

The Significance of Precision

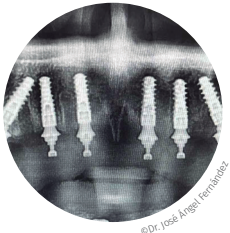
in fabricating Implant-Supported Dental Prosthetics

“Implant-supported prosthetics have revolutionized modern dentistry, offering dental patients a **durable and functional solution** for replacing missing teeth. However, the success and longevity of these restorations hinge significantly on the accuracy of the restorative process. In modern dentistry, implant-supported dental prosthetics represent a **transformative solution** for patients with missing teeth, relying heavily on the highest level of precision at every stage of fabrication to ensure **optimal fit, function, and longevity.**”

Precision at Every Stage

1 Precision in Treatment Planning

The process begins with meticulous treatment planning, involving advanced imaging technologies like CBCT scans to visualize the patient's anatomy in three dimensions. This ensures optimal implant positioning and minimizes the risk of biomechanical complications such as screw loosening and implant fractures.



2 Accurate Scanning and Data Integration

Digital intraoral scanners capture detailed impressions with enhanced precision. IPD Dental Group addresses the challenge of discrepancies in scan data by creating a multi-library process, allowing dental technologists to toggle among scan abutments for the most accurate rendering and reference engraved by laser etching. This ensures the best possible outcomes for patients.



- 2 heights for engaging
- Reference laser etched
- The TiN Coating
- 100 autoclave cycles
- +/- 0.005 UM
- Enable X-Ray use
- Titanium and Peek
- Intraorally and desktop scanner
- Multiple libraries with geometrical stable rendering for optimal best-fit

4 Validation of 3D Printing Accuracy

Recognizing the variations in 3D printers, IPD Dental Group has developed a rigorous testing protocol to validate the offset value for each printer and resin combination. This ensures zero discrepancy in accuracy and precision from scanning to printing.



- IPD testing protocol to validate offset value
- Zero discrepancy in accuracy and precision
- Calibration pin

3 Precision in Prosthetic Design and Fabrication

Using CAD/CAM technology, the accurate placement, orientation, and timing of implants are critical. IPD Dental Group's innovative solutions, such as the use of two fixation screws for implant models, ensure geometric stability in the X, Y, and Z axes, leading to precisely fitting prosthetics.



- Geometric stability along the X, Y and Z axes and rotational discrepancies
- 2 fixing screws for the models
- Proper and unique position

5 Precision in Prosthetic Design and Fabrication

The dental laboratory employs artistic skills to create restorations that mimic the natural dentition. Precise layering of dental ceramics, shade matching, and individualized staining techniques contribute to the aesthetic success and lifelike appearance of the final restoration.



- Tall post (8mm high on engaging Ti-Base)
- Multiple Platform widths
- Multiple gingival heights
- Titanium Nitrate Coating (TiN Coating): Durability and precision, beneficial for tissue recovery and aesthetic purposes.
- Customizable with cutting guides

6 Long-term Stability and Patient Satisfaction

Precision and accuracy in the fabrication process directly correlate with the long-term stability and patient satisfaction of implant-supported prosthetics. Proper fit, occlusion, and material selection ensure the restoration can withstand functional forces and maintain its integrity over time, enhancing patient comfort and chewing efficiency.

