cover screw

11b - Suture the gingiva
Z1-CONNECT SYSTEM

Titanium abutment + screw

Plastic castable screw-retained abutment + screw

Gold cast-to screw-retained abutment + screw with plastic sleeve

Screw-retained conical head

8 possible positions—Anti-unscrewing system.

Anti-unscrewing system.

Anti-unscrewing system.

Titanium base + castable ring + screw.

COMMENTS: Anti-unscrewing system: the system is activated with a 30 Newtons·cm torque (use the torque wrench, or torque screwtool see p.13).
**PROSTHETIC COMPONENTS**

### Castable bar

<table>
<thead>
<tr>
<th>Component</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Castable bar</td>
<td>BC019</td>
</tr>
</tbody>
</table>

### Clip

<table>
<thead>
<tr>
<th>Component</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel clip</td>
<td>CA020</td>
</tr>
<tr>
<td>Gold clip</td>
<td>CO020</td>
</tr>
</tbody>
</table>

### Spherical attachment

### Cap

<table>
<thead>
<tr>
<th>Component</th>
<th>Height</th>
<th>For all implant diameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spherical</td>
<td>5 mm</td>
<td>O-ASC550</td>
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</tbody>
</table>

### O’ring

<table>
<thead>
<tr>
<th>Component</th>
<th>Height</th>
<th>For all implant diameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>O’ring</td>
<td>5 mm</td>
<td>O-ASO550</td>
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</table>

### Temporary abutment

<table>
<thead>
<tr>
<th>Component</th>
<th>For all implant diameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temporary abutment</td>
<td>ZC-MP000</td>
</tr>
</tbody>
</table>
PROSTHETIC ACCESSORIES

Implant analog

For Ø 3.5 mm and 4 mm implants: O-RL500
For Ø 5 mm implants: O-RL600

Conical head analog

For Ø 3.5 mm and 4 mm implants: HP400
For Ø 5 mm implants: HP500

Spherical attachment analog

For all implant diameters: HAS001

Copping for screw-retained abutment

<table>
<thead>
<tr>
<th></th>
<th>0°</th>
<th>15° and 25°</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Ø 3.5 mm and 4 mm implants</td>
<td>CZ400</td>
<td>CZ401</td>
</tr>
<tr>
<td>For Ø 5 mm implants</td>
<td>CZ500</td>
<td>CZ501</td>
</tr>
</tbody>
</table>

For an easy and accurate laboratory impression

Laboratory screw

For all implant diameters: VTD185
PROSTHETIC ACCESSORIES

Transfer - SwissClip technique

Transfer - direct technique: Pick-up

Transfer - indirect technique: Pop-in

Transfer for conical head - indirect technique: Pop-in

Transfer for conical head - direct technique: Pick-up
Transfer SwissClip technique

Transfer Indirect technique (Pop-in)

Transfer Direct technique (Pick-up)

Cemented crown and bridge application. Titanium

Cemented crown and bridge application. Plastic castable screw-retained abutment.

Cemented crown and bridge application. Gold cast-to screw-retained abutment with plastic sleeve
Fixed detachable prosthetic application with plastic castable screw-retained abutment

Indirect transfer for conical head

Direct transfer for conical head

Fixed detachable prosthetic application conical head

Castable bar conical head

Spherical attachment
Fixed detachable prosthetic application with gold cast-to screw-retained abutment with plastic sleeve.
Titanium abutment
0°, 15°, 25°

MCB
0°, 15°, 25°

Plastic castable or cast-to gold abutment

Plastic castable or cast-to gold abutment

Plastic castable or cast-to gold copping

Cap or O’ring

Analog

Direct or indirect transfer

Conical or spherical analog

Conical or spherical analog

Conical or spherical analog

Conical base (+ healing cap)

Overdenture prosthetic application

Fixed detachable prosthetic application

Cemented crown and bridge prosthetic application

Direct or indirect conical transfer
System with internal octagonal connection

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Surgical protocol ............................................................................. p 33
Prosthetic components ................................................................. p 35
Prosthetic accessories ................................................................. p 39
Prosthetic protocol ........................................................................ p 41
CONNECT SYSTEM
conic-shaped screw implants

Connect implant - diameter 3.5 mm

Connect implant - diameter 4 mm

Connect implant - diameter 5 mm

COMMENTS: ZT-Hybrid body surface: sandblasted and acid-etched with a machined collar. Every implant is delivered with a surgical cover screw.
**Healing screw - Height 3 mm**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Height</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø 3.5 mm</td>
<td>3 mm</td>
<td>HO-VT330</td>
</tr>
<tr>
<td>Ø 4 mm</td>
<td>3 mm</td>
<td>HO-VT430</td>
</tr>
<tr>
<td>Ø 5 mm</td>
<td>3 mm</td>
<td>HO-VT530</td>
</tr>
</tbody>
</table>

**Healing screw - Height 5 mm**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Height</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø 3.5 mm</td>
<td>5 mm</td>
<td>HO-VT350</td>
</tr>
<tr>
<td>Ø 4 mm</td>
<td>5 mm</td>
<td>HO-VT450</td>
</tr>
<tr>
<td>Ø 5 mm</td>
<td>5 mm</td>
<td>HO-VT550</td>
</tr>
</tbody>
</table>

**Healing screw - Height 7 mm**

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<tr>
<th>Diameter</th>
<th>Height</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø 3.5 mm</td>
<td>7 mm</td>
<td>HO-VT370</td>
</tr>
<tr>
<td>Ø 4 mm</td>
<td>7 mm</td>
<td>HO-VT470</td>
</tr>
<tr>
<td>Ø 5 mm</td>
<td>7 mm</td>
<td>HO-VT570</td>
</tr>
</tbody>
</table>

**COMMENTS**: The healing screws are graduated every 2 mm to enable to evaluate gingival thickness.
**Drilling protocol**

*Note:* The implant choice (diameter and length) will be done thanks to the T.B.R.® Zirconnect® scanora and X-ray template (notice of the 1.0 mm drills point when you are evaluating the available bone height).

1. Initiate crestal bone penetration with the round pilot drill
2. Use the stop drill #1 adapted to the implant length

**Contra-angle protocol**

6a. Take the screwtool for the contra-angle and clamp the implant inside its housing. Maintain the contra-angle up when the implant is moved to the surgical site
7a. Insert the implant into the prepared site until the end of the most coronal microthread
   *Note:* It is recommended not exceed a tightening torque above 50 Ncm
8a. Vertically remove the contra-angle and the contra-angle screwtool

**Ratchet wrench protocol**

6b. Take the screwtool and clamp the implant inside its housing. Maintain the screwtool up when the implant is moved to the surgical site
7b. Begin to manually insert the implant into the prepared site
   *Note:* It is recommended not exceed a tightening torque above 50 Ncm
8b. Complete the implant insertion with the ratchet wrench until complete burying on bone
SURGICAL PROTOCOL

3 - Use drill #2 up to the required mark

4 - Use the drill:
#3 for Ø 3.5 implants
#3 then 4 for Ø 4 implants
#3, 4 then 5 for Ø 5 implants

5 - Use screw tap Ø3,5 for Ø3,5 implants
Use screw tap Ø4 for Ø4 implants
Use screw tap Ø5 for Ø5 implants

Note: If the implant insertion is not complete with the contra-angle, finalize the insertion with the ratchet wrench and its screw-tool

9a - Take the cover screw out of its housing. Maintain the screwdriver up while the screw is moved to the surgical site. Seal the implant with the cover screw

10a - Suture the gingiva

9b - Remove the ratchet wrench and vertically remove the screw-tool

10b - Take the cover screw out of its housing. Maintain the screwdriver up while the screw is moved to the surgical site. Seal the implant with the cover screw

11b - Suture the gingiva
**CONNECT SYSTEM**

**Titanium abutment** - non shouldered abutment + screw

8 possible positions – Anti-unscrewing system

<table>
<thead>
<tr>
<th>Shoulder height in mm</th>
<th>0°</th>
<th>15°</th>
<th>25°</th>
</tr>
</thead>
<tbody>
<tr>
<td>For implants Ø 3.5 mm</td>
<td>O-MT300</td>
<td>O-MT301</td>
<td>O-MT302</td>
</tr>
<tr>
<td>For implants Ø 4 mm</td>
<td>O-MT400</td>
<td>O-MT401</td>
<td>O-MT402</td>
</tr>
<tr>
<td>For implants Ø 5 mm</td>
<td>O-MT500</td>
<td>O-MT501</td>
<td>O-MT502</td>
</tr>
</tbody>
</table>

**Titanium abutment** + screw - shoulder height 2 or 4 mm

8 possible positions – Anti-unscrewing system

<table>
<thead>
<tr>
<th>Shoulder height in mm</th>
<th>0°</th>
<th>15°</th>
<th>25°</th>
</tr>
</thead>
<tbody>
<tr>
<td>For implants Ø 3.5 mm</td>
<td>O-MT320</td>
<td>O-MT340</td>
<td>O-MT322</td>
</tr>
<tr>
<td>For implants Ø 4 mm</td>
<td>O-MT420</td>
<td>O-MT440</td>
<td>O-MT421</td>
</tr>
<tr>
<td>For implants Ø 5 mm</td>
<td>O-MT520</td>
<td>O-MT540</td>
<td>O-MT521</td>
</tr>
</tbody>
</table>

**Plastic castable screw-retained** abutment + screw

Anti-unscrewing system

| For implants Ø 3.5 mm | O-MC300 |
| For implants Ø 4 mm  | O-MC400 |
| For implants Ø 5 mm  | O-MC500 |

**Gold cast-to screw-retained** abutment + screw with plastic sleeve

Anti-unscrewing system

| For implants Ø 3.5 mm | O-MS300 |
| For implants Ø 4 mm  | O-MS400 |
| For implants Ø 5 mm  | O-MS500 |

**COMMENTS** : Anti-unscrewing system : the system is activated with a 30 Newtons . cm torque (use the torque wrench, or torque screwtool see p.13).
PROSTHETIC COMPONENTS

MCB abutment : aesthetic line

**MCB : Zirconia titanium ring** - Shoulder height : 2,5 mm + screw

<table>
<thead>
<tr>
<th>×°</th>
<th>0°</th>
<th>15°</th>
<th>25°</th>
</tr>
</thead>
<tbody>
<tr>
<td>For implants Ø 3.5 mm</td>
<td>CO-MZ320</td>
<td>CO-MZ321</td>
<td>CO-MZ322</td>
</tr>
<tr>
<td>For implants Ø 4 mm</td>
<td>CO-MZ420</td>
<td>CO-MZ421</td>
<td>CO-MZ422</td>
</tr>
<tr>
<td>For implants Ø 5 mm</td>
<td>CO-MZ520</td>
<td>CO-MZ521</td>
<td>CO-MZ522</td>
</tr>
</tbody>
</table>

8 possible positions – Anti-unscrew

**MCB : Zirconia titanium ring** - Shoulder height : 3,5 mm + screw

<table>
<thead>
<tr>
<th>×°</th>
<th>0°</th>
<th>15°</th>
<th>25°</th>
</tr>
</thead>
<tbody>
<tr>
<td>For implants Ø 3.5 mm</td>
<td>CO-MZ330</td>
<td>CO-MZ331</td>
<td>CO-MZ332</td>
</tr>
<tr>
<td>For implants Ø 4 mm</td>
<td>CO-MZ430</td>
<td>CO-MZ431</td>
<td>CO-MZ432</td>
</tr>
<tr>
<td>For implants Ø 5 mm</td>
<td>CO-MZ530</td>
<td>CO-MZ531</td>
<td>CO-MZ532</td>
</tr>
</tbody>
</table>

8 possible positions – Anti-unscrew

**MCB : Castable ring + screw**

**MCB : Castable ring** with overflow ring + screw

**MCB : Castable ring** with overflow ring + screw

<table>
<thead>
<tr>
<th>×°</th>
<th>0°</th>
<th>15°</th>
<th>25°</th>
</tr>
</thead>
<tbody>
<tr>
<td>For implants Ø 3.5 mm</td>
<td>CO-MZC320</td>
<td>CO-MZC320</td>
<td>CO-MZC320</td>
</tr>
<tr>
<td>For implants Ø 4 mm</td>
<td>CO-MZC420</td>
<td>CO-MZC420</td>
<td>CO-MZC420</td>
</tr>
<tr>
<td>For implants Ø 5 mm</td>
<td>CO-MZC520</td>
<td>CO-MZC520</td>
<td>CO-MZC520</td>
</tr>
</tbody>
</table>

Anti-unscrewing system
Plastic castable screw-retained

Gold cast-to screw-retained

Conical head protection cap

Castable bar

Clip
**PROSTHETIC COMPONENTS**

**Spherical attachment**

**Cap O’ring**

**O’ring**

**Universal titanium screw-retained abutment**

**Temporary screw-retained abutment**

**Bridge type screw-retained castable abutment**

**Castable abutment to be cemented**
PROSTHETIC ACCESSORIES

Implant analog

For implants Ø 3.5 mm | O-RL300
For implants Ø 4 mm | O-RL400
For implants Ø 5 mm | O-RL500

Conical head analog

For implants Ø 3.5 mm | HO-HP300
For implants Ø 4 mm | HP400
For implants Ø 5 mm | HP500

Spherical attachment analog

For all implant diameters | HAS001

Copping for titanium shouldered abutments

<table>
<thead>
<tr>
<th>Ø</th>
<th>0°</th>
<th>15° and 25°</th>
</tr>
</thead>
<tbody>
<tr>
<td>For implants Ø 3.5 mm</td>
<td>HO-TC300</td>
<td>HO-TC301</td>
</tr>
<tr>
<td>For implants Ø 4 mm</td>
<td>HO-TC400</td>
<td>HO-TC401</td>
</tr>
<tr>
<td>For implants Ø 5 mm</td>
<td>HO-TC500</td>
<td>HO-TC501</td>
</tr>
</tbody>
</table>

Copping for MCB abutment

For implants Ø 3.5 and 4 mm
<table>
<thead>
<tr>
<th>Ø</th>
<th>0°</th>
<th>15° and 25°</th>
</tr>
</thead>
<tbody>
<tr>
<td>For implants Ø 5 mm</td>
<td>CZ400</td>
<td>CZ401</td>
</tr>
<tr>
<td>For implants Ø 5 mm</td>
<td>CZ500</td>
<td>CZ501</td>
</tr>
</tbody>
</table>

For an easy and accurate laboratory impression

Laboratory screw

For all implant diameters | VTD185
PROSTHETIC ACCESSORIES

Transfer - SwissClip technique

Transfer - indirect technique: Pop-in

Transfer - direct technique: Pick-up

Transfer for conical head - indirect technique: Pop-in

Transfer for conical head - direct technique: Pick-up

---

**For implants Ø 3,5 mm**
- O-TDC300
- O-TI300
- O-TD300

**For implants Ø 4 mm**
- O-TDC400
- O-TI400
- O-TD400

**For implants Ø 5 mm**
- O-TDC500
- O-TI500
- O-TD500

---

**For implants Ø 3,5 mm**

**For implants Ø 4 mm**

**For implants Ø 5 mm**

---

**For implants Ø 3,5 mm**
- HO-TIP300
- HO-TDP300

**For implants Ø 4 mm**
- TIP400
- TDP400

**For implants Ø 5 mm**
- TIP500
- TDP500
Transfer SwissClip technique

Transfer Indirect technique (Pop-in)

Transfer Direct technique (Pick-up)

Cemented crown and bridge application. Titanium or MCB abutment

Cemented crown and bridge application. Plastic castable screw-retained abutment.

Cemented crown and bridge application. Gold cast-to screw-retained abutment with plastic sleeve
PROSTHETIC PROTOCOL

Transfer Indirect technique (Pop-in)

Transfer Direct technique (Pick-up)
Fixed detachable prosthetic application with plastic castable screw-retained abutment

Indirect transfer for conical head

Direct transfer for conical head

Fixed detachable prosthetic application conical head

Castable bar conical head

Spherical attachment
Fixed detachable prosthetic application with gold cast-to screw-retained abutment with plastic sleeve.
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