

# the steering market

David Gill reports on how, by **emphasizing quality and customer involvement**, Powers and Sons has made itself into more than a typical commodity-products manufacturer.



IT WOULD BE EASY FOR POWERS and Sons of Montpelier, Ohio, to simply pump products out of its manufacturing facilities. Powers and Sons produces components for steering systems for automobiles and trucks, and every vehicle in the world needs steering components. Even Tim Ressler, general manager for this division of Letts Industries, admits that steering components is a commodity business. This company could easily make money by simply turning its machines on and letting them run, day and night. But it doesn't do that.

Powers and Sons has established itself as a manufacturer of quality idler arms, pitman arms, tie-rod assemblies and wheel-to-wheel linkages in steering systems for vehicles ranging from automobiles to light- and medium-weight trucks. In a highly competitive marketplace, this company has chosen the combination of high-level engineering, up-to-the-minute design and direct customer involvement as its niche. The number of vehicles produced in the world fluctuates with shape of the economy; but whether the business is up or down, Powers and Sons is poised to profit.

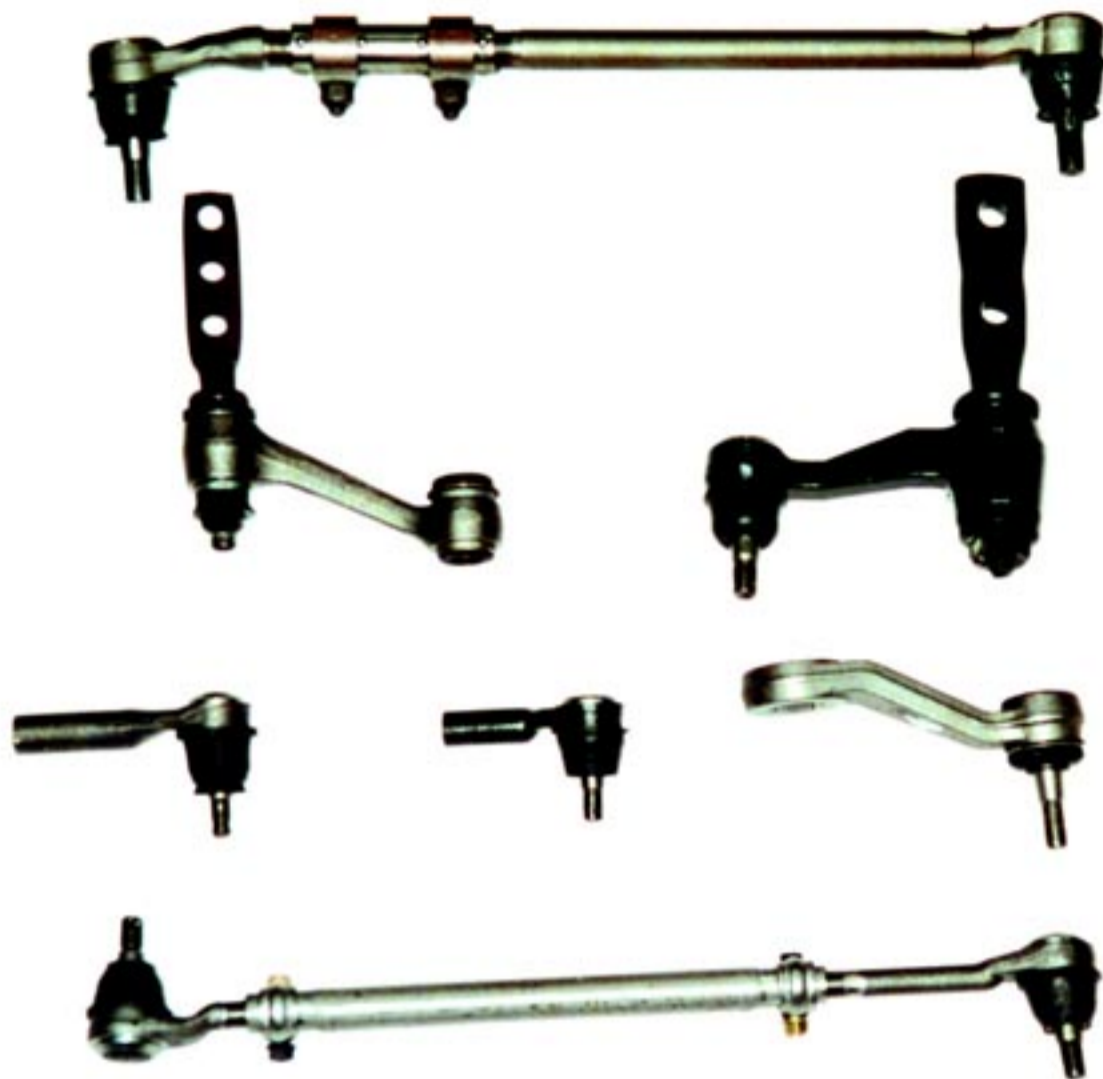
Probably nothing illustrates Powers and Sons' focus better than its relationship with Ford Motor Company. Ford was Powers and Sons' first customer, in a relationship dating back to the company's founding in 1932 – and it is still a valued customer today. Ford has honored Powers and Son with its Q1 award, signifying a vendor-customer relationship of the highest order. Powers and Sons has also received the Gold Pentastar award from DaimlerChrysler, another long-standing customer. These honors go hand in hand with the company's QS 9000 certification for quality.

## Total Quality Top to Bottom

"We follow a total quality management system," he says. "We look at everything from the quality standpoint, and not just products. Our system covers the way workers work and paperwork is handled. Fifteen years ago, quality simply meant making good product. But we've found we can take cost out of the product by running the whole business around quality. We have rewritten procedures and created standardized procedures for each facet of the operation."

The work of all 470 Powers and Sons employees revolves around this total quality management system, and in Ressler's view, the participation of everyone on the staff – from the factory floor on up the executive ladder – is critical. "Our system includes extensive employee involvement activities, and the employees are very supportive of these activities. They've seen the company grow over the past few years and perceive that it will be here to stay. There's no enmity between various levels of company, and everybody works together. The upper management is on an open-door basis. Anybody on the factory floor can walk into my office any time they want to."

Along with total quality management, Powers and Sons has also embraced the principles of lean manufacturing – which, in this company's case, means adopting the cellular system on the plant floor. Ressler says, "We've gone through a substantial quick changeover program in our work areas, and one of the major areas of the plant is undergoing the transformation to lean and will be made all cellular. This will be kicked off this fall, and it should make the manufacturing area more efficient. We're looking to get 85 percent efficiency in all the cells of the plant. By 2005 the whole company



**Left: typical passenger car steering components.**

should be all cellular." The cell system integrates nicely with the total quality management system, Ressler adds. "The various cells will meet on a regular basis with supervisors and discuss their operations. It's our way of letting workers take responsibility."


### Linking to the Customer

These systems have easily translated into better business for Powers and Sons, and so has the work of the company's engineering and design department. But it isn't just that this company is very good at designing and engineering; it's how it involves the customer in these functions.

Like many manufacturers, Powers and Sons is fully loaded with CAD/CAM capabilities – but it uses these capabilities in a unique way. Ressler says, "We electronically transfer our CAD/CAM files directly from our engineering cells to the customers. This works well because, in our industry today, the customer does very lit-


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**Left: a 4x2 medium truck linkage.**

the pure design any longer. In fact, the engineering group for the customer functions more as the project manager, while the suppliers like us are required to have all the design expertise. So we design the parts from square one and transfer these designs to their systems – and then their engineering group can plug our design into their model.”

The products that result from these unique facets of Powers and Sons exemplify the company’s commitment to high quality at competitive prices – especially the company’s most recent product introduction, the steering linkage for Ford’s F-250, F-350 and F-450 series trucks. “Not only are we able to provide the design and engineering expertise to work in the customer’s concept, but we also have a fully equipped test lab that can duplicate what a linkage will see down the road,” says Ressler. “We can build a prototype linkage

and hook it right to the partial frame of a vehicle we get from the customer and test it at our lab.”

These capabilities will also permit Powers and Sons to embark confidently on a new product field: suspension systems. These products “are a logical extension of what we do today,” says Ressler, “primarily because the ball joint is an integral part of a steering linkage and of a suspension. Suspensions move on the same four axes as a steering linkage. So now we’re taking the knowledge we have of ball joint linkages and applying it to the suspension area. We’re now working on some designs for vehicles that’ll come in the 2005-2006 model years.”

### Dipping into the Overseas Market

At the same time Powers and Sons looks to enter this new field, it will by no means

abandon its core steering linkage business. The international market presents some further opportunities for the company in the steering market, according to Ressler. The company already has an assembly plant in Mexico, and “we work with a company located in Brazil. We buy and market their product up here and they’re supplying our product in South America. It’s strictly a working agreement, not a joint venture. We also have technical representation in Europe, and we do purchase product from overseas. We’re continually searching for the best quality at the best cost on worldwide basis.”

For the moment, working agreements rather than formal alliances are Powers and Sons’ preferred way to tackle the international market. Ressler explains, “We can grow through working agreements around the world with other small companies, because it gives us the ability to tell our customers that we can furnish a product where they want it.”



**Below: Powers and Sons manufacturing plant and offices.**



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