

Surgical Template Fabrication Protocols

| OPTICAL SCAN TECHNIQUE | DUAL SCAN TECHNIQUE |
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| Process 1) Patient is scanned. No scan appliance is used. | Process 1) Scan appliance fabricated. |
| 2) Treatment plan is prepared.3) Stone model is optically scanned (stl format) and merged into the treatment plan.4) A surgical template is fabricated by the lab. | 2) Patient is undergoes CT scan wearing the scan appliance. A separate CT scan of the Scan Appliance alone is performed. 3) Scan Appliance is imported and merged with the patient's scan. 4) Treatment plan is prepared. 5) Surgical Template is fabricated by the lab. |
| Advantages Saves time and cost by eliminating the need of a Scan Appliance. Optical scans often result in a better Surgical Template fit. Limitations Fully edentulous cases or cases with many metal restorations may be difficult or impossible. Future tooth positioning will not be visible. This may cause mostly or fully edentulous cases to be harder to treatment plan. | Advantages A full set of teeth is visible in the treatment plan during the treatment planning. Viable option for all cases. Limitations CT/CBCT are less accurate then optical scans and greater buffer distances should be allowed during surgery. |
| Send the lab Stone models and optical scan of models. Patient DICOM images or a prepared treatment plan. | Send the lab ☐ Patient DICOM images or a prepared treatment plan. ☐ Scan Appliance DICOM images. |
| ☐ Drill dimensions. | □ Drill dimensions.□ Stone models for testing. |