

RealGUIDE™ Z3D Guided Surgery Kit

Designed for Zimmer Biomet's TSV®, Trabecular Metal™ and Eztetic® Dental Implants

FULLY
GUIDED!



 RealGUIDE™ Z3D
GUIDED SURGERY KIT

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RealGUIDE Z3D GUIDED SURGERY KIT

The RealGUIDE Z3D Guided Surgery Kit has been designed for use with the Zimmer Biomet Dental Tapered Screw-Vent, Trabecular Metal and 3.1 mm Eztetic Implant lines. The kit consists of diamond-like carbon (DLC) coated calibrated surgical drills and mounting devices for guided surgery. It can be used to place implant diameters 3.1 mm, 3.7 mm, 4.1 mm and 4.7 mm. The TSV Screwdriver and TSV Ratchet can be bundled with the kit to have a self-contained kit.

SURGERY KIT COMPONENTS



COLOR CODE

The color code of the drills shown on the tray corresponds to the recommended surgical sequence based on the diameter of the implant. The color code of the guided implant mounts corresponds to the diameters of the prosthetic platforms of Zimmer Biomet's dental implants.

DRILLS – TECHNICAL SPECIFICATIONS

The drills in the RealGUIDE Z3D Guided Surgery Kit are made of hardened AISI 420B stainless steel and coated with DLC (Diamond-like Carbon) treatment which provides an increase in surface hardness and reduces the friction forces generated during use. The wear resistance aids cutting efficiency and minimizes bone overheating. Additionally this treatment also minimizes corrosion phenomenon during the cleaning and sterilization cycles. Drills should be used for no more than 15 patients. Thoroughly inspect the cutting portion of the drills before every use. The use of worn-out drills could compromise the osseointegration process of the implant. Use of copious irrigation during drilling is highly recommended.



DRILLING SYSTEM

The drilling system of the surgical alveolus is sequential and each drill has laser markings indicating the diameter of the drill and the implant length. The cylindrical portion of the drill preceding the cutting edge engages in 5mm diameter guide sleeves. A 9 mm guide path is provided, consisting of the sleeve of the surgical guide (4 mm) and the maximum thickness of the soft tissues (5 mm). The smaller diameter of the stepped drills is consistent with the full diameter of the previous drill, providing further guidance in the sequence from one drill to the next.



ANCHOR PINS

The Pin Drills, with a diameter of 1.5 mm, and vestibular anchor pins make up the stabilization system provided for the surgical guide in cases of total edentulism or significant partial edentulism.



EXTENSION & CONNECTION

The extension tool for the ratchet and the handpiece implant driver have been designed to be connected to the guided implant mounts and used with original instruments of the TSV.



MOUTH OPENING GAUGE / BITE GAUGE

The bite gauge simulates the maximum size of the drills of the RealGUIDE Z3D Guided Surgery Kit and must be used before the patient's CT/CBCT exam. The size of the hexagon at the base of the gauge is the same size as the hexagon of the guide sleeve incorporated in the resin of the surgical guide.



RECOMMENDATIONS

Surgical instruments are supplied **NON-STERILE** and **MUST BE STERILIZED BEFORE USE**. Sterilize in a steam autoclave according to the autoclave manufacturer's specifications (minimum 20 minutes at a temperature between 132°C and 135°C or 270°F and 275°F). Repeated sterilization cycles¹ involve a progressive deterioration of the surgical instruments, therefore it is necessary to periodically review all the instruments to check their condition (including unused instruments).



¹ Nilay Er, DDS, PhD; Alper Alkan, DDS, PhD, Serim Ilday, PhD, Erman Bengu, PhD
"Improved dental implant drill durability and performance using heat and wear resistant protective coatings"
J Oral Implantol (2018) 44 (3): 168-175

SURGERY KIT COMPONENTS

DRILL FOR FIXATION PIN

Used to create temporary osteotomies in edentulous patients and to allow stabilization of the surgical guide by buccal anchoring pins. Insert the tool into the fixation pin sleeve with the motor stopped and once it comes into contact with the soft tissue, start the motor. A spare drill is provided.



FIXATION PINS

Used for anchoring surgical guides for total edentulism. Press-fit the pins through the fixation pin sleeves in the surgical guide and into the osteotomy created by the pin drill and ensure that the surgical guide is in the correct and stable position.



MUCOTOME / TISSUE PUNCH

Used in the flapless technique to remove soft tissue. Insert the tool into the guide sleeve with the motor stopped and once it comes into contact with the soft tissue, start the motor.



BONE CREST LEVELER

Used to smooth the irregular surfaces of the bone crest. Insert the tool into the guide sleeve with the motor stopped and once it comes into contact with the hard tissue, start the motor.





START DRILL

Used to create the opening on the bone crest prior to the first drill.
Insert the tool into the guide sleeve with the motor stopped and once it comes into contact with the hard tissue, start the motor.



2.4 × 6.0 DRILL

Used to allow the next drill to take advantage of a guided path, especially in cases of irregular bone crest. Insert the tool into the guide sleeve with the motor stopped and once it comes into contact with the hard tissue, start the motor.



IMPLANT MOUNTS

Place the Zimmer Biomet TSV or TM implant vial on the dedicated implant staging pedestal corresponding to the implant length. After removing the Fixture Mount Transfer (FMT), connect the Z3D guided mount to the implant using the integrated passing screw and the TSV manual screwdriver diameter 1.25 mm (not included in the kit, but available for optional purchase). Connect the handpiece driver to the mount and remove the implant from the vial. Insert the tool into the guide sleeve with the motor stopped and once it comes into contact with the hard tissue, start the motor.

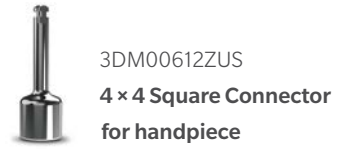


NOTES

- The RealGUIDE Z3D Surgical Kit does not require any reduction instruments to be inserted into the guide sleeves. The use of calibrated drills allows the user to obtain greater precision of the osteotomy and frees up the doctor's hand during surgery.
- All surgical instruments must be inserted into the guide sleeves **WITH THE MOTOR OFF**. Once the instrument or implant makes contact with the soft tissue or hard tissue, start the motor.
- The grommetless version of the surgical tray allows better cleaning and sterilization, avoiding the presence of biological residues that are difficult to remove in the versions with grommets.
- Implant staging allows easy removal of the FMT and connection of the dedicated Z3D guided implant mount.



CONFIGURATION



Drill for
Fixation Pin
3DM00610ZUS
(x2)



Mucotome /
Tissue Punch
3DM00607ZUS



Bone Crest
Leveler
3DM00614ZUS



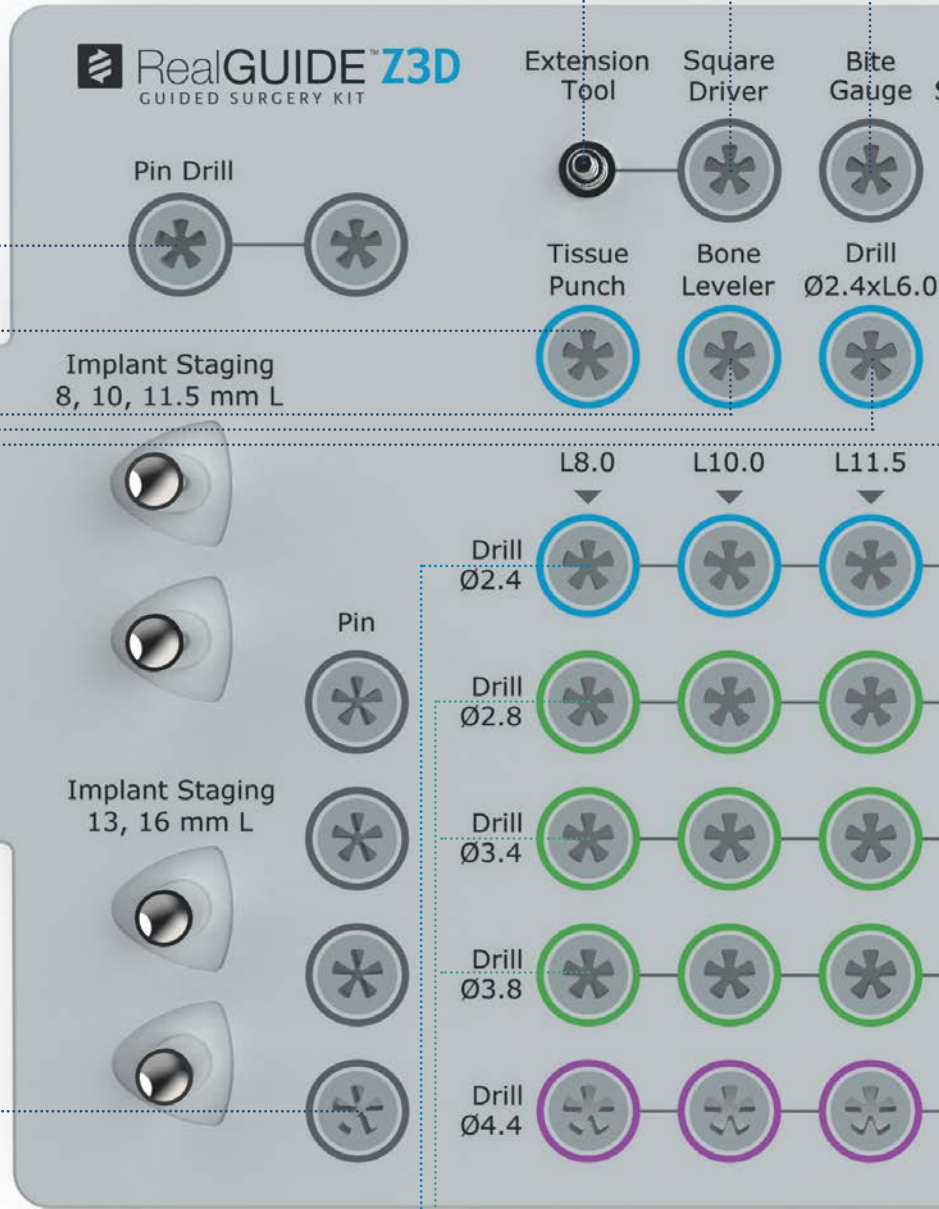
Drill
ø2.4 x 6 mm
3DM00619ZUS



Start Drill
3DM00621ZUS



Fixation Pin
3DM00609ZUS
(x4)



Drill, ø2.4 mm
3DM00613.24.XXXZUS
(x5)



Double Diameter
Drills, ø2.8 / 2.4 mm
3DM00613.28.XXXZUS
(x5)

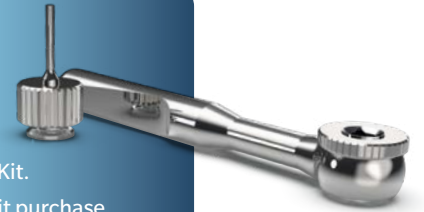




3DM00622ZUS

Mouth Opening Gauge /
Bite Gauge

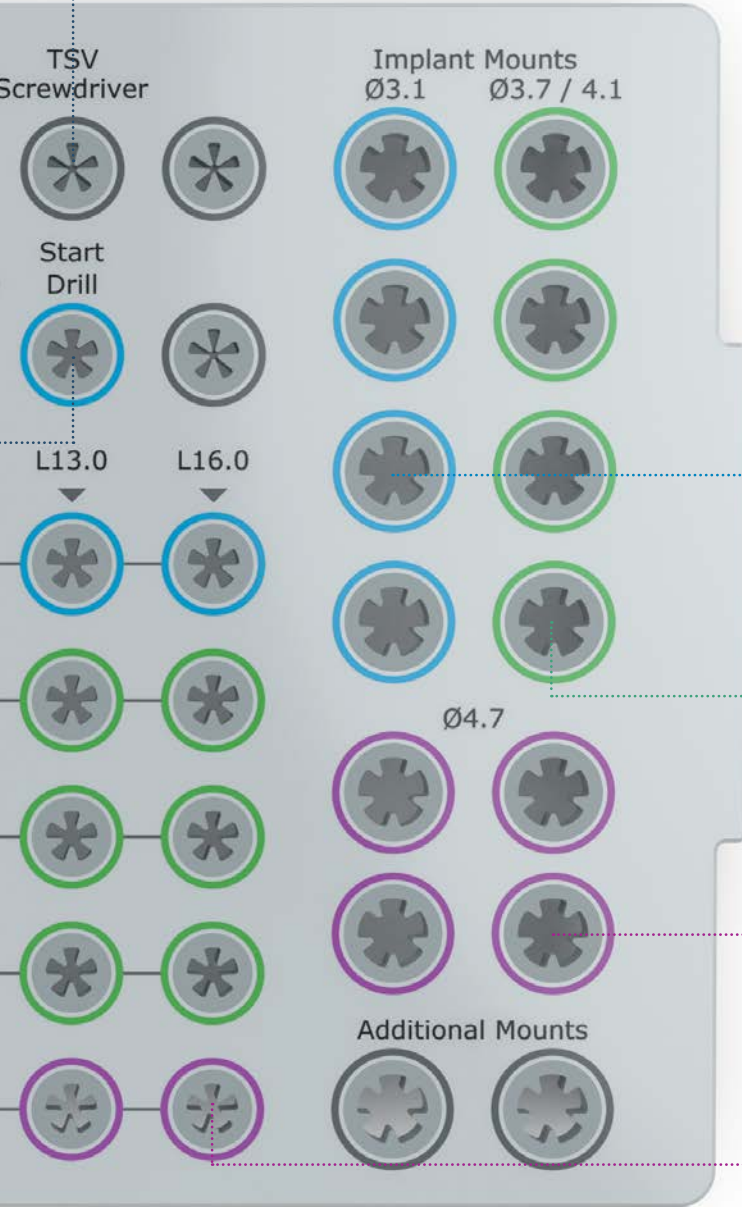
TSV SCREWDRIVER AND RATCHET ...



... do not come prepackaged
in the RealGUIDE Z3D Surgical Kit.

They can be bundled with the kit purchase,
or use the instruments from your existing
standard TSVKIT.

Four empty slots are also provided for
additional instrumentation and implant mounts.
Additional implant mounts are available for
purchase.



Implant Mount
(Zimmer Biomet Eztetic
Ø3.1 mm)
3DM00606ZIM31US
(x4)



Implant Mount
(Zimmer Biomet TSV
Ø3.7 / 4.1 mm)
3DM00606ZIM35US
(x4)



Implant Mount
(Zimmer Biomet TSV
Ø4.7 mm)
3DM00606ZIM47US
(x4)

**Double Diameter
Drills, Ø3.4 / 2.8 mm**
3DM00613.34.XXXZUS
(x5)



**Double Diameter
Drills, Ø3.8 / 3.4 mm**
3DM00613.38.XXXZUS
(x5)



**Double Diameter
Drills, Ø4.4 / 3.8 mm**
3DM00613.44.XXXZUS
(x5)



ORDERING INFORMATION

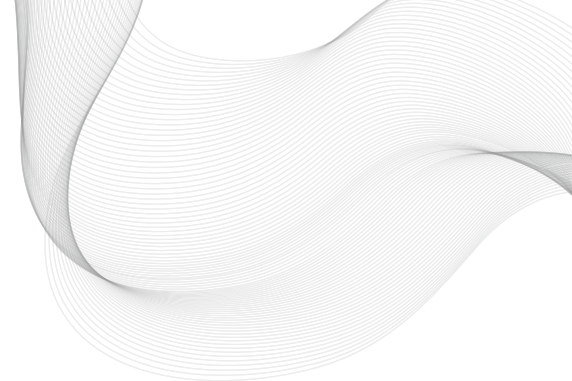


RealGUIDE Z3D Guided Surgery Kit


| Product | Part No. |
|---|------------|
| RealGUIDE Kit Z3D Surgical Kit (fully loaded) | 3DM0070ZUS |
| Autoclavable Kit RealGUIDE Z3D Box | 3DM00616Z |

Configuration

| Product | | Part No. |
|---|---|-------------|
| Drill for Fixation Pin max. 1,000 rpm, hardened stainless steel AISI 420B with DLC coating |  | 3DM00610ZUS |
| Fixation Pin TiAl6V4 ASTM F136 |  | 3DM00609ZUS |
| Torque Wrench Extension max. 50 Ncm, hardened stainless steel AISI 420F MOD |  | 3DM00623ZUS |
| 4 x 4 Square Connector for handpiece max. 50 Ncm, hardened stainless steel AISI 420F MOD |  | 3DM00612ZUS |
| Mouth Opening Gauge / Bite Gauge hardened stainless steel AISI 303 |  | 3DM00622ZUS |
| Mucotome / Tissue Punch Internal diameter: 4.2 mm, max. 100 rpm, hardened stainless steel AISI 420F MOD with DLC coating |  | 3DM00607ZUS |
| Bone Crest Leveler max. 600 rpm, hardened stainless steel AISI 420B with DLC coating |  | 3DM00614ZUS |
| Start Drill Implant site preparation drill, max. 600 rpm, hardened stainless steel AISI 420B with DLC coating |  | 3DM00621ZUS |
| Drill ø 2.4 x 6 mm max. 800 rpm, hardened stainless steel AISI 420B with DLC coating |  | 3DM00619ZUS |



Implant Mounts (hardened stainless steel AISI 420F MOD)

| Product | | Part No. |
|--|---|-----------------|
| Implant Mount (Zimmer Biomet Eztetic \varnothing 3.1 mm) incl. screw, max. 20 rpm, 50 Ncm |  | 3DM00606ZIM31US |
| Implant Mount (Zimmer Biomet TSV \varnothing 3.7 / 4.1 mm) incl. screw, max. 20 rpm, 50 Ncm |  | 3DM00606ZIM35US |
| Implant Mount (Zimmer Biomet TSV \varnothing 4.7 mm) incl. screw, max. 20 rpm, 50 Ncm |  | 3DM00606ZIM47US |

Drills (hardened stainless steel AISI 420B with DLC coating)

| Length | Drill \varnothing 2.4 mm | Double Diameter Drill \varnothing 2.8 / 2.4 mm | Double Diameter Drill \varnothing 3.4 / 2.8 mm | Double Diameter Drill \varnothing 3.8 / 3.4 mm | Double Diameter Drill \varnothing 4.4 / 3.8 mm |
|---------|---|---|---|---|---|
| | max. 800 rpm | | | | |
| |  |  |  |  |  |
| 8 mm | 3DM00613.24.080ZUS | 3DM00613.28.080ZUS | 3DM00613.34.080ZUS | 3DM00613.38.080ZUS | 3DM00613.44.080ZUS |
| 10 mm | 3DM00613.24.100ZUS | 3DM00613.28.100ZUS | 3DM00613.34.100ZUS | 3DM00613.38.100ZUS | 3DM00613.44.100ZUS |
| 11.5 mm | 3DM00613.24.115ZUS | 3DM00613.28.115ZUS | 3DM00613.34.115ZUS | 3DM00613.38.115ZUS | 3DM00613.44.115ZUS |
| 13 mm | 3DM00613.24.130ZUS | 3DM00613.28.130ZUS | 3DM00613.34.130ZUS | 3DM00613.38.130ZUS | 3DM00613.44.130ZUS |
| 16 mm | 3DM00613.24.160ZUS | 3DM00613.28.160ZUS | 3DM00613.34.160ZUS | 3DM00613.38.160ZUS | 3DM00613.44.160ZUS |

Surgical Guide Accessories

| Product | Part No. |
|---|----------|
| Surgical Guide Sleeve RG CAD Procedure 5.05 mm, compatible 3DM RG, Zimmer Biomet Z3D, Nobel RP Kit (10 pcs) | 3DM00670 |
| Surgical Guide Pin Fixation Sleeve RG CAD Procedure (10 pcs) | 3DM00671 |

SURGICAL DRILL SEQUENCE

The drill sequences suggested below refer to a uniform and qualitatively ideal bone. They do not replace the clinical experience of the surgeon and do not consider the need to obtain primary implant stability by underpreparing the surgical alveolus.

Always refer to the specifications of the surgical manual of the Trabecular Metal line and to its particular indications for use.

DENSE BONE: drills sequence in bold /italics only for dense bone
(For soft bone, stop at the previous step)

| | | | | | |
|--------------------------|----------------|-----------------|-------------------|-------------------|-------------------|
| Implant Diameter (mm) | 3.1 | | | | |
| Implant Length (mm) | 8 | 10 | 11.5 | 13 | 16 |
| Sleeve | Z3D | | | | |
| Depth Control | Yes | Yes | Yes | Yes | Yes |
| SURGICAL SEQUENCE | | | | | |
| Tissue Punch | Yes | Yes | Yes | Yes | Yes |
| Bone Leveler | Yes | Yes | Yes | Yes | Yes |
| Drill 2.4 × 6 | Yes | Yes | Yes | Yes | Yes |
| Start Drill | Yes | Yes | Yes | Yes | Yes |
| Drill | 2.4 × 8 | 2.4 × 8 | 2.4 × 8 | 2.4 × 8 | 2.4 × 8 |
| Drill | 2.8 × 8 | 2.4 × 10 | 2.4 × 11.5 | 2.4 × 11.5 | 2.4 × 11.5 |
| Drill | - | 2.8 × 8 | 2.8 × 8 | 2.4 × 13 | 2.4 × 16 |
| Drill | - | 2.8 × 10 | 2.8 × 11.5 | 2.8 × 8 | 2.8 × 8 |
| Drill | - | - | - | 2.8 × 11.5 | 2.8 × 11.5 |
| Drill | - | - | - | 2.8 × 13 | 2.8 × 16 |
| Driver | 3.1 | | | | |

| | | | | | |
|--------------------------|----------------|-----------------|-------------------|-------------------|-------------------|
| Implant Diameter (mm) | 3.7 | | | | |
| Implant Length (mm) | 8 | 10 | 11.5 | 13 | 16 |
| Sleeve | Z3D | | | | |
| Depth Control | Yes | Yes | Yes | Yes | Yes |
| SURGICAL SEQUENCE | | | | | |
| Tissue Punch | Yes | Yes | Yes | Yes | Yes |
| Bone Leveler | Yes | Yes | Yes | Yes | Yes |
| Drill 2.4 × 6 | Yes | Yes | Yes | Yes | Yes |
| Start Drill | Yes | Yes | Yes | Yes | Yes |
| Drill | 2.4 × 8 | 2.4 × 8 | 2.4 × 8 | 2.4 × 8 | 2.4 × 8 |
| Drill | 2.8 × 8 | 2.4 × 10 | 2.4 × 11.5 | 2.4 × 11.5 | 2.4 × 11.5 |
| Drill | 3.4 × 8 | 2.8 × 8 | 2.8 × 8 | 2.4 × 13 | 2.4 × 16 |
| Drill | - | 2.8 × 10 | 2.8 × 11.5 | 2.8 × 8 | 2.8 × 8 |
| Drill | - | 3.4 × 8 | 3.4 × 8 | 2.8 × 11.5 | 2.8 × 11.5 |
| Drill | - | 3.4 × 10 | 3.4 × 11.5 | 2.8 × 13 | 2.8 × 16 |
| Drill | - | - | - | 3.4 × 8 | 3.4 × 8 |
| Drill | - | - | - | 3.4 × 11.5 | 3.4 × 11.5 |
| Drill | - | - | - | 3.4 × 13 | 3.4 × 16 |
| Driver | 3.7/4.1 | | | | |

| | | | | | |
|--------------------------|----------------|-----------------|-------------------|-------------------|-------------------|
| Implant Diameter (mm) | 4.1 | | | | |
| Implant Length (mm) | 8 | 10 | 11.5 | 13 | 16 |
| Sleeve | Z3D | | | | |
| Depth Control | Yes | Yes | Yes | Yes | Yes |
| SURGICAL SEQUENCE | | | | | |
| Tissue Punch | Yes | Yes | Yes | Yes | Yes |
| Bone Leveler | Yes | Yes | Yes | Yes | Yes |
| Drill 2.4 × 6 | Yes | Yes | Yes | Yes | Yes |
| Start Drill | Yes | Yes | Yes | Yes | Yes |
| Drill | 2.4 × 8 | 2.4 × 8 | 2.4 × 8 | 2.4 × 8 | 2.4 × 8 |
| Drill | 2.8 × 8 | 2.4 × 10 | 2.4 × 11.5 | 2.4 × 11.5 | 2.4 × 11.5 |
| Drill | 3.4 × 8 | 2.8 × 8 | 2.8 × 8 | 2.4 × 13 | 2.4 × 16 |
| Drill | 3.8 × 8 | 3.4 × 8 | 3.4 × 8 | 2.8 × 8 | 2.8 × 8 |
| Drill | - | 3.4 × 10 | 3.4 × 11.5 | 3.4 × 8 | 3.4 × 8 |
| Drill | - | 3.8 × 8 | 3.8 × 8 | 3.4 × 11.5 | 3.4 × 11.5 |
| Drill | - | 3.8 × 10 | 3.8 × 11.5 | 3.4 × 13 | 3.4 × 16 |
| Drill | - | - | - | 3.8 × 8 | 3.8 × 8 |
| Drill | - | - | - | 3.8 × 11.5 | 3.8 × 11.5 |
| Drill | - | - | - | 3.8 × 13 | 3.8 × 16 |
| Driver | 3.7/4.1 | | | | |

| | | | | | |
|--------------------------|----------------|-----------------|-------------------|-------------------|-------------------|
| Implant Diameter (mm) | 4.7 | | | | |
| Implant Length (mm) | 8 | 10 | 11.5 | 13 | 16 |
| Sleeve | Z3D | | | | |
| Depth Control | Yes | Yes | Yes | Yes | Yes |
| SURGICAL SEQUENCE | | | | | |
| Tissue Punch | Yes | Yes | Yes | Yes | Yes |
| Bone Leveler | Yes | Yes | Yes | Yes | Yes |
| Drill 2.4 × 6 | Yes | Yes | Yes | Yes | Yes |
| Start Drill | Yes | Yes | Yes | Yes | Yes |
| Drill | 2.4 × 8 | 2.4 × 8 | 2.4 × 8 | 2.4 × 8 | 2.4 × 8 |
| Drill | 2.8 × 8 | 2.4 × 10 | 2.4 × 11.5 | 2.4 × 11.5 | 2.4 × 11.5 |
| Drill | 3.4 × 8 | 2.8 × 8 | 2.8 × 8 | 2.4 × 13 | 2.4 × 16 |
| Drill | 3.8 × 8 | 3.4 × 8 | 3.4 × 8 | 2.8 × 8 | 2.8 × 8 |
| Drill | 4.4 × 8 | 3.8 × 8 | 3.8 × 8 | 3.4 × 8 | 3.4 × 8 |
| Drill | - | 3.8 × 10 | 3.8 × 11.5 | 3.8 × 8 | 3.8 × 8 |
| Drill | - | 4.4 × 8 | 4.4 × 8 | 3.8 × 11.5 | 3.8 × 11.5 |
| Drill | - | 4.4 × 10 | 4.4 × 11.5 | 3.8 × 13 | 3.8 × 16 |
| Drill | - | - | - | 4.4 × 8 | 4.4 × 8 |
| Drill | - | - | - | 4.4 × 11.5 | 4.4 × 11.5 |
| Drill | - | - | - | 4.4 × 13 | 4.4 × 16 |
| Driver | 4.7 | | | | |



CUSTOMIZED DRILL REPORT

The RealGUIDE Software Suite allows you to automatically generate a customized drill report from an implant project planned with the Zimmer Biomet Dental TSV, Trabecular Metal and 3.1 mm Ezzetic Implant lines and Z3D sleeve, as in the example shown ...



RealGUIDE Software Suite
with PLAN, APP, GUIDE Modules



MORE INFORMATION
ABOUT THE RealGUIDE Z3D
GUIDED SURGERY KIT AT
ZBDGUIDEDSURGERY.COM



Contact us at 1-800-342-5454 or visit
zbdguidedsurgery.com

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