



GUIDED SURGERY – SIMPLE AND SAFE!

The **BEGO Guide Trays** – the innovative, open solution for completely guided implant placement

WORK INSTRUCTIONS

Partners in Progress



The BEGO Guide Trays – the perfect complement to your BEGO Semados® implant system!

The BEGO Guide Trays provide you with the completely guided implantation of BEGO Semados® implants (S/SC/SCX 3.25 – 4.5 and RS/R SX 3.0 – 4.5). For the use of this tray you require a BEGO Guide drill template whose production is based on a three-dimensional, virtual implant planning and which is equipped with the BEGO Guide master sleeves. This type of template is available from a range of suppliers. You can find an up-to-date list of the compatible systems at <http://www.bego.com/implantology-solutions/guided-surgery/compatible-planning-solutions/>.

Guided surgery – simple and safe

The focus during the development of the BEGO Guide Trays was on creating a simple and clearly structured system. Guided surgery based on 3D diagnostics should make implant placement even safer, but user convenience should also be borne in mind. For this reason, the emphasis was on user-friendliness. This is reflected by the intuitive user guidance system directly on the tray.

Partition of tray

Thanks to the partitioning of the tray into two halves (A and B), only a selection of the individual components is required, depending on the implant diameter to be used. This allows you to find the instrument you require significantly faster.

Colour coding

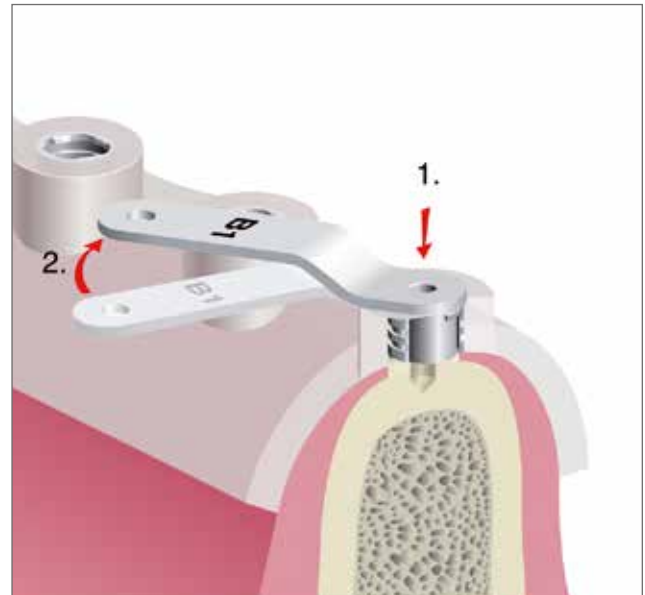
The colour coding of the BEGO Semados® implants has been applied to the individual drills in the BEGO Guide Trays. This allows you to see directly which instrument you require for which implant.

Self-locking Spoons

Two hands instead of three: with the new BEGO technology – the self-locking BEGO Guide Spoons – completely guided implant placement is even more convenient. With this method, you do not need an additional hand to hold the reduction spoon, the BEGO Guide Spoon. Simply insert the BEGO Guide Spoons in the master sleeve (A or B) and lock them in place with a small twist. The BEGO Guide Spoons are now locked in the drill template and you can focus your full attention on drilling. A small twist in the opposite direction is sufficient to unlock the spoons, allowing you to change to the next implant position quickly and conveniently.

Implant placement with the BEGO Guide Connector

The choice is yours with the BEGO Guide Connector: Do you prefer to place the implants with or without a depth stop via the master sleeve? The BEGO Guide Trays leave both options open to you. With the BEGO Guide Connector with variable depth stop ring specially developed for guided surgery, you can set the depth stop however you wish. If you prefer to place implants with a real depth stop, you can lock the ring in the required position. If you would like to remain more flexible, simply lock the ring in the top position. There are also clear laser markings on the BEGO Guide Connector to allow you to determine the correct depth.



The system's open approach

With the BEGO Guide Trays you don't have to tie yourself down to working with a specific guide system. BEGO Implant Systems offers a range of planning system providers the possibility of implementing the BEGO Guide Trays in their respective software, so that you can continue to work with your favourite system. BEGO Guide Trays are already compatible with a wide range of different systems. You can find an up-to-date list at <http://www.bego.com/implantology-solutions/guided-surgery/compatible-planning-solutions/> – or simply ask us about compatibility.

Do you work with a laboratory-assisted planning system? This is not a problem either, as you can order the BEGO Guide master sleeves directly from us.

The most important details

- Precise realisation of your three-dimensional planning
- Optimal safety thanks to depth stop
- Exact guidance of all instruments
- Minimally invasive, transgingival implantation is possible
- Open system, compatible with most planning systems
- Can be used with BEGO Semados® S/SC/SCX-RS/R SX implants (S/SC/SCX 3.25 – 4.5 and RS/R SX 3.0 – 4.5)
- Supports all implant lengths
- Implant placement directly through the drill template (see page 11, point 8)



BEGO GUIDE TREATMENT PROTOCOL

for BEGO Guide SAFE (full guided surgical template)

Patient **XXXXXXXXXX**

Dentist **XXXXXXXXXX**

Laboratory **BEGO**

Lower jaw Upper jaw

Case number **XXXXXXXXXX**

Implant information						
Position	15	16	17	26		
Implant type	SC	SC	SC	SC		
Length*	10	10	11.5	8.5		
Diameter*	3.75	4.5	3.75	4.1		
Color code	blue	red	blue	grey		

* Value in mm

Drill information						
Sleeve platform	A	B	A	B		
Depth drill	Y	X	Y	X		
Final depth drill / countersink / screw tapper	4	6	4	5		
Connector depth marking	4	2	3	3		

Additional comments

1 - D4M16070 © by BEGO 2016-05

Example protocol

BEGO Guide Spoons (Spoon Platform)

The values "A" and "B" are possible here. These specify the diameter of the BEGO Guide master sleeve. "A" corresponds to an internal diameter of 4.2 mm (for S/SC/SCX 3.25 – 3.75 and RS/RSX 3.0 – 3.75), "B" to 4.7 mm (for S/SC/SCX 4.1 – 4.5 and RS/RSX 4.1 – 4.5).

You can use this specification to select the corresponding half of the tray ("above" or "below").

BEGO Guide Depth Drill

The possible values here are "X", "Y" and "Z". The specifications refer to the length of the drills. This depends exclusively on the sleeve position in the template and has no direct relation to the length of the selected implant.

X: 18 mm, Y: 23.5 mm, Z: 29 mm

BEGO Guide Last Drill/Countersink/Screw Tapper

This specification describes up to which diameter you need to prepare. You use all the drills of the required length until you reach the instrument with the specified value. The BEGO Guide Countersink required afterwards and the BEGO Guide Screw Tapper have the same value.

BEGO Guide Connector (Connector Depth Marking)

This value shows you which depth mark you require on the BEGO Guide Connector. Depending on the BEGO Guide Connector, there are up to six markings. The lowest marking is always "1". The numbering then increases until the contra angle is reached. When reading the markings, please ensure that the correct height is set via the depth stop ring (see Point 5) and that you measure from the bottom of the mark.

BEGO Guide Spoons (A1-A4, B1-B6)

The innovative BEGO Guide Spoons are the most important components of the BEGO Guide Trays. They reduce the diameter of the BEGO Guide master sleeve to the respective drilling diameter. To ensure the spoons remain locked during drilling, they are equipped with a locking mechanism, similar to that of a bayonet connection.

BEGO Guide Tissue Punches (A and B)

The mucosal punch is applied directly via the master sleeve without a spoon.
Speed: 200 rpm

BEGO Guide Centre Drills (A and B)

The centre drill is an instrument which is only for use with a drill template and without a spoon directly via the master sleeve. The non-cutting guiding sheath of the centre drill, which is exactly calibrated to the master sleeve, achieves very high precision. It is used to centre-punch the cortical section of the bone and guarantee initial guiding.
Speed: 800 rpm

BEGO Guide Pilot and Depth Drill (X1-X6, Y1-Y6, Z1-Z6)

The pilot drill is always used with spoon A1 or B1. Unlike with other pilot drills, the BEGO Guide Pilot Drill prepares the cavity right to the final length.
The depth drills are used in connection with the corresponding BEGO Guide Spoon. The supplied drill template protocol informs you of the matching drill and spoon. The designation (numbering) of the drill must always match the number on the spoon.
Speed: 800 rpm





BEGO Guide Ratchet Adapter (BEGO Guide S-Line Tray only)

With the ratchet adapter you can use the BEGO Guide Connector manually with the ratchet instead of the contra-angle handpiece. There is an optional mount for the ratchet in the base of the tray.

Add-on

Additional tools can be placed on the mounts.

BEGO Guide Screw Tapper (3-6)

The screw tapper can be used to prepare a thread in the implant bed for the subsequent implant. This is done by placing the screw tapper onto the connector. Select the correct instrument for this in accordance with your protocol.

Speed: 15 rpm

BEGO Guide Countersink (3-6)

The countersink can be used to expand the cortical bone for simpler implant placement. This is done by placing the countersink onto the connector. Select the correct instrument for this in accordance with your protocol.

Speed: 800 rpm

BEGO Guide Connector (AX, AY, AZ, BX, BY, BZ)

The BEGO Guide Connector forms the interface to the countersinks and screw tappers as well as later to the implant's insertion post.

Six BEGO Guide Connectors with ratchet connection are additionally included in the BEGO Guide RS/RSX-Line Tray.

The layout of the trays

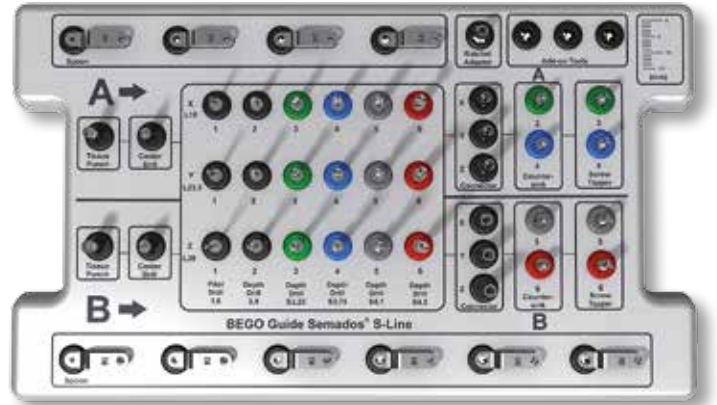
The BEGO Guide Trays offer you simple handling, which makes safe guided surgery simple for you. All the instruments can be quickly and intuitively assigned as the BEGO Guide Tray is clearly partitioned in two sections (A and B).

Depending on which implant diameter is planned or which master sleeve is in the drill template, you will either require the instruments from the upper (A) or lower (B) section of the tray – only the depth drills are positioned between the two sections A and B in the tray.

In addition, all the instruments are positioned in the order that they are used (from left to right) and labelled. This offers you added safety and optimal convenience during implant placement. A protocol included by the manufacturer of the respective drill template also provides you with support when choosing the instruments to use. This lists all the preparation steps in detail (step by step).

An example:

For the final drilling of a BEGO Semados® SC 3.75 L10 you will require the A4 spoon and, for example, the Y4 drill, depending on the protocol. This simply means that you use the BEGO Guide Spoon for the BEGO Guide master sleeve A with the "4" diameter (SC 3.25). The BEGO Guide depth drill also accordingly has a diameter of "4" and in this case the length Y (23.5 mm). In this way, the protocol leads you through the individual steps systematically.



BEGO Guide S-Line Tray

All the components are clearly labelled and can be located quickly in the tray using the protocol.

- A and B:** Components calibrated to the master sleeve
- X, Y and Z:** Component lengths calibrated to the respective sleeve positions
- 1 to 6:** Components calibrated to the individual (implant) diameters

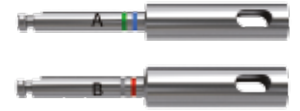
The individual instruments (in their order of use)

1 BEGO Guide Mucosal Punches (A and B)

The mucosal punch is applied directly via the BEGO Guide master sleeve without a BEGO Guide Spoon.

Speed: 200 rpm

You may need to remove the template to remove mucosa with forceps.



2 BEGO Guide Centre Drills (A and B)

The centre drill is an instrument which is only for use with a BEGO Guide drill template and without a spoon directly via the master sleeve. The non-cutting guiding sheath of the centre drill, which is exactly calibrated to the master sleeve, achieves very high precision. It is used to centre-punch the cortical section of the bone and guarantee initial guiding.

Speed: 800 rpm



3 BEGO Guide Spoons (A1-A4, B1-B6)

The innovative spoons are the most important components of the BEGO Guide Trays. They reduce the diameter of the BEGO Guide master sleeve to the respective drilling diameter. So that the spoons do not need to be held during drilling, they are equipped with a locking mechanism, similar to that of a bayonet connection.

Insert the required spoon in the master sleeve – there are exactly four possible positions. Ensure that the spoon is completely inserted in the master sleeve until the spoon handle is flush and then turn it gently clockwise until you feel slight resistance. The spoon is now locked.

To release it, turn it anticlockwise and remove it from the master sleeve.



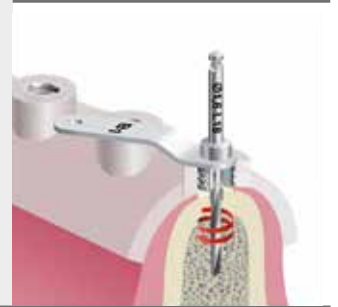
4 BEGO Guide Pilot and Depth Drill (X1-X6, Y1-Y6, Z1-Z6)

The pilot drill is always used with BEGO Guide Spoon A1 or B1. Unlike with other pilot drills, the BEGO Guide Pilot Drill prepares the cavity right to the final length. Start by inserting the required spoon into the BEGO Guide master sleeve and locking it in place. Then position the pilot drill (X1, Y1 or Z1) specified on the drill protocol in the spoon and drill intermittently until you reach the depth stop. The master sleeve position is calibrated to the implant length selected in the 3D implant plan.

The depth drills are used in connection with the corresponding spoons. The protocol informs you of the matching drill and spoon. The designation (number) of the drill must always match the number on the spoon.

Example: BEGO Guide Drill X1 with BEGO Guide Spoon A1 or B1 (depending on BEGO Guide master sleeve)
Drill with the depth drills intermittently up to the depth stop.

Speed: 800 rpm



5 BEGO Guide Connector (AX, AY, AZ, BX, BY, BZ)

The connector forms the interface to the countersinks and the screw tappers. Select the corresponding connector in accordance with the drill protocol and insert it in your contra-angle handpiece.

The BEGO Guide Connector features up to 4 (length X) or up to 6 (length Y and Z) depth markings. These are labelled 1 to 6 on the protocol. The lowest marking is 1 and the numbering increases until the contra angle is reached.

The depth stop ring is a component of the connector. You can use this to adjust the depth stop to the selected instrument length. To do so, turn the depth stop ring approx. 90° in the opposite direction to the arrow (until the flat portions of the connector and the depth stop ring are above one another) – this can then be freely positioned at any height in this position. Select the required depth marking and lock the ring by turning it the other way approx. 90° in the direction of the arrow. The ring is now locked again. Please note that the respective depth marking is covered by the depth stop ring and as such is no longer visible.

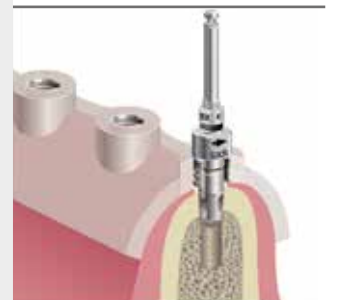
Six BEGO Guide Connectors with ratchet connection are additionally included in the BEGO Guide RS/RSX-Line Tray.



6 BEGO Guide Countersink (3-6)

The countersink can be used to expand the cortical bone for simpler implant placement. This is done by placing the countersink onto the BEGO Guide Connector. Select the correct instrument for this in accordance with your protocol. The use of the countersink is optional. The use is recommended for hard bone (D1/D2).

Speed: 800 rpm



7 BEGO Guide Screw Tapper (3-6)

The screw tapper can be used to prepare a thread in the cavity for the implant to be inserted. Due to the high precision of all the components, you will need to tap a thread in considerably more cases than you are used to when drilling unaided. For this reason, we recommend the general use of the screw tapper in the mandible and its use in the maxilla if hard bone (D1/D2) is expected.

This is done by placing the screw tapper on the BEGO Guide Connector. Select the correct instrument for this in accordance with the supplied protocol.

For manual tapping, you can use the BEGO Guide Ratchet Adapter together with the corresponding BEGO Guide Connector.

Speed: 15 rpm



8 BEGO Guide Implant Placement

With the BEGO Guide Connector you can also optionally place the implant via the template. Firstly select the correct instrument as per your protocol and then set the depth stop ring as described in step 5. If you have already used the countersink or screw tapper, the BEGO Guide Connector is at the right marking and does not need to be changed.

Remove the implant from the packaging with the BEGO Guide Connector and place it directly via the template (max. torque 50 N/cm). When inserting make sure not to turn the implant any further upon reaching the depth stop as you may otherwise damage the implant bed.

BEGO Guide S-Line Tray: Use the BEGO Guide Ratchet Adapter for insertion with the torque spanner.

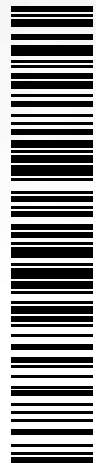
BEGO Guide RS/RSX-Line Tray: For insertion with the torque spanner, use one of the 6 BEGO Guide Connectors with ratchet connection (selection as per the protocol), make sure that the depth ring stop is set correctly.

Warning: To insert the implants via the template, you require implants with the new BEGO Guide-compatible insertion post. These can be recognised with the aid of the following images.



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