

[Email this article](#)
[Print this article](#)
Most emailed pages

[Click to send](#)
Choose File Print or Ctrl P or Apple P
[Today](#) | [This Week](#)

Area firm saves money on diesel

Luci Scott
The Arizona Republic
Jan. 4, 2007 12:00 AM

Debra Johnson's business is thriving because of the high cost of diesel fuel and the increased attention by environmental regulators to emissions from machinery used in construction, mining, the rail industry, agriculture and oil drilling.

She is president of Chandler-based Emissions Products International, the Mexico and Arizona distributor of a device called the combustion catalyst system. The device, manufactured by Phoenix-based Emissions Technology, saves fuel and reduces emissions.

"Business is excellent," Johnson said. She won't give numbers, but she said revenue in 2006 was double the previous year, and she expected to at least double revenue again this year.

She says she has five active customers on the Fortune 1000; she declined to name them.

One of her Phoenix-based customers is Gro-Well Brands, which grinds waste and makes it into fertilizers and organic products for gardens and lawns. Gro-Well's customers are The Home Depot, Lowe's, Wal-Mart and nurseries.

Doug Hanchett, the vice president of operations, installed the combustion catalyst system on 40 big grinders after tests showed a significant fuel savings.

"On top of that, our oil was staying much cleaner and we were seeing the carbon in our oil samples was a lot lower," he said. "You could visibly see the emissions on the machine, and where we used to have black smoke, we didn't see that black smoke any more."

In his grinders, he's seeing 20 to 25 percent savings on fuel. He had tried other devices, he said, but "we'd never seen that kind of saving."

In his trucks, he saves fuel, too, from a half-mile to 1½ miles per gallon.

"When we first put (the system) on our trucks, we were skeptical because we didn't see the increase in fuel economy. But it had given our drivers more horsepower and they were driving faster and using the horsepower. As we realized that, we put GPS systems on our trucks and set it up so we can monitor their speeds. We have seen economy come way back up."

The system includes a liquid catalyst containing the precious metals platinum, rhodium and rhenium in the form of an aerosol mist. The vapor is injected into the engine's incoming air stream and deposited in the combustion chamber. This makes hydrocarbons burn more efficiently, thereby reducing pollution and fuel consumption.

The technology has won awards from Valley Forward and the Arizona Concrete

Contractors Association.

The concept was developed to work on a gasoline engine by a Boston inventor in 1982. The concept was developed for diesel by Emmett Cunningham of Ahwatukee, former owner of Emissions Technology.

Johnson is currently attending the APS Academy for the Advancement of Minority and Women Owned Enterprises, a two-year mentoring and development program for small businesses.

As a result of work in that program, she has changed the focus of her business slightly to helping diesel fleets optimize profits with fuel economy and improved operations by matching companies with the right technology while reducing their environmental impact.

"It's more of an integrity thing, so we're not just selling them a product; we're their partner in saving them money. And if we're not saving them money, they should not be buying that particular product."

The combustion catalyst system is still her "crown jewel," she said.

Email this article
Print this article
Most emailed pages

Click to send
Choose File Print or Ctrl P or Apple P
Today | This Week