

Core Competency

*Concentrating on the Crucial Components
Can Keep Your Company Competitive*

Rodgers and Hammerstein produced some of America's most memorable and lasting songs in musical theater. Lyricist Oscar Hammerstein II once said of composer Richard Rodgers, "I hand him a lyric and get out of his way." Hammerstein knew what Rodgers was good at, and vice versa, and each trusted his partner. Their partnership was so successful that you can scarcely think of one man without the other.

Musical composers aren't the only ones who form successful partnerships. In today's manufacturing world, partnerships are almost a necessity. Original equipment manufacturers have competition not only from other manufacturers of similar equipment, but also from manufacturers of the components that go into their equipment and the service providers who process some of those components along the way.

Ron Davis of Caterpillar Inc. made this point at the recent annual meeting of the American Gear Manufacturers Association. Davis works in Caterpillar's business administration division, which helps decide when to manufacture components in-house and when to outsource them.

Caterpillar equipment requires a broad range of gear products, including transmission shafts, straight and spiral bevel gears, planet gears, sun gears and final drive ring gears. They use large quantities of both machined and powder metal gears.

But Caterpillar can't hope to stay competitive by manufacturing all of its components when other companies specialize in manufacturing some of those components, Davis says.

The challenge is to decide which components and manufacturing processes give Caterpillar the greatest competitive advantage when manufactured in-house, and which give them the greatest competitive advantage when outsourced. Of course, the company examines factors such as cost, quality and customer satisfaction when considering competitive advantage. Another factor is whether Caterpillar has special expertise in manufacturing a particular component. The company also examines various risk criteria: whether a part requires proprietary technology, whether it's an aftermarket-critical component or whether its time-to-market is critical.

Those components that give them the greatest competitive advantage when manufactured in-house are part of Caterpillar's core competency. Outsourcing those components could lower the quality of the end-product, make it more expensive or otherwise worsen the company's position in the marketplace. Components that are not a part of Caterpillar's core competency might be better manufactured by others, specialists who can lower the costs, improve the quality or both. Outsourcing those non-core components also affords Caterpillar the opportunity to devote its own resources to improving those processes and products that are part of its core competency.

Many of Caterpillar's less critical, high-volume components, such as engine gears, are generally outsourced. Critical components, such as large transmissions or final drive gears, are generally manufactured in-house. Medium-duty components, such as small axles and small



transmissions, are mixed between in-house manufacturing and outsourcing.

Some of the outsourced gears are manufactured by Avon Gear Co., a division of Okubo Gear Co. Ltd. in Rochester Hills, MI. At the AGMA meeting, I had the chance to talk with Avon Gear's president, Aaron Remsing.

According to Remsing, there was a time not long ago when Avon Gear had a near-death experience. Business was down, the company had just moved into a new, expensive building, and the future was uncertain. Avon Gear had to do some soul-searching about its business. Management was forced to think about the company's capabilities and reinvent the way that it obtained new business, Remsing says. The answer lay in examining the company's own core competencies.

Avon Gear knew it had the technical expertise, equipment and experience to manufacture certain sizes, types and quantities of gears of excellent quality and at competitive prices. Instead of waiting for orders to come in, Remsing

says, the company began approaching those customers who could best take advantage of Avon Gear's core competencies. One of those companies was Caterpillar.

By making a commitment to specialize in a certain type of gear for a certain market segment, Avon Gear was able to capture Caterpillar's business. That business, in turn, allowed the company an opportunity to invest in new equipment

and training to provide even greater competitive advantage.

Today, according to Davis, Avon Gear is one of the most important suppliers for Caterpillar's transmission business unit. Working together, the companies are able to provide the world-class manufacturing, quality and pricing on gear components that help keep Caterpillar's equipment competitive in the world market. Furthermore,

the processes, machines and expertise developed by Avon Gear have given the company the ability to sell gears of world-class quality and price to other customers with similar needs.

In fact, Davis says, the partnership between these two companies has developed into one of mutual trust and planning. Like most successful partnerships, it's now in the best interest of each party that the other doesn't fail.

Like Caterpillar and Avon Gear, each of our own companies has core competencies—things that are central to our business, which years of working in certain areas allow us to do better than other companies without the same focus. Finding those things, concentrating on them and expanding on them can help make us more successful.

Not finding and developing your core competency can have the opposite effect. It's true that some companies will be more focused than others. But even the most generalist of companies has core competencies. For example, a general-purpose gear job shop with a broad range of equipment and tooling might not seem to have a specific niche. Nevertheless, that same company might specialize in fast turnaround, design assistance or extremely high quality, each of which could be developed for greater competitive advantage in certain marketplaces.

You can learn more about your core competencies by choice or by necessity. If you do so by choice, perhaps you'll be able to make intelligent decisions about your company's operations, as Caterpillar did. However, if you wait, you may be forced to learn about your core competencies the hard way. Perhaps you'll be able to act quickly enough to save your company, as Avon Gear did. But then again . . .

GEAR Burnishing

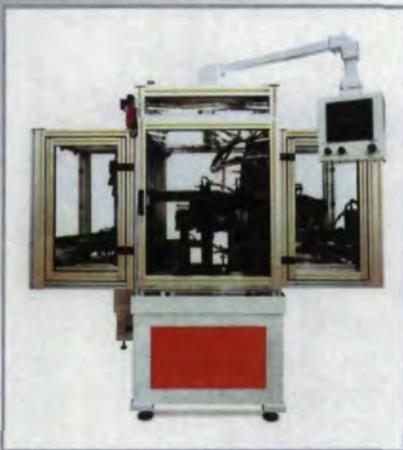
... from the Source

**Remove nicks, burrs, heat treat scale
and improve gear tooth surface.**

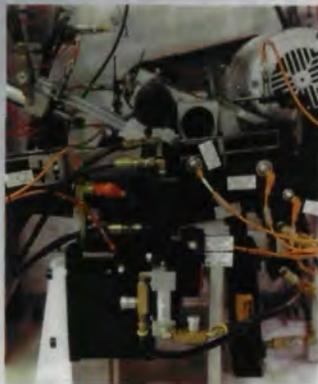
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ITW Vertical Burnisher



Working components of the Horizontal Burnisher

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