



Already an industry leader, Philadelphia Gear remains on the leading edge by utilizing the Internet to enhance its successful shift to a service-oriented business model.

# Harnessing the **INTERNET** for Sizzling **SERVICE**

In 1998, the Philadelphia Gear Corporation—a century-old gearing and power transmission manufacturer—conducted a business evaluation of its operations to determine the long-term profitability outlook for the gear-manufacturing segment of its business. Founded in 1892, Philadelphia Gear had developed a reputation for manufacturing custom-gearing solutions to meet the world's growing industrial needs. In 1998, however, the once-lucrative American gear manufacturing industry was in steady decline, with cheaper foreign competition making significant inroads into domestic market share. Five years ago, Philadelphia Gear was at a crossroads: should it continue to focus on manufacturing, or look for more profitable ways to leverage the company's 100-plus years of gearing expertise?

The choice, as it turned out, was quite clear.

## A Strategy for the 21st Century

After reexamining current business strategies, Philadelphia Gear chose to switch operations toward more of an after-market service and maintenance focus. Making the switch meant a complete change in the company's business efforts, with a new service-based emphasis that included:

- The inspection, repair, and upgrade of gear drives
- Providing renewal parts
- Making technical services available in the field
- Offering Philadelphia Gear, Western, and WesTech enclosed drives for sale
- Embracing custom manufacturing for applications that weren't viable for sourcing overseas

This change required a significant investment in facility upgrades. As an OEM manufacturer, Philadelphia Gear could consolidate its operations within a single facility, shipping manufactured units across the globe as they were completed, but it required the ability to provide comprehensive service in a timely and customer-focused manner in order to focus on regional maintenance and repair. In order to provide more-localized service, Philadelphia Gear opened two new maintenance facilities in Delaware and Alabama, joining already-operating facilities in California, Illinois, and Texas. This strategy brought the company closer to its various customer bases, all working in conjunction with the Central Engineering and Technical Center, which is located in Norristown, Pennsylvania. The expansion gave Philadelphia Gear the unique advantage of being the only national gear manufacturer to provide such regional service.

In addition to its new national presence, Philadelphia Gear maintained two important strengths that would serve it well with its new service orientation: its reputation for innovative power-transmission solutions, and a century's-worth of gearing knowledge and expertise, cataloged in nearly three-million pages of technical information. These drawings include technical designs, bills of material, customer

information, company forms and documents, and informational "tool kits" on Philadelphia Gear products and services.

## Targeting Markets via Technology

While this extensive collection of drawings, engineering standards, and manufacturing process standards gave Philadelphia Gear an advantage over other after-market service providers, providing instant access to this information at each regional facility—as well as by Philadelphia Gear representatives around the globe—was more important than ever.

Instant access meant utilizing the Web to share these documents, so Philadelphia Gear began the process of converting all 2.5 million pages—containing critical sales and service information—into scanned digital images to be available to all employees via a password-protected Intranet browser. These digital files were cross-referenced in several ways, allowing for easy access. This was a major change for the company: replacing two filing cabinet-filled warehouses full of drawings and product information going as far back as 1916. Overall, the conversion required an investment of approximately one million dollars.

Before the conversion, it would have taken multiple engineers as many as two days of searching to locate necessary technical information; provided they were able to locate it at all. For employees in the field, getting the information they needed was an even more time-consuming process, taking up to four days or more to submit a request to Philadelphia Gear's headquarters and have it sent to them via fax.

The time saved from the conversion—which is now measured in minutes rather than days—has allowed for faster service to Philadelphia Gear customers, which is a definite competitive edge for an after-market service provider. Finding necessary documents so quickly has provided Philadelphia Gear engineers with more time to service customer requests. Plus, the change is even more significant within the context of Philadelphia Gear's global-service goals. Important product information is now centralized online, allowing employees worldwide to access

and exchange documents in a matter of seconds via e-mail. Another benefit of the technology is its facilitation of productive information exchanges between the Norristown facility and its assorted vendors and licensees.

"The technological upgrades, in regard to cataloging our technical data, has made it possible for us to provide regional service that was unimaginable prior to the conversion," according to Carl Rapp, president and CEO of Philadelphia Gear.

Making this information easily accessible has helped Philadelphia Gear achieve both manpower and time savings, and the system also helps ensure the accuracy of the data used in sales and parts maintenance. Employees can cite specific information they need in a repair rather than speculating, which is particularly important when manufacturing replacement parts, where any inaccuracy can mean the finished product doesn't meet customer requirements. The new system allows sales representatives to put quotes together more effectively and accurately, and to respond to prospects more quickly.

This conversion has already saved Philadelphia Gear seven to 10 man-years of labor within its first 24 months of implementation. "The return on investment made the decision a no-brainer," says Rapp.

In addition, converting these drawings to a digital format has allowed Philadelphia Gear to identify only the information important for the service and maintenance of the company's more than 300,000 units that are currently in the field, allowing representatives to easily access the information they need, right when they need it. The initial success of the conversion has prompted Philadelphia Gear to also convert some 300,000 pages of technical documents from WesTech and Western Gear—two gearing manufacturers acquired by Philadelphia Gear—to incorporate into its digital library.

## Customer Support Enhanced Online

Today, Philadelphia Gear continues to invest in the Internet to better its serv-

ice to customers with several important additions to the company's Web site. First launched in 2001, the site has become more than just a source for information about the company.

Philadelphia Gear has made a large amount of literature available to customers online, including 11 technical manuals that are downloadable as PDF files. These manuals include important information on the installation, operation, and maintenance of Philadelphia Gear drives. Plus, as the exclusive provider of Western Gear and WesTech products, Philadelphia Gear offers manuals for the full range of their units, including high-speed gear units and cooling-tower speed reducers, just to name a few.

Customers can also request technical gearbox drawings at no cost through the company's Web site. Available drawings include outline dimension drawings, layout drawings and, in the case of high-speed drives, mass-elastic drawings as well—and all requests are processed within 48 hours. To effectively execute a drawing request, customers need only provide a "unit serial number" and an "order number," which are

The top screenshot shows the Philadelphia Gear website's 'REQUEST PARTS QUOTE' page. It features a navigation menu at the top with links for Company Overview, Industries Served, Regional Facilities, Products & Services, Parts Quote, Manuals & Literature, News & Events, and Careers. The main heading is 'REQUEST PARTS QUOTE' with a search bar and a 'GO' button. Below the heading is a 'Click here for non-Philadelphia Gear parts' link. The bottom screenshot shows the 'MANUALS' page, which includes a navigation menu and a list of technical manuals: 'Technical Manuals', 'Additional Literature', 'Drawing', and 'Request Form'. The page also features a large image of a gear assembly and a brief description of Philadelphia Gear's manufacturing capabilities.

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both located on the nameplate of each Philadelphia Gear enclosed drive. Customers can also include the unit's "size and/or type" for quicker fulfillment of their drawing request, even though this information is optional and will not prevent Philadelphia Gear from honoring its customers' requests.

The most significant customer resource now available online, however, is Philadelphia Gear's new online parts quoting system, which was added in 2003. Customers can request price quotes for replacement parts at no cost via the Web site's "parts quote" section. Price quotes can be provided for Philadelphia Gear-designed parts and equipment, as well as parts for gearboxes manufactured by other companies. This new system streamlines the replacement parts ordering process, thus reducing customer downtime due to inoperable equipment.

For Philadelphia Gear gearboxes, customers need only submit their machine's model number, which is found on the nameplate in the box labeled "size/type." Once they've entered this information, customers gain access to a detailed technical drawing and parts list, and they can simply click on the desired part to add it to a virtual shopping cart. This information, along with the gearbox serial number and customer contact information, is all that's needed to submit a quote request. A representative will then respond within 24 hours with a price quote for the necessary parts.

For non-Philadelphia Gear gearing equipment, customers can submit technical drawings via the Web site, as well as other product-specific information that is crucial to identifying

replacement parts. Once this information has been received, a representative will contact the customer with a quote.

This new online parts quote system will enable Philadelphia Gear to better serve its growing customer base, leading to the ultimate success of a shift in business that was first undertaken only a few short years ago. "Philadelphia Gear is continuing to increase its online presence in an effort to provide our customers with the most convenient and reliable gearing solutions available," Rapp says. "We're excited about the increased speed, efficiency, and overall parts-service improvements that our customers will experience with our new online price-quote system.

"The melding of more than a century's worth of technical know-how with innovative Web-based solutions has allowed Philadelphia Gear to make a smooth and successful transition from manufacturer to service provider. Most gear manufacturers are still doing business with outdated business models that are inefficient and unprofitable," Rapp says. "The Internet is revolutionizing how we do business, and helping us to better serve our customers."

For more information on Philadelphia Gear, call (800) 766-5120, or visit them online at [[www.philagear.com](http://www.philagear.com)].

## About the author:

Andy Pomerantz is director of commercial support and field service for Philadelphia Gear, which is a founding member of the American Gear Manufacturers Association (AGMA) and headquartered in Norristown, Pennsylvania.

## Worry-Free, Affordable Gear Solutions

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