



Smarter, lighter, stronger

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Constant product and process innovation are driving expansion at Gill Industries, a global supplier of precision-engineered assemblies. Richard Perreault talked to Bernie Sheehan

In April Gill Industries launched a folding headrest mechanism for second- and third-row seats of SUVs, minivans, and crossover vehicles that is 10 times quicker to place into production than competitors' products. The new headrest system largely eliminates the need for Tier One suppliers and OEMs to pay for new tooling of the production lines at Gill, which can cost up to \$400,000 for a program. The versatility of the headrest platform also reduces the need for engineering/design changes and testing that can add up to \$250,000 per program.

"We're in a growing phase, trying to service our market segments better," said Richard Perreault, NCO. "We're achieving growth through innovation, both of our products and of our processes. With our products, such as the platform headrest and other technologies, we're expanding our portfolio both horizontally and vertically. With the headrest, we've eliminated design time and development time. It can be used on multiple car platforms without the need for redesign; no new tools are required. The second step is horizontal product innovations. We look at our existing products and try to offer new ideas on them; for example, developing new processes for tubing and welding operations for utility vehicles."

In terms of process innovation, Gill is driven by the need to remain competitive. It has implemented lean initiatives to eliminate waste, reduce costs, and improve processes throughout its operation. "For example, we've taken the cost out of design, reducing the number of parts in the headrest from 16 to nine. It's a lean design initiative, because we're taking complexity out of the process. In manufacturing we're using all the traditional lean tools," continued Perreault. "Six sigma and other techniques are in place throughout the company, from the manufacturing floor to the office. We have teams moving from cell to cell applying the techniques. For example, in the assembly cells for the headrest mechanism, the number of operators per line has gone down from eight to three, working two shifts, which has reduced our labor costs. The same team has also reduced floor space utilization by 50 percent, so we can put more cells into the facility."

Based in Grand Rapids, MI, Gill Industries supplies stamped metal components, welded assemblies and mechanisms to leading automakers and Tier One auto suppliers, such as Johnson Controls, Continental Teves, Intier, Lear Corporation, and Bosch. Automotive products focus on seating mechanisms, headrests, seat frames, latches, and in-console assemblies. Gill also designs and manufactures components, tilt mechanisms, and systems for the office and medical furniture industries, and steering columns and tubing frames for utility vehicles. "We're involved in anything that requires motion, involves metal and assembly, welding, and stamping operations," explained Perreault.

Gill Industries was founded in 1964 when John Gill started a small tool and die business with his brother-in-law, Gerald Williams. In 1985 Gill's wife, Rita Williams, was hired as general manager. Today Rita is the CEO and majority owner of the company, a certified female-owned business by the Women's Business Enterprise National Council. Sales are \$100–\$200 million and steadily rising.

The company has two manufacturing facilities in Grand Rapids—one is a joint venture, Lopez Industries—and an R&D technical center. There are also manufacturing sites in Trenton, GA, and Naucalpan, Mexico, and sales offices in Milford, MI (automotive), Grand Rapids (furniture), and the Netherlands (Europe). “We're going global to meet customers' requirements by expanding into Mexico, Europe, and we're now entering a growth phase in Asia.”

Gill's core focus is on its customers and employees. “Service, creativity, and honesty toward customers is one of our company values. We have good relationships with all our customers,” said Perreault. “We try to offer creative solutions to their problems and be honest in the way we do business.” Employees are involved in improving Gill's operations at all stages. For example, in pre-production mode, before any new equipment is purchased or installed, employees are invited to “play” with representative Lego blocks and give feedback.

Each facility is responsible for its own continuous improvement. The continuous improvement team includes the director of operations and an identified engineer who tracks all improvement activity, ideas, and implementation. “This is reviewed once a month by me, but the team is responsible for setting most of its own goals, timelines, and techniques,” said Perreault. “It involves a continuous training process. For example, we're sending one director of operations back to do another six sigma course next month. We don't assume that once people have done the training, they're experts.”

The continuous improvement effort extends beyond manufacturing too. As well as improving innovation and design, Gill continually seeks to enhance VAVE (value-added value engineering), with an approach probably unique in its industry. “We regularly bring in our suppliers and customers to tear down the products we make,” said Perreault. “We brainstorm with them about how we can design the product better and at lower cost.”

The need for constant innovation is driven by ever-growing pricing pressure. “Customers feel it and pass it on to our level,” continued Perreault. “There's pressure from Asia, and to combat that trend we need to be more and more competitive, offer something that isn't offered in Asia—for example, bulky components that are difficult to ship. We need to ensure we're a low-cost producer.”

This philosophy has seen the company grow steadily in the last 15 months. In 2006 it has added production capabilities in Mexico and sales facilities in Europe. “Strategic acquisition is an element of growth: if a business comes along that fits our strategy, then we'll buy it, but not the reverse; we won't buy a company and then try to fit it into our business,” said Perreault. “Our focus is controlled growth of 15 percent a year through product and process innovation.”

31 May 2006 16:00