HITTING THE SPOT

"Our 3D printed models are the bridge between a good treatment plan and an excellent surgical result."

— Dr. Maria Ester Hidalgo,
Protaico LTDA

Protaico uses an Objet 3D Printer to produce detailed guides for implant surgery.

One of the most significant issues facing implant dentistry is pre-surgical determination of the optimum location, angulations and depth to place an implant. Dental surgical guides are used to carefully consider these important decisions prior to dental surgery.

The Challenge

Protaico provides dental surgical guides in Latin America based on complete understanding of the patient's underlying bone anatomy. Created directly from a well thought-out treatment plan, the surgical guide provides the most accurate means for placing the implants. Protaico has developed a process that can improve presurgical planning by revealing all characteristics of the patient's anatomy in order to guiding the drilling process with precision.

In order to accommodate business growth, Protaico needed to achieve faster throughput without compromising its high standards and without costly expansion of technician staff and facilities.

The Solution

Protaico used the Objet Eden260™ 3D Printer to create surgical guides to assist with presurgical planning and provide interoperative positioning verification. 3D printed surgical guides are fully compatible with conventional CT scanners and new low-radiation, conebeam CT scanners. After the scan is taken, the data is converted to STL format in order to start the planning.

Models produced on the Objet 3D Printer provide exceptionally fine detail and an outstanding surface finish, ensuring the high degree of accuracy required to meet the high standards of Protaico customers. The surgical guides can also be cold-sterilized.

At a Glance

Challenges
• Needed to achieve faster throughput
• Had to maintain high quality standards

Solution
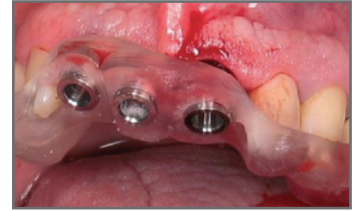• Objet Eden260 3D Printer

Results
• Achieved complete digital workflow
• Can now fulfill every customer order
• Higher revenues and reduced operating costs
• Reduced delivery times

Stratasys
FOR A 3D WORLD™

The Results

Protaico now uses a complete digital workflow for in-house fabrication of surgical guides. The company produces surgical guides for customized oral and maxillofacial surgery, dental trauma, oral pathology, dental reconstruction, correction of dental deformity and dental implants. While before the company often had to reject or outsource inquiries, it can now fulfill every customer order.
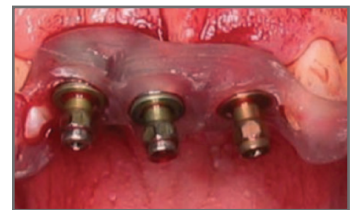
Protaico has achieved a quick return on its 3D printing investment through higher revenues and reduced operating costs. The productivity of the company›s technicians has increased dramatically so Protaico can offer dental customers appliances and models with short delivery times at competitive prices. The company›s new 3D printing capabilities continue to create new business opportunities.

Protaico is a leader in producing surgical guides for dental implants.

The Objet Eden260 3D printer provides a fast and easy to use method for building guides.

Protaico can now produce guides for every customer order.

Yield per technician has substantially increased.

For more information about Stratasys systems, materials and applications, call **888.480.3548** or visit **www.stratasys.com**