THE 3D SOLUTION INVENTORS

OPTIGUIDE
SICAT Surgical Guides

Partially Edentulous

- Significant metal- or motion artifacts to be expected
  - Several missing teeth: CLASSIC GUIDE
  - 1 or 2 missing teeth: CLASSIC GUIDE

- Only minor metal- or motion artifacts to be expected
  - Several missing teeth: OPTI GUIDE
  - 1 or 2 missing teeth: CLASSIC GUIDE

Fully Edentulous

- Radiographic template for fully edentulous jaws: CLASSIC GUIDE
  - Only minor metal- or motion artifacts to be expected: OPTI GUIDE
  - Only minor metal- or motion artifacts to be expected: CLASSIC GUIDE
  - Only minor metal- or motion artifacts to be expected: CLASSIC GUIDE
OPTIGUIDE - Overview

Customer + SICAT =

SICAT
For Sirona CBCT & CEREC Users …

1. Is patient appropriate for OPTIGUIDE? (If not, prepare for a CLASSICGUIDE!)
2. Take a GALILEOS/ORTHOPHOS XG 3D Scan
3. Take a CEREC Scan and import it into GALILEOS Implant
4. Plan your implants
5. Send order to SICAT via Internet
OPTIGUIDE - Workflows

For all users…

1. Is patient appropriate for **OPTIGUIDE**? (If not, prepare for a **CLASSICGUIDE**!)
2. Take a CBCT Scan of patient
3. Plan your implants
4. Send [order CD and stone model](#) to SICAT via SICAT Pickup service
Requirements for Patient, 3D X-Ray & CEREC Scan or Stone Model

1. Patient:
   • Sufficient teeth structure to support guide
   • Only few crowns and fillings to assure sufficient matching

2. 3D X-Ray:
   • No motion artifacts
   • Only insignificant metal artifacts
   • Sufficient Field of View (FoV). At least 3/4 arch (better full arch)! (The more teeth you cover the higher the probability to have artifact free teeth for registration and potentially the better the registration accuracy)
   • Jaws scanned slightly opened (use some cotton rolls for example)

3a. Optical Scan:
   • At least 3/4 arch (→ increased stability of guide during surgery; increases probability to get enough artifact free teeth for registration process.)

Or…

3b. Model:
   • Typ 4 stone, scanable, must match exactly the current patient situation!
OPTIGUIDE is not for …

- …fully edentulous jaws
- …guides with mucosa support
- …patient with too many fillings and crowns

OPTIGUIDE is available with …

- …GALILEOS Implant 1.9 (Beginning 2012)
- …SICAT Implant 1.5 (Spring 2012)
Summary

- Recommended for cases with
  - Sufficient teeth support
  - Sufficient image quality (x-ray and optical scan)
- OPTIGUIDE does not replace CLASSICGUIDE. It complements CLASSICGUIDE for appropriate cases.
OPTIGUIDE is not indicated for cases with mainly crowns and fillings! In such cases a reliable registration between optical and x-ray scan is not possible!

Too many crowns and fillings. A reliable evaluation of the registration is not possible!
Use artifact free teeth mesial and distal of implant for registration!

Artifact free teeth mesial and distal of implant!
Scan at least ¾ of the jaw optically!

Extend the optical scan at least up to here to reach a higher stability of the guide during surgery as well as a higher registration accuracy!
Check the quality of the optical scan carefully, especially in combination with the X-Ray-Volume!!!
The optical scan is responsible for the exact fit of the OPTIGUIDE on the patient’s jaw.

Optical model cut off! Guide will not fit on jaw!

Optical model defective! Guide will not fit on jaw!
Check the quality of the registration between CBCT Scan and optical scan!!!
The accuracy of the registration is responsible for the accuracy of the surgical guide!
**OPTIGUIDE - Comparison**

**CLASSICGUIDE** vs. **OPTIGUIDE**

- Scan stent (Bite plate) based
- Transformation of scan stent into surgical guide
- Quality of fit of guide based on quality of scan stent
- Accuracy of sleeve position dependent on spherical markers

- Based on optical scan
- Milled out of a blank
- Quality of fit of guide based on quality of optical scan/(plaster model)
- Accuracy of sleeve position dependent on quality of registration (CEREC/GALILEOS)
OPTIGUIDE - Comparison

CLASSICGUIDE vs. OPTIGUIDE

Pros & Cons

+ relatively tolerant towards metal and motion artifacts
+ fit of the guide can already be checked on the scan stent
+ for all indications

- Scan stent necessary
- One additional shipping

+ no scan stent needed
+ digital order process possible

- Only for cases with sufficient teeth support
- Only for cases with sufficient image quality where matching of optical and x-ray data works reliably!
