Approaching 20 years of clinical use and over 5-million implants sold, the Tapered Screw-Vent (TSV) Implant has gained the trust of thousands of surgeons worldwide to deliver successful patient outcomes. This success is well documented with 130 peer-reviewed papers and a 98.7% cumulative survival rate.1,14

**TSV™ Implant Overview**

**Tapered Implant Body**
Designed for primary stability, the tapered titanium alloy body provides strength for reliable function.1 (Model TSVT, shown)

**Screw-Vent Design**
Apical cutting threads designed for immediate cutting impact.

**MTX® Surface for Ongrowth**
The MTX Microtextured Surface has been documented to achieve high levels of bone-to-implant contact or ongrowth.16, 17

*Data based on cyclic fatigue testing conducted on TSV Implants to 5 million cycles. Results of preclinical testing are not necessarily indicative of clinical performance.
The Virtual Cold Weld Implant

The proprietary internal hex connection, utilized with Zimmer Biomet Dental’s friction-fit abutments, has been documented to shield crestal bone from concentrated occlusal forces.21, 22

Crestal Options for Bone-Level Maintenance

The coronal microgrooves are designed to preserve crestal bone.30

Three coronal surface configurations are available:

- 1.0 mm Machined Collar (Model TSV)
- 0.5 mm Machined with MTX Crestal Microgrooves (Model TSVM)
- Full MTX Microtexturing with MTX Crestal Microgrooves (Model TSVT)

The TSV Implant System is celebrated for its performance, having been designed to provide:

- Primary Stability7, 15, 18-20
- Secondary Stability2-14, 16, 17
- Crestal Bone Maintenance21-28
- Prosthetic Stability21, 22, 29
- Clinical Success2-14, 27, 28
Designed For Stability

Primary Stability

Primary stability achieved by using Tapered Screw-Vent Implants enables immediate placement and/or immediate loading in appropriately selected patients.2, 7, 15

- The triple-lead threads are designed to achieve intimate bone contact at implant placement.15
- The soft-bone surgical protocol enables bone compression and provides additional stability in poor quality sites.15
- In dense bone, the stepped finishing drill enables apical bone engagement for initial stability.15

<table>
<thead>
<tr>
<th>Tapered Screw-Vent Implant 4.7 x 13 mm</th>
<th>Competitor 1 5.0 x 13 mm</th>
<th>Competitor 2 5.0 x 13 mm</th>
<th>Competitor 3 4.8 x 12 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average Max Insertion Torque (Ncm)</strong></td>
<td>119.9</td>
<td>93.0</td>
<td>89.5</td>
</tr>
</tbody>
</table>

Data on file with Zimmer Biomet Dental
Secondary Stability

Biocompatibility And Strength

- Tapered Screw-Vent Implants are made of grade 5 titanium alloy chosen for its biocompatibility and strength.\textsuperscript{31-34}
- Minimum tensile and yield strength requirements for this material, set by the American Society for Testing and Materials (ASTM) and the International Organization for Standardization (ISO), are 32\% and 59\% higher respectively than those of the strongest CP titanium available.\textsuperscript{32-34}
- Zimmer Biomet Dental specifications require that the grade 5 titanium alloy used in Tapered Screw-Vent Implants meet or exceed the combined standards of ASTM and ISO.\textsuperscript{1}

Documented MTX Surface Advantages

- High degree of bone-to-implant contact (BIC) and osteoconductive capacity.\textsuperscript{16, 17}
- Successful clinical results under conditions of immediate loading.\textsuperscript{2, 5, 7, 9-11}
- Greater than 90\% BIC as compared to 42-77\% BIC achieved by TPS-coated, sandblasted and acid-etched, oxidized and HA-coated surfaces placed in grafted human sinuses.\textsuperscript{17}
Coronal Options

Tapered Screw-Vent Implants are offered with and without crestal microgrooves and machined collar or texturing to the top to maximize flexibility, tissue management and crestal bone maintenance in a variety of clinical conditions.\textsuperscript{14, 21-26, 30} Configurations available on select implants are shown below.

The Platform Plus\textsuperscript{™} Technology Difference

The proprietary Platform Plus Technology creates favorable conditions for crestal bone-level maintenance.\textsuperscript{21, 22}

- The internal hex creates a friction-fit connection that shields the crestal bone from occlusal force\textsuperscript{21, 22}
- The lead-in bevel connection reduces horizontal stresses better than flat “butt-joint” connections\textsuperscript{29}
- The 1.5 mm deep internal hex distributes bite force deep into the implant\textsuperscript{21, 22, 29}

Fig A: Proprietary friction-fit connection with lead-in bevel and virtual cold weld.

Fig B: Higher magnification of unique beveled interface and full interface seal.

Fig C: Higher magnification of the virtual cold weld between the abutment and implant.
Documented Clinical Success

Celebrate the clinical outcomes of the original Tapered Screw-Vent Implant.

Documented Prospective Clinical Survival Rates
For 1,553 Tapered Screw-Vent MTX Implants:¹⁻¹⁴

- Implant survival rate mean 98.7% (range from 95.1% to 100%)
- Follow-up times range from 3 to 120 months (mean = 36.4 months)

Numerous other short-term (<5 years) studies have further documented the quality and performance of Tapered Screw-Vent Implants under immediate and delayed placement, as well as immediate and delayed loading.¹

Individual results may vary according to patient selection and clinical experience.
### TSV MTX: Tapered Screw-Vent Implants With MTX Surface
Includes Fixture Mount/Transfer and Cover Screw.

<table>
<thead>
<tr>
<th>Implant Diameter</th>
<th>Implant Platform</th>
<th>Internal Hex Connection</th>
<th>Implant Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.7 mmD</td>
<td>3.5 mmD</td>
<td>2.5 mmD</td>
<td>TSV88, TSVB10, TSVB11, TSVB13, TSVB16</td>
</tr>
<tr>
<td>4.1 mmD</td>
<td>3.5 mmD*</td>
<td>2.5 mmD</td>
<td>TSV4B8, TSV4B10, TSV4B11, TSV4B13, TSV4B16</td>
</tr>
<tr>
<td>4.7 mmD</td>
<td>4.5 mmD</td>
<td>2.5 mmD</td>
<td>TSVWB8, TSVWB10, TSVWB11, TSVWB13, TSVWB16</td>
</tr>
<tr>
<td>6.0 mmD</td>
<td>5.7 mmD</td>
<td>3.0 mmD</td>
<td>TSV6B8, TSV6B10, TSV6B11, TSV6B13, TSV6B16</td>
</tr>
</tbody>
</table>

### TSVT MTX: Tapered Screw-Vent Implants With Full MTX Surface Texturing And Microgrooves
Includes Fixture Mount/Transfer and Cover Screw.

<table>
<thead>
<tr>
<th>Implant Diameter</th>
<th>Implant Platform</th>
<th>Internal Hex Connection</th>
<th>Implant Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.7 mmD</td>
<td>3.5 mmD</td>
<td>2.5 mmD</td>
<td>TSVMB8, TSVMB10, TSVMB11, TSVMB13, TSVMB16</td>
</tr>
<tr>
<td>4.1 mmD</td>
<td>3.5 mmD*</td>
<td>2.5 mmD</td>
<td>TSVMB4B8, TSVMB4B10, TSVMB4B11, TSVMB4B13, TSVMB4B16</td>
</tr>
<tr>
<td>4.7 mmD</td>
<td>4.5 mmD</td>
<td>2.5 mmD</td>
<td>TSVMBWB8, TSVMBWB10, TSVMBWB11, TSVMBWB13, TSVMBWB16</td>
</tr>
<tr>
<td>6.0 mmD</td>
<td>5.7 mmD</td>
<td>3.0 mmD</td>
<td>TSVMB6B8, TSVMB6B10, TSVMB6B11, TSVMB6B13, TSVMB6B16</td>
</tr>
</tbody>
</table>

### TSVM MTX: Tapered Screw-Vent Implants With 0.5 mm Machined Collar, MTX Surface And Microgrooves
Includes Fixture Mount/Transfer and Cover Screw.

<table>
<thead>
<tr>
<th>Implant Diameter</th>
<th>Implant Platform</th>
<th>Internal Hex Connection</th>
<th>Implant Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.7 mmD</td>
<td>3.5 mmD</td>
<td>2.5 mmD</td>
<td>TSVMB8, TSVMB10, TSVMB11, TSVMB13, TSVMB16</td>
</tr>
<tr>
<td>4.1 mmD</td>
<td>3.5 mmD*</td>
<td>2.5 mmD</td>
<td>TSVMB4B8, TSVMB4B10, TSVMB4B11, TSVMB4B13, TSVMB4B16</td>
</tr>
<tr>
<td>4.7 mmD</td>
<td>4.5 mmD</td>
<td>2.5 mmD</td>
<td>TSVMBWB8, TSVMBWB10, TSVMBWB11, TSVMBWB13, TSVMBWB16</td>
</tr>
<tr>
<td>6.0 mmD</td>
<td>5.7 mmD</td>
<td>3.0 mmD</td>
<td>TSVMB6B8, TSVMB6B10, TSVMB6B11, TSVMB6B13, TSVMB6B16</td>
</tr>
</tbody>
</table>

### Surgical Cover Screws

<table>
<thead>
<tr>
<th>Implant Platform</th>
<th>Item No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5 mmD</td>
<td>TSC</td>
</tr>
<tr>
<td>4.5 mmD</td>
<td>TSCW</td>
</tr>
<tr>
<td>5.7 mmD</td>
<td>TSC5</td>
</tr>
</tbody>
</table>

*While the implant platform color code for the 4.1 mmD Tapered Screw-Vent Implant is green, the implant surgical sequence is color-coded white on the surgical kit surface.*
Instrument Kit System

From complete set-ups that include all instruments, to standalone instrument kits and a unique Staging Block, the Instrument Kit System is conveniently adaptable to your individual needs. Intuitive instrument organization and color-coding make the surgical sequence easy to learn and follow.

Drill Stop Kit

The Drill Stop Kit includes a set of titanium, reusable drill stops designed to limit drilling depth from bone level during osteotomy preparation. Featuring a convenient “pick and go” stop application mechanism, this cost-efficient kit is designed to save chair time and increase clinician convenience. Drill Stops are only intended for use with updated Driva™ Drills (marked with axial stripes).

Guided Surgery Drill Module

This kit insert includes sixteen Driva EG Drills and can be snapped into your Tapered Screw-Vent Surgical Kit to provide additional drills required for guided surgery.

Tube Adapter Kit

Designed to fit in the tubes located inside model- and software-based surgical guides, these surgical instruments orient drills and provide positional and angular control.

NP Surgical Module for Eztetic® Implants

This kit insert includes additional instrumentation required to place the 3.1 mmD Eztetic Implant which offers a narrow, powerful solution for demanding anterior spaces.
References

1. Data on file with Zimmer Biomet Dental.