



Gold Tooth

IMPLEMENTING A SEAMLESS DIGITAL DENTISTRY WORKFLOW

“Our integrated 3Shape software and Objet 3D Printer solution has increased our business growth by producing excellent restorations effortlessly for our quality minded dental clients.”

– Larry Stites, CO - Founder

CASE STUDY



The Objet 3D Printer has given Allure full control over its entire dental restoration process.

Allure Dental Studio has moved ahead of its competition by combining 3Shape's digital CAD/CAM solution with an Objet 3D Printer in a seamless workflow.

The Challenge

Allure's vision is to become the most technologically advanced dental lab. Allure wanted to enable faster throughput without compromising its high quality standards and those of the dentists who are the majority of its customers. The company wanted to avoid expanding its technician staff and facilities.

Surveys showed that their dentist-clients preferred to give all their business to one lab. So Allure needed to firmly establish its position as a top-quality dental laboratory offering the widest spectrum of dental indications. Allure wanted full control of the complete process – from the dentist’s initial order, to designing the restoration and ending with final manufacturing. So outsourcing parts of the workflow was not an option.

The Solution

Allure’s goals called for the best CAD-design tools and the best manufacturing equipment. But best-of-breed tools alone aren’t enough – the best components must be able to work with each other in a seamless digital workflow.

3Shape’s Dental System™ was Allure’s choice for 3D scanning and CAD-design of restorations. 3Shape’s solution offers the market’s largest number of indications and initial trials demonstrated that Allure’s technicians could easily complete its intuitive workflows at high speed. 3Shape’s Dental System includes the 3Shape D700 3D scanner, DentalDesigner™ CAD design software and 3Shape’s CAMbridge™ manufacturing preparation software.

For the actual manufacturing process, Allure selected the Objet Eden260V™ 3D Printer. The printer’s fine-detail printing, layer thickness and smooth surface output makes it well-suited for manufacturing dental restorations. The Objet Eden260V 3D Printer is fully integrated with and controllable from 3Shape’s DentalSystem. So the full system’s two main components communicate without any extra steps.

The Results

3Shape’s Dental System and the Objet 3D Printer deliver a complete digital workflow for in-house fabrication of models, abutments, coping/crowns and bridges of any size or combination. With efficient in-house manufacturing and many new indication possibilities, Allure can provide a greater variety of dental solutions to its dentist clients. While before Allure had to reject or outsource many inquiries, it can now fulfill every restoration order.

Using 3Shape AbutmentsDesigner™ software, Allure can simultaneously create customized abutments, coping/frameworks and crowns and print them together flawlessly with the Objet 3D Printer. Allure reduced the time needed to print a full mouth case from 6 hours or more with milling to only 1 hour with the Objet Eden 3D Printer. The intuitive 3Shape Dental System design tools enable Allure to use non-technicians for tasks they could never perform in the past. This greatly increases the daily production yield per dental technician.