

When to Order an Imaging Aligner (CT Appliance)

We make surgical drill guide for 85 to 90% of the partial edentulous cases without an Imaging Aligner (CT Appliance). However, if your patient has many metal objects in the mouth, an Imaging Aligner is strongly recommended. For some cases, it is impossible to make an accurate surgical guide if a CT scan was taken without an Imaging Aligner.

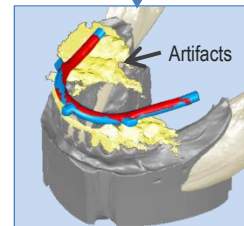
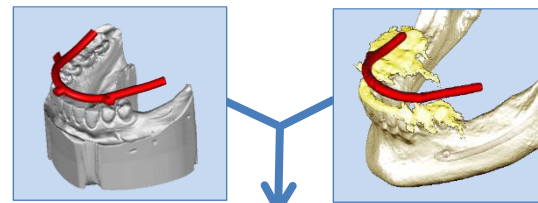
Artifacts in CT data caused by metal objects (crowns, existing implants, braces, etc.) may make the data alignment very difficult, resulting in surgical guides with insufficient accuracy. It is a critical factor especially when implants have to be placed in narrow spaces.



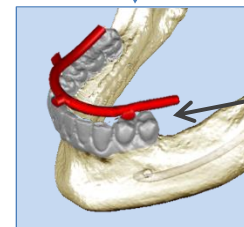
CT Image Artifacts



Patented Negative Marker Design & Marker Imaging in Scan Data



Two data sets are aligned using the negative marker image in the CT data and the design of the marker on our master data file.



The distorted area is replaced with accurate surface scan image.

There is no simple rule regarding 'how many metal objects are too many' to take a scan without an Imaging Aligner since it depends on the number of remaining teeth, location of metal objects, the quality of the scan data, etc.. **Generally speaking, we would like to be able to see clean borders of two or more teeth in the anterior area and two or more teeth in the posterior area.** Please remember that metal objects affect the image of adjacent teeth also. It is a good idea to consult with us if the patient has 3 or more metal crown in a row.

HELPFUL TIP (when you are not using an Imaging Aligner):

- Keep the bite open with cotton balls or foam bit stick while scanning in order to avoid metal objects from the opposing jaw affecting the CT image.
- Ask the patient to keep the tongue away from the palatal area if the surgery is for the maxilla. Sometimes we use the gum tissue on the palate for aligning data files.

