

OPEN TRAY OR CLOSED TRAY? ©

In the dental community, it is generally understood that implant restorations have a higher degree of accurate fit when certain appropriate impression techniques are used for certain situations (e.g. open tray impression posts for multiple splinted implant situations). Unfortunately, to our knowledge, there are no evidence-based publications available when it comes to the “recommended” use of impression posts in a multitude of restorative situations. For example, what is the “recommended” impression technique for screw-retained vs. cement retained, for splinted vs. non-splinted implant situations, for single units vs. multiple unit situations? Clinicians have a need to be well informed when making decisions in this aspect of implant dentistry.

After working with implants for well over 25 years, Shanto Dental Ceramics, as a dental laboratory, has accumulated anecdotal opinions on this matter, and would like to share them. We cannot claim that the following “recommendations” are based on scientific research, but we can claim that we have had more success with accurate fit when the recommendations below have been respected and adhered to.

Impression Trays:

- Never use “Triple Tray” technique in connection with implants.
- Lab made Custom Trays generally work better than Stock Trays.

Technique:

Desired Retention			Closed Tray Technique	Open Tray Technique	Open Tray Splinted
↓			↓	↓	↓
Cement Retained	Single Units	→	Engaging Post	Engaging Post	NO
	Multiple Units	Non-Splinted	Engaging Posts	Engaging Posts	Engaging Posts (if they “draw”)
		Splinted	NO	Engaging Posts	Engaging Posts (if they “draw”)
Screw Retained	Single Units	→	Engaging Post	Engaging Post	x
	Multiple Units	Non-Splinted	NO	Engaging Posts	Engaging Posts (if they “draw”)
		Splinted	NO	Non-Engaging Posts	Non-Engaging Posts

Clarification of Fonts used in the Table above:

Large Fonts represent the BEST use of posts within a certain technique
Small Fonts represent WORKABLE use of posts within a certain technique (but not the “best”)