

Choosing the Right Partner

A photograph of a yellow and blue locomotive pulling a train through a forest. The locomotive is in the foreground, and the train extends into the distance. The background is filled with tall evergreen trees under a cloudy sky.

**Helps Paragon Products
Create More Success**



Installed in more than 20,000 locomotives worldwide, Paragon's products decrease costly downtime and keep things moving reliably on the rails. As the market leader in a sector that never stands still, Paragon Products continues to set new industry standards for truly innovative products.

Sometimes as a small business it's hard to get the attention of large suppliers, getting the engineering support and service that's required for a small company to achieve exponential growth. That was the case with Paragon Products, a company based in El Dorado Hills, California, which designs and manufactures the most technologically advanced fuel pumps for large diesel engines used in the rail, mining, marine and power industries.

About six years ago, an uneasy relationship with its key motor supplier became even more stressful when the manufacturer eliminated production of one critical Paragon product. But what could have been a major setback

to the business turned out to be the best thing that could have happened because Paragon Products found a new supplier that would become the true partner it had been looking for.

Keith Wright, engineering manager for Paragon Products, says when Baldor's Jim Cooke from the Hayward district office told him Baldor could handle its motor production, he was so relieved. The situation, he says, went from very bad to something very positive.

"Not only did Baldor step in and take the order for the 12-gallon motor we needed, but we found that Baldor could offer us a much better solution," says Wright. "Having a real motor expert

call on us was a great way to start the relationship; plus, from the beginning we were so well treated by Baldor manufacturing."

Understanding the Product

From that first project, the relationship between the two companies has only grown stronger. Cooke believes one of the reasons why is the way Baldor engineers studied the application. Because the pump motors are submerged in diesel, biodiesel or kerosene, Baldor engineers worked hard to ensure that the motors would perform in all of these fuels. That meant looking at everything from the varnish on the wires, to the insulation, to the way the motor is laced. He says these engineers understand that Paragon builds complex and highly engineered pumps that are critical components in a large engine.

"That's why Baldor has done a great deal of testing and collecting data to ensure that every component of the electrical system is compatible," explains Cooke. "We build samples to send to Paragon for testing in their lab. Because each fuel behaves differently, we have to make sure that the materials going into the motor will stand up to each of these fluids for 10 years, which is Paragon's guarantee to their customers."

The engineering partnership has been so successful that Paragon's Senior Electrical Engineer, Zack Marin, says he no longer has to detail basic specifications; instead, he can focus on performance issues that involve voltage, frequency, torque and speed requirements. Marin says what he appreciates most is how Baldor engineers listen and then deliver.

"We build small, very specialized products, and we usually ask for voltages that are very uncommon," explains Marin. "Sometimes we ask for almost the impossible – so much power coming out of a small package.



After rotors have been attached to pump brackets, they are ready for final assembly.

But again and again, Baldor has met these challenges. I'm amazed that a manufacturer is so willing to work like this."

Support from the Plant

Beyond the engineering support, Wright says he is also impressed with the employees at Baldor's Westville motor plant who take such great care while building motors for Paragon. It's more than just building a motor to Paragon specifications; he says the employees have also done a great job in the special handling that is required to keep all surfaces smooth. In a normal application, a small scratch may not make a difference in performance, but for a motor in a fuel pump, Wright says a minor imperfection can have serious consequences.

"This is critical because at the end of the motor shell, there is an O-ring that seals the pump, and if it's scratched, it can leak," explains Wright. "If fuel leaks on a big diesel engine, you can end up with a fire. In the past, it's been tough for us to get motor manufacturers to understand this critical issue. But not the Westville plant, because these employees pay attention to all of the details."

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Zack Marin, senior electrical engineer,
Paragon Products



According to Paragon officials, one of the reasons why the two companies have a great relationship is the way Baldor engineers took time to study the application to fully understand the complexity of a motor that is fully submerged in fuel. They appreciate the way Baldor engineers tested the varnish on the wires and insulation and the way the motor is laced to ensure that every component of the motor will perform and last for 10 years.



Paragon officials say Baldor employees have done a great job in the special handling that is required to keep all the surfaces smooth for the Paragon product. A minor imperfection can have serious consequences for a motor in a fuel pump, and officials say they are impressed with the way Baldor employees pay attention to all the right details.



Each Paragon product is thoroughly tested in-house prior to being shipped to the customer. This test, the first of many, is designed to check all seams and welds to make sure there are no leaks.

“We trust Baldor because time and time again they have come through for us, proving that they care about our success.”

Sharon Cesena, materials manager,
Paragon Products

Wright was equally impressed with the Westville plant when Paragon needed help packaging a stator into an aluminum housing for the first time. Paragon’s customer needed the product quickly, which meant Paragon would only have one chance to get it right and meet the deadline. Wright says his engineering team believed all its calculations were correct but was relieved when Baldor invited one of its technicians to travel to the plant, so they could work on it together.

“This is something Baldor knows how to do, and they wanted to help us get it right,” explains Wright. “We might have been able to figure it out on our own, but there was no room for error. The folks at the plant helped us get it done,

and without this kind of support, this project could have gone very wrong. The bottom line is that with Baldor’s help we got it right, and we got it to the customer on time – making it a huge success.”

A Good Partner Makes Your Life Easier

Paragon’s Materials Manager, Sharon Cesena, deals with Baldor as much, or perhaps more, than anyone else in the company because she’s the one who sets the master production schedule, secures inventory and expedites orders. From the beginning to the end of each project, Cesena is the conduit between Paragon and Baldor, making sure everything runs smoothly. And

when Cesena says she needs something from Baldor, she gets it.

“You guys are very easy and pleasant to do business with, and it’s such a nice change from other motor vendors,” says Cesena. “In the past it was often frustrating getting what we needed, when we needed it. But Baldor is so responsive, and it’s such a nice change.”

Calling Baldor flexible and reliable, Cesena says when Paragon really needs help on a project, the Baldor team will pull together to get it done. She says it’s that kind of support that has led to a very trusting relationship.

“We get the feeling that we are important to Baldor – that’s how they treat us,” says Cesena. “We trust Baldor because time and time again they have come through for us, proving that they care about our success.”



Paragon fuel transfer pumps with Baldor brushless AC motors are maintenance-free and provide installation versatility and reliable performance.