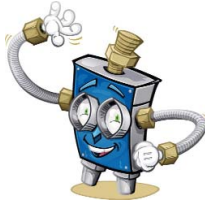


Bringing Value to a Changing Market and World

The Superior Products Story

By Gregory K. Gens and Susan White



Superior Products uses barcode control on all parts and assemblies.

Superior Products (www.superiorprod.com), located in Cleveland, OH, has always taken pride in its willingness to go the extra mile to meet the needs of customers to provide on-time, defect-free, and competitively priced fittings and gas management systems for the gas industry. A key part of that philosophy is to understand what will work for the customer based upon the customer's present and future needs.

"Our engineering team designs our products and then engages our customers in their uses in their gas management systems," says Superior Products President Donald L. Mottinger. "We manufacture our own products and have sophisticated computer systems to help our customers manage their logistics and inventories. In short, Superior Products offers customers a start-to-finish solution, which includes design, manufacturing, and logistics."

This philosophy has served the company well. From its modest beginnings as a contract screw machine company that was founded 65 years ago to make a line of compressed gas fittings, Superior has grown its product lines to serve the alternate energy, welding, medical, beverage, and specialty gas industries worldwide. In recent years, Superior has expanded its engineering department

to continue growing Superior's products and systems. Superior produces everything from industrial gas products and oxygen wall systems in hospitals to its newest additions—hydrogen fuel management systems and LNG filling systems. The company now services more than 1,000 customers with 15,000 parts and 3,500 products.

In the early 2000s, Superior opened a state-of-the-art distribution center in Cleveland, OH to handle and ship some 15 million parts per year all over the world, including North America, Central America, South America, and Europe, and is now developing markets in China and South East Asia.

A Commitment to the Gas Industry

Superior is not only dedicated to providing expert support to its customers, but supports the industry as a whole by serving on a number of industry association committees. For example, Iain Hodgekins, General Manager of Superior Products, serves on GAWDA's (Gases and Welding Distributors Association) Management Information Committee; Bob Ranc, Superior's Vice President of Sales and Marketing, will be WEMCO's (an association of welding manufacturers and an Ameri-

can Welding Society Standing Committee) next President; Ron Johnston, Superior's Engineering Manager, serves on numerous CGA (Compressed Gas Association) committees, and Howard Konishi, Chief Engineer for Superior at Macro Technologies, is on ASME's (American Society of Mechanical Engineers) new LNG committee. "It's important to our company culture not only to sell products, but also to demonstrate our commitment to the overall industry's vitality and success," Mottinger says.

Changing Markets and Customer Expectations

Today, the gas industry, at all levels, demands a lot in a total business relationship. For example, our industrial gas customers expect Superior to remove all wasteful practices from the business process—from the time an inquiry is initiated, though the design, production, and delivery processes, and until the payable is processed and the accounts receivable is cleared from the books.

Superior is also expected to be a logistics provider, understanding demand, measuring response time, managing finished goods inventory, and shipping to the point of use on time, every time. To compete in today's chang-



All of Superior's data is available on the company's intranet and can be accessed from worldwide locations using a web enabled device.



Macro Technologies recently moved into a state-of-the-art facility to produce high quality products in Kirkland, WA.

ing and emerging markets, customers also rely on Superior to remain vigilant in developing technology in all phases of compressed gases and cryogenic fluids, and to develop products that offer new, safer, and better solutions for the transmission of compressed gases and cryogenic liquids. These horizons have broadened dramatically as the world looks to better means of providing energy, medical solutions, creative laboratory research, and production efficiencies. Finally, many of our customers run global operations and expect Superior to service them worldwide.

Bringing Value with Best Business Practices

Superior's business management systems are so advanced that both customers and vendors have tapped Superior to share their expertise in information technology. Superior manages customer data, websites, inventories, and logistics for numerous customers. When managing an enormous amount of data for products and customers, efficient use of technology is the key.

Efficiency begins in engineering with three dimensional design and configuration software that is tightly integrated into a real time ERP system. To utilize all of the information, we have designed an internal website that displays up-to-the-minute information on sales, production, and the metrics with which we manage the company.

With these advances in information technology, Superior can cut call times in half with greater customer satisfaction; reduce inventory levels and eliminate the need for annual audits by using barcode control of all parts and assemblies; and manage electronic catalogs and product data for its customers.

The use of current best business practices allows us to offer our products to customers at lower costs and with better logistical services. If Superior had continued to manage its business with 1990s practices, Superior would now have 46 percent more employees.

Bringing Value with Technology

With alternative energy and medical markets growing and becoming more sophisticated, Superior recognizes the need to bring more cryogenic and LNG solutions to its gas management stable of products. One of the ways Superior has chosen to meet this need is through the acquisition of Macro Technologies of Kirkland, WA. Macro is a designer and manufacturer of high precision components



Superior Holding, LLC

and assemblies for the industrial, medical, aerospace, cryogenic, and CNG/LNG markets. This acquisition strengthens Superior's presence in the medical and cryogenics markets. Macro recently moved into a new state-of-the-art facility to produce high quality products. This facility will also serve as Superior's logistics center for the western United States.

Together, Superior and Macro are aggressively pursuing emerging markets, primarily the alternative fuel and energy markets. Superior has developed new systems to manage hydrogen fuel cells. In May, Superior/Macro introduced a new, patent pending, LNG fueling nozzle at the Alternative Clean Transportation (ACT) Expo in Long Beach, CA. (See a review of ACT in *CryoGas*' June 2011 issue on pp. 28-30.) The new nozzle—coupled with mating receptacle, cryogenic hose, and cryogenic hose break-away—gives Macro a complete LNG delivery system product line.

To make industry fill plants more efficient, Superior developed a new quick connect, the Push2Fill. In addition to greater efficiency the Push2Fill, which just came on the market, is safer than previous models and handles the newer RPV valves.

The New Superior Holding Company

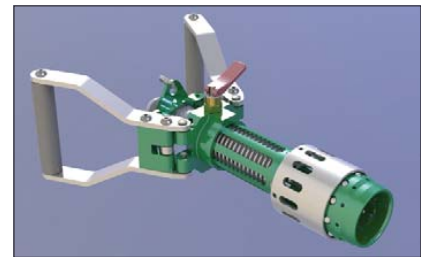
Today Superior Holding Company, which controls Superior Products and Macro Technologies, is engaged in providing hardware to keep cell phones operating, fueling over-the-road trucks with LNG, and fueling school buses with CNG. Superior fittings are in hospital walls delivering medical oxygen to recuperating patients and in university cryobiology banks preserving heart valves and stem cells. Compressed gases distribution companies use Superior's latest fill room technology to fill cylinders and cryogenic vessels. Manufacturing firms use Superior Products' manifolds to move gases from storage locations to plant application areas, and your favorite restaurant might be serving you carbonated beverages provided by automated systems engineered by Superior Products.

In addition to these high quality product offerings, Superior's business systems are helping the industry adopt the best business practices in order to compete in changing global markets.

Macro Technologies' engineering expertise and cryogenic experience, combined with Superior Products' broad compressed gas product offering, logistics, and infrastructure, provide great synergy to service the gas industry with a complete business relationship.

The screw machines in the Cleveland plant continue to provide the most basic brass fittings, but the minds at Superior Holding are focused on a whole new era of needs in the management of compressed gases and cryogenic liquids, as well as the business relations processes that streamline total supply chain efficiency. ■

Gregory K. Gens is Executive Vice President and a Board Member of Superior Holdings, LLC. Susan White is President of the Enterprise Group in Cleveland, OH and a Board Member of Superior Holdings, LLC. For more information on Superior Products contact Bob Ranc, Vice President of Sales and Marketing for Superior Holdings, LLC, at BRanc@superiorprod.com.



Macro's LNG nozzle was designed to be a significant improvement over current connection systems.



Superior Products' new Push2Fill is designed for fill plant efficiency.