Making a Great Impression

The Caulk division of Dentsply International, located in Milford, Delaware, has a rich heritage of supplying quality products to the dental profession. The company was started by Dr. Levin D. Caulk, a Delaware dentist who began making his own dental materials in a humble shed behind his home. His products gained regional popularity and in 1877 he founded the L.D. Caulk Company, dedicating himself to full-time manufacturing of dental materials. His products were transported via horse and buggy to dental product retail stores in the mid-Atlantic area, and as transportation methods improved, L. D. Caulk products were shipped across the country, and eventually across the world. Dr. Caulk passed away in 1895, and the business was purchased by the Grier family which was continuously involved in the business until the mid-1990s.

L. D. Caulk became a division of Dentsply International in 1963, which provided the opportunity to expand the global reach of the materials made at the facility in Milford. Today, the Caulk division continues to be a leader in the development and manufacturing of dental materials, and serves as a manufacturing center for many other Dentsply divisions. The product line focus is on restorative dentistry with leading brands in the composite, impression material, adhesive and temporary material categories. Dentaltown Magazine recently spoke with Gene Dorff, VP and General Manager, to learn more about the company and where it’s headed.
What is your current business philosophy?

Dorff: Dentsply Caulk is dedicated to understanding the needs of the dental community and developing solutions to provide better outcomes to dentists and their patients. We continue to develop our core competencies, developing and manufacturing award winning composites, impression materials, adhesives and temporary materials, as well as many others.

What sets Caulk apart from the competition?

Dorff: Our rich history in dental product development and manufacturing provides our customers the confidence that the materials they use from Caulk will provide excellent outcomes for their patients. Innovative new products that are focused on providing clinical solutions are a primary focus of the Caulk division. Our new product development process is very rigorous, and ensures that the products we bring to market are ready.

In addition to the team at the Caulk headquarters there is a dedicated group of product specialists across the country that provides education and product support for Caulk products in the dental office. These product specialists undergo one of the most comprehensive training regimens in the industry, from dental anatomy and terminology, to clinical and technical product attributes. They are an excellent resource for the dental office in providing clinical solutions. Along with the field product specialists, we also have a professional services team based at our Milford headquarters that provides product support over the phone. If a dentist has a Caulk product question - this team is there to provide answers!

What can you guarantee dentists who purchase your products?

Dorff: We guarantee the highest quality premium products on the market to allow clinicians to provide the best clinical care to their patients.

How do you gather feedback from your customers and what do you do with that information?

Dorff: Dentsply Caulk continuously gathers feedback from customers in order to drive product development and refinement. We use many methods to attain the “voice of the customer,” including surveys, focus groups, one-on-one interviews, clinical observations and several others. In addition, an observation

1: Built in 1912, the L. D. Caulk manufacturing facility is still used today. The campus has expanded to include additional administration, R&D and manufacturing facilities on the same site.

2: Current Dentsply Caulk Administration building.

3: A shipment of alloy filling materials leaving the L. D. Caulk facility for the U.S. military in 1918. L. D. Caulk product supply to the military was a closely guarded secret to avoid giving away any information regarding U.S. military troop strength.

4: A selection of the early dental materials manufactured by Dr. L. D. Caulk as well as the sign that hung outside of his office in Camden, Delaware.

5: Aquasil Ultra single unit impression from Dr. Alan Boghosian.

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team of professionally trained observers was recently created and tasked with visiting dental offices to identify unmet needs. This feedback from our customers is extremely important in order for us to identify the needs that the dentists have for providing exceptional treatment to their patients. The information that we gather is provided to many different functions here at Caulk: to the research and development team to begin building specifications for new products, to the continuous improvement team to understand how we can make improvements to our existing products, and to the field sales team, so that they are better able to understand the needs of our customers, and how our products can support them in their practice.

From imagination to developed product, what are the steps Dentsply Caulk takes in R&D?

Dorff: The Dentsply Caulk product development process is very rigorous and detailed. Every product that is developed and launched by Caulk follows a strict development procedure to ensure the product meets the demands of our customers in terms of performance and ease of use. The early stages start with gathering customer feedback to understand what the desired features are for the product, and what benefits it provides to the dentist and the patient. Our research and development team takes these design objectives, and begins formulating products to meet the desired objectives. It’s interesting to note that in the course of new product development, there might be hundreds of different formulas developed before a final formula is decided upon that meets the goals and objectives of the project. Once a formula is decided upon, the product enters an extremely thorough physical property testing regimen that ensures the material will withstand all the oral forces it will be subjected to in clinical use. The final stage of the product launch process is the clinical validation. All Caulk-formulated products are entered into clinical trials, to understand the performance of the product in actual clinical use. We work very closely with a wide variety of clinical research partners from many different universities across the world in order to provide final validation of the products’ performance from both the dentist and patient perspective. Along with university clinical trials, new products are provided to practicing dentists around the world for their evaluation in private practice, to understand if the material delivers on the original goals and objectives. Along with the meticulous internal Caulk process, we also strictly adhere to the FDA medical device product launch process, providing all the information necessary to validate the performance of the product and receive FDA approval for launch.

In many cases, product development can take years of investigation and customer research. Our dentist customers can be confident that the Caulk products they use in their offices today have been thoroughly researched and tested to ensure they meet the high quality standards they have come to expect from Caulk. The Caulk R&D facility contains a variety of high-tech testing equipment, and the Caulk labs serve as a testing site for many Dentsply divisions.

Where is Dentsply Caulk investing most of its time and money right now?

Dorff: The Dentsply Caulk team invests heavily in continued product development and innovation. With a staff of 450 employees in the Milford facility, everyone stands behind our mission, “To produce and offer innovative dental solutions that add exceptional value to dentists and their customers.” We also focus on finding new and better ways to manufacture products that provide performance or ease-of-use benefits to our dentist customers.

To what do you attribute Dentsply Caulk’s success and achievements?

Dorff: Dentsply Caulk has a long heritage of being the first in dentistry to launch many successful innovative products. We research, develop and manufacture almost all of our own products. From the research and development labs to the manufacturing floor, Dentsply Caulk employees take pride in providing best-in-class products to the industry. Innovative products like: Aquasil Ultra Smart Wetting Impression Material, TPH3 Micro...
Matrix Restorative, Prime & Bond NT Nano-Technology Dental Adhesive System and SureFill SDR Flow Posterior Bulk Fill Flowable Base provide clinical solutions to dentists around the globe. Dentsply Caulk continues to be a key contributor to Dentsply’s strong performance in the current market conditions. The combination of employee talent, dedication and passion drives this success.

What can we expect to see from Dentsply Caulk in the near future?

Dorff: At Caulk, we are committed to developing innovative new technologies that will provide unique solutions to dentists and their patients. Recent developments in low-stress resins, such as the SDR resin developed by Caulk and found in SureFill SDR flow provides unique handling and bulk-fill capability for easier placement. The proprietary zinc-modified glass formula used in ChemFil Rock Advanced Glass Ionomer Restorative has set new standards for strength and handling of glass ionomer restorative materials. We will continue to build on these platform technologies to provide further advancements in these categories. In the near future you will see a variety of products launched from Caulk that will continue to provide the strength and quality that dentists have come to expect from Caulk, as well as unique ease of use features. 2011 will bring an exciting new product launch in the matrix system category – providing dentists easier ways to manage posterior interproximal contact creation. We will also launch a new technology in the temporary crown and bridge category – providing unique new chemistry that offers excellent performance and ease of use. As we move into 2012 and beyond, the Caulk development pipeline is full of exciting new materials that will provide solutions to the dental industry.

For more information, please call 800-532-2855 or visit www.caulk.com.