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PROFILE

Three generations succeed in making Superior quartz lamps

SUPERIOR QUARTZ PRODUCTS INC. PHILLIPSBURG

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The future looks bright for the 61 employees of Superior Quartz Products Inc. — literally.

In the 44 years since the company's founding in Verona, N.J., SQP has grown into one the world's largest manufacturers of medium- and high-pressure quartz lamps. But according to company officials, the highly specialized product line is only beginning to hit its stride in the international marketplace.

SQP lamps are manufactured in the company's 30,000-square-foot plant in Phillipsburg, N.J. Sales offices are located in Easton as well as Newport Beach and Capistrano Beach, Calif. Customers come from the graphic arts, aerospace and entertainment industries, which use super-bright SQP quartz lamps for various applications.

The "you-are-there" experience of an IMAX theater comes courtesy of a powerful SQP lamp, which is required to run the gigantic trademark IMAX image projected onto the screen at venues like the Liberty Science Center in Jersey City, N.J. Major printing companies all over the United States use SQP lamps to cure inks. And NASA uses SQP products to illuminate the space shuttle prior to launches at Cape Kennedy, Fla.

Dennis "Denny" Losco Jr., SQP's corporate treasurer and director of sales, says the company produces three distinct types of quartz lamps in a fully integrated operation. SQP also custom-manufactures lamps for special applications. All told, the company ships more than 50,000 lamps all over the world every year, at prices ranging from a few hundred to almost $10,000 each.

In an era of venture-capital fueled technology businesses, SQP is a fast-growth, family-owned and operated company. Denny and his brother Jeffry, vice president of engineering, are the grandsons of founder Joseph Losco, who started a small mercury vapor lamp manufacturing business in Alpha, N.J.

"Our original product was developed to cure the ink used on blueprints, back when there was a large demand for mercury vapor lamps," Denny says.

The medium-pressure lamp technology still is widely used in linear ultraviolet curing applications to dry adhesives, ink, plastic and paper during manufacturing, he adds.

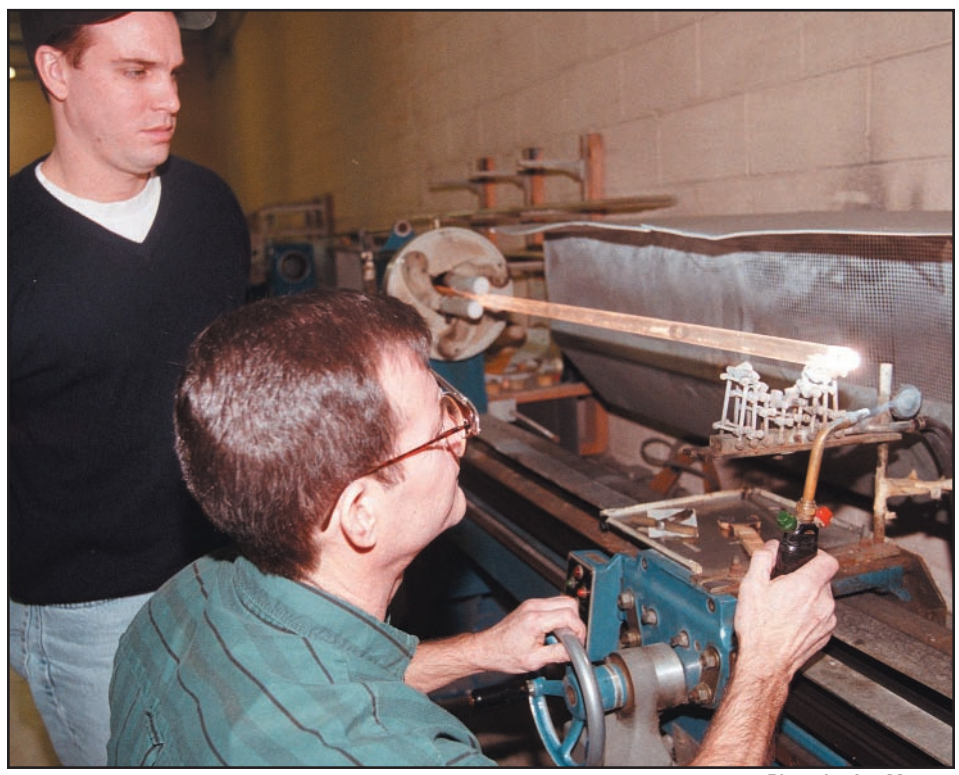

Photo by Joe Marcus

Dennis Losco, corporate treasurer and director of sales, watches as lathe line supervisor Tom Sampson forms a linear UV lamp for curing printer's inks. Losco's grandfather, Joseph Losco, started the company in 1957.

SQP's product line has evolved significantly since the company's early days in the 1960s. Denny and Jeffry's father, Dennis A. Losco, and Dennis' brother, Joseph, led the company through two decades of successful growth, steadily adding employees and square footage along the way. In 1995, Joseph passed away, having, with his brother, established SQP as the largest manufacturer of ultraviolet lamps in the United States.

Denny and Jeffry credit their father, now SQP's president, and their late uncle for building a strong foundation from which to grow the business — and a culture unique to family businesses. Operations manager Jack Sabo, a boyhood friend of both brothers who signed on recently after successful stints at larger regional manufacturing companies, says the Loscos have created the kind of work environment employees dream of.

"The company is secure, successful and growing fast. Employees feel like they are part of the family. What more could you want?" Sabo says.

SQP has experienced even more rapid growth since the introduction of two new types of pressurized lamp technology. The expanded product line has opened the door to some unique opportunities, including the deal recently signed with IMAX.

"In just a little more than a year, we have become the leading U.S. supplier of high-pressure, water-cooled short arc lamps. Our only competition is in Europe and Japan," Denny says.

This type of lamp was the kind that NASA approved and purchased to spotlight the launch pad at Cape Kennedy. For that high-profile, 50-piece order, SQP engineers designed a 20-kilowatt, high-pressure lamp measuring 18 inches long and 5 inches in diameter. The relatively modest size of the lamp belies its illumination specifications, Losco says. "NASA tells us that once a space shuttle reaches orbit, the astronauts aboard can still clearly see the lights on the pad," he claims.

SQP's third product line, an air-cooled version of the high-pressure lamp, was introduced in the early 1990s after the acquisition of some experienced engineers from a former competitor. That type of lamp is used extensively in the cinema industry, which Denny estimates to be a $65 million market domestically. Regionally, Regal Cinemas use SQP air-cooled lamps in their projectors. And if you have ever been drawn to a carnival, auto tent sale or a grand opening of a shopping mall by criss-crossing spotlight beams in the night sky, you can thank SQP.

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The SQP facility merges traditional craftsmanship techniques with modern technology. Skilled glass blowers form quartz bodies for lamps, using a variety of torches and heat sources. Across the floor, custom-engineered vacuum pumps extract all but a tiny fraction of the contaminants that exist in the atmosphere, so that the medium- and high-pressure lamps' innards generate the brightest, purest light possible.

After being fitted with precision-machined electrodes — developed with a proprietary, patented process invented by SQP engineers and produced in an on-site clean room — the empty tubes are filled with various gases, including xenon. Fittings designed to allow either air or liquid cooling, depending on the lamp order, are then cemented to the tube ends.

The final step in the manufacturing process is what one major distributor of SQP products says separates it from the company's worldwide competitors. Every lamp is tested by technicians before being wrapped and packaged in containers made exclusively for SQP.

"Their quality control is absolutely the best in the quartz lamp industry," says Rob Sauter, owner and president of SMR Industries Inc., based in North Wales. SMR, has been a customer of Superior Quartz for 10 years and uses SQP as its sole source of supply for medium-pressure quartz lamps. SMR's customers, mostly commercial printers, buy both air- and water-cooled SQP lamps for ink curing in their operations.

Sauter says he also is a satisfied and loyal customer because of the company's family atmosphere. "I can talk to the top people in the company whenever I need to, and they bend over backwards to satisfy SMR's needs," he says.

Thanks to customer testimonials like Sauter's and 44 years of experience in an industry with very high barrier to entry, business is booming at SQP. Already the world's number-one supplier of linear ultraviolet quartz lamps, Losco says the company now is gunning for the top slot in xenon-filled, air- and water-cooled lamps.

"We only have a handful of competitors worldwide and just a couple in the United States. We know our the quality of our lamps is higher than any of them on the xenon lamps, and our prices are competitive," he claims.

Sabo says SQP has identified and made sales presentations to several major customers who use xenon lamps. Such prospects are typically using competitive lamps made in Europe or Japan. "We have provided samples for them to evaluate, and the feedback has been all positive," Sabo says.

After multiple expansions at its 30,000-square-foot Phillipsburg site, plans are being developed for a new, 60,000-square-foot plant that will accommodate the company's growing business, and potential sites include eastern Northampton County, a short drive across the Delaware for many of SQP's employees.

Wherever the plant is built, Denny and Jeffry plan to continue the Losco tradition of managed growth at SQP. "We fully expect to utilize that space and hire at least 15 more people over the next year or so," Losco says.