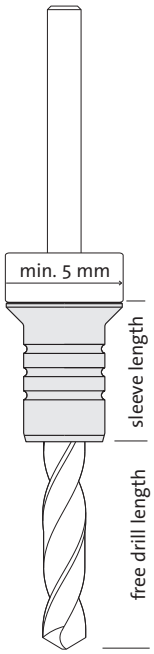
K.27.11.EN02/06.16

Depth stop for double sleeves

StecoGuide

The system of StecoGuide titanium double sleeves indicates titanium sleeves for axial guiding of cylindrical drills in surgical templates or surgical guides. Under certain conditions they might be used together with depth controlled surgical instruments within 3D implant planning tools.
Therefore the exact drill diameter and the length between drill tip to depth stop have to be known. The distance between implant shoulder and the drill sleeve is specified by the free drill length, the sleeve length and the implant length.



To use double sleeves with depth stop drills the diameter of the depth stop has to be at least 5.0 mm. Otherwise it would stop inside the sleeves funnel. For drills with small depth stop the titanium inner sleeves with depth stop (M.27.24.D ...) can be used. It has to be made sure that the drill fits the sleeve correctly in advance. Please refer to instruction for use for further information. Conical shaped drills cannot be guided in a cylindrical sleeve.

Requirements

- Which drill shall be used? Does the drill fit the sleeve? (check in advance!)
- Which sleeve should be used? (innersleeve or inner- and outer sleeve)
- Does the drill have a depth stop > 5,0 mm → Titanium sleeve possible with funnel
  < 5,0 mm → Inner sleeve with depth stop
- Distance between drill tip and depth stop is larger than implant plus sleeve length.

The sleeves upper collar has a height of 0.2 mm. By choosing the sleeve diameter within the software it has to be considerated, that the inner sleeve sits 0.34 mm on the outer sleeve. Depending on the usage of inner sleeve and/or outer sleeve this distance has to be considerate within planning (see page 2). All provided measures may vary due to production tolerances.

Digital drilling template production

If the drilling templates are milled or printed, the software can already schedule the necessary fit for the sleeve. Therefore, the distance of the sleeve to the implant, the bit length and the distances of the additional nested sleeves must be considered.

Conventional production in the laboratory

By using the template drill for inner or outer sleeve a hole is made with the exact shape of the sleeves outer surface. The sleeve just has to be pressed in.

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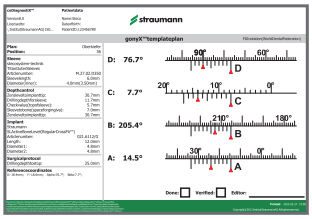
Depth stop with double sleeves on the example of coDiagnostiX™

Axis adjustment (gonyX ™)

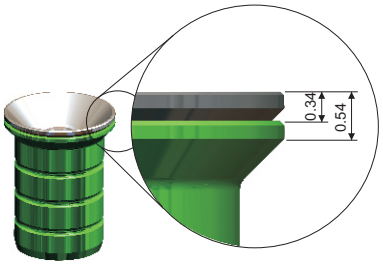
The axis adjustment is independent of vertical sleeve position and can be used from the software directly. The screenshot to the right shows an example for the outer sleeve.

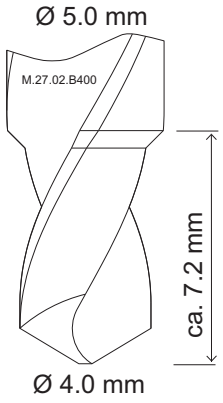


Titanium double sleeve with depth stop with coDiagnostiX™ (Dental Wings)
The following statement applies to the common use of outer and inner sleeves.

- The axis adjustment is independent of vertical sleeve position and can be used from the software directly.
- Take bearing of zero level with the tip of template drill (M.27.02.B400)!
- Drill depth is calculated like following:

Check value upper sleeve rim from software
+ 7.2 mm* (tip of template drill to end of bevel)
+ 0.2 mm collar of outer sleeve
+ 0.34 mm collar of inner sleeve**
= drill depth



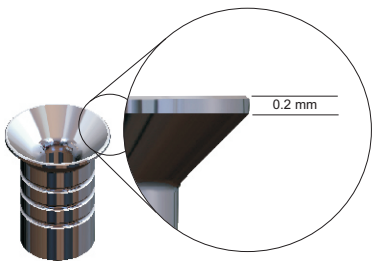


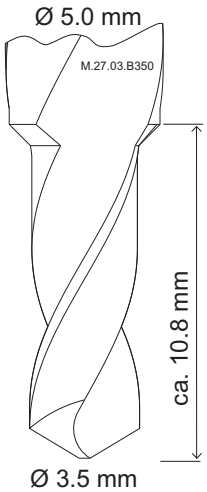
* This length definition is only sketchy because the measure is taken within the spiral cut of the drill. The real measure is depending on the drill procedure as well. Make sure to plan additional safety distance!
** Inner sleeve bears on outer sleeve.

Titanium inner sleeve with depth stop with coDiagnostiX™ (Dental Wings)
The following statement applies to the use of inner sleeves without outer sleeves.

- The axis adjustment is independent of vertical sleeve position and can be used from the software directly.
- Take bearing of zero level with the tip of template drill (M.27.03.B350)!
- Drill depth is calculated like following:

Check value upper sleeve rim from software
+ 10.8 mm* (tip of template drill to end of bevel)
+ 0.2 mm collar of inner sleeve**
= drill depth





* This length definition is only sketchy because the measure is taken within the spiral cut of the drill. The real measure is depending on the drill procedure as well. Make sure to plan additional safety distance!
** Inner sleeve bears on drilled hole.

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