

# Adding Brains to the Wellhead

SPOC Automation added a brain to oil and gas pumps. Its market spread from Trussville across the U.S. and into Canada.

TEXT BY BILL GERDES



**ABOVE** SPOC Automation developed a controller that made oil and gas pumps more efficient. They spread from the oil and gas fields of west Alabama across the country and into Canada.

Photo courtesy of SPOC Automation

“We are,” says Bobby Mason with a wry grin, “the iPhone of electrical automation.”

Mason is president and founder of SPOC Automation, a Trussville firm that has become a leader in “technology that allows users to get more product out of the ground.” That product is mainly oil and gas.

Born during the coalbed methane boom in Alabama, SPOC Automation developed a controller that made oil and gas pumps more efficient. This product became an especially hot item when oil prices fell in 2001 and oil and gas companies were looking

to cut costs. They are considered an industry leader in their product, and the company shows up frequently on the Inc. listing of 5,000 fastest growing companies.

Mason founded SPOC Automation in 2001 to serve the oil fields of West Alabama. Spun off from an electrical wholesale business his father owned, he led a group of engineers into systems integration and automation.

“We took that handful of guys and we did 55 units the first year, and, right before oil took its bath, we put out a little over 5,500 units that year.”

The “units” are metal boxes about the size of an upright freezer. Inside is a conglomeration of electric components and a logic engine that does the work that SPOC Automation engineers configure. The units are programmed to control the rate at which oil or gas is pumped out of the ground and then stored in tanks before being trucked to refineries. The units are assembled at the firm’s complex on the edge of Trussville, a location chosen, according to Mason, because it was “close to home.”



**ABOVE SPOC Automation developed a controller that made oil and gas pumps more efficient. They spread from the oil and gas fields of west Alabama across the country and into Canada.**

Photo courtesy of SPOC Automation

In the oil and gas extraction business, “you are moving fluids from one place to another,” says Ted Wilke, the firm’s vice president. “You have a mechanical pump to do that work, but that pump doesn’t have a brain. It just does whatever you want it to, and we provide equipment that helps make those pumps run efficiently and in a protected way, so that the pumps do not get overloaded or under-loaded. If there is a problem with one of the pumps, we detect it and create a safe stop condition. We keep it so that tank has the right amount of fluid in it all the time, and the right amount means that if there is a problem, we can keep running for quite a while before we have to get a truck over and do this the old-fashioned way.

“If you don’t get that production today, you are never going to get it. That is what people don’t understand about the oil production business.”

Mason says the self-funded, family-owned business now sells nationwide. “We have product across the entire United States where there are oil and gas fields, and we have product internationally as well. We bought a small operation up in Canada, and we have some product in the Middle East, but we do not do business over there directly. We do a little bit of offshore, but our primary product is land based.”



**ABOVE SPOC Automation managers, at the company’s headquarters in Trussville, where the controller units are assembled. From left Bobby Mason, founder and president; Ted Wilke, vice president, and Stacey Brooks, engineering manager.**

Photo by Art Meripol



The company also offers a service that monitors the well site software. Customers can view the equipment from anywhere on earth through their phone, tablet or computer.

Mason says the company is tied to the price of oil, but not directly to new exploration. “We are not dependent just on new drills, because our equipment retrofits into existing equipment.” He says on old wells with out-of-date technology, “on average we save a customer, on certain applications, between 25 and 40 percent in energy consumption per well site, so that can add up to significant dollars. You look at an average 100-horsepower electric motor, the utility cost on that on an annualized basis is \$50,000 to \$80,000 — it costs a lot of money to run that. So if we can save you 25 to 40 percent, it makes good retrofit as well as new installation opportunities.”

Lifting oil and gas out of the ground is not the only efficiency SPOC has to sell, adds Stacey Brooks, engineering manager. “The centerpiece of our product is the variable frequency drive — so everything is geared around a variable frequency drive controlling a motor on a pump — and we customize to fit certain applications. There are a lot of opportunities for electric motor drive projects in the oil and gas business, not just getting fluid out of the ground but moving it around on the surface.”

Says Mason, “What we specialize in is taking a complex control automation scheme and making it simple. We take away the fear of complexity. If we can lower your energy costs, that is going to lower your lifting costs and costs of getting oil out of the ground.

“We engineer all of our equipment. We farm out a lot of our design and build, but all the assembly and engineering and manufacturing is here. We don’t bid it out.”

SPOC Automation’s products don’t come with a standard price tag. Instead they are priced primarily by horsepower, the application and type of product.

And, Mason says, “The same technology will work on any rotating equipment out there. We have the ability to look at problems and not always do what your grandfather always did. Our core business is controlling automation and the process around it. If oil dried up tomorrow, you still are going to move water and other fluids, and even though we focus on this core industry, our equipment could be used in almost any industry that has an electric motor.”

*Bill Gerdes and Art Meripol are freelance contributors to Business Alabama. Gerdes is based in Hoover and Meripol in Birmingham.*

