To have a Implant Surgical Guide made, please follow the following protocol

### 1 - CBCT

When taking a CBCT, please be mindful of the following tips:

- The patient should be positioned with their tongue touching the back of the palate. While not essential, it is recommended to place cotton rolls in the buccal sulcus of the patient during the scan. This allows good visualisation of the gingiva.
- The Mandible FOV should include the incisal and occlusal surfaces of the teeth down to the inferior border of the mandible.
- The Maxilla FOV should include the incisal and occlusal surfaces of the teeth up to half the sinus cavity

For Endentulous patients a two scans approach is required:

- One scan of the patient wearing the prosthesis with radiological markers in place and the bite index. Radiological markers can be purchased from Dentsply Sirona
- One scan of the same prosthesis by itself with radiological markers.

Dicomm file:

- Dicomm format must be in raw non proprietary single frame format. Slice thickness can be between 0.2-0.8 and slice increments can be 0.3 – 0.5mm

Recommended FOV is 8cm x 8cm. Limited sectional field of view will compromise the accuracy of the CBCT – STL overlay registration that is required during the planning phase.

### 2a - Intra-oral Scan

Where available for dentate patients, we recommend taking a scan with an intra oral scanner as this prevents potential issues with drag marks, voids or distortions that can sometimes occur in traditional PVS impressions.

When taking an intraoral scan, please ensure the following:

- All teeth and soft tissue are captured to the level of the free gingiva.
- That the distal and mesial surfaces of the teeth adjacent to the implant site are also captured.
- If the plan is to place any implants in a free end saddle, please ensure the saddle area distal to the proposed implant site is captured as this soft tissue area will form the part of the support for the proposed surgical guide.

#### STL File Format

Please save intra oral scans in STL file format only. When saving the file select highest quality as this will be the model of which the guide is made.







### **2b - PVS Impressions**

If an intral oral scan is not available or for cases for endentulous patients, please take a traditional impression using PVS/VPS material.

- For Dentate patients ensure the tray is large enough to capture the teeth within the tray. Do not modify the stock trays by heating them up and bending them as when the tray cools distortion will occur. If a stock tray does not fit the patient we recommend a special tray be fabricated and used instead.
- Please use a medium to light body pvs and ensure that the teeth do not show drag marks or voids around the teeth.
- For free end saddles or terminal teeth consider using periphery wax to ensure adequate distal support for the PVS material as the impression is being taken. As the guide is fabricated based on this impression, any inaccuracies will transfer on to the final surgical guide.

Alginates are not suitable.

#### 3a - Upload Scan via Sirona Connect

For customers who have a Sirona Chairside Scanner (i.e Primescan) the intra-oral scan can be uploaded directly via the Sirona Connect portal. Once the impression scan has been taken for the specific patient:

- 1. Log-in to the Sirona Connect Portal.
- 2. In the section of Additional Files, a scanned copy of the completed Premium Dental Lab surgical guide lab prescription form can also be added on this section as well. Alternatively it can be emailed to cases@premiumdentallab.com.au

For first time customers of Premium Dental Lab:
Login to Sirona connect
Select "+" symbol to add a favourite recipient
You will be taken to an external web browser window, Click on the search icon and search for "Premium Dental Lab in Country Australia" Add Premium Dental Lab as a favourite recipient

3. Once the case has been added to orders in the cart ensure that the "submit" button is pressed as this sends the case to Premium Dental Lab. Once the case has been submitted to Premium Dental Lab it will be labelled as "commissioned".



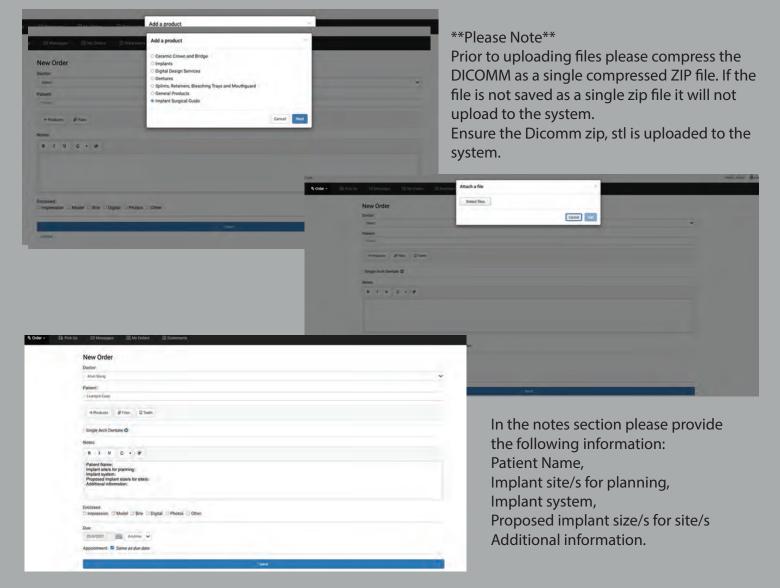
Please Note, DICOM files of CBCT cannot be uploaded via Sirona Connect, and will need to be packaged and send via a different method.



### 3b - Upload files directly to Premium Dental Lab

For users without a Dentsply Sirona Primescan unit, files can be uploaded directly to Premium Dental Labs website. Please go to https://premiumdentallabclient.labzona.net/Login.aspx and if you do not already have an account with us click on: "Don't have an account? Sign up now" Enter the details and then Save. This will usually take 24 hours but if its urgent please call the lab on 0735053980 and we can set it up straight away.

Once logged in, please enter the details and click on + Products, select "Implant Surgical Guide". From there you can select what type of guide you will require and then follow the prompts to upload files.



In the instance where a completed implant lab sheet has been uploaded along with the stl and zip files the above details in the notes section is not necessary.



### **3c - Alternate Options for File Transfer**

We are also setup to access upload of files through Dropbox and Wetransfer by sharing it with the lab at cases@premiumdentallab.com.au. Please ensure to label the shared folders with the Patients name and Doctors name. Completed Lab Prescription form and photos (where relevant) can also be sent here should the files sizes be too large to send via email.

### 4 - Guide Planning and approval

Once records have been taken, please send along with a completed lab prescription form, outlining any special instructions, as well as the implant system you will use for implant placements.

Once we receive your case it will be reviewed and planned within 5 in-lab working days. When the surgical guide has been designed the proposed plan will be emailed to you to review and modify/approve.

#### **5 - Guide Fabrication**

Once the Guide plan has been signed off and approved it will go into production. Please allow 5 in-lab days for production and dispatch. If the case requires a quicker turn around time please contact Premium Dental Lab and we will advise the earliest plan and dispatch date.



For Implant guided related questions please email: implants@premiumdentallab.com.au or, call Alvin on 0412906198

