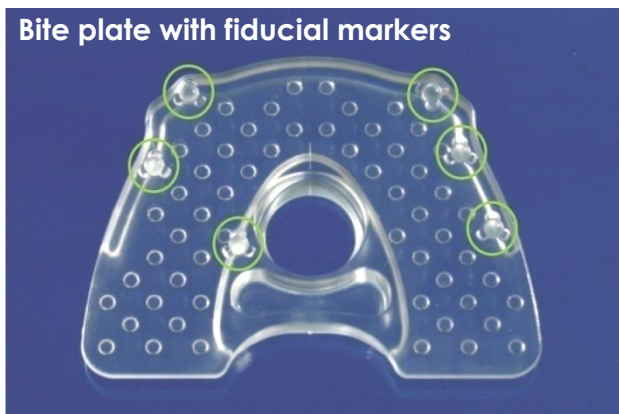
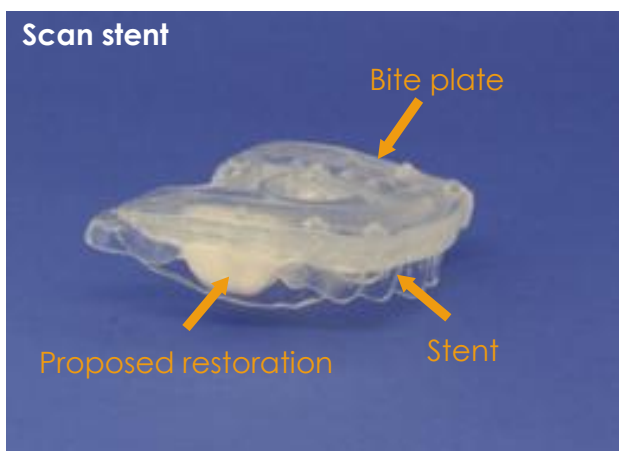


Bite plate with fiducial markers



Scan stent



Surgical guide



The scan stent is further processed by SICAT to become a precise surgical guide.

## Instructions for the production of scan stents

What you need:

1. Hard elastic, transparent thermoforming foil which bonds to acrylic (thickness: 2.0 mm)<sup>1</sup>
2. Thermoforming device
3. Cold-curing acrylic
4. Barium sulfate powder<sup>2</sup>



**Use only materials approved for dentistry.**

What you receive from your implantologist:

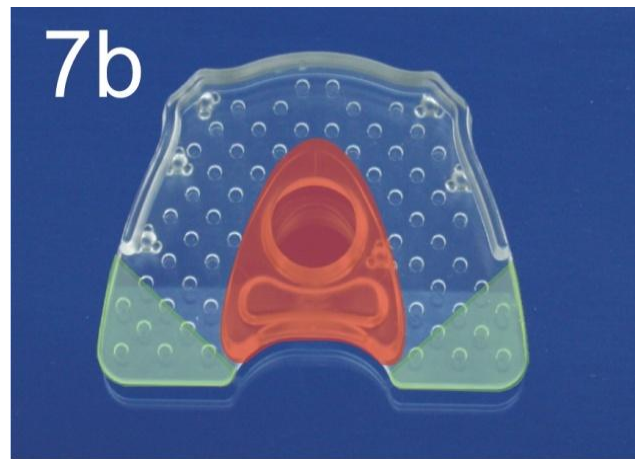
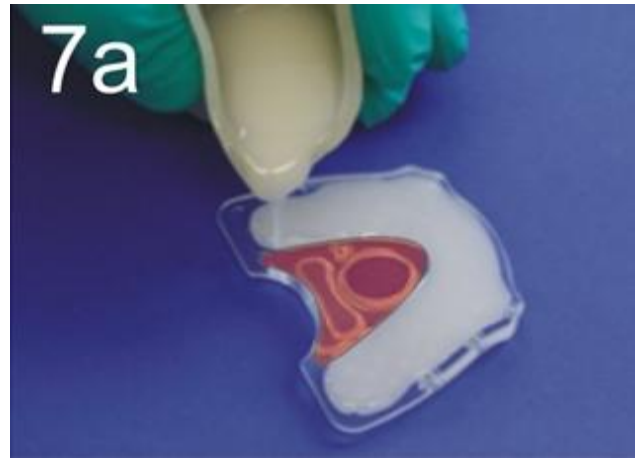
1. Impression or plaster model of the patient's jaw
2. A bite plate with fiducial markers



**Use only hard elastic, transparent thermoforming foil that bonds to acrylic. Isolating foil must be removed after thermoforming, to ensure a stable bonding between bite plate, thermoforming stent and proposed restoration.**

<sup>1</sup>Erkodur distributed by Glidewell ([www.glidewelldirect.com](http://www.glidewelldirect.com)) or Biocryl Splint from Great Lake Orthodontics ([www.GreatLakesortho.com](http://www.GreatLakesortho.com))

<sup>2</sup>Barium Sulfate Manufacturer: American Dental Supply (800-558-5925), Item Number: S883-30-3



1. Produce a plaster model and build a wax-up. The plaster model should not be higher than 4 cm because of the parcel height.



**The quality of the impression and of the plaster model is essential for the fit of the scan stent and of the surgical guide and therefore for a precise implant placement.**

2. Create on the plaster model and the wax-up stent (foil thickness 2.0 mm). Afterwards remove the wax-up from the stent.
3. Block out undercuts. Isolate with a separating varnish plaster/resin.
4. Mix the cold-curing acrylic with 15% of barium sulfate (relating to the weight of the polymer). Make sure that the barium sulfate and the acrylic are homogeneously mixed and that no clots are present.
5. Insert the mixture of barium sulfate and acrylic into the stent where the wax-up was placed before.
6. The proposed restoration must match a perfect fit with the mucosa.
- 7a. Mix some cold-curing acrylic (without barium sulfate) until it gets pasty. To etch the upper surface of the stent brush it with the fluid cold-curing acrylic. Pour the acrylic evenly onto the bite plate. Use sufficient acrylic as it is not only used as a bonding agent between the bite plate and the stent but also to stabilize the scan stent.
- 7b. In case of small jaws the bite plate can be shortened in the area marked in green.



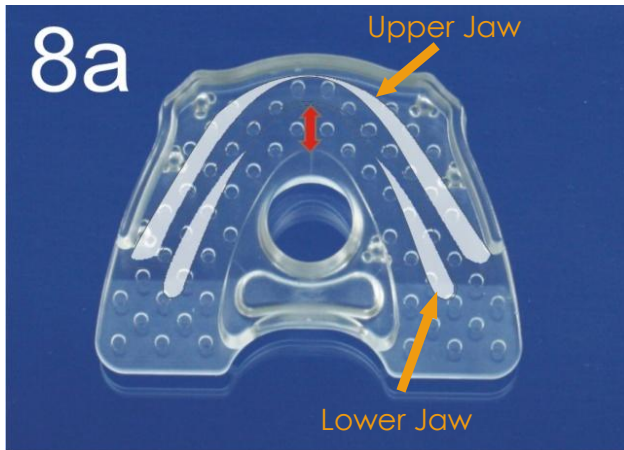
**Only the region that is marked green may be cutted.**



**Do not cover or modify the fiducial markers with the acrylic.**



**Do not cover or modify the central triangle and circular opening marked in red with the acrylic.**



- 8a. If the scan stent is used for the upper jaw place the stent at the front side of the bite plate. If the scan stent is used for the lower jaw place the stent at the middle region of the bite plate.
- 8b. Place the stent on the plaster cast, then press them into the acrylic on the bite plate until is polymerized. Check that the scan stent is firmly positioned and definitely fits to the plaster model.



**Use only Sirona bite plates**



**Check the scan stent for precise fit and stability. Bite plate, stent and proposed restauration must also be well bound to support mechanical strain. The dental resin must be completely hardened.**

# SICAT.

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We reserve the right to make any alterations which may necessary due to the technical improvements.