Your system for safe handling & success in implantology!

Trias® Implant System
The main advantage of the Trias® implant system is its simplicity as far as the surgical and prosthetic procedures are concerned – this reduces medical costs and at the same time optimizes the success prognosis.

Trias® has an intelligent thread structure: The extension lamellae in the shoulder area provide a reduction of heat generation during insertion and an excellent primary stability. The circular grooves on the outer implant surface optimize osseointegration. There is a smooth transition between compression thread and tapping thread in the apical area. As a result of the slight enlargement of the compression thread diameter compared to the diameter in the cortical area an optimal compression of the cancellous bone is achieved. The central screw has an undercut that allows pre-fixation of the screw in the abutment. This way the screw can not be lost before it is tightened.

Not only platform switching possibilities and a tube-in-tube design but also a complete range of prosthetic components make Trias® your system for safe handling and success in implantology.

1. Planning

The preprosthetic and preoperative diagnostics include a detailed anamnesis and a thorough clinical examination. Important parameters to be assessed are: width of the attached gingiva at the prospective implant site, width and shape of the alveolar processus and localisation of sensitive anatomical structures adjacent to the probable implant position. The objective is to place the implant in a prosthetically favourable position taking into account the anatomy and bone physiology (ideal position: the implant should be surrounded by at least 1 mm of vital bone). Study casts of both jaws should be made and analyzed since this is the only way to determine the correct position and inclination of the implants. Diagnostic set up will provide a basis for the fabrication of a template which can be used for diagnostics (radiography) and the transfer of desired implant positions to the jaws.
2. Tools and Instruments

**Depth gauge**

Check of the drilling depth. Depth markers from 8 to 16mm.

**Torque ratchet**

With this ratchet the torque can be set progressively from 10-40Ncm. It is used to fix the implants in their final position (40Ncm) as well as winding in various prosthetic components (25Ncm).

**Universal insertion tool and insertion tool for contra angle**

The octagonal part can be used for insertion of the implants, the hexagonal part is used for fixing all of the prosthetic components. As an option the universal insertion tool is available in a “molar” version. In addition an insertion tool for contra angle is also available.

3. Preparation of the implant bed

After conservative opening of the gingiva the location of the implant is determined using the round drill or the cortical drill.

The definitive implant depth is now determined with the twist drill (ø 2mm). For this purpose the twist drill has depth marks matching the available implant lengths (8, 10, 12, 14, 16mm).

Using a 2-calibre drill the diameter of the cavity is then increased to 3mm. Due to the rounded tip of the 2-calibre drill the cavity depth remains unchanged.

After this the cavity diameter is increased again, step by step, using the final drill next in size in each case, up to the desired implant diameter. All final drills have drill stops so that only the correct length has to be observed. The special cutting blade geometry enables autologous bone material to be harvested.

> Abundant and continuous rinsing with cool, sterile saline solution must be performed. Also, applying too much pressure during preparation of the implant bed must be avoided, especially for diameter 5mm.
4. Implant placement

The following steps are performed:

- Insertion of the implant using the transport pin (1-2 turns).
- Removal of the transport pin.
- Screwing the implant into the final position using a universal insertion tool, torque ratchet or hand piece with the corresponding adapter. (In cases when the teeth are close together the hand piece adapter can be fitted with the drill extension or the universal insertion tool “long version” can be used.)
- Verification of the implant position with a prosthetic abutment.
- Removal of the healing screw from the transport pin using a universal insertion tool and screwing it into the implant. Wound closure by interrupted or mattress suture.
- Postoperative x-ray, prescription of medication and patient recalls.

5. Implant exposure, impression taking and gingiva forming

Following the implant exposure using a scalpel or mucosal punch the healing screw is removed.

By means of impression posts the impression is taken using closed tray or the open tray impression technique. For closed tray impressions the central screw is used which is compatible to all abutment types. For open tray impressions a special screw is available.

The impression is followed by forming the gingiva using gingiva shapers that are available in different sulcus heights. The gingiva shapers remain on the implant for 10 to 14 days.

6. Prosthetics

The Trias® system provides practitioners with a wide range of restorative options, including support for single tooth crowns, bridges, fixed prostheses and prostheses that are removable by the dentist or the patient as well as attachments for securing overdentures. The Trias® system has been developed to meet the diverse needs of patients and to offer practitioners a choice of restorative techniques customized to meet each individual’s requirements.
Trias® Implant System

Preparation

- Gingiva forming
- Impression taking
- Master cast preparation

Temporary treatment

- Temporary acrylic abutment

Final treatment

- Titanium abutment
- Plastic sleeves (as an option)
- Titanium abutment 0° (Standard Profile)
- Titanium abutment 0° (Emergency Profile)
- Titanium abutment 15° (Emergency Profile)
- Titanium abutment 25° (Emergency Profile)
- Individual titanium abutment
- Ti-base for ZrO2 abutments

Restorations with:

Self-locating anchor systems

- Locator® abutment
- Prosthetic kit for Locator® abutments

Magnetic abutment systems

- Dyna Magnetic abutment
- Magnet S3, removal force 300g
- Magnet S5, removal force 500g

Ball anchor systems

- Ball abutment, ball diam. 1.8mm
- Prosthetic kit for ball abutments, ball diam. 1.8mm
- Ball abutment, ball diam. 2.5mm
- Prosthetic kit for ball abutments, ball diam. 2.5mm

Bar restorations

- Bar segment incl. connector and bar screw

Restorations with shock absorber systems

- Tsa® abutment for fixed dentures
- Tsa® abutment for removable dentures
- Female for Tsa® abutments

1) Dyna Dental Engineering B.V., the Netherlands, 4600 Bergen Op Zoom
2) Locator® is a registered trademark of Zest Anchors Inc., USA, 2029 CA Escondido
3) Tsa® abutment is manufactured by BaneCare® GmbH, Germany, 86150 Augsburg
CAVE:

The implantation and all corresponding procedures are based on the principle of lege artis. For courses, training and information about the Trias® implant system please ask Servo-Dental. It is mandatory that the criteria for the selection of patients (indications and contraindications) are strictly observed before using Trias® implants. The practitioner has to ensure adequate operative skills and sterile conditions for endosseous implantations as well as for precise and proper restorations. He is also responsible for the qualification of the assistants. Product illustrations may differ from the original parts.