

RealGUIDE™ Universal Guided Surgery Kit



Content

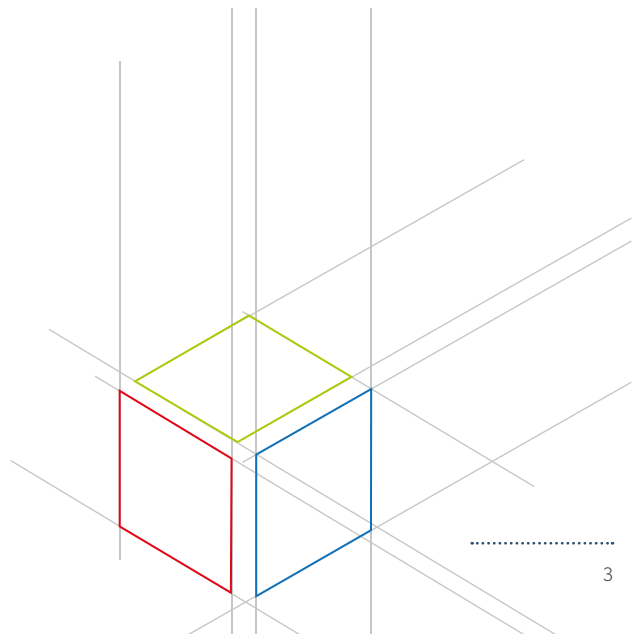
| | |
|---|----|
| RealGUIDE™ Universal Guided Surgery Kit | 3 |
| Surgery kit components | 4 |
| Configuration | 8 |
| RealGUIDE™ Universal Guided Surgery Kit composition ... | 10 |
| Ordering information Universal Guided Surgery Kit | 13 |
| RealGUIDE™ MINI Kit | 16 |
| Ordering information MINI Kit | 18 |





RealGUIDE™ UNIVERSAL GUIDED SURGERY KIT

The RealGUIDE™ Universal Guided Surgery Kit has been designed for use with the 3DIEMME's guided sleeves. The kit consists of Diamond-like Carbon (DLC) coated calibrated surgical drills, dedicated drivers and mounting devices for guided surgery. It can be used to place the most popular implant systems according to the drills diameters and lengths included in the kit.



SURGERY KIT COMPONENTS



GROMMET-LESS VERSION

The grommet-less version allows better cleaning and sterilization during the autoclave cycles of the tray, while ensuring an excellent seal of the surgical instrument housings.

DRILLS – TECHNICAL SPECIFICATIONS

The drills in the RealGUIDE™ Universal Guided Surgery Kit are made of hardened AISI 420B stainless steel and coated with DLC 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.¹ 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 5 mm 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.



REDUCTION RINGS

The reduction rings are color-coded and available in heights of 1, 1.5 and 2 mm. They must be interposed on the guided portion of the drill to reduce the desired height in case of using different lengths. They are very useful when using short implants or when it is necessary to underprepare the osteotomy in the vertical dimension.



IMPLANT MOUNTS

The implant mounts are designed for guided implant insertion, following the osteotomy, in accordance with the implant planning. Connect the implant mount to the implant using the manual screwdriver by means of the passing screw, subsequently connect the handpiece screwdriver to the mount and remove the implant from the vial. Insert the tool into the guide sleeve with the motor off and once it comes into contact with the hard tissue, start the motor.

WARNING: Contact 3DIEMME to verify the availability of guided implant mounts in accordance with the desired implant connections.



BONE MILLS

Bone mills, available in cylindrical and conical versions, are used to remove excess portions of bone in case of irregular bone crests or positioning of tilted implants. The protection screw, included in the kit, to be connected directly to the implant, ensures correct use of the drill, guiding it in the right direction and preserving the implant itself.



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.



DRIVERS & CONNECTORS

The manual and handpiece drivers and extension tools have been designed to be used with the guided implant mounts provided by 3DIEMME.



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 cycles 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.



BITE GAUGE

The bite gauge simulates the maximum size of the drills of the RealGUIDE™ Universal 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.



TORQUE RATCHET

The Torque Ratchet is used for the manual phase of final implant insertion. Make sure that the flat face of the hexagon shown on the implant mount matches the flat face of the hexagon on the head of the guided sleeve in accordance with the implant planning.



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.



2.3 × 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.



CYLINDRICAL BONE MILL

Used to remove regular portions of excess bone and facilitate the insertion of straight secondary prosthetic components (MUA).
Insert the tool into the protective screw with the motor stopped and, once it comes into contact with the hard tissue, start the motor.



CONICAL BONE MILL

Used to remove irregular portions of excess bone and facilitate the insertion of angled secondary prosthetic components (MUA).
Insert the tool into the protective screw with the motor stopped and, once it comes into contact with the hard tissue, start the motor.



BONE MILL GUIDE SCREWS

Connect the protection screw directly to the implant and proceed with the guided removal of the excess bone portions using the bone mills

WARNING: Contact 3DIEMME to verify the availability of bone mill guide screws in accordance with the desired implant connections.



NOTES

- The RealGUIDE™ Universal Guided Surgery 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.

CONFIGURATION



**Extension Tool
for ratchet**
3DM00623



**Square Connector
for ratchet**
3DM00611

**Reduction Rings
h 1.0 mm**
3DM00626.1
(×4)



**Reduction Rings
h 1.5 mm**
3DM00626.15
(×4)



**Reduction Rings
h 2.0 mm**
3DM00626.2
(×4)



Pin
3DM00609
(×4)



Pin Drill
3DM00610
(×2)



Adapter Extender



Drill Stop



Tissue Punch

Bone Leveler

D
Ø2.3



Drill
Ø2.3

Drill
Ø3.0

Drill
Ø3.4

Drill
Ø3.8

Drill
Ø4.2

Pin

Pin Drill

**Calibrated
Cylindrical
Step Drills
ø 2.3 mm**
3DM00613.23.XX
(×5)



**Calibrated
Cylindrical
Step Drills
ø 3.0 mm**
3DM00613.30.XX
(×5)



**Calibrated
Cylindrical
Step Drills
ø 3.4 mm**
3DM00613.34.XX
(×5)



**Calibrated
Cylindrical
Step Drills
ø 3.8 mm**
3DM00613.38.XX
(×5)



**Calibrated
Cylindrical
Step Drills
ø 4.2 mm**
3DM00613.42.XX
(×5)





**Square Connector
for contra-angle**
3DM00612



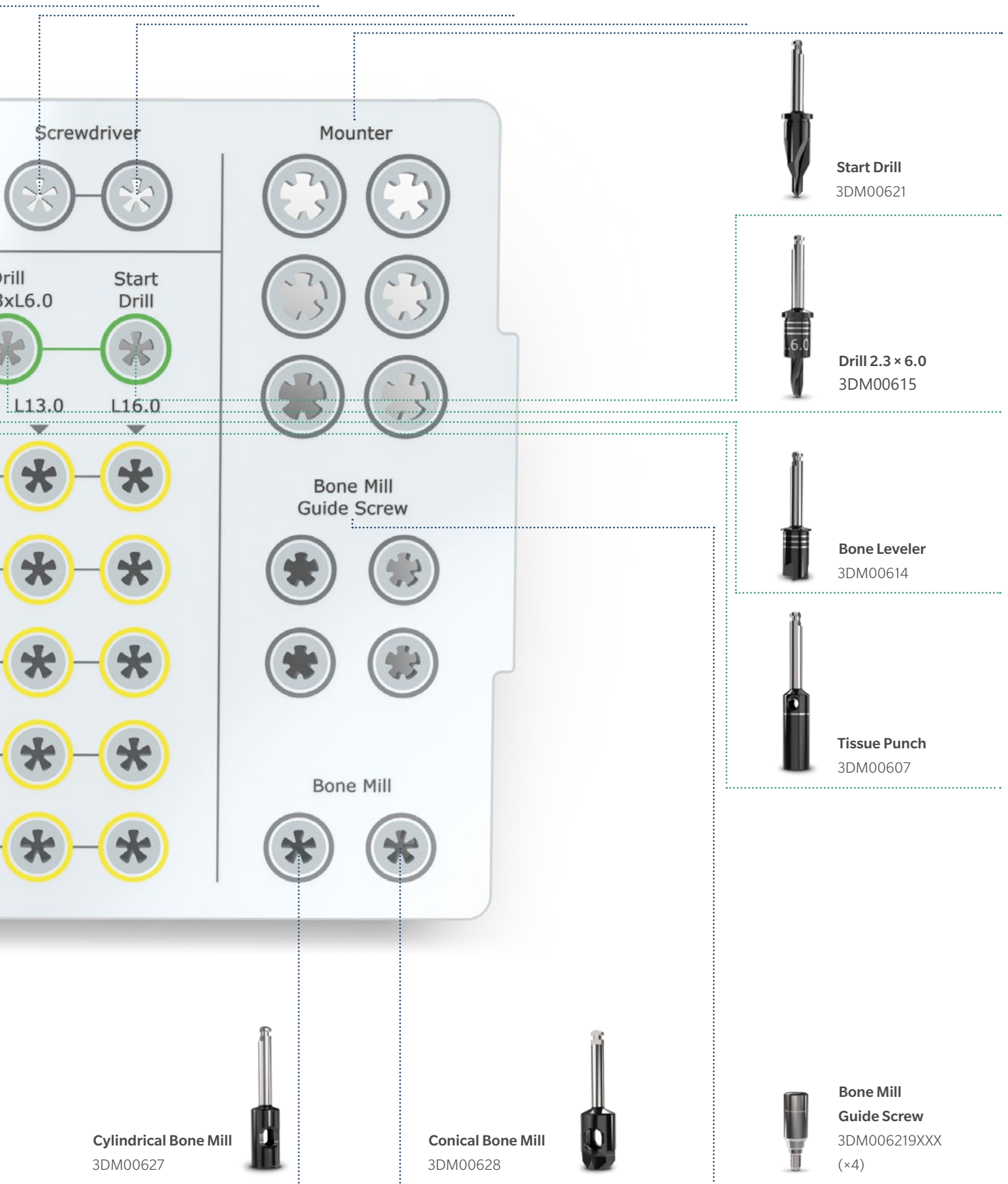
**Handpiece
Screwdriver**
3DM00618



**Manual
Screwdriver**
3DM00617



Implant Mount
3DM00606XXX
(×6)



Start Drill
3DM00621



Drill 2.3 x 6.0
3DM00615



Bone Leveler
3DM00614



Tissue Punch
3DM00607



Cylindrical Bone Mill
3DM00627



Conical Bone Mill
3DM00628



**Bone Mill
Guide Screw**
3DM006219XXX
(×4)

COMPOSITION 1

RealGUIDE™ FULL KIT

RealGUIDE™ FULL KIT

INSTRUMENTS INCLUDED IN THE FULL KIT (3DM00700)

- 1 mucotome
- 1 start drill
- 1 bone leveler
- 1 drill D2.3 × 6.0 mm
- D2.3 × 8.5 mm, D2.3 × 10 mm, D2.3 × 11.5 mm, D2.3 × 13 mm, D2.3 × 16 mm drills set
- D3.0 × 8.5 mm, D3.0 × 10 mm, D3.0 × 11.5 mm, D3.0 × 13 mm, D3.0 × 16 mm drills set
- D3.4 × 8.5 mm, D3.4 × 10 mm, D3.4 × 11.5 mm, D3.4 × 13 mm, D3.4 × 16 mm drills set
- D3.8 × 8.5 mm, D3.8 × 10 mm, D3.8 × 11.5 mm, D3.8 × 13 mm, D3.8 × 16 mm drills set
- D4.2 × 8.5 mm, D4.2 × 10 mm, D4.2 × 11.5 mm, D4.2 × 13 mm, D4.2 × 16 mm drills set
- Reduction rings (4 × H1.0 mm | 4 × H1.5 mm | 4 × H2.0 mm)
- 2 drills for fixation pins
- 4 fixation pins
- 6 implant mounts of the same prosthetic connection chosen among the compatibility list
- 1 manual screwdriver
- 1 handpiece screwdriver
- 14 × 4 square connector for handpiece
- 1 torque wrench prolongation
- 1 cylinder bone mill
- 1 conical bone mill
- 4 bone mill protection screws, chosen among the compatibility list
- 1 torque wrench with removable adapter
- 1 mouth opening gauge
- 1 surgical box

Additional implant mounts can be purchased separately (6 implant mounts per prosthetic connection sets). Please refer to the compatibility table for the updated list of compatible platforms.



COMPOSITION 2

RealGUIDE™ BASIC KIT

RealGUIDE™ BASIC KIT

INSTRUMENTS INCLUDED IN THE BASIC KIT (3DM00700LT)

- 1 mucotome
- 1 start drill
- D2.3×8.5 mm, D2.3×10 mm, D2.3×11.5 mm, D2.3×13 mm drills set
- D3.0×8.5 mm, D3.0×10 mm, D3.0×11.5 mm, D3.0×13 mm drills set
- D3.4×8.5 mm, D3.4×10 mm, D3.4×11.5 mm, D3.4×13 mm drills set
- D3.8×8.5 mm, D3.8×10 mm, D3.8×11.5 mm, D3.8×13 mm drills set
- Reduction rings (4 × H1.0 mm | 4 × H1.5 mm | 4 × H2.0 mm)
- 1 drill for fixation pins
- 3 fixation pins
- 4 implant mounts of the same prosthetic connection chosen among the compatibility list
- 1 manual screwdriver
- 1 handpiece screwdriver
- 1 4 × 4 square connector for handpiece
- 1 torque wrench prolongation
- 1 torque wrench with removable adapter
- 1 mouth opening gauge
- 1 surgical box

Not included instruments can be purchased separately. Additional implant mounts can be purchased separately (6 implant mounts per prosthetic connection sets). Please refer to the compatibility table for the updated list of compatible platforms.



COMPOSITION 3

RealGUIDE™ UNIVERSAL KIT

For Implant Site Preparation Only

RealGUIDE™
UNIVERSAL KIT

INSTRUMENTS INCLUDED IN THE UNIVERSAL KIT (3DM00701)

- 1 mucotome
- 1 start drill
- D2.3 × 8.5 mm, D2.3 × 10 mm, D2.3 × 11.5 mm, D2.3 × 13 mm, D2.3 × 16 mm drills set
- D3.0 × 8.5 mm, D3.0 × 10 mm, D3.0 × 11.5 mm, D3.0 × 13 mm, D3.0 × 16 mm drills set
- D3.4 × 8.5 mm, D3.4 × 10 mm, D3.4 × 11.5 mm, D3.4 × 13 mm, D3.4 × 16 mm drills set
- D3.8 × 8.5 mm, D3.8 × 10 mm, D3.8 × 11.5 mm, D3.8 × 13 mm, D3.8 × 16 mm drills set
- D4.2 × 8.5 mm, D4.2 × 10 mm, D4.2 × 11.5 mm, D4.2 × 13 mm, D4.2 × 16 mm drills set
- Reduction rings (4 × H1.0 mm | 4 × H1.5 mm | 4 × H2.0 mm)
- 1 drill for fixation pins
- 3 fixation pins
- 1 mouth opening gauge
- 1 surgical box

Not included instruments can be purchased separately.



ORDERING INFORMATION

RealGUIDE™ Universal Guided Surgery Kit














| Product | Part No. |
|---|------------|
| RealGUIDE™ Universal Guided Surgery Kit Full Kit | 3DM00700 |
| RealGUIDE™ Universal Guided Surgery Kit Basic Kit | 3DM00700LT |
| RealGUIDE™ Universal Guided Surgery Kit For Implant site Preparation Only | 3DM00701 |
| Autoclavable RealGUIDE™ Universal Guided Surgery Box | 3DM00632 |

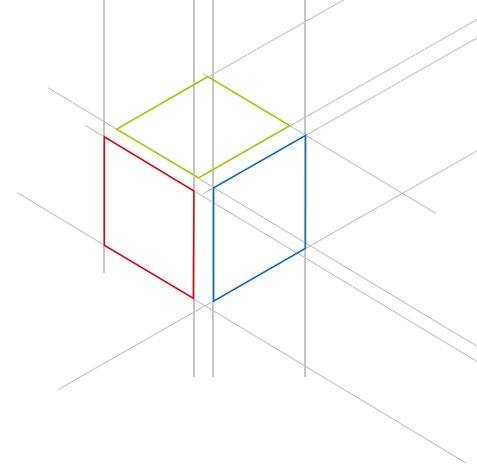
Configuration

| Product | Part No. |
|---|--|
| Drill for Fixation Pin max. 1,000 rpm, hardened stainless steel AISI 420B with DLC coating |  3DM00610 |
| Fixation Pin TiAl6V4 ASTM F136 |  3DM00609 |
| Manual Screwdriver hardened stainless steel AISI 420F MOD |  3DM00617 |
| Handpiece Screwdriver hardened stainless steel AISI420F MOD with DLC coating |  3DM00618 |
| Torque Wrench Extension max. 50 Ncm, hardened stainless steel AISI 420F MOD |  3DM00623 |
| 4 × 4 Square Connector for handpiece max. 50 Ncm, hardened stainless steel AISI 420F MOD |  3DM00612 |
| Mucotome / Tissue Punch Internal diameter: 4.2 mm, max. 100 rpm, hardened stainless steel AISI 420F MOD with DLC coating |  3DM00607 |


ORDERING INFORMATION

Configuration

| Product | | Part No. |
|--|---|-------------|
| Bone Crest Leveler max. 600 rpm, hardened stainless steel AISI 420B with DLC coating |  | 3DM00614 |
| Start Drill Implant site preparation drill, max. 600 rpm, hardened stainless steel AISI 420B with DLC coating |  | 3DM00621 |
| Drill ø 2.3 × 6 mm max. 800 rpm, hardened stainless steel AISI 420B with DLC coating |  | 3DM00615 |
| Cylindrical Bone Mill max. 600 rpm, hardened stainless steel AISI 420B with DLC coating |  | 3DM00627 |
| Conical Bone Mill max. 600 rpm, hardened stainless steel AISI 420B with DLC coating |  | 3DM00628 |
| Bone Mill Protection Screw (Choose among the compatibility list) hardened stainless steel AISI 420F MOD |  | 3DM00629.XX |
| Reduction rings 4 × h 1.0 mm TiAl6V4 ASTM F136 |  | 3DM00626.1 |
| Reduction rings 4 × h 1.5 mm TiAl6V4 ASTM F136 |  | 3DM00626.15 |
| Reduction rings 4 × h 2.0 mm TiAl6V4 ASTM F136 |  | 3DM00626.2 |
| Mouth Opening Gauge / Bite Gauge hardened stainless steel AISI 303 |  | 3DM00622 |
| Torque Ratchet hardened stainless steel AISI 630 (17-4PH) |  | 3DM00611 |



Implant Mounts (hardened stainless steel AISI 420F MOD)

| Product | Part No. |
|---|--|
| Implant Mount Screw, max 20 rpm, 50 Ncm (Choose among the compatibility list) |  3DM00606XXX |

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

| Length | Drill ø2.3 mm | Double Diameter Drill ø3.0 / 2.3 mm | Double Diameter Drill ø3.4 / 3.0 mm | Double Diameter Drill ø3.8 / 3.4 mm | Double Diameter Drill ø4.2 / 3.8 mm |
|---------|--|--|--|--|--|
| | max. 800 rpm | | | | |
| |  |  |  |  |  |
| 8.5 mm | 3DM00613.23.85 | 3DM00613.30.85 | 3DM00613.34.85 | 3DM00613.38.85 | 3DM00613.42.85 |
| 10 mm | 3DM00613.23.10 | 3DM00613.30.10 | 3DM00613.34.10 | 3DM00613.38.10 | 3DM00613.42.10 |
| 11.5 mm | 3DM00613.23.115 | 3DM00613.30.115 | 3DM00613.34.115 | 3DM00613.38.115 | 3DM00613.42.115 |
| 13 mm | 3DM00613.23.13 | 3DM00613.30.13 | 3DM00613.34.13 | 3DM00613.38.13 | 3DM00613.42.13 |
| 16 mm | 3DM00613.23.16 | 3DM00613.30.16 | 3DM00613.34.16 | 3DM00613.38.16 | 3DM00613.42.16 |

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 |

COMPOSITION 1

RealGUIDE™ MINILOC GUIDED SURGERY KIT

RealGUIDE™
MINILOC KIT

INSTRUMENTS INCLUDED IN THE MINILOC KIT

(3DM00700MINILOC)

- 1 mucotome D3,5 mm
- 1 drill D1,6 × 7 mm
- 1 drill D1,6 × 11,5 mm
- 1 drill D1,6 × 15 mm
- 1 drill D2,1 × 15 mm
- 1 drill D2,4 × 15 mm
- 1 drill D2,8 × 15 mm
- 1 drill D3,2 × 15 mm
- Reduction rings (2 × H1,0 mm | 2 × H1,5 mm | 2 × H2,0 mm)
- 1 surgical box

Additional instruments for the surgical guide fixation and Locator™ compatible implant mounts:

- 2 fixation pins drills
- 4 fixation pins
- 3 Locator™ compatible implant mounts



COMPOSITION 2

RealGUIDE™ MINIPIN GUIDED SURGERY KIT

RealGUIDE™ MINIPIN KIT

INSTRUMENTS INCLUDED IN THE MINIPIN KIT

(3DM00700MINIPIN)

- 1 mucotome D3,5 mm
- 1 drill D1,6 × 7 mm
- 1 drill D1,6 × 11,5 mm
- 1 drill D1,6 × 15 mm
- 1 drill D2,1 × 15 mm
- 1 drill D2,4 × 15 mm
- 1 drill D2,8 × 15 mm
- 1 drill D3,2 × 15 mm
- Reduction rings (2 × H1,0 mm | 2 × H1,5 mm | 2 × H2,0 mm)
- 1 surgical box

Additional instruments for the surgical guide fixation:

- 2 fixation pins drills
- 4 fixation pins



COMPOSITION 3

RealGUIDE™ MINI GUIDED SURGERY KIT

RealGUIDE™ MINI KIT

INSTRUMENTS INCLUDED IN THE MINI KIT

(3DM00700MINI)

- 1 mucotome D3,5 mm
- 1 drill D1,6 × 7 mm
- 1 drill D1,6 × 11,5 mm
- 1 drill D1,6 × 15 mm
- 1 drill D2,1 × 15 mm
- 1 drill D2,4 × 15 mm
- 1 drill D2,8 × 15 mm
- 1 drill D3,2 × 15 mm
- Reduction rings (2 × H1,0 mm | 2 × H1,5 mm | 2 × H2,0 mm)
- 1 surgical box










ORDERING INFORMATION

RealGUIDE™ MINI Guided Surgery Kit





| Product | Part No. |
|---|-----------------|
| RealGUIDE™ MINI Guided Surgery Kit MINILOC | 3DM00700MINILOC |
| RealGUIDE™ MINI Guided Surgery Kit MINIPIN | 3DM00700MINIPIN |
| RealGUIDE™ MINI Guided Surgery Kit MINI | 3DM00700MINI |
| Autoclavable RealGUIDE™ MINI Guided Surgery Box | 3DM00616MINI |

Configuration

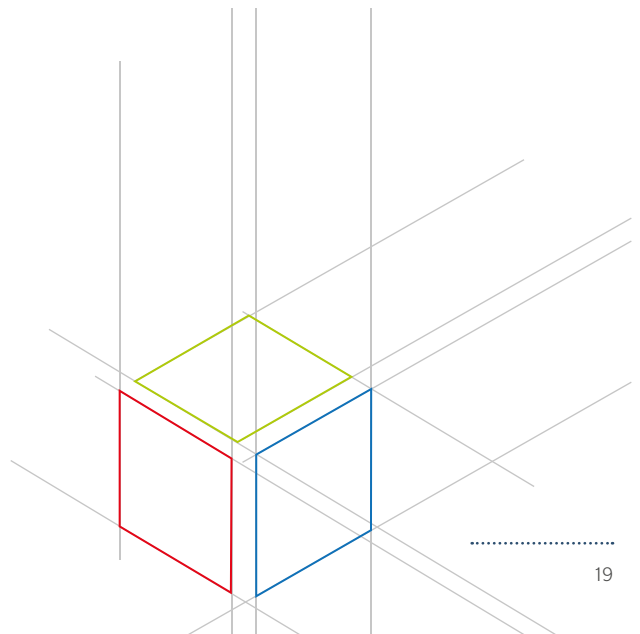
| Product | Part No. |
|---|--|
| Drill for Fixation Pin max. 1,000 rpm, hardened stainless steel AISI 420B with DLC coating |  3DM00610 |
| Fixation Pin TiAl6V4 ASTM F136 |  3DM00609 |
| Mucotome / Tissue Punch ø 3.5 mm hardened stainless steel AISI 420F MOD with DLC coating |  3DM00607S |
| Locator™ compatible Implant Mount (x3) hardened stainless steel AISI 420B |  3DM00606LOC |
| Reduction rings 2 × h 1.0 mm TiAl6V4 ASTM F136 |  3DM00626.1S |
| Reduction rings 2 × h 1.5 mm TiAl6V4 ASTM F136 |  3DM00626.15S |
| Reduction rings 2 × h 2.0 mm TiAl6V4 ASTM F136 |  3DM00626.2S |

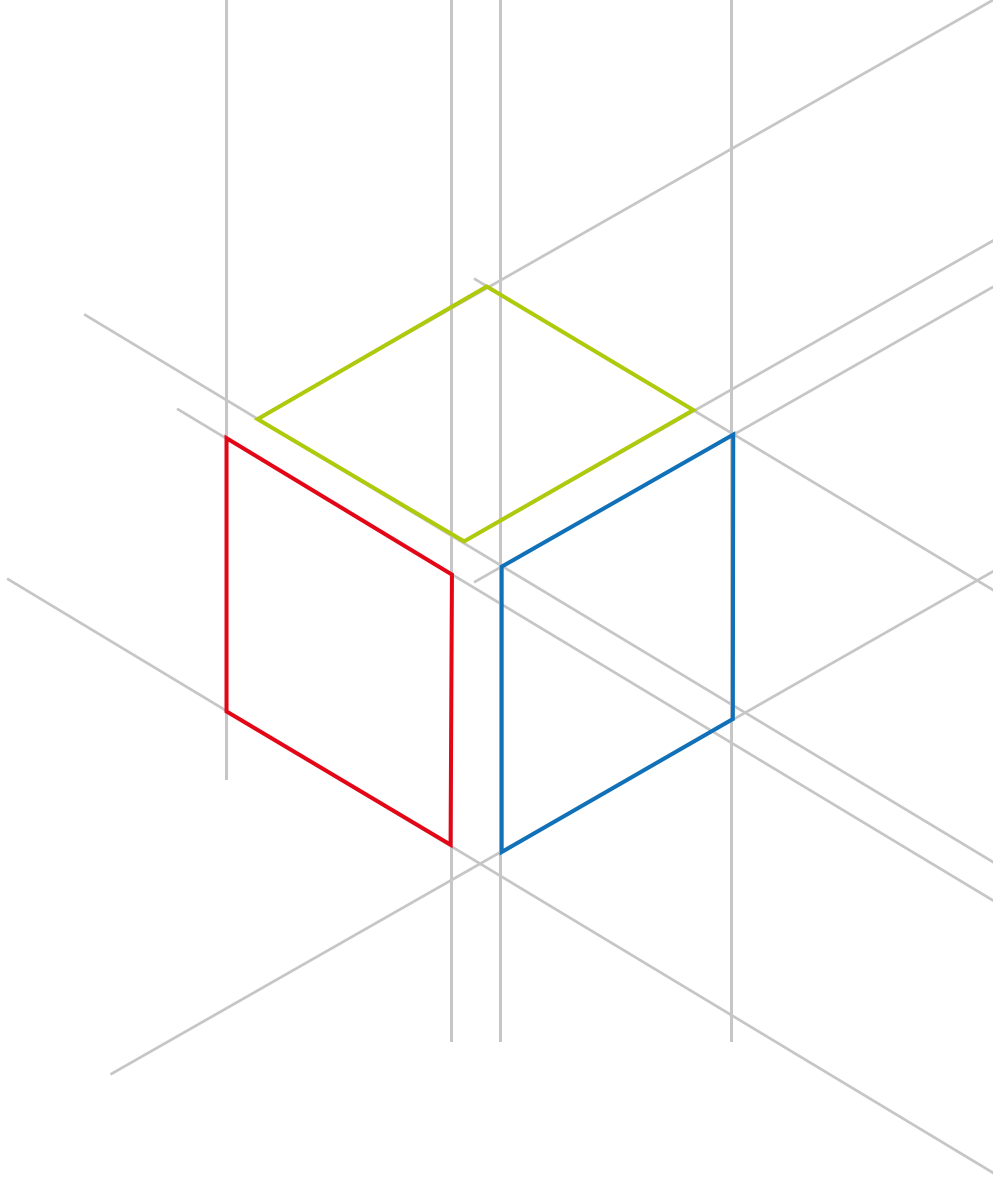
Calibrated Cylindrical Drills (hardened stainless steel AISI 420B with DLC coating)

| Length | Drill ø1.6 mm | Drill ø2.1 mm | Drill ø2.4 mm | Drill ø2.8 mm | Drill ø3.2 mm |
|---------|---|---|---|---|---|
| | max. 800 rpm | | | | |
| |  |  |  |  |  |
| 7.0 mm | 3DM00613.16.70 | - | - | - | - |
| 11.5 mm | 3DM00613.16.115 | - | - | - | - |
| 15.0 mm | 3DM00613.16.15 | 3DM00613.21.15 | 3DM00613.24.15 | 3DM00613.28.15 | 3DM00613.32.15 |

Surgical Guide Accessories

| Product | Part No. |
|--|-----------------------|
| Surgical Guide Sleeve RG CAD Procedure 3.5 mm for RealGUIDE™ MINI Surgery Kit (10 pcs) | 3DM00604CAD1.SMALL.10 |





3DIEMME S.r.l.

Via Delle Baraggette 10 | 22060 Figino Serenza (CO) | Italy

Phone +39 031.7073353 | support@3diemme.it | www.3diemme.it

