As he led me on a tour of the IMEX toner plant in rural Okayama, Japan, General Manager Takayuki Ohmi stopped to pick up two stray leaves on an otherwise pristine path. The leaves were certainly not in our way, but Ohmi neatly disposed of them, clearing our path as he continued to showcase IMEX’s recently renovated, $65 million complex. Ohmi’s action exemplified an important trait from IMEX’s core business practice — the attention to even the smallest details yields powerful results. After all, IMEX became an industry leader by creating near-perfect toner particles, measuring success micron by micron.

IMEX (Imaging Materials and Electronics Chemicals), headquartered in Hiratsuka, Japan, has primarily been producing toner for the remanufactured cartridge industry for 26 years. The company’s precision and attention to detail that permeates its corporate culture is best seen in IMEX’s ability to manufacture OEM-quality toner, color in particular. IMEX’s success in toner has made the company an industrial powerhouse, boasting sales numbers at $80 million for fiscal 2007. (The distribution breakdown of IMEX product sales is 50 percent to the U.S., 20 percent to Europe, 20 percent to Asia and 10 percent to the Japanese domestic market.) IMEX also has pioneered cartridge recycling programs and offers a successful printing services
business, both for the Japanese market.

According to InfoTrends/CAP Ventures’ 2006 research, IMEX has a 3.4 percent global market share in toner production and ranks as the seventh largest toner manufacturer in the world after such industry giants as Canon, Xerox, Ricoh and Lexmark. The toner produced at both the Okayama plant and the U.S. plant in Salem, Ore. (IMEX America Corp.) comprises 80 percent of IMEX’s total business. IMEX, which also has a sales office in Barcelona, Spain (IMEX EU Trading), has nearly 500 customers for its products and utilizes a distributor network to reach its smaller customers. Avidly environmental, IMEX proudly sells 92 percent of its toner to the remanufacturing industry.

Founded in 1982 by CEO Akira Kitaoka, IMEX began as a developer, producer and seller of toners for the electrophotography industry. Recognizing the imaging industry’s future potential, Kitaoka set out to start a business that would contribute to society in this field.

Kitaoka said, “I established IMEX 26 years ago with the objective of ‘revolutionizing information through visualization.’ I believed in the growth of electrophotography and wanted to make a societal contribution in that domain. At that time there were only analog copy machines. I did not foresee the era of digitalization as seen in today’s laser printers and MFPs, but I thought the best medium for the visualization of information would be toner. I started my business with the spirit of entrepreneurship.”

Kitaoka’s entrepreneurial spirit first surfaced at the beginning of his business career at Dainippon Ink and Chemicals, Inc., where he started in 1964. As a sales manager, Kitaoka was actively involved in discussions and proposals at the product development and manufacturing departments with the task of creating products with a competitive edge.

Kitaoka said, “I repeatedly proposed that relevant departments be brought together to form project teams and that the manufacturing method be changed. It was my firm belief that cross-sectional cooperation and gathering of ideas was essential in producing good products.” Kitaoka felt that rather than working together as a whole toward a common goal, his co-workers were only concerned with their departmental achievements. The result was a fragmented mindset resulting in production that didn’t meet its full potential. Kitaoka envisioned a company that would synchronize its efforts — employees would work together rather than become divided by departmental rivalry. However, Kitaoka’s suggestions fell on deaf ears and he left Dainippon to create IMEX.

Kitaoka said, “I was committed to creating a flexible company with a cross-organizational footprint, instead of a collection of individual departments, each concentrating solely on their scope of duties.”

As laser printers became a staple of business environments worldwide, IMEX focused on toner. In 1990, IMEX’s high-quality monochrome toner was first used as the refill for laser printer all-in-one cartridges and became the core of the company’s business. Kitaoka’s passion for the industry grew. “Today,” he said, “remanufacturers in the world are estimated to be more than 50,000 strong. It is my sincerest desire to see the further development of the remanufacturing industry.”

Despite years of effort by dedicated leaders like Kitaoka, the aftermarket share in Japan is still low compared to Europe and the U.S.
Japan, recycled color cartridges comprise about 5 percent of the market and remanufactured monochrome cartridges hold about 20 percent of the market.

IMEX Managing Director Naofumi Morita estimates it will take 2-3 years for Japan’s domestic market to reach a desired 25-35 percent market share, on par with the U.S. and European markets. “Back when IMEX was a new company, there was no market for recycled cartridges.”

In those early days, with Kitaoka at the helm, IMEX persisted to market its wares. In 1988, Kitaoka discovered the booming computer industry in the U.S. and he established his niche, becoming the first company to supply high-quality toner to the cartridge remanufacturing community. That same year IMEX built the factory in Okayama to produce toner that matched OEM quality.

IMEX’s business philosophy evolved with the end user in mind. “We will help achieve a consumer-oriented society,” Kitaoka said, “in which end users can enjoy the benefits of quality and affordable aftermarket toners and services. Because of this philosophy, in 1995 IMEX began remanufacturing cartridges, solely for the Japanese market. Feedback from this operation helps IMEX understand issues in the market and further refine toner development.

“Gaining full consumer confidence is our biggest desire,” said Kitaoka. “We will expand our business in remanufacturing cartridges and printing solutions to increase support from end customers and initiate a consumer-oriented tide in the Japanese market.”

Globally, that consumer tide seems to be veering toward color products. According to Lyra Research, in 2007, revenue generated from the sale of color cartridges was $14.8 billion. Lyra predicts that by 2010, worldwide revenue generated from color sales will surpass monochrome sales for the first time ever.

Where many industry insiders make their case for chemically produced color toner as the method that offers better quality, cost reduction and higher machine reliability, IMEX is certain the future lies in its unique technology that creates spherical color toner.

“In the full color laser printer market, we expect to see new color machines which will be much smaller, higher-speed and higher-yield. Under these circumstances, it is important for us to improve technical fundamentals in production and development to meet the demand. Refining R&D capacity is
an absolute imperative. We will continue to reinforce the fundamentals of toner development and improve speed to market."

The Okayama plant houses six color production lines that create IMEX’s spherical color toner, with an additional seven monochrome production lines. The Okayama lines run 24 hours a day, seven days a week. In its Oregon plant, IMEX houses two monochrome lines, which allow for production of 30 percent of total toner quantities.

IMEX America President Tomoaki Abe said, “In order to better serve our North American customers, we have recently invested $5 million in our Oregon plant, which has doubled our capacity.”

With 300 employees worldwide, IMEX produces more than 7,000 tons of toner (monochrome and color) per year, making good on IMEX’s investment.

“We would like to contribute to the improvement of the current 5 to 6 percent market share of recycled color cartridges by providing high-performance IMEX spherical color toners to the market,” said Kitaoka. “The current market requires a wide variety of color cartridges. IMEX color production methods provide for greater flexibility, allowing for better coverage of the market’s demands.”

“Due to the number of machines in the marketplace, we have to be diligent in prioritizing our development list,” said Vice President Jeff Johnson. “We do this by utilizing industry-leading market research firms as well as feedback from our valued customers.”

The challenges for developing and producing quality color toner are great. “In addition to the challenges of color development and production, we’re also very sensitive to all intellectual property issues,” said Morita. “We do thorough patent research and, when appropriate, we file our own patents as well.”

IMEX’s development expertise is seen in its unique color toner TMC 2600, also for use in HP 2600/2605 and the 1600. The toner has the IMEX spherical shape and a sharp particle distribution that recreates to near-perfection the OEM in quality and yield.
Smart chips are often heralded as the OEMs’ biggest threat to an efficient, highly competitive aftermarket. But noting the complexity of the color process, it seems that the ability to produce a high-quality color product will make or break a toner remanufacturer, especially as end-user demand for color increases. Because toner technology is so difficult to standardize, IMEX’s research team has devoted itself to developing cutting-edge technology.

The company has made great achievements in terms of toner development, including improvement of resins, charge-control technologies and dispersion techniques of colorants. To create such closely matched, OEM-quality color toner, IMEX devotes 50 employees solely to R&D. It allocates a budget of $4 million per year for development and has made a $3 million investment in R&D equipment in the last three years.

Some of that impressive equipment includes a scanning electron microscope and a transmission electron microscope, with which the inside and the outside of the toner particle are magnified and examined. Resembling a somewhat science fiction-sized spore, the toner particle is examined by IMEX researchers to note its shape, the electrical charge and everything in comparison to the OEM particle. Once the toner is approved, it is subject to numerous quality-assurance tests in the climate-controlled R&D department. The end result is effective toner that can reproduce OEM-level standards not only in color expression, but also in texture, density and gradation.

IMEX’s dedication to producing high-quality products is also seen in the company’s commitment to maintaining a truly environmentally friendly company. One of Kitaoka’s priorities for IMEX is to harmonize corporate management and the natural environment. “Issues such as global warming and high oil prices can push companies to the verge of termination unless they can become more environmentally conscious,” Kitaoka said. “By integrating environmental issues into our product design, we are going to develop and provide environmentally friendly toner to the global market.” In addition to its commitment to creating toner with lower volatile organic compound (VOC) emissions, IMEX was the first Japanese company to institute a cartridge recycling program to help reuse resources and reduce industrial waste.

Morita said that using one recycled printer cartridge saves 2.5 liters of crude oil. “Within the Japanese domestic market, approximately five million recycled cartridges are used a year. That amounts to almost 13 million liters of crude oil that can be saved by using recycled cartridges.”

Kitaoka said, “The end user in Japan is sensitive to environmental issues and will incorporate environmental thinking into the purchasing decision. The Japanese customer will buy a product if it has an (official) environmental label on it.”
In the lobby of the Okayama plant, there are three posters with the slogan “For the Future of the Earth,” from green-conscious environmental ad campaigns. Kitaoka explained that the 10-year-old Association of Japan Cartridge Remanufacturers (AJCR), of which Kitaoka is a former chairman, creates such ads. AJCR approves labels to be placed on finished goods that meet environmental standards. The end user will pay a few cents extra for the product and that money is donated to an environmental cause or will be used for future earth-friendly ad campaigns. “The association is a way to educate people about the industry and its relationship to the environment,” Kitaoka said, “and when we integrate environmental issues into our product designs, we develop and provide environmentally friendly toner to the global market.”

IMEX offers a hybrid monochrome toner as a strong example of its environmentally friendly practices. IMEX recovers residual toner from used cartridges and removes any foreign objects and paper dust. The recovered toner is given a high dispersion through special processes, and then the hybrid toner is subjected to stringent quality control. The result is a toner that contributes to the reduction of waste materials and disposal costs. IMEX is the only known company currently utilizing residual toner in this manner.

Cutting-edge technology mixed with globally-conscious thinking established IMEX as a world leader in the remanufacturing industry, but IMEX’s lofty achievements are grounded in humble beginnings. Kitaoka said, “The small building in Atsugi where our business was founded used to have snow blowing in that would accumulate during the winter. Being sensitive to loneliness, I suffered a sense of isolation in that environment. But my former subordinates gathered every weekend to extend a helping hand for free. Some brought carpet from a nearby store and laid it while others provided technological assistance.” During these tough beginnings, Kitaoka’s fledgling IMEX was competing for a large contract from a major toner manufacturer. Kitaoka cites his colleagues’ “helping hands” as a key factor that helped IMEX secure that crucial early contract.

Kitaoka said, “IMEX’s positive corporate motto is ‘give it a go rather than hold back in fear of failure.’ At the heart of IMEX is the company’s ambitious approach to tackle fresh challenges, as seen in our establishment of qualitative evaluation technology for toners. IMEX’s success is largely attributable to cooperation from people within and outside the company.”