

Designing 12- 20 crowns an hour with CAD/CAM



CRM Dental and Team Aesthetics are a unique dental technology service and knowledge powerhouse. CMR Dental Lab provides a wide range of services covering all areas of cosmetic and restorative dentistry. Team Aesthetics offers hands-on seminars and education programs for working dental professionals.

CRM Dental and Team Aesthetics are passionate about excellence in dentistry, always applying cutting-edge CAD/CAM technologies wherever it helps them provide better services. Their goal is to offer the latest methods and best systems to continue elevating the level of care patients can expect when they seek cosmetic or reconstructive treatment.

Today, 3Shape scanners and design software are integrated into many of CMR Dental Lab's workflows. With 3Shape, CMR Dental has greatly increased productivity while concurrently discovering new methods that can be transformed into profitable business models.

Key selection criteria

- Support a wide range of restorations
- Interface with existing equipment
- Interface to outsourced manufacturing partners
- Fast and robust system for high productivity
- Intuitive CAD-design means minimum training requirements

The high accuracy, consistency and productivity achieved using 3Shape systems has enabled CMR Dental Laboratories to develop a new business model to providing greater value to their customers while increasing their productivity potential. CMR has gained a versatile, user-friendly and intuitive design tool that merges the valuable knowledge and skills of its technicians with the newest technology breakthroughs.

The Challenge

CMR's position as a knowledge- and education-base for the Dental lab industry requires that it keeps pace with the latest technologies – including CAD/CAM. CMR Dental services and products include high quality posterior restorations and, as orders continued to stream in, they sought a way to become more productive in this business area. They needed a technology solution that would speed up their workflow, yet enable them to continue achieving high aesthetic standards and optimal fit for every patient.

Additionally, CMR Dental provides a wide range of indications, and this requires their work-association with various partners in relation to materials and milling. For their in-house design processes, CMR needed a flexible system that could cope with this arrangement, so they wouldn't need to invest in different software to provide inputs for different applications.

The Solution

For CMR Dental Laboratories, any worthwhile CAD/CAM investment had to provide one or more business advantages, such as better products, shorter processing times or more accuracy. They found all of these advantages, and more, with 3Shape's Dental System™.

CMR Dental also found it easy to integrate the 3Shape system with existing equipment and interface with CMR's outsourced partners for materials and manufacturing.

Technicians experienced the ease and speed of 3Shape's intuitive design software, and it didn't take long for them to learn how to use the system and initiate efficient production. The screen-interfaces and tools enabled them to adjust position, view cuspa-fossa relationships, and maintain control over functional occlusion with only a few mouse clicks.

CMR Dental applied the 3Shape Dental System™ mainly in their Posterior Restoration services, and soon discovered that the CAD/CAM process radically speeded up their normal manual design workflows. Additionally, technicians could work in parallel – with one scanning models while the other worked on the design in the software.

The system was not only fast, but it also ensured consistent quality of CMR's end products. Milling results were highly accurate and predictable. Post-milling adjustments to the restoration were predictable and consistent to provide a perfect fit and occlusion on the physical model.

CMR Dental & Team Aesthetics

Full-service dental lab

Source: Matt Roberts, CMR Dental Laboratory



ROI Benefits for CMR Dental Laboratories

- Faster production times – from 4 crowns to 20 crowns per hour.
- Speed, consistency and accuracy enable new productive business model
- Customer satisfaction and loyal returning customers
- High ratio of daily production output per technician
- Reasonable entry cost and high returns
- Minimum training through intuitive software

About 3Shape A/S

3Shape A/S is a Danish company specializing in the development and marketing of 3D scanners and CAD/CAM software solutions. 3Shape's more than 65 developers provide superior innovation power, and their systems are applied in thousands of labs in more than 60 countries worldwide.

www.3shape.com

The Results

CMR set up an advanced business model based on digital design of posterior restorations, and this is proving very successful, both in terms of client satisfaction and increased order volume. Investing in 3Shape solutions not only helped CMR Dental meet many of their business goals, but also enabled them to consider completely new ideas for enhancing their laboratory business.

"It's simple math," says Matt Roberts, CMR Dental. "3Shape Dental System™ enables us to produce 10 crowns in the time it took us to wax only 2. This means the production potential of 20 crowns every hour in an 8-hour workday, creating an opportunity for a fairly high dollar-return while maximizing the potential of our highly trained technicians."

“With the new virtual articulator, I can now adjust the excursive interferences in the virtual world. This not only saves finishing time, but adds consistency to our finished restorations. Keep the new innovations coming 3Shape!”

Matt Roberts, CMR Dental Laboratory

Productivity was not the only great improvement brought by 3Shape Dental System™. The milling results achieved through the digital data are highly accurate, reliably giving predictable fits and aesthetic results for the patient – ensuring that CMR Dental's customers build their respective businesses and in turn, create more business for CMR. It's all about providing more value for the customer and this is what creates the opportunity for growth.

3Shape Solutions at CMR Dental Laboratories

3D model and impression scanning

3Shape Dental System™ / D700, 3D Scanners

CAD Design

3Shape Dental System™ / DentalDesigner™, AbutmentDesigner™