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CASE STUDY: CALJET OF AMERICA

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The Fuel For Success

CALJET OF AMERICA, LLC UTILIZES BLACKMER[®] CENTRIFUGAL AND SLIDING VANE PUMPS TO BECOME THE HOTTEST FUEL-HANDLING AND -STORAGE COMPANY IN ARIZONA

By John Wallace



With more than one million barrels of storage capacity, Caljet of America, LLC handles approximately 50% of the refined and renewable motor fuels consumed in this marketplace and is projected to pump more than one billion gallons of fuel and additives in 2014.

Like the blazing desert sun on a scorching summer day, Caljet of America, LLC, is the hottest fuel handling company in Arizona. Based in Phoenix, AZ, USA, Caljet operates five state-of-the art storage-tank farms, unloading facilities, dispensing terminals and customerfocused operations that have been recognized repeatedly, both locally and nationally, for outstanding innovation, commitment and drive.

Handling about 50% of the motor fuels that are consumed in this market place, the company operates 24 hours a day, 365 days a year. Founded, owned and managed by entrepreneur David Alexander, Caljet has succeeded in its mission to grow to serve Arizona with superior fueling-terminal operations that offer unparalleled fast, friendly, reliable service.

Caljet serves as the link between the refinery and the carrier and never actually owns any of the fuel that it handles. Refiners transfer their product to Caljet by rail, pipeline and truck where it is unloaded and stored. Carriers then load the product into their trucks at Caljet dispensing racks and deliver it to their customers.



Products stored and dispensed at Caljet include leaded, regular unleaded and premium unleaded gasoline; diesel; biodiesel; ethanol; specialty fuels; aviation fuel and lubricity additives. The operation loads more than 12,000 trucks per month and is projected to pump more than one billion gallons of fuel and additives in 2014.

Customers range from refiners, retailers, distributors to trading companies, and each driver who visits the facility is individually valued. Because lines of trucks leading to the dispensing racks frequently back up, Caljet employees often visit with drivers in line and offer popcorn and cold water. That customer-focused philosophy is cemented throughout the entire operation.

QUICK FACTS

Company:	Caljet of America, LLC
Location:	Phoenix, AZ, USA
Market:	Storage Terminals
Challenge:	Needed extremely reliable pumps to support 24-hour-
	a-day, 365-day-a-year fueling operations
Solutions:	Blackmer [®] System One [®] Centrifugal Pumps and
	Blackmer GX and MLX Series Sliding Vane



Caljet of America, LLC standardized on the Blackmer[®] System One[®] Centrifugal Pump because of its extremely reliable operation and efficient design that has decreased maintenance costs and reduced staff time in the field.

"Our goal is to make their experience at Caljet as pleasant as possible in any way we can," said Alexander.

A Vision Fulfilled

Caljet had its beginning in 1982 when Alexander borrowed \$1,000 on his credit card to found the company. Later he acquired an aging four- acre terminal facility built in the 1950s by the Texas Independent Oil Company. The small terminal had two petroleum top-loading racks and a limited 135,000-barrel storage capacity.

With a background in the crude oil industry, Alexander was well-equipped for his mission — to become the premier fuel warehouse storage and distribution facility in Arizona.

Tapping his extensive knowledge of fuel and petroleum operations, Alexander strategically renovated and expanded the facility in the ensuing 30 years by adding critical components and capacity for key functionality and growth, including railcar offloading, and biofueland ethanol-handling capabilities.

Today, after several major expansions, Caljet-operated facilities consist of:

- 1,020,000 barrels of storage capacity for refined and renewable fuels, with 130,000 barrels of storage to be added in 2015
- Fourteen high-speed 500-gpm truck-loading lanes
- Six high-speed truck-offloading lanes
- 38 railcar-offloading positions
- A well-equipped and fully staffed laboratory

The various fuels arrive at Caljet facilities via train,

truck and the Kinder-Morgan Pipeline and are stored in their five Phoenix tank farms/terminals, all of which are located in close proximity.

The fuel is dispensed into trucks and transported to the customers' storage points, such as commercial accounts and retail fueling stations around the state. When the fuel is dispensed into the trucks, Caljet's multiple-additive sidestream blending capabilities precisely mix products and additives according to customer specifications.

Meet The Family

Caljet of America LLC and two affiliates stores blend and dispense selected fuel types through their own terminals, all of which are located in Phoenix. Caljet of America LLC operates three pipeline-connected terminals and pumps the highest volume of product.

The Caljet 53rd Avenue Terminal can store 325,000 barrels of conventional gasoline, ethanol and Arizona Clean Burning Gasoline (CBG), which is formulated specifically for use in Maricopa County, AZ, to reduce harmful emissions from motor vehicles. The terminal features three high-speed loading lanes, each of which has ethanol blending and multiple additive capabilities; two highspeed truck-offloading lanes; and five railcar-offloading positions. In addition, the 53rd Avenue Terminal also contains a fully-equipped laboratory for product analysis and quality control.

With a 365,000-barrel capacity, the Caljet Monroe I Terminal stores conventional gasoline, CBG, ethanol, biodiesel and ultra-low-sulfur diesel (ULSD). It contains six high-speed rail-offloading positions, four truck-loading lanes and two truck-offloading spots.



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The Caljet Monroe II Terminal has a storage capacity of 300,000 barrels of ULSD and CBG products. The terminal utilizes two truck-offloading positions and three high-speed truck-loading lanes, each of which provides biodiesel and ethanol blending.

One affiliate operates a terminal with a 22,000-barrel storage capacity for biodiesel and ethanol; 22 railcar-offloading positions; and two truck-loading lanes. The other affiliate is a dedicated 100LL aviation gasoline facility with 8,000 barrels of storage, five railcar-offloading positions and two truck-loading lanes.

Each of the five terminals was designed with a focus on safety, environmental protection and maintenance.

Eight-foot and 10-foot concrete retaining walls serve as spill prevention and containment. An oil/water separator collects residual product from the loading racks, and waste is transported to disposal facilities. In addition, wherever possible, all piping was installed above grade for convenient access.

Delivering Convenient, Reliable Service

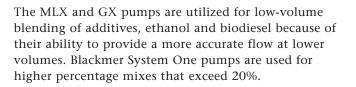
"We excel in customer convenience and value-added service, and that's why we're successful today," said Alexander. "Our reputation was built on those critical factors, so we have to continue to be reliable for our customers who depend on our ability to supply product

24 hours a day. Every piece of equipment must function all the time, including our pumps, which are the heart of our operation."

Key components of Caljet's various fuel- handling operations are the pumps that are used to transfer millions of gallons of various fuel types into and out of trucks, railcars and storage tanks. That's why Caljet of America, LLC has chosen to standardize on Blackmer[®] System One[®] Centrifugal Pumps and MLX and GX Series Sliding Vane Pumps.

"Since we have standardized on Blackmer pumps, our maintenance and operations staff have had nothing but wonderful things to say about Blackmer, and the operational data proves their great reliability," said Alexander.

Caljet currently utilizes 37 Blackmer System One 4x6-13 1,200-gpm (4,543 L/min) centrifugal pumps for loading unleaded and diesel fuel into trucks and for unloading railcars; one System One 4x6-13 900-gpm (3,407 L/min) centrifugal pump for ethanol blending; 12 System One 2x3-8 300-gpm (1,136 L/min) centrifugal pumps for biodiesel and ethanol blending; six 4" MLX4B sliding vane pumps for gasoline blending; and 14 2" GX2B sliding vane pumps for sidestream additive blending.





With their ability to produce an extremely accurate flow at lower volumes, Blackmer MLX and GX Sliding Vane Pumps provide low-volume blending of additives, ethanol and biodiesel.

Caljet was introduced to Blackmer System One pumps during its first terminal expansion in 2004.

"Our supplier suggested we try the Blackmer System One pump," said Jaydee Bullard, Caljet Manager of Terminals & Construction. "Since we were not familiar with the product, we were initially hesitant, but we closely compared the engineering specs of the System One to the competitor's and decided to try the System One."

According to Bullard, it took just six months of in-thefield operation to realize the superior reliability of Blackmer pumps.

"We didn't have to continually realign the pumps and motors, and we weren't going through seals like before. It was very clear early on that these pumps were going to bring us less downtime and save us money," he said.

As for those original pumps installed in 2004, Bullard said they have never broken down or even presented a problem. "All we do is change the oil. They are that reliable."

Prior to standardizing on Blackmer System One pumps, Caljet experienced constant pump maintenance





Because of their proven reliability and ease of maintenance, Blackmer pumps are the only brand that Caljet of America, LLC will install.

and operational issues such as seal failures, bearing failures, coupling problems and continual pump/motor misalignments.

"Blackmer System One pumps were expertly designed to prevent the typical failures and problems experienced with competitors' pumps," said Bullard. "From the initial engineering to the quality workmanship, Blackmer makes the perfect pump that, once put into service, will keep on running."

Reduced Maintenance Costs

A critical benefit of Blackmer System One Pumps is Caljet's significantly lowered maintenance costs.

"The System One Pump is perfect," said Caljet Maintenance Manager Tim Gardner. "We've decreased maintenance costs and reduced staff time in the field, all of which goes toward our bottom line. With Blackmer pumps, we basically just need to change the oil once a year and grease the electrical motor." Gardner said other pumps constantly needed their oil levels checked because they leaked, needed constant replacement parts and required shaft alignments.

"Because it's critical that we keep product flowing 24 hours a day, our maintenance program stocks a spare of everything. We even have spare Blackmer pumps, but they have been sitting on the shelves for years gathering dust because we never need them," said Gardner.

According to Gardner, Blackmer System One pumps are the easiest pumps he has ever worked on. He attributes the ease to the C-Face design, allowing for quick sealing and coupling changeouts. Because the motor bolts directly to the pump, it eliminates the time-consuming alignment procedure required by other pump brands.

Conclusion

For Caljet, when it comes to keeping customers happy, it is all about moving product, which requires utilizing pumps that are reliable.

"Compared to the competition, Blackmer gives us the reliability and dependability that we need to minimize downtime to stay competitive, said Bullard. "We've got to keep product moving to keep customers happy, and that's what Blackmer lets us do."

About the Author:

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