



Style Points

By Anna Wells

After a huge investment in renovation and sustainability efforts, Garlock Sealing, Palmyra, NY, is new and improved.

/// It's a great story, because it goes from the turn of one century, to the turn of another century," says Garlock's VP of global marketing, John Mosko. "It's about a business sticking with what it knows how to do, working with the community, and finishing the job."

Modesty aside, the most interesting piece of the Garlock story is about a business learning that what it "knows how to do" is more than anyone ever realized. But this cognizance in its own abilities came through an upheaval—a major renovation project, embedded in a new approach where "challenge everything" has become the mantra.

Deep Roots

Garlock Sealing Technologies (an EnPro Industries company) has been a pioneer in high-performance fluid sealing for over a century, with 15 global operations employing more than 1,800 people, and a distributor net-

work that covers 75 countries.

In 2005, Garlock initiated a \$35 million plant modernization project of its headquarters in Palmyra, NY. This mammoth undertaking is now through its second phase—2006 brought the KLOZURE® dynamic seals plant, and this past summer the company opened its GYLON® brand PTFE-based gasket plant. While modernization has been a huge part of this, Garlock has also taken an aggressive approach to sustainability, safety, and an overall ambition to improve the value it is able to offer its customers.

Digging A Way Out

It seems one of the greatest difficulties in a large overhaul such as this one is in the danger of scratching the surface. "Some of the hidden issues were difficult," says Mosko. "But you didn't know until you drilled the hole and tested it. If you picked at what appeared to be a little scab, you found other

issues that had to be rolled into bigger projects.”

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no stone would go unturned in the quest to find the most efficient, cost-effective improvement, with the customer’s best interests ultimately in mind. At the onset of the project, says senior project manager, Jeff Hall, upper management requested the project team “scare” them with ideas: “If it’s a wind turbine, or solar panels, or putting panels and generators in the creek out back... they allowed us a lot of freedom to

do the appropriate things.”

This outside the box thinking translated into big gains for the company’s demolition projects. Initially, demolition companies were quoting Garlock Palmyra \$25 to \$32 a square foot to take the buildings down. According to Hall, “Our latest building (demolition project) is 40,000 square feet, and we’ve started the demolition at \$8 a square foot, because we are re-using all the

Garlock’s 15 global operations collectively produce a broad range of fluid sealing products specifically designed for industrial applications.

material. We’re recycling all of the steel, and separating the aluminum and copper,” he says. “We’re basically paying for the gas in their equipment and they’re taking the buildings down. We’re pretty proud of that.”

Tech Savvy

Garlock took additional steps to ensure peak efficiency by upgrading technologies in its GYLON and KLOZURE buildings.

GYLON Building:

- **New building climate control, with ultrasonic humidification.**
- **A solvent recovery system which recirculates 50 percent of air flow back into ovens, and recovers heat value and offsets conditioning air.**

KLOZURE Building:

- **A lake water cooling system, utilizing Canandaigua Lake water to condition plant air, and for process cooling.**
- **New Quincy Compressor variable speed screw compressors, with PowerSync® Variable Capacity Control.**
- **The installation of super high efficiency T-8 fluorescent lighting fixtures.**

What You Think You Know

“This falls under the theme of the second part of the story,” adds VP of operations, Chuck Volo. “How do you use what you know, and think so far out of the box that the answer you come up with is so different than what you would have originally come up with?”

This concept seems to reach back to the biggest gains of this project—challenging what you know to be true, in order to take the best possible approach to improvement. “It gets back to the TCV (total customer value), which is one of the three main objectives of the EnPro corporation,” Volo explains.

TCV has its roots in Six Sigma and

lean manufacturing—the latter of which was implemented prior to and throughout the site improvement process—and has resulted in improved quality, lead time, productivity, and delivery.

Authentic Sustainability

But the project itself has not been simply about updating an old and antiquated facility; this modernization also presented the opportunity for company leaders to improve upon a long neglected approach to the environment—something they took on full force.

For starters, Garlock began to use water piped from nearby Canandaigua Lake for comfort and process cooling, producing significant annual savings with no adverse impact on the environment.

Among other conservation-minded features of the project are closed-loop process equipment saving up to 20,000 gallons of water per day, use of non-treated water for production processes, separation of the storm water system, and creation of green spaces to reduce runoff.

“Being a business that’s been around for 100+ years, this project has really given us the opportunity to walk the talk,” says Janet Jessen, Marketing Director.

“EnPro is one of the few companies who actually measure ‘percent recycled,’” adds Volo. “We have a vision of 100 percent recycled.”

VOC

One very specific way Garlock was able to find two-fold benefit for itself and its customers was in a recent \$3 million investment to replace a VOC (volatile organic compound) in its gasketing material production. The new, more environmentally-friendly approach has eliminated 120 tons of annual air emissions—with a 97 percent overall reduction anticipated by 2009. Says Mosko, “We went from being one of the top polluters in the state of New York. We won’t be on that list anymore. That says we’re doing the right thing.”

But these improvements have customer benefit as well. According to Jessen, the



Garlock's current \$35 million modernization project has resulted in cleaner, more sustainable manufacturing operations.

new product seals 20 percent better, is more easily removed from the flange, and has better labeling to reduce mistakes in the installation process. “Now we’re aggressively looking for these types of cases, where we can take an operational issue, but bring it to a resolution that actually has customer benefit,” she says.

Safety Culture

In other operational improvements, Garlock has embraced an increased awareness of its safety culture—with a mindset where any dollar spent on a worker’s compensation claim is a waste. Besides employee injury avoidance, the initiative also once again came down to customer value.

“If a customer knew that a product had ten cents added in for worker’s compensation, or twenty cents added in because someone left the power on when they shouldn’t have, etc., they’d never pay the price you’re charging,” says Volo. “You’ve got to get rid of the waste the customer wouldn’t pay for if they knew it was in the cost of the product.”

Part of the embrace of safety culture has been a shift of focus to the prevention side, and imbuing the doctrine that zero injuries is possible. Garlock’s safety training became more aggressive, and utilized employee suggestions in order to help successfully reduce its accident rates. As added validation, Garlock Palmyra was awarded the EnPro annual safety award last year.

Change Is Good

With the sheer amount of change this facility has seen over the past few years, one thing is for certain—these folks are fired up.

“We’ve been out there pounding the pavement, finding the neat ways to save,” says Hall. “It’s one of the coolest companies to work for, because there’s so much change and so much energy. Now, to see every dollar we make be reinvested, has really changed the way everybody thinks.”

Adds Mosko, “It shows by having a culture that is focused on getting the job done. It’s been a complete transformation over the past five years.” **IMPO**