Case Study

Surgical Guide



Surgical Guide

Application: Implants

Surgical guides allow highly accurate implant placements in dental treatments. The replacement of missing teeth becomes more efficient and precise when using patient-specific guides.

Requirements

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Material: Medical device class IIa Production Method: Quick and easy production, high precision

Recommended Material

SolFlex Surgical Guide

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Digital Workflow

Preparation: Prior to the printing process, the surgical guides have to be prepared for printing. A 3D printing software helps to place the model on the building platform. Also, support structures have to be added.





Printing Process: In the next step, the prepared files are being processed by the printer. In this specific case the surgical guides were 3D printed under the following conditions:

3D printer:	SolFlex 15
Layer thickness:	100 µm
Printing time:	21 min.
Resin:	SolFlex S
Number of printed objects:	2
Resin use:	5.2 g
Total resin use (incl. support structures):	6 g
Total resin costs:	€ 1.92

Depending on the size of the 3D printer's building platform, a different number of surgical guides can be 3D printed.

Number of surgical guides that fit on the building platform:

SolFlex 650: 12 SolFlex 363: 8 SolFlex 350: 6 SolFlex 170: 4 SolFlex 150: 2

Post-Processing: The 3D printed surgical guides are post-cured in a UV light box, cleaned and the support structures have to be removed.



Finished Part

50 PLUS

urgical Guide