

JP Mfg. Inc.: Keeping Optics in the Family

Jan and Maryann Kania



JP Mfg. Inc.'s
COO Jan Kania

Courtesy of Jan Kania

A manufacturer of plastic injection-molded optics has been a successful family affair for 40 years. It is also helping the town of Southbridge, Mass., U.S.A., to carry on an optics heritage that dates back to the 19th century, when New England workers founded the American Optical Company.

During a period of rapid economic change and rising global competition, it's nice to see a small company stand the test of time. For 40 years, JP Mfg. Inc. has produced plastic lenses that can be used in classrooms and medical settings, as photographic tools, and for a variety of industrial uses. The company also provides services in molding and the assembly of components.

JP Mfg. was founded in 1969 by a Massachusetts-based couple, Albert Kania and Gloria (Tucci) Kania. Albert attended Wentworth College and Northeastern University, where he earned a mechanical engineering degree after serving in the Navy in World War II. He was an entrepreneur from the beginning—and a tinkerer. He had a passion for machines and electronics, and he tried his hand at several businesses, including producing jackknives and operating a ham radio store, before he and his wife settled on JP Mfg. Inc. (named after their sons Jan and Paul).

An optics heritage

Optics was their destiny—and it was in the family. Albert had at one time been

URL: www.jpmsg.com
Headquarters: Southbridge, Mass., U.S.A.
Products: Plastic injection-molded lenses for hobby, education and industrial use
Founded: 1969
Founder: Albert and Gloria (Tucci) Kania
President : Jan L. Kania
CEO: Edmund Kuzdzol
Number of employees: 19
Partners: 2

a head engineer at Omnitech, a groundbreaking optics firm located in Dudley, Mass., and his brother-in-law Edmund Kuzdzol had worked at the American Optical Company, the lens giant in Southbridge that dates back to 1869. Like many in Southbridge, the Kania family knew the optics market well, and they decided to focus their business on plastic lenses, which were inexpensive to produce and had a solid niche among the hobby, consumer and educational segments.

Albert and Gloria operated their business out of a small six-stall garage near their house that contained a few small plastic injection-molding machines. They manufactured and sold acrylic “bug” boxes—which are used in science

classrooms to magnify the anatomical features of insects—along with various small hand magnifiers. Albert's brother Richard helped construct the molds.

A growth phase

Soon, the company began producing more sophisticated and higher tolerance products for other applications—including medical devices and optical components. Optical-grade polymers were new to the market at this time, and they were rapidly replacing glass lenses in many applications. Fortune 500 companies expressed interest in pursuing this innovative technology. The Kania family hired relatives and neighbors to operate five injection-molding machines to manufacture plastic products in a new market.

As Albert and Gloria enjoyed their first taste of success, their company outgrew the original garage space. They purchased a building on 13 Lovely Street—a space previously occupied by a large bread bakery in Southbridge. Brick ovens were soon replaced by injection-molding machines, and bakers with engineers. JP Mfg. still operates out of this location.

Reinventing the company

When Albert died in 1974, Gloria took over the company. She hired relatives to help her perform operations management, while she focused on accounting operations and helping with the machines. She brought on her brother-in-law Edmund Kuzdzol as the marketing manager. After investing his time and expertise—and bringing many new contacts and customers—he was promoted to chief executive officer.

The company continued to grow through the mid-1990s, with a focus on large customers. Then the market shifted, and many of those big companies began to seek cheaper products in Asia. In order to survive, JP had to reinvent itself. It did that by shifting from larger- to smaller-volume customers and emphasizing quick turn-arounds and small, customizable jobs.

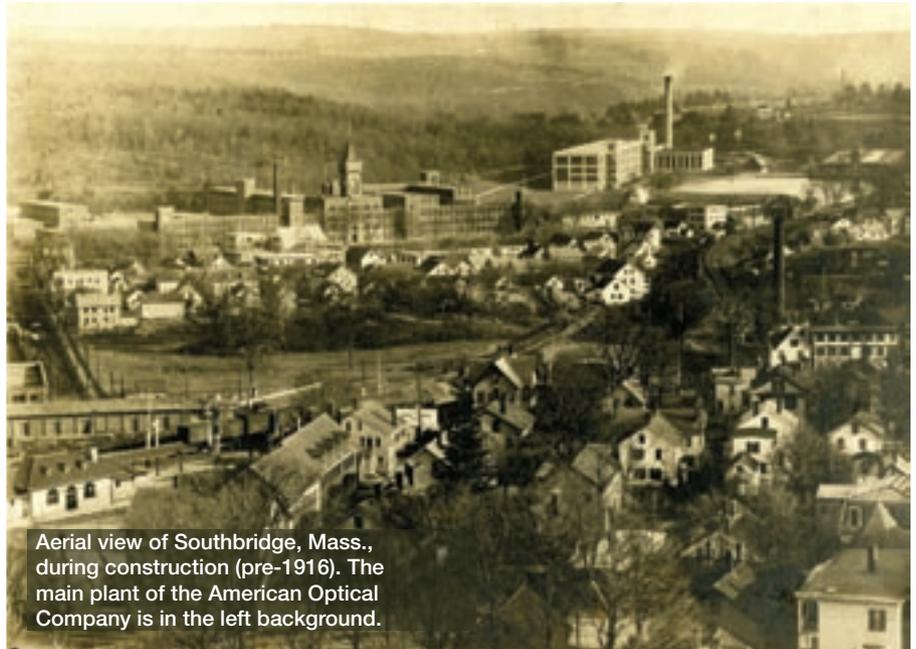
Management was passed on to the next generation as well. I (Jan Kania), Albert's son, moved into the position of the chief operations officer. Ed Kuzdzol remains the CEO. My brother Paul manages the engineering aspects of the business.

JP Mfg. has evolved from an old management strategy of controlling growth to a new one of adapting to the global economy. We found that, in order to succeed, it is not sufficient to know how to manufacture your product; you must also understand how to effectively manage the entire business.

Current and future directions

We have implemented cross-training of employees' jobs, lean manufacturing, cell manufacturing and just-in-time production (a strategy for reducing in-process inventory). One of us (Jan) works on the day-to-day operations while the other (Maryann) is involved with strategic planning and cost-saving measures. Together, we have developed a new business plan, marketing plan and strategic direction to move the company into the new culture.

Both of us also realized that we need additional education as entrepreneurs



Aerial view of Southbridge, Mass., during construction (pre-1916). The main plant of the American Optical Company is in the left background.

Jacob Edwards Library/Tucci Collection (<http://dlib.cwmars.org>)

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to make our newly reinvented company a success. To accomplish that and keep the company competitive, we both earned Masters of Business Administration degrees. We learned new business practices, techniques, computer applications, marketing strategies and cost-effective measures for combating heavy competition.

When the economy began to slow down, the business went through good and bad times. We have made it through the rough spots by being cost-efficient and using the state's unemployment program for shared work weeks. This has enabled us to avoid laying off our long-term employees.

Customer service is key for our small business. JP Mfg. Inc. works to understand our customers' needs, and we have developed a flexible business philosophy to do so. Our customer base is both national and international, so the company offers good market exposure.

JP Mfg. continues to offer many types of hand magnifiers and other optical magnifier boxes. To help customers avoid tooling costs, a stock of varied off-the-shelf optical lenses are available in plano convex, double convex, windows, meniscus and aspheric configurations. In addition, we serve medical, consumer and industrial markets with optical and conventional molded high-quality products.

We believe in giving back to the community. We are adjunct professors at Quinsigamond Community College in Worcester, Mass., where we teach manufacturing technology and business courses and continue to learn on a daily basis. With dedicated employees and great customers, we look forward to our company's next 40 years. ▲

Jan Kania (jkania@jpmfg.com) is the chief operations officer of JP Mfg. Inc. in Southbridge, Mass., U.S.A. Maryann Kania is involved in strategic planning for the company.