

The Team Approach

BY CULTIVATING RELATIONSHIPS WITH A NUMBER OF RELIABLE PARTNERS, INCLUDING BLACKMER®, PIRKL GAS TURNS VALVE UPGRADE REQUIREMENT INTO A HUGE OPPORTUNITY

By Bill Holmes



Faster loading thanks to Blackmer's LGL pumps.

Pirkl Gas, Inc., was founded in 1959 in Owatonna, MN, USA—a community located about 50 miles south of Minneapolis on Interstate 35—as a supplier of fuel oil for residential and commercial consumption. After specializing in fuel oil for more than 35 years, in 1995 Pirkl Gas created a new niche for itself as a supplier of propane gas when it purchased a propane dealership in nearby Meriden, situated about 7 miles west of Owatonna.

In hindsight, the decision to expand into propane was a fortuitous one for Pirkl Gas. That initial acquisition included a solitary 18,000-gallon propane storage tank, but within 15 years the company had installed a total of seven additional storage tanks at its two locations with a total storage capacity of 210,000 gallons of propane—a 30,000-gallon tank in Owatonna in 1996 and another in 2000; three 30,000-gallon tanks in Meriden in 2005; and two 30,000-gallon tanks in Owatonna in 2010.

It's not hard to see why, along the way, Pirkl Gas chose to concentrate on the propane end of its business. "We got out of fuel oil in 2000 to concentrate on propane solely," said Greg Pirkl, President of Pirkl Gas. "It's been a good move."

But while the first decade or so of Pirkl's commitment to the propane business was marked by slow, calculated growth, a series of events beginning in the summer of 2009 has been the accelerant that kicked that growth into overdrive, with Pirkl now positioned to become one of the area's fastest-growing propane suppliers.

The Perfect Storm

The summer of 2009 was one of the wettest in the Upper Midwest in many, many years, which meant that the region's corn crop was essentially waterlogged when it was harvested that fall. That created a problem for many of the harvesters of that corn because when damp corn is stored, it will begin to mold, which affects the quality and sales value of the crop. To prevent that from happening, the corn has to be dried, generally through the use of propane-fueled grain dryers, meaning that those heavy rains turned into money from heaven for propane distributors like Pirkl Gas.

"We had our biggest year ever in 2009, but the trucks were waiting forever to load by using the single pump we had in service at the Owatonna plant," said Pirkl. "We decided that we had to add some more storage and provide faster loading."

An upgrade at Owatonna was also needed. When the bulk plant was originally built, the propane storage tanks were placed at ground level despite the fact that the area was prone to flooding, which had been a constant concern over the years. Also, playing a role in Pirkl's decision to enhance and expand the plant was the pending valve upgrade mandate that falls under the National Fire Protection Association's (NFPA) Section 58 guideline. This safety requirement will come into effect on July 1, 2011, and requires all bulk-storage tanks with a volume of more than 4,000 gallons of water capacity to have their storage tanks fitted with either internal valves or an Emergency Shutoff Valve that is located near the inlet or outlet of the storage tanks.

"Owatonna is Pirkl's flagship plant and Greg Pirkl was very pleased with our ability to build the other plant. With the 2011 plant-upgrade issues, he felt it was time to upgrade the Owatonna facility," said Jeff Munzel, Vice President of LPG & NH₃ Supply, Inc.

Since the Owatonna facility has a tendency to flood, the first order of business was raising the two storage tanks off the ground and placing them on piers about five feet above grade, before installing the two new storage tanks, which were also placed on piers. In order to increase the speed of the bobtail-loading process, three pumps were included in the system to raise the loading capacity. Two pumps are



In effect, the NFPA Section 58 regulation dramatically alters the types of equipment that can be legally used in propane-gas systems. Also, since there are no exceptions to the Section 58 rule, and no classes of "grandfather" exemptions have been created, operators of propane-storage facilities that fall under the purview of the new regulation must be in compliance by the July 1, 2011, deadline. Many plant operators are also realizing that if they're required to upgrade the valves on the tanks, why not just install new pumps and motors, or even add tanks, as well?

With all of these factors converging, Pirkl turned to the experts at LPG & NH₃ Supply, Inc., Buffalo, MN, USA, which has been supplying equipment and service for the propane and anhydrous ammonia markets since 1976, for the design and installation of the equipment that would help modernize the Owatonna bulk plant. LPG has been a supplier of equipment to Pirkl Gas for several years and played a role in building Pirkl's Meriden plant, making them Pirkl's obvious partner when the Owatonna plant expansion was proposed.

installed on the north end and connected via manifold to all four storage tanks, allowing the operator to load with one or two hoses at once. Another pump was installed on the opposite end and also connected via manifold to all four tanks for additional loading capacity. Together, the three pumps have the capability of pumping 525 gpm, and lowered Pirkl's overall loading times from 40 minutes down to a speedy 13 minutes on its 5,000-gallon trucks. This also means that Pirkl Gas can now turn over its product three times faster than it had been able to in the past, increasing the amount of propane it can sell in a shorter period of time. Pirkl was able to save roughly 9 hours of loading time per truck per month...or basically getting an extra day of delivery time.

To ensure that these new loading areas would function at maximum efficiency, Munzel and LPG specified Blackmer® 3-inch LGL sliding vane pumps for the job. These pumps can handle all that Pirkl Gas throws at them because they have been designed for maximum performance and reliability under the most severe operating conditions.

Standout features include cavitation suppression liners that reduce noise, vibration and wear; replaceable casing liners and end discs; ductile-iron construction with internal relief valves; self-priming and dry-run capabilities; and vanes that can be replaced without removing the pump from the piping system. Blackmer pumps had also been used with great success at Pirkl's Meriden bulk plant.

2011 NFPA Mandate
Greg Pirkl Activates
New Internal
Shutoff valves



"Blackmer started making its move in this market several years ago," explained Munzel. "Because of our relationship with this customer and because of our status as a master distributor of Blackmer equipment, and his experience with Blackmer pumps at the other plant, he definitely wanted to use Blackmer pumps. Plus, we had the ability to drive the Blackmer pumps with more horsepower and could speed them up to get the performance that Pirkl wanted. Greg is absolutely ecstatic now with the loading speed for his trucks."

"The Blackmer pumps have been a tremendous improvement to our bulk plant. They are highly reliable, very quiet and, thanks to their efficiency, have improved our load times dramatically," noted Pirkl. "They run so quiet, efficient and fast. They are the best pumps in the LPG market, by far!"

The result is a modernized bulk plant that is the epitome of fast, efficient, cost-effective operation. Three Blackmer LGL 3-inch pumps with 15-horsepower motors and enhanced RPMs were installed at the Owatonna site. An outside firm was used to add more openings on the tanks so there's now a high-speed loading bulkhead off the tail of two tanks with two 3-inch loading lines and one vapor line. On the other end of the tanks is a lower-speed bulkhead with one 3-inch loading line and one 3-inch Blackmer pump with a 15-horsepower motor. The pumps on both ends are geared to pump 175 gallons per minute, with the two pumps running in tandem at one end capable of producing 350 gpm of loading capacity combined at that end.

And, to top it off, the timing of the upgrade couldn't have been better.

"Ironically, this summer they had torrential rains and the whole area flooded," said Munzel. "Because the tanks are now set so high and the pumps are abnormally high off the ground, the upgrade saved the plant, basically."

"LPG did such a wonderful job on this project for us," said Pirkl. "They took pride on the project and it really shows in the results. It pays to work with companies that are experts in the market."



Pictured Left to Right: Kelly Schlinkenmayer, Greg Pirkl, Bill Holmes, Tim Schweppe

Dependability With Capacity

Pirkl Gas' delivery fleet consists of six total trucks, two tandem trucks and four propane bobtails with capacities ranging from 3,499 to 5,000 gallons. What they all have in common is that they were built by Arrow Tank and Engineering Co., Inc., Minneapolis, MN, USA, which since 1957 has been serving the bulk-gas delivery market. What they also have in common is that they feature TLGLF3 pumps from Blackmer.

"We've been a Blackmer OEM distributor since 1957 and we value the time, history and representation we get from them, plus they're just a great product," said Tim Schweppe, Sales for Arrow Tank. "We've built a number of trucks for Greg and he hasn't had any premature failures with any of his trucks, which is most important for him and us."

The TLGLF3 pumps meet the needs of Pirkl's rolling fleet because they provide the capacity that is needed and constant flow rates. They can also be used in tandem with Blackmer's 2-inch external Bypass Valve, which increases their reliability and dependability.

Conclusion

The story of Pirkl Gas is one of a company that recognized an opportunity and then took the necessary steps to ensure success. A crucial part of Pirkl's growth as a propane distributor is its commitment to using Blackmer pumps when possible, which are always provided by LPG & NH₃ Supply and Arrow Tank.

"The reason I really like Blackmer and recommend them is that Blackmer pumps have a push rod design with vanes

that can spin its pumps at lower RPMs but still provide equal performance. Also, Blackmer's locking rotor plate eliminates side-plate wear issues and the superior seal design is way more reliable," said Munzel. "I also like the fact that Blackmer has one of the best warranties in the LPG market. That means a lot to us, and our customers. Finally, all Blackmer products are built in the USA, which fits right into our wheelhouse. We are all about that, that's a huge consideration for us when we look for high-quality equipment partners."

For Pirkl Gas, its relationships with companies like LPG & NH₃ Supply, Arrow Tank and Blackmer have grown and evolved to the point where they now are a well-oiled machine working together to produce the best possible outcome for all parties involved.

"We always look to partner with companies that have the same values and drive that we have," said Pirkl. "The proof that our relationships with LPG, Arrow and Blackmer are paying dividends can be found in the success of our recent plant upgrades, as well as the reliability of our delivery fleet. These are relationships that we can also build on into the future."



Pictured Left to Right: Bill Holmes, Chad Pendill, Greg Pirkl, Jeff Munzel

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