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## More bang for fuel buck

*Device Chandler firm distributes goes easy on wallet, environment*

**Luci Scott**

The Arizona Republic  
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Businessman Doug Hanchett was skeptical when Debra Johnson told him her Chandler company had a device that would save him fuel and cut down on air pollution.

"We've heard that a thousand times," said Hanchett, vice president of operations at Tempe-based Western Organics, a national recycling company that grinds up tree branches, leaves and grass from yards and forests and then sells bags of compost to nurseries, landscapers and big-box retailers.

But Hanchett tested the device that Johnson distributes on his diesel-run grinders - and was surprised by what he discovered.

"It saved us about 24 percent of our fuel, a huge number for us," he said. "We bought it and put it on every piece of equipment we own in Arizona."

The device, called the combustion catalyst system, is drawing more attention as fuel prices increase and environmental regulators take a harder look at emissions from machinery used in construction, mining, the rail industry, agriculture and oil drilling.

The device is manufactured by Phoenix-based Emissions Technology and distributed in Arizona and Mexico by Chandler-based Emissions Products International, led by Johnson.

Johnson's sales have increased dramatically.

"Last year (revenue) was five times the year before, and this year we hope to have four or five times what last year's was," Johnson said.

The device was installed on Hanchett's trucks, as well, which saw mileage increases of about 1.5 miles per gallon, although the savings depends on the driver and the route.

"If the driver is running cruise control, we see a tremendous amount of saving," he said.

Diesel fuel was \$1.87 a gallon when Western Organics installed the device, and now the company occasionally pays as much as \$3, said Hanchett, who sees benefits beyond the financial.



Debra Johnson of Emissions Products International says combustion catalyst system gives heavy equipment better fuel economy. Jeremiah Armenta/The Republic

"You can see a visual difference in emission," he said. "We do oil sampling on all of our equipment to see what's happening in the engine, and the carbon in the oil samples has dropped to half of what it was prior to (the CCS) being installed. So the engines are running much cleaner."

Another company, Arizona Materials, a ready-mixed concrete supplier, has realized a 10 percent savings by having the device on about 150 mixers, cement haul trucks and generators, controller Pat McLaughlin said.

Buesing Corp. installed two of the devices on the 875-horsepower generator that powers its concrete and asphalt recycling plant in Chandler. Crushing supervisor Ed Triplett says the machine burns about 11 gallons of fuel an hour, and as soon as he installed the device, he saw a 17 to 18 percent decrease in fuel consumption and a decrease in emissions.

"A big unit like this usually blows black smoke in the air, and it's almost completely eliminated that," he said.

Another believer is Bob Lyman, vice president of the Mexico division of Swift Transportation.

"Besides saving fuel, it reduces emissions, burns cleaner, the engine lasts longer and gives the truck more horsepower," he said.

"When you're a trucking company running hundreds and hundreds and hundreds of units and get 3 or 4 or 5 percent savings over a long period of time, it can be substantial."

He expects to save a half-million dollars a year before factoring in the cost of each device - less than a thousand dollars each, plus an annual bottle-replacement cost of usually between \$1,000 and \$2,000, depending on the equipment.

The largest construction company in northern Mexico installed 75 devices on dirt-moving and other equipment.

"In the first month, we saved \$17,000 in diesel fuel," said Luis F. Gutierrez, machinery and repair shop manager of Tijuana-based Makro.

Testing and sales with other companies are also under way in other markets, including Canada and India.

## **Emissions Products International**

**Who:** Debra Johnson, president; staff of four; looking to hire a salesperson.

**Where:** 7400 W. Detroit St., Suite 150, Chandler.

**Information:** (480) 705-4444, or [www.epi-intl.com](http://www.epi-intl.com).

## **Combustion catalyst**

**How it works:** 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, therefore reducing pollution and fuel consumption.

**Awards:** The technology won awards last year from Valley Forward and the Arizona Concrete Contractors Association.

**History:** The concept was developed to work on a gasoline engine by a Boston inventor in 1982. Then Emmett Cunningham of Ahwatukee developed the concept for diesel. In 2001, Martin Marietta Aggregates tested the product and now uses it in its mining equipment.

## Exporting seminar

**What:** Debra Johnson, president of Chandler-based Emissions Products International, along with Judith Valdes, commercial specialist from Tijuana, will speak at "Tijuana: Gateway for American Exports."

**When:** 9 a.m. March 1.

**Where:** U.S. Export Assistance Center, 2901 N. Central Ave., Suite 970, Phoenix.

**Cost:** \$55.

**Information:** Call Pompeya Lambrecht, (602) 640-2513, Ext. 16, or e-mail her at Pompeya

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