INTERNAL HEX Implants
Product Catalogue
Southern Implants is a leading provider of unique and innovative dental implant products with a focus on top-end professional users who want more choices. Southern’s expertise in research, development and manufacturing of dental implants allows us to provide Innovative Treatment Solutions that will reduce treatment times and improve patient outcomes.

Striving for excellence and meeting customer needs, has led to our wide product range characterized by Unique and Innovative products which include:

- Multiple interfaces, to suit customer preference.
- INVERTA™ implant, featuring a body-shift design, engineered for primary stability and suitable for immediate loading.
- Co-Axis®, sub-crestal angle correcting implant, available in angulations of 12, 24 & 36° and various internal and external connections.
- MAX implant, specifically designed for immediate molar tooth replacement.
- The ZYGAN and ZYGEX implants for severely resorbed maxilla and craniofacial reconstruction.

Our product portfolio is in synchronized evolution with protocol improvements and technological advances.

My sincere thanks to all specialists, dentists and technicians who put their trust in our company.

Graham Blackbeard
Managing Director, Southern Implants
NOTE:  • Images are for illustration purposes only and do not necessarily accurately represent the product.
  • All dimensions in this catalogue are in mm, unless otherwise specified.
  • Not all products are cleared for sale in all countries.
INTERNAL HEX

Ø3.75mm / Ø4.2mm / Ø5.0mm
**Implants are available in lengths of:**

<table>
<thead>
<tr>
<th>ITEM CODE</th>
<th>TAPERED</th>
<th>IMPLANT LENGTHS (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM-T3708</td>
<td></td>
<td>8.0</td>
</tr>
<tr>
<td>IM-T3710</td>
<td></td>
<td>10.0</td>
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<tr>
<td>IM-T3711</td>
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<tr>
<td>IM-T3713</td>
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<tr>
<td>IM-T4208</td>
<td></td>
<td>8.0</td>
</tr>
<tr>
<td>IM-T4210</td>
<td></td>
<td>10.0</td>
</tr>
<tr>
<td>IM-T4211</td>
<td></td>
<td>11.5</td>
</tr>
<tr>
<td>IM-T4213</td>
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<tr>
<td>IM-T4215</td>
<td></td>
<td>15.0</td>
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<tr>
<td>IM-T5013</td>
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<td>13.0</td>
</tr>
<tr>
<td>IM-T5015</td>
<td></td>
<td>15.0</td>
</tr>
</tbody>
</table>

**Surgical Components**

<table>
<thead>
<tr>
<th>Cover Screw</th>
<th>Healing Abutments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS-M</td>
<td>HA-M-37</td>
</tr>
<tr>
<td></td>
<td>Ø3.7 3/4/6 lengths</td>
</tr>
<tr>
<td>HA-M-45</td>
<td>Ø4.5 3/4/6 lengths</td>
</tr>
<tr>
<td>HA-M-55</td>
<td>Ø5.5 3/4/6 lengths</td>
</tr>
</tbody>
</table>

NOTE: Implant dimensions and information - page 22
Prosthetic Flowchart

Direct

Healing Abutments
- HA-M-37
- HA-M-45
- HA-M-55

Impression Copings
- ICT-M
- IC-M
- ICT-MW

Laboratory Analogues
- LA-M
- DIRECT Abutments

Prosthetic Components
- TC-M (non-engaging)
- GC-EM (non-engaging)
- PKC-M-2 (non-engaging)

Retaining Screws
- TS-Z-18
- TCA-M (engaging)
- TCA12-M (engaging)

Titanium Abutments
- TIB-M (engaging)
- TIB-NM (engaging)
- CAB-NM (engaging)
- CIA-EW (engaging)

Gold Abutments
- TCA24-M (engaging)
- CAB-NM (engaging)

PEEK Abutments
- PA-EM-5 (engaging)
- PA-NM-5 (engaging)

Titanium (1.27 mm)
- Gold (Gold)
- Brass (1.27 mm)

Indirect

Compact Conical Abutments
- WC-M
- MC-M-30d°
- MC-M-50d°

HMC
- CMC1
- CMC2
- SFT-MC-48
- LAD-MC

CMC1 (integrated)
- LAD-MC (digital
analogue)

GMC1
- TMC1/5
- PA-MC-48 (passive abutment)

Gold
- Titanium
- Titanium (long version)
- PEEK

1 Series Screws
- PA-M-18T
- PA-Z-18G
- PA-M-18B°

NOTE: Refer to CAT-1189 for Equator Overdenture options.
Site Preparation Sequence

Ø3.7mm Tapered (IM-T37)

Ø4.2mm Tapered (IM-T42)

Ø5.0mm Tapered (IM-T50)

(All Illustrations are for 13mm implants)

NOTE: • Site preparation sequence recommended by Southern Implants does not replace the judgement and experience of the surgeon.
• Refer to page 16 for the Fixture Mount Removal Protocol.

Instrumentation

<table>
<thead>
<tr>
<th>Placement Tool</th>
<th>Converters</th>
<th>Drivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-HM-S / M / L</td>
<td>I-WI-CST</td>
<td>I-HD-22U-S/M/L</td>
</tr>
<tr>
<td>I-WI-M-S / M / L</td>
<td>I-WI-SS</td>
<td>I-QDI-5/S/M/L</td>
</tr>
</tbody>
</table>

Wrench Insert

For Handpiece inserts (Latch-type) featuring the W&H hex

For SQUARE connection of fixture mounts and Instruments

1.22 Universal Hex Driver

Quad Driver

NOTE: • Refer to CAT-1155 for more information on wrench insert converters
• Most instruments are available in various lengths
**Ø4.2mm Co-Axis® Implants (Tapered)**

![Image of Implant](image)

**Implants are pre-mounted and available in lengths of:**

<table>
<thead>
<tr>
<th>ITEM CODE</th>
<th>IMPLANT LENGTHS (in mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L1</td>
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<tr>
<td>IM-T4208-12d</td>
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<tr>
<td>IM-T4210-12d</td>
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<tr>
<td>IM-T4211-12d</td>
<td>11.5</td>
</tr>
<tr>
<td>IM-T4213-12d</td>
<td>13.0</td>
</tr>
<tr>
<td>IM-T4215-12d</td>
<td>15.0</td>
</tr>
<tr>
<td>IM-T4218-12d</td>
<td>18.0</td>
</tr>
</tbody>
</table>

**NOTE:** Implant dimensions and information - page 22

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**Surgical Components**

<table>
<thead>
<tr>
<th>Cover Screw</th>
<th>Healing Abutments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS-M</td>
<td>HA-M-37</td>
</tr>
<tr>
<td><img src="image" alt="Image of CS-M" /></td>
<td><img src="image" alt="Image of HA-M-37" /></td>
</tr>
</tbody>
</table>

3/4/6 lengths | 3/4/6 lengths | 3/4/6 lengths
Prosthetic Flowchart

Direct

Healing Abutments
- CS-M
- HA-M-37
- HA-M-45
- IM-T42-12d

Impression Copings
- ICT-M (internal)
- IC-M (translucent)
- HA-M-45

Laboratory Analogues
- LAM
- TITANIUM Abutments
- TCA-M (titanium)
- TCA12-M
- TCA24-M
- Titanium

Prosthetic Components
- TC-M (titanium)
- GC-EM (ceramic)
- PKC-M-2 (ceramic)
- Gold
- PEEK

Retaining Screws
- TS-2-18
- GS-0-18
- BS-2-18

Indirect

Compact Conical Abutments
- HMC
- CMC1 (internal)
- CMC2 (internal)
- LSMC1
- SFT-MC-48 (scanning flag)
- LAD-MC

Passive Abutment Screws
- PA-EM-5 (titanium)
- PA-NM-5 (not-engaging)
- PA-M-18T
- PA-M-18G
- Titanium
- Gold

NOTE: Refer to CAT-1189 for Equator Overdenture options.
## Site Preparation Sequence

**Ø4.2mm Tapered Co-Axis® (IM-T42-12d)**

(Illustration is for 13mm implants)

**NOTE:**
- Site preparation sequence recommended by Southern Implants does not replace the judgement and experience of the surgeon.
- Refer to page 16 for the Fixture Mount Removal Protocol.

### Instrumentation

#### Placement Tool

<table>
<thead>
<tr>
<th>Placement Tool</th>
<th>Converters</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-HM-S / M / L</td>
<td>I-WI-CST</td>
</tr>
<tr>
<td>I-WI-M-S / M / L</td>
<td>I-WI-SS</td>
</tr>
</tbody>
</table>

- For Handpiece inserts (Latch-type) featuring the W&H Hex
- For SQUARE connection of fixture mounts and instruments

#### Drivers

<table>
<thead>
<tr>
<th>Drivers</th>
<th>Final tapered drill position</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-HD-22U-S/M/L</td>
<td>PLEASE NOTE: Point 1 This corner of the drill is to be at bone level.</td>
</tr>
<tr>
<td>I-QDI-S/M/L</td>
<td>Point 2 This corner of the drill will be subcrestal.</td>
</tr>
</tbody>
</table>

**NOTE:**
- Refer to CAT-1155 for more information on wrench insert converters
- Most instruments are available in various lengths
PLATFORM MATCHED PROSTHETICS

for Ø5mm implants
In applications of the Internal Hex Ø5mm implants, for single posterior teeth, where the patient is known to have a very strong bite force, the clinician may choose to follow this “Platform Matched” approach. This approach uses the implant platform, in order to give the single tooth prosthetics greater stability.

**Warning:** These Platform Matched Prosthetics are not compatible with Internal Hex Ø3.7mm/ Ø4.2mm implants or Internal Hex Co-Axis™ Ø4.2mm implants.

### Compatible with:

<table>
<thead>
<tr>
<th>ITEM CODE TAPERED</th>
<th>IMPLANT LENGTHS (in mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM-T5008</td>
<td>8.0</td>
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<tr>
<td>IM-T5013</td>
<td>13.0</td>
</tr>
<tr>
<td>IM-T5015</td>
<td>15.0</td>
</tr>
</tbody>
</table>

**NOTE:** Implant dimensions and information - page 22

### Surgical Components

<table>
<thead>
<tr>
<th>Cover Screw</th>
<th>Healing Abutments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS-M</td>
<td>HA-M-P45</td>
</tr>
</tbody>
</table>

Ø4.5

3/4/6 lengths
**Prosthetic Flowchart**

**Direct**

- **Healing Abutments**
  - CS-M
  - IM-T50

- **Impression Copings**
  - HA-M-P45 (titanium)
  - ICT-MW-P45 (titanium)

- **Laboratory Analogues**
  - LA-M-P45

- **Prosthetic Components**
  - TBI-M-P45 (engaging)
  - CAB-M-P45 (engaging)

- **Retaining Screws**
  - TS-Z-18 (titanium 1.27 hex)
  - GS-18 (gold)
  - BS-Z-18 (brass 1.27 hex)

**Insertion Tool Depth Markings**

- **IHML** used for illustration purposes
- **IWML** used for illustration purposes

**NOTE:**
- Laser markings at 3mm, 5mm, 6mm and 9mm from implant platform.
- Refer to CAT-1201 for Insertion Tool markings and depths.

**Important:** The PEEK bits (I-PBIT-L18) should be replaced on a regular basis. General wear & tear are to be expected with regular use. Items sold separately.
Twist Drill Markings

CAUTION: When drilling close to crucial anatomical landmarks, consider that the drill preparation site may be up to 1mm deeper than the corresponding implant length.

INSERTION TOOL PROTOCOL

Implant Placement Procedure for Straight Internal Hex implants

1. The tool I-HM-S / M / L is used to pick up the implant from the packaging.

2. The hexagon of the insertion tool in the implant must be fully engaged before torque is applied, to prevent any damage [The hexagon is fully engaged when the straight portion of the hexagon tool is almost completely sunken in the implant (fig. 1)].

3. The implant is placed in the prepared site and screwed in with a motor unit at 15rpm while applying downwards pressure.

CO-AXIS™ FIXTURE MOUNT REMOVAL PROTOCOL

1. The tool I-HM-S / M / L is used to pick up the implant from the packaging (fig 1) using the fixture mount.

2. Once the implant is placed, the position verified, and after final X-rays have been taken, remove the fixture mount by unscrewing the fixture mount screw using a I-HD-22U-S / M / L handheld driver (fig 2).
**Drivers**

<table>
<thead>
<tr>
<th>HANDHELD</th>
<th>HANDPIECE</th>
<th>WRENCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIVERSAL 1.22/1.27</td>
<td>QUAD</td>
<td>UNIVERSAL 1.22/1.27</td>
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<tr>
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<td><img src="210x496" alt="Image" /></td>
<td><img src="82x500" alt="Image" /></td>
</tr>
<tr>
<td>I-HD-22U-S/M/L</td>
<td>I-HHD-22U-S/M/L</td>
<td>I-WI-22U-S/M/L</td>
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**Abutment Drivers** (for Compact Conical Abutments)

<table>
<thead>
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<th>HANDPIECE</th>
<th>WRENCH</th>
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<tbody>
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<tr>
<td>I-AD</td>
<td>I-HAD</td>
<td>I-WI-A</td>
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</tbody>
</table>

**Driver Information for 1 Series Screws**

<table>
<thead>
<tr>
<th>UNIVERSAL 1.22/1.27</th>
<th>HANDHELD</th>
<th>HANDPIECE</th>
<th>WRENCH</th>
</tr>
</thead>
<tbody>
<tr>
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<td><img src="435x374" alt="Image" /></td>
<td><img src="289x267" alt="Image" /></td>
</tr>
<tr>
<td>I-HD-22U-S/M/L</td>
<td>I-HHD-22U-S/M/L</td>
<td>I-WI-22U-S/M/L</td>
<td></td>
</tr>
</tbody>
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**UNGRIP**

<table>
<thead>
<tr>
<th>UNGRIP</th>
<th>HANDHELD</th>
<th>HANDPIECE</th>
<th>WRENCH</th>
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<tbody>
<tr>
<td><img src="129x352" alt="Image" /></td>
<td><img src="435x290" alt="Image" /></td>
<td><img src="435x374" alt="Image" /></td>
<td><img src="289x267" alt="Image" /></td>
</tr>
<tr>
<td>I-UGI-S/M/L</td>
<td>I-HUG-S/M/L</td>
<td>I-WI-UG-S/M/L</td>
<td></td>
</tr>
</tbody>
</table>

Refer to CAT-1203 for alternative Drivers.
I-INT-HEX-EG for surgical placement of Internal Hex Implants

**Primary Drills**
- Ø2.0mm Twist Drills
  - D-20T-M10
  - D-20T-M15
- Ø2.5mm Twist Drills
  - D-25T-M10
  - D-25T-M15
- Ø3.0mm Twist Drills
  - D-30T-M10
  - D-30T-M15
  - D-30T-M20
- Ø4.0mm Twist Drills
  - D-40T-M10
  - D-40T-M15

**Intermediate Drills**
- Ø3.7
  - D-MT3708
  - D-MT3710
  - D-MT3710
  - D-MT3713
  - D-MT3715
- Ø4.2
  - D-MT4208
  - D-MT4210
  - D-MT4210
  - D-MT4215
  - D-MT4215
- Ø5.0
  - D-MT5008
  - D-MT5010
  - D-MT5011
  - D-MT5013
  - D-MT5015

**Additional Drills**
- Ø3.75
- Ø4.2
- Ø5.0

**Placement Tools**

**Insertion Tools**
- I-HMS-S/M/L
  - Handpiece Insert
- I-WMS-S/M/L
  - Wrench Insert

**Dedicated Tapered Drills**
- Ø3.7
- Ø4.2
- Ø5.0

**Drill / Implant length measure**

**Quad Drivers**
- I-QD4-S/M/L
  - Handheld
- I-QD4-S/M/L
  - Handpiece Insert

**Hex Drivers**
- Universal 1.22/1.27
NOTE:
- The surgical kit has an intuitive layout to guide the surgeon through the drill sequence.
- Most Instruments available in various lengths.
- All instruments and tooling used during the procedure must be maintained in good condition, and cleaned and sterilized prior to use. Please consult the Southern Implants Cleaning and Sterilization Procedure Guidelines (CAT-1039) for guidance concerning the maintenance of drills, instruments, and surgical trays.
I-PROS-EG Prosthetic Instrument Tray

NOTE:
- This instrument tray is to be customised by the user to be suitable for use with the preferred implant system and its surgical or prosthetic items.
- Most Instruments available in various lengths.
# Torque Table for Southern Screws

<table>
<thead>
<tr>
<th>1.27 Hex Prosthetic Screws</th>
<th>Quad Prosthetic Screws</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS-Z-18</td>
<td>BS-Z-18*</td>
</tr>
<tr>
<td>GS-Q-18</td>
<td></td>
</tr>
</tbody>
</table>

**Torque:** 32Nm  
**Head Diameter:** 2.25mm  
**Screw Torque with PEEK Prosthetics:** 15Nm

<table>
<thead>
<tr>
<th>1.27 Hex Passive Abutment Screws</th>
<th>Quad Passive Abutment Screws</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA-M-18T</td>
<td>PA-M-18G</td>
</tr>
<tr>
<td>PA-M-18G</td>
<td>PA-Q-18G</td>
</tr>
<tr>
<td>PA-M-18S*</td>
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</tr>
</tbody>
</table>

**Torque:** 32Nm  
**Head Diameter:** 2.60mm

### Digital Laboratory Analogue Screw

<table>
<thead>
<tr>
<th>1.22 Hex</th>
<th>TIB Abutment Screw</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAD-S</td>
<td>TS-II-TIB</td>
</tr>
</tbody>
</table>

**Torque:** Finger tighten  
**Head Diameter:** 2.40mm

**NOTE:** Screw supplied with all Digital Analogues

### 1 Series Screws

<table>
<thead>
<tr>
<th>M1.4</th>
<th>Unigrip</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.22 Hex</td>
<td>TSU1</td>
</tr>
<tr>
<td>TSH1</td>
<td>GSH1</td>
</tr>
<tr>
<td>BSH**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GSU1</td>
</tr>
</tbody>
</table>

**Torque:** 10-15Nm  
**Head Diameter:** 2.25mm  
**Screw Torque with PEEK Prosthetics:** 10 - 15Nm

**NOTE:**  
- Due to design revisions screw tips may be flat or rounded.  
- Always ensure that the correct screw is used for the relevant implant and component.  
- Blackened for laboratory use only.

### Screw Head Connections

- **Hex**  
- **Quad**  
- **Unigrip**
# Range

<table>
<thead>
<tr>
<th>Range</th>
<th>Major Diameter</th>
<th>Implant Platform Diameter</th>
<th>Prosthetic Diameter</th>
<th>Prosthetics</th>
<th>Hex Width (across flats)</th>
<th>Smooth Collar Height</th>
<th>Thread Pitch</th>
<th>Apex Diameter</th>
<th>Cylindrical or Tapered C/T</th>
<th>Platform Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM-T37</td>
<td>Ø3.75mm</td>
<td>3.83</td>
<td>3.75</td>
<td>3.6</td>
<td>2.44</td>
<td>0.30</td>
<td>1.0</td>
<td>3.1</td>
<td>T</td>
<td>✓</td>
</tr>
<tr>
<td>IM-T42</td>
<td>Ø4.2mm</td>
<td>4.2</td>
<td>3.75</td>
<td>3.6</td>
<td>2.44</td>
<td>0.27</td>
<td>1.0</td>
<td>3.7</td>
<td>T</td>
<td>✓</td>
</tr>
<tr>
<td>IM-T50</td>
<td>Ø5.0mm</td>
<td>5.0</td>
<td>4.55</td>
<td>3.6/4.5</td>
<td>2.44</td>
<td>0.27</td>
<td>1.0</td>
<td>4.5</td>
<td>T</td>
<td>✓</td>
</tr>
<tr>
<td>IM-T42-T2D</td>
<td>Ø4.2mm</td>
<td>4.2</td>
<td>3.75</td>
<td>3.6</td>
<td>2.44</td>
<td>0.15</td>
<td>1.0</td>
<td>3.7</td>
<td>T 12°</td>
<td>✓</td>
</tr>
</tbody>
</table>

All dimensions in this catalogue are in mm, unless otherwise specified.
EXPLANATION OF SYMBOLS

The following symbols are used on our packaging labels and they indicate the following:

1. Manufacturer
2. Implant image
3. Implant details and size
4. Sterilization using Irradiation
   - Do not Resterilize
   - Consult instruction for use
   - Do not reuse
5. CE mark and notified body number
   - Expiry date
   - Sterile unless package is opened or damaged
6. 2D Bar coding
   - Contains the GTIN, Expiry Date and LOT Number
7. Patient sticker for documentation purposes
   - (to be used by health care provider on patient file)
8. Prescription device
   - CAUTION: FEDERAL LAW RESTRICTS THE DEVICE TO SALE BY OR ON THE ORDER OF A LICENCED HEALTH CARE PROVIDER.

Platform Interface

- Ø3.75
- Ø4.2
- Ø5.0

Images are for illustration purposes only and do not necessarily accurately represent the product.
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