

# Jewel in the Crown

ALBENSI LABORATORIES EXPANDS BUSINESS AND SHRINKS COSTS WITH DIGITAL DENTISTRY WORKFLOW

"We deliver a complete restoration within three days of the intraoral scan. Objet 3D Printing Solutions provide an accurate and cost effective result for completing this process and increasing profitability."

- Don Albensi, Albensi Dental Lab

CASE STUDY



By utilizing the Objet 3D Printing System, Albensi Laboratories has expanded its line of dental restoration solutions while lowering costs

# BACKGROUND

Albensi Laboratories, a dental laboratory located near Pittsburgh, Pennsylvania, has long recognized the value of advanced technologies. The company was quick to explore the potential for producing dental parts straight from CAD design imagery. Among the benefits: access to new, almost defect-free, industrially prefabricated and controlled materials; higher quality and reproducibility; data storage suitable for a standardized chain of production; improved precision and planning; and greater efficiency.



## The Challenge

Recently, the price of dental laboratory work has become a major factor in treatment planning and therapy. Albensi Laboratories' management realized that further automation could enable more cost-effective production of individual dental models.

"To stay competitive, we needed to streamline our business," said Don Albensi, president/owner of Albensi Laboratories. "We wanted to speed up our throughput without compromising our high quality standards or expanding our technician staff or facilities."

"We concluded that integrating 3D printing into our workflow could reduce our costs and open new opportunities for growth, while still meeting our quality and operational requirements."

### The Solution

The Objet<sup>™</sup> 3D Printing system provides the ideal solution for Albensi Laboratories by making it possible to rapidly manufacture digital stone models and improving the quality of dental restoration manufacturing and placement. With the Objet 3D Printer, Albensi Laboratories can produce dental restorations with exceptionally fine details and an outstanding surface finish to meet the high standards of its team and dentist clients. The Objet 3D Printer smoothly integrates with the market's leading dental restoration manufacturing solutions, helping to achieve fully digital dental solutions.

"3D printing with the Objet 3D Printing Systems enables us to guarantee dentists a high standard of precision in the placement of dental restorations that is difficult to achieve using traditional freehand techniques," Albensi said.

#### The Result

By adopting the Objet 3D Printing System, Albensi Laboratories has achieved a complete digital workflow for in-house fabrication of models, abutments, coping/ crowns and bridges of any size or combination. The company is now able to offer a greater variety of solutions to its clients. "Before installing the Objet 3D Printing System, we had to decline or outsource certain types of enquiries. Now, we have the production capability to accept every restoration order that comes in," Albensi said.

With the Objet 3D Printing system, Albensi Laboratories has dramatically reduced its design process time. It has also been able to bring non-technicians into the workflow to handle tasks that they could not handle in the past. Daily production per dental technician has increased. Albensi Laboratories has earned a rapid return on its investment by gaining more revenues, faster throughput and operating cost reductions.

AT A GLANCE	
Challenges	<ul> <li>Automate dental model production</li> </ul>
	<ul> <li>Speed up throughput without compromising high standards and without expanding technician staff and facilities</li> </ul>
Solution	<ul> <li>Objet 3D Printing System with high resolution and fine detail output</li> </ul>
Results	<ul> <li>A complete digital workflow for in-house fabrication of all dental models</li> </ul>
	<ul> <li>Fast business growth, with a more varied offering</li> </ul>
	<ul> <li>Optimized resource allocation and significantly shorter design time</li> </ul>
	<ul> <li>Fast return on investment through higher revenues, faster throughput and lower operational costs</li> </ul>

