Japanese Dental Manufacturers: Committed to Innovation

Earlier this winter, I had the good fortune to travel to Japan for the first time. While there, I learned a Japanese saying: “Chiko gotsu,” which means, “Harmonize actions with knowledge.” I thought this was an appropriate summary of what I was doing in Japan in the first place.

As the President and Publisher of Dental Product Shopper, I have watched as several Japanese dental companies have had significant growth in the American dental market, and I wanted to learn more. What I discovered is that the American and European dental manufacturers can expect to see even more competition from their Japanese counterparts, particularly in the field of minimally invasive cosmetic dentistry.
GC Corporation: Embracing the Semui Spirit

Surrounded by the hustle and bustle of Tokyo, the GC Corporate headquarters is in the final stages of a complete renovation. Inside the brand new state-of-the-art facility, the company’s stated commitment to becoming the number one dental company in the world in less than a decade becomes clear. Within the headquarters is housed the GC R&D department, which is comprised of a team of dedicated researchers who are all working toward bringing to market the very best and innovative dental products.

During my visit, I had the distinct pleasure to meet several key GC executives, including Dr. Kiyotaka Nakao, who is GC International’s Director, and the son of current CEO Makoto Nakao. Dr. Nakao emphasized GC’s focus on quality control as well as efficiencies in bringing new products to market. For example, GC-Dental just received the Deming Prize for management expertise, making it the third GC group company to win this prize, after GC Corporation received it in 2000 and GC Dental Products Corp received it in 2003.

This is an incredible feat for a dental company. I also was able to spend some time with both Takanari Abe, who is the International Sales Section Manager, and Satoshi Toshi, the Deputy General Manager of Research and Development. As I spent the day with my hosts, what became clear to me was their complete dedication to the company and a passion for dentistry. Nothing we spoke about during my trip excited them as much as our conversations regarding GC’s growth and the new products coming to market over the next few years.

After spending time at corporate, we departed by bullet train to the Oyama Factory at the base of Mt. Fuji. GC officials take a lot of pride in their established development processes, and it quickly became clear why as we toured the Oyama Factory. I was impressed with their technology-forward shipping processes, which use robots to select particular products, place them in plastic shipping containers, and load them on a truck within hours of receiving the order.

The theme of continued improvement also is obvious when one considers the history of the company, and of this particular factory. It was founded in 1921 as GC Chemicals Research Laboratory in Tokyo, by Makoto Nakao’s grandfather, Kiyoshi, who was named as president in 1946. The company was renamed GC Dental Industrial Corporation in 1973, and nearly 20 years later, on its 70th anniversary, the company became GC Corporation. Since 1976, the Fuji Oyama factory has continually evolved, undergoing 8 expansions, including the company’s main plants and Dental Equipment Logistics Centers.

GC Corporation’s Newest Additions

Following a spirit of “Semui,” which is a Buddhist philosophy meaning “There is no fear if you do nothing for your own sake,” GC’s 2,500 employees take special care to ensure quality for the company’s customers, using advanced inspection, clean production, and superior productivity systems. Two of the newest additions to the GC Family, G-ænial Universal Flo flowable composite and G-ænial Bond are the fruits of these superior productivity systems.

Universal Flo flowable composite and G-ænial Bond are the latest additions to the GC Family. 6-ænial Universal Flo joins G-ænial Bond in ranking high in performance and customer satisfaction. G-ænial Bond is a 7th-generation, 1-step, self-etch bonding agent designed to improve bond strength to enamel and dentin. Thirteen of 14 dentists who participated in a Dental Product Shopper evaluation of G-ænial Bond, which appeared in the February issue, noted that they would definitely or probably recommend it to their colleagues. One evaluator said, “I am switching to this product immediately.” To read the full evaluation, visit www.dentalproductshopper.com.

Shofu Inc.: Committed to Research and Development

Founded by Kyoto ceramics maker Kajo Shofu III in the early 1920s as a high-end maker of porcelain products, Shofu Inc. did not stop at traditional crafts. Mr. Shofu quickly realized that the porcelain he was using in his ceramics could be used to produce high-quality teeth. Since those early beginnings, Shofu has consistently applied the highest standards of research and development in bringing new products into the dental market.

Shofu’s motto is “proven products for better dentistry,” and a tour of the plant in Shiga revealed just how those “proven products” are created. I was struck by how their processes for making porcelain teeth is so highly automated, yet, they have a team of 15 to 20 people who inspect individual teeth as they are produced. According to Shofu, even as the company “automates its production facilities and systems further, the company will not sacrifice quality for the sake of quantity.”

I was also impressed with how Shofu’s President Noriyuki Negoro took time out of his busy schedule to meet with me and discuss his passion for his company’s products and his commitment to research on the minimally invasive cosmetic dentistry market. Before being named the president of Shofu in 2009, Mr. Negoro worked with the company for 25 years and was responsible for some of the company’s leading products, Solidek and Ceramage. Mr. Negoro’s personal hobbies emulate his work ethic. A black belt in Kenpo and a super archer, Mr. Negoro is disciplined in all aspects of his life, leading to the continued success for his 900-person company.

Mr. Negoro and his staff emphasized their ongoing research projects in the areas of Giomer and Ceramage Micro-Ceramic Indirect Composite, and they will continue to develop new products in the area of minimally invasive cosmetic dentistry.
Sunstar: Innovative Design

Sunstar Americas attributes the success of its products to their innovation and advanced designs. Such is the case with the GUM Technique Deep Clean manual toothbrush. The brush features bi-level, ultra-tapered angled bristles for superior penetration and access, and a patented thumb pad designed to ensure proper positioning. Extreme tapering of the bristles (the upper 6 mm tapers to a rounded 0.01 mm end) enables penetration 2.8 mm into the sulcus, along the gingival margin, and interproximally for access to areas not reached by conventional brushes. The GUM Technique’s angled bristles optimize interproximal penetration and cleaning by striking the surface in different directions.

Fourteen Dental Product Shopper evaluators used the GUM Technique Deep Clean toothbrush for 4 weeks and then reported back about their experience and the toothbrush they received top scores. One evaluator said, “I felt the bristles going subgingivally and my gums felt massaged. Thank you!”

Sunstar: Partnering to Help Patients with Diabetes

The next stop on my trip was the city of Osaka, one of Japan’s larger industrial cities to see one of the world’s top-10 oral care companies. Sunstar’s commitment to oral care is obvious, particularly as it relates to periodontal disease and diabetic patients. Partnering with the world-famous Joslin Diabetes Center, affiliated with Harvard University, Sunstar and Joslin researchers are working closely to prevent complications in diabetic patients, including periodontal disease.

My host at Sunstar, Oral Care Business Unit General Manager Eiichi Shirakawa, said that Sunstar’s operations are multifaceted, which often leads to autonomy in the areas of research and development of new Sunstar products. Many of the tried and true dental products that American dentists have come to trust, like the Butler and GUM lines, are likely developed and made here in the United States at Sunstar Americas. But the interdisciplinary collaboration between Sunstar Americas and Sunstar Japan can be seen in the company’s Guidor project, which is a portfolio of products dedicated to the regeneration of oral tissue and bone substitution.

Ongoing research efforts focus on the relationship of periodontal disease to whole-body health, including helping to host the The Coordination Meeting on Oral Health and Systemic Health, near Sunstar’s corporate headquarters in Geneva, Switzerland.

Tokuyama Corporation: Inventive Solutions

One company I had on my list to visit but was unable to was Tokuyama. I have worked closely with their representative in the United States, Ichi Yamata. This part- nership has led to the opportunity for Dental Product Shopper to evaluate several Tokuyama products, including Estelite Sigma Quick and Estelite Flow Quick High Flow.

With a 90-year history as a diversified chemical producer, Tokuyama began developing and manufacturing dental materials 30 years ago. Guided by the philosophy of “inventive dental solutions,” Tokuyama has demonstrated its commitment to creating quality products and provide solutions for dental professionals. Tokuyama officials say, “As we substantiate ourselves as an industry leader, our forward-thinking researchers are developing new technology to revolutionize the global dental industry.”

This corporation has an established track record for its reliner materials, Rebase II, a chairside hard denture reline material, and Sofreliner. These products command a majority of the market share in their respective categories. The company also produces bonding agents, composites, and cements. With Japanese branches in Osaka, Sapporo, Sendai, and Nagoya, Tokuyama continues to be a growing force in the US dental market.

Tokuyama’s Newest

Exceptional handling is the theme of the latest products to surface out of Tokuyama. For example, Estelite Flow Quick High Flow is an esthetic and fast-curing flowable composite resin that features 100% spherical filler and patented Radical Amplified Photopolymerization (RAP) initiator technology that enables exceptional handling and flowability. Twelve dentists who participated in a Dental Product Shopper evaluation of this product ranked their overall satisfaction with this product as excellent (7 evaluators), very good (3 evaluators), and good (5 evaluators). Turn to page 84 to read the full review.

Another recent addition to the Tokuyama family, Estelite Sigma Quick, is a light-cured, universal resin composite that provides extended working time, reduced curing time, and 20 shades. Clinicians enjoy the sculptability of this product, the technology that enables exceptional handling and flowability. Of 13 evaluators, 5 rated the product’s sculptability as excellent, 7 rated it as very good, and 1 rated it as good. One evaluator said, “It sculpted well in areas where I was trying to match the adjacent anatomy.”

A note of thanks—I feel very fortunate to have had the opportunity to get a better understanding of these growing dental companies, and the chance to meet the people who run these companies. Everyone showed me wonderful hospitality during my visit to Japan.

—Dave Branch