

Securing Accurate Impressions for Surgical Guides

To strategically print an accurate surgical guide, there are important factors to be aware of and to address regardless of the impression material you use.

Accurate **IMPRESSIONS** lead to
Accurate **QUALITY SURGICAL GUIDES** lead to
Accurate **GUIDED SURGERY**

- **When Prepping the Patient:** It is important the patient's teeth are brushed and flossed clean.
- **Prior To Taking the Impression:** Please ensure that teeth are dry, free from the presence of blood or saliva, and that the tongue and cheeks are distant from the area of interest.
- **Ensure Accurate Impressions:** Achieving an accurate and precise guided surgery depends on an accurate impression. Important factors to consider are to ensure that the impression is free of any bubbles, includes the whole arch and the area of interest on the antagonist, as well as, the last tooth near the edentulous area. Using the upper and lower impressions, along with the bite registration, will help us complete treatment planning using the proper restoration to accurately direct the abutments for final restorations and the impression. **(See Figure 1).**
- **Using Alginate:** Taking impressions using alginate poses possible imperfections with the impression which ultimately affects fabricating an accurate surgical guide. Factors that affect achieving a quality impression include the materials used, the consistency of the mixture and the experience level of the person mixing the substance to be able to identify the right consistency.
- **Using VPS Impression Material:** Accurate models and impression material help ensure the computer guided dental surgery to go as planned. Therefore, choosing VPS impression material is highly recommended as it reduces the risk of creating an unstable surgical guide. **(See Figure 2).**
- **The Models:** If impressions are used, it is crucial to follow the manufacturer's instructions to ensure the models are perfect. The use of bubble wrap to secure the models during shipment is important to prevent damage to the models.
- **Using Intraoral Scan:** As compared to traditional dental impression options, intraoral scan results in surgical guides that fit over all teeth and soft tissue, are more accurate, and are distortion-free. **(See Figure 3).**
- **STL Files:** After completing the intraoral scans, STL files of the dental arches need to be uploaded to your patient's file in your secured CinZara account.

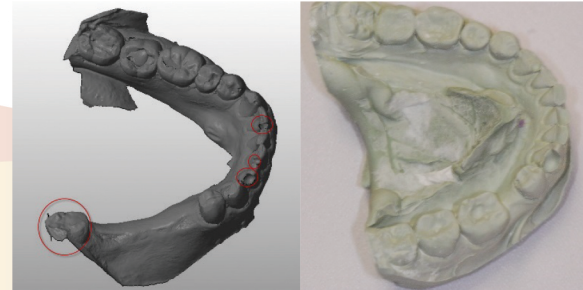


Figure 1. Printed and stone models of impression-taken using alginate. Notice the large bubbles on the teeth and the disfigured large molar in the red circle.



Figure 2. Impressions using VPS material to secure accurate impressions.

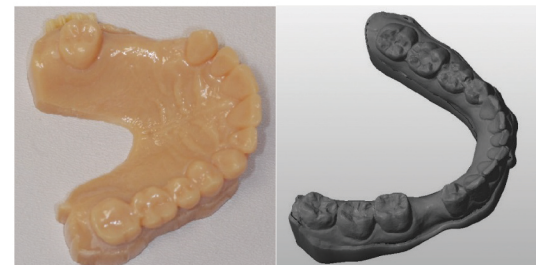


Figure 3. Printed models of intraoral scan.

Note: The proper fit that is achieved from an accurate surgical guide that fits over the teeth and soft tissue.

