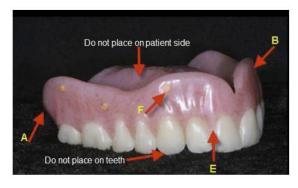


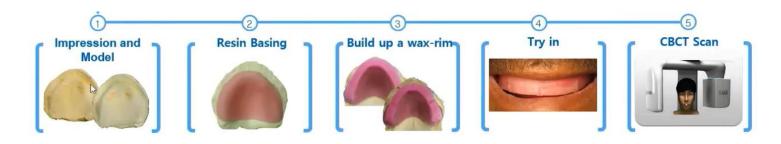
Edentulous jaw - Acquisition of data needed for implantology template

X-ray contrast markers are needed on the denture (or base plate with wax rims). See the example in the figure. Do not place markers where they would obstruct the seating of the denture. It is possible to use special markers designed for this purpose, x-ray contrasting composite beads (if they tear off easily, put a dot of bond under them) or e.g. gutta-percha beads.





We also use the position of the teeth in the denture as a preliminary waxup for implant positioning. If you wish to change the position of the teeth in a future implant-supported prosthesis, please notify us or provide a digital wax-up of the new prosthetic situation from the dental technician along with the data (in right coordinates to the remaining tissues). Alternatively, a new denture can be made, which may be at the stage of wax-rims according to your desired tooth position (or more advanced stage), and with it, you carry out the procedure described here. If the body of the denture is not radiographically contrasting, the aforementioned markers need to be added to it when the CT scan with the denture is done. According to the position of the wax rims or the teeth in the denture, the position of the implant is planned, which is primarilly determined by the prosthetic situation.



The denture should have a clear definite desired position in the mouth, it should not move. If the denture does not have a good fit, i.e. a clear position on the gingiva, it should be relined/rebased before the CT scan is performed. It is also possible to temporarily reline the denture with a light/medium silicone or other suitable material to perform the CT scan so that it adheres well to the patient's mouth and has a clear position. No air pockets should be

visible on CT between the inner surface of the denture and the gingiva. The patient has the denture in the mouth and undergoes the CT scan. When doing the CT scan, put a roll of gauze between the patient's teeth (so that the teeth are not in contact, but at the same time the denture is well seated). This also applies when doing a CT scan with patients teeth present (we don't want the teeth in contact - it causes a problem when overlapping the data from the IO scan and CT scan).





Denture rebasing using impression materials (upper pictures). Biting into a roll of gauze before CT (lower picture).



The gauze is then removed from the patient's mouth and an alginate impression is made with the denture intraorally seated. The X-ray contrast markers and the rebasing material remain in the denture, it must be in the same position as it was when the CT scan was taken. From this impression, a plaster model is made. After the plaster model is cast, the denture is

left on the model, it is not taken off. On the base of the plaster model, the technician makes markings on all sides vestibular and lingual (4-6 marks).



The technician then scans the model with the denture in place on the laboratory scanner. After this scan, he takes the denture off and scans the model without it (it is the model of the gingiva, or more precisely of the inner surface of the denture). You send us a .stl file of these two scans + a dicom file of the CT scan via www.biovoxel.tech - together with filled form and placed order.

With the records supplied in this way, we can accurately relate the position of the bone to the soft tissues and the desired prosthetic position in the case of an edentulous jaw. In cases of edentulous jaw, we also add bone fixation pins to the template to fix the guide firmly.



Biovoxel technologies

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