OSSEOINCORPORATION:
Adding Dimension to Implant Dentistry
ADDING DIMENSION

The Zimmer Trabecular Metal Dental Implant combines the popular features of the Tapered Screw-Vent® Implant with the unique properties of Trabecular Metal Material. Designed to achieve interconnected ingrowth, the Trabecular Metal Dental Implant introduces a new dimension to implant dentistry:

OsseoIncorporation
Zimmer Dental's MTX® Microtextured Surface has been documented to achieve high levels of bone-to-implant contact, or ongrowth.1,2 The Trabecular Metal Dental Implant features an osteoconductive mid-section designed for ingrowth as well as ongrowth in a process new to implant dentistry - osseoincorporation.3-5 Osseoincorporation refers to the healing potential of bone onto an implant surface and into an implant structure.

The Trabecular Metal pores offer the potential for bone to interconnect as it grows into the structure.4,6-9 Studies of the Trabecular Metal Dental Implant are currently underway and additional studies are planned to document the process of osseoincorporation by measuring the volume and rate of ingrowth, as well as its effects on secondary stability.

The Best Thing Next to Bone™

Trabecular Metal Technology is a three-dimensional material, not an implant surface or coating. Its structure and function are similar to cancellous bone.4,6,10 Trabecular Metal Material has up to 80% fully interconnected porosity designed for ingrowth.3-5,7,10,11

Zimmer has utilized Trabecular Metal Material - The Best Thing Next to Bone - for over a decade in implantable orthopaedic devices. Now Zimmer brings this unique technology to implant dentistry with the Trabecular Metal Dental Implant.
Zimmer Dental proudly introduces the Trabecular Metal Dental Implant, a premium addition to the Tapered Screw-Vent implant system – the implant family trusted by clinicians for over a decade.

Sharing some of the most popular Tapered Screw-Vent implant design features, the new Trabecular Metal Dental Implant offers clinicians additional treatment planning options.

The Trabecular Metal Dental Implant is placed with the Zimmer Instrument Kit System and restored using the extensive selection of Tapered Screw-Vent prosthetic components. This compatibility allows for convenient integration of the Trabecular Metal Dental Implant into treatment plans without requiring additional surgical purchases or new restorative procedures.
**TRABECULAR METAL DEN**

*THE BEST THING NEXT TO BONE.*

5. **TAPERED IMPLANT BODY**
   Designed for primary stability, the tapered titanium alloy body provides the strength of traditional dental implants.15-18

4. **MTX SURFACE FOR ONGROWTH**
   The *MTX* Microtextured Surface has been documented to achieve high levels of bone-to-implant contact, or ongrowth.1,2
**TRABECULAR METAL MATERIAL FOR INGROWTH**
The implant’s *Trabecular Metal* Material mid-section has been designed for ingrowth and ongrowth. Zimmer Dental continues to gather data to document the volume and rate of osseointegration and its effects on secondary stability.

**CRESTAL OPTIONS FOR BONE-LEVEL MAINTENANCE**
The coronal microgrooves are designed to preserve crestal bone. Two coronal surface configurations are available:
- 0.5mm Machined Titanium (Model TMM, shown above)
- *MTXM*icrotexturing to the top (Model TMT, shown to the left)

**PLATFORM PLUS™ TECHNOLOGY**
The proprietary internal hex connection, utilized with Zimmer Dental’s friction-fit abutments, has been documented to shield crestal bone from concentrated occlusal forces.
Human clinical studies of the *Trabecular Metal* Dental Implant began in 2010, and data collection will continue in the coming years. Additional studies to document osseointegration in humans and animals are in progress. In 2011, the availability of the *Trabecular Metal* Dental Implant will be extended to clinicians and their patients in multiple countries.

In a preliminary study of *Trabecular Metal* Dental Implants in canine mandibular models, evidence of ingrowth by maturing bone was documented as early as two weeks after implantation.\(^{19,20}\) Further data is being collected to document the rate of ingrowth and its effects on secondary stability in human dental applications.
References


For more information about the Zimmer Trabecular Metal Dental Implant, visit trabecularmetal.zimmerdental.com.