

# benchmark

Summer 2009

A publication of the Oklahoma Manufacturing Alliance

## Tank Goodness

Challenges as  
opportunities  
at VE Enterprises  
Page 18

Earth-shaking  
production at  
Expanded Solutions  
in Wewoka  
Page 10

See what two  
manufacturers  
are doing to  
reach new  
customers  
Page 6

Also:

Tips on energy and water efficiency

A planning guide for family-owned businesses

News on workers' compensation insurance



***We'll Help You Make It!***

Tuesday, September 22  
Doubletree Warren Place in Tulsa

Workforce Solutions ● Exporting Issues ● Lean Manufacturing  
Management Plans ● Job Shop Production ● Innovation and Marketing

Sponsored by the Oklahoma Department of Commerce  
and presented by the Oklahoma Manufacturing Alliance



## On the cover



VE Enterprises, with its 100 or so employees in Springer, manufactures tanks and trailers used to store and transport liquids. It's a willingness to look at challenges as opportunities that has led this company to a remarkable transformation.

**Page 18**



Expanded Solutions is an Oklahoma-based company with factories in Oklahoma City and Wewoka. Its always looking to invest in the future of the business while continuing the traditions of innovation and excellence established over the past 50 years.

**Page 10**

UPCO, a manufacturer in Claremore, and Cookshack in Ponca City are taking advantage of the Eureka! Winning Ways program offered through the Oklahoma Manufacturing Alliance. It has led to some amazing new ideas and products at both companies, which is helping them fend off a lackluster economy.

**Page 6**

Here are six steps to help your facility achieve greater energy and water efficiency.



**Page 26**

Local manufacturing councils are ramping up efforts to assist their members. One is offering a new lower-cost workers' compensation program, while another is looking to share Lean ideas.

**Page 28**

Find a local manufacturing council in your area.

**Page 29**

Succession planning is especially important in family-owned companies. Here are a few ideas to get the ball rolling.



**Page 30**

The Oklahoma Manufacturing Alliance has a network of manufacturing extension agents with offices throughout Oklahoma. They offer free technical assistance and business advice, helping manufacturers become more successful. Find your local manufacturing extension agent.

**Page 31**



# i2E

TURNING INNOVATION INTO ENTERPRISE

i2E, Inc. is focused on growing Oklahoma's technology-based entrepreneurial economy.

Through a contract with the Oklahoma Center for the Advancement of Science and Technology (OCAST) i2E manages the following programs:

- *Oklahoma Technology Commercialization Center*
- *Technology Business Finance Program*
- *Oklahoma Seed Capital Fund*

To help bridge the gap in capital and human resources for Oklahoma's innovative companies i2E manages the following programs:

- *i2E Angel Fund*
- *SeedStep Angels*
- *Entrepreneurial Leadership Program*
- *Donald W. Reynolds Governor's Cup Competition*

access to capital

innovation

proof of concept

home grown

resources

angel capital

commercialization services

entrepreneurship

business development

technology

seed capital



840 Research Parkway, Suite 250, Oklahoma City, OK 73104, 405.235.2305  
Williams Tower II, 2 West 2nd Street, Suite 210, Tulsa, OK 74103, 918.582.5592

[www.i2E.org](http://www.i2E.org)

# OCAST»

Oklahoma Center for the Advancement of Science and Technology



**ADVANCING OKLAHOMA  
THROUGH TECHNOLOGY-BASED  
ECONOMIC DEVELOPMENT**



**Health Research**  
**Plant Sciences**  
**Intern Partnerships**  
**Applied Research**  
**Small Business**  
**Innovation Research**  
**Inventors Assistance**  
**Technology Commercialization**  
**Technology Business Finance**  
**Seed Capital**  
**Nanotechnology Applications**  
**Manufacturing Alliance**



**OCAST»**

755 Research Parkway, Suite 110  
Oklahoma City, Oklahoma 73104

405-524-1357

toll free 866-265-2215

fax 405-319-8426

info@ocast.state.ok.us www.ocast.state.ok.us



*Cookshack's new mobile Q-Kitchen was developed through the Eureka! Winning Ways program and is a big hit with customers.*

# Eureka!

## Oklahoma manufacturers reaping benefits of program that quickly develops, then implements new ideas and products

If there's one thing that stays constant at UPCO, it's change.

For instance, when faced with declining orders and subsequent production lulls in the 1990s, UPCO President Bill Ridenour hit the road to discuss with customers what changes his company could implement to retain existing customers and drive new business to the Claremore manufacturer, which makes steel sucker rods used in the oil-drilling industry.

Unacceptable lead times and marginal quality were just a few of the answers he received, and enough to initiate a call to the Oklahoma Manufacturing Alliance, a not-for-profit organization that provides a variety of support to Oklahoma industry.

With the help of Bill Shortridge, a manufacturing extension agent with the Manufacturing Alliance, UPCO went through a Lean transformation, a process that helps companies produce more with existing resources by eliminating non-value added activities.

Changes were made within the 140,000-square-foot facility, resulting in the retention of key customers and relationships struck with new ones. While the oil industry was booming, Ridenour understood all too well the cyclical nature of the oil industry, and that a slow down would be inevitable.

"I realized that at some point we would have to pick up new products and customers," he said. "We were going to have to become more customer driven. We had to find a way to show that we know the market, we understand our customers and we can speak their language."

Now that efficient changes had been implemented in the plant

through Lean, it was time to change focus from the nuts and bolts of manufacturing to tinkering with advertising and marketing.

"It was obvious we had to change the direction we were heading in," said Ridenour. "You have to take essential steps to become the brand leader in your market. One part of becoming a brand leader is providing market value for the customer."

That's when he once again contacted Shortridge for assistance. Shortridge is one of 20 manufacturing extension agents with offices throughout Oklahoma. He is sponsored locally by Tri County Technology Center in Bartlesville and Rogers State University in Claremore. Working with another manufacturing extension agent, Chuck Prucha, the two put the wheels in motion for the Eureka! Winning Ways program.

Developers of the Eureka program have helped manufacturers like Nike, American Express, and Walt Disney generate business-building ideas by mining ideas from innovation sources such as employees, technology experts, supply chain partners, and customers.

Prucha, sponsored by Kiamichi Technology Center in Wilburton, helped facilitate the first Eureka session at UPCO. It was an extremely fast-paced, one-day session involving 15 participants from every functional area in the company, as well as two UPCO customers to give an outside perspective.

"That first meeting helps us identify opportunities for growth," said Prucha. "We extract ideas that are in committee members' minds, but they haven't had a chance to talk about it openly. It's a way for us to leverage these ideas into shared information. We really take a close look

at what they are void of, where they want to be, and what they have in the pipeline that could get them there.”

During the intense session, 50 or so ideas are discussed and then narrowed to a few that are sent to the Eureka! Ranch, where it is boiled down using historical and scientific data. The ranch sends back the top ideas with the best potential for successful implementation.

It was Prucha’s job to then begin working with the group to get the ball rolling on the top ideas.

“Companies have to realize it’s not an overnight fix, rather a process that’s implemented and perfected over time,” said Prucha.

Not to mention the cultural consideration anytime a facility deals with change of any type. For instance, engineers were asked to begin keeping the customer in mind in their approach to hardware and parameters.

“They now think in terms of how this product will help the guy out in the oil patch,” said Ridenour. “Customers are looking for benefits. Eureka makes you look at what the benefits are and how to communicate those benefits to the customer. We are really telling the end user how our products will benefit them.”

As a result of going through the process, UPCO now has a handful of ideas in development. The first roll-out involved modifications to an existing product. Changes to the oil-well piece allowed it to remain in the

hole four or five times longer than the current industry standard. It eliminates several expensive replacement cycles costing companies millions of dollars in downtime. In addition to the actual physical modifications to the part, marketing the new benefits was essential. This one item alone has helped UPCO’s business stay strong while others in the industry are suffering with recessionary problems.

Ridenour said Eureka provided UPCO with the ability to explain the merits of the new product in terms that were most meaningful to customers.

“Eureka is a cookbook approach to the basic marketing thinking, and the point you need to step back and examine is if it’s a viable and long-term product,” he said. “Before, we would know what we would like to do, but we would not know how to develop the specific products and effectively offer them to our customers.”

At about the same time UPCO was going through the Eureka process, another Oklahoma company, Cookshack, was experiencing a transition of its own.

“We were an organization having problems with taking our research and development ideas to fruition,” said Stuart Powell, president of Cookshack, a Ponca City based company that manufactures residential and commercial smoker ovens.

His group went through the initial process, coming up with 50 ideas



*This process is for any organization that is trying to grow and become more successful.*

—Stuart Powell



*Story continued on page 9* ➤



*Through the Eureka! Winning Ways program, UPCO in Claremore developed a new product that saves customers hundreds of thousands of dollars. The new product is keeping orders brisk at UPCO, while other manufacturers are seeing diminished sales.*

# How it works

## Eureka! Winning Ways



### 1 Create

In a one day session, your team works together to create ideas for growth that balance what customers dream of and what you can practically deliver. Ideas are developed in areas like:

- ▲ More Effective Sales Messages
- ▲ New Customers or Markets
- ▲ New & Improved Products/Services
- ▲ Export Opportunities
- ▲ Green/Sustainability Opportunities

#### Results You Can Expect:

*You'll create a pipeline of ideas for growing the business. The final ideas will include BOTH new ideas and thinking deeper (and smarter) about old ideas. Most importantly, your team will learn key growth leadership principles they can apply well beyond the workshop.*

### 2 Select

Your team selects ideas with the greatest odds of success. Research then aligns your team on those growth ideas with the greatest chance of generating real customer interest. Specific diagnostics help you improve your odds of success:

- ▲ Overt Benefit: Helps drive customer interest
- ▲ Real Reason to Believe: Increases sales/close rates
- ▲ Dramatic Difference: Increases profitability

#### Results You Can Expect:

*Through the program, small and mid-sized companies create ideas roughly 2x as unique as those created by Fortune 500 companies.*

### 3 Execute

At a half-day meeting your team's collective brain power creates a step-by-step action plan for turning the top growth ideas into reality. Importantly, the process reduces risk, increases meaningful learning and accelerates time-to-market in smarter, less-costly ways.

Over a month, weekly coaching sessions keep your project leaders on track, accelerating learning by applying seven-day rapid cycles of “fail fast/fail cheap/get smart” learning—keeping the budget low but the learning and profit potential high.

#### Results You Can Expect:

*98%+ success rate discovering and developing ideas that you feel confident taking to market—to get you growing now.*

*Plus a team that is unified, focused and full of growth leaders able to create and execute growth ideas. The result is faster speed to market at lower cost. The most impressive results: a market launch using 10% of the staff, 16% of the time and at 18% of the cost.*

### 4 Repeat

Because the need for growth never ends, we “reload” the next quarter, repeating an abbreviated workshop, running research, and using our fast development to move new ideas through the pipeline.

#### Results You Can Expect:

*With repeated cycles of application and learning, your managers continue to transform into growth leaders—getting faster, smarter, and more efficient at creating, selecting, and developing ideas to grow the business—while keeping the pipeline full in the process.*

*For more information on Eureka! Winning Ways, contact your local manufacturing extension agent or phone (918) 592-0722.*

before picking four to be sent to the Eureka! Ranch. Of those, four were sent back for consideration.

Powell said one, a mobile kitchen, has already been implemented with great success, and another product has already launched and has taken off quickly as well.

Powell said he was so impressed with the results that the company has already begun another round of Eureka by going through the initial brainstorming process and sending the more ideas to the Ranch.

What advice would Powell give another company going through the process?

"You really have to have someone on your staff willing to take the process and run with it," he said. "That's the one area you have to have covered—someone dedicated to the process full time."

Powell was so impressed with the process, in fact, that he is taking it outside the walls of his plant to his local country club. "This process is for any organization that is trying to grow and become more successful," he said.

Back at UPCO, Ridenour said it would have been difficult implementing the Eureka process without first going through Lean Manufacturing.

"The Lean process prepared our organization to act on the needs of our customers, and to communicate those needs," he said. "Eureka has helped us gain a more mutual and common understanding of new products. What we have to do is qualify the product message of who we are, and implementing a much more unified approach of communicating who we are, what we are really offering our customers, and to focus on benefits, not features."

While the Eureka process has been implemented and will be ongoing, Prucha said it's important not to forget the 45 or so other ideas that UPCO submitted to the Eureka! Ranch for review. The manufacturing extension agent is encouraged to keep the unused idea cards for consideration at a later date.

"With Eureka! there is a follow-up process," he said. "Each person is writing all day long and there is enough time for each group to capture and share their thoughts, so there are a lot of new and innovative ideas still waiting to be implemented."

And if history is any indicator, UPCO should see bright days ahead as the ideas bounce from the drawing board to the marketplace.



## Success with Eureka around Oklahoma

Thanks to the Eureka! Winning Ways program, many Oklahoma companies are expanding and adding new customers during tough economic times.

### Rosewood Industries

#### Stigler

- ▲ A new online tracking system for customers that provides a value-added tool for sales representatives that helps Rosewood stand out among its competitors and capture additional market share with very little investment. Also, development of other innovative, new products.
- ▲ 20 percent increase in overall sales.

### Cookshack

#### Ponca City

- ▲ New, innovative mobile kitchen product that is a big hit with customers.
- ▲ Other new products and systems that are adding to Cookshack's bottom line and increasing its market share.

### UPCO

#### Claremore

- ▲ Modifications to an existing product that is revolutionizing the industry and neutralizing sagging sales.

### Lindsay Manufacturing

#### Ponca City

- ▲ A new do-it-yourself internet sales system.
- ▲ Working on a new environmentally-friendly vacuum system to appeal to non-traditional customers.



# Expanded Horizons

When the ground shakes in Wewoka,  
this manufacturer knows everything is just fine

**A**sk folks in Wewoka if Expanded Solutions is operating at full force and chances are good they can tell you without hesitation—Yes! After all, when in full production the factory's giant presses literally shake the earth.

Time was, however, when the ground would go for long periods of time without trembling and production would come to a near standstill because of mechanical problems with the plant's largest and most critical piece of equipment.

When Rick and Carol Bahner bought the company in 2002, they were warned the large camshaft—used to furiously punch and expand pieces of metal—had a limited life expectancy and frequent breakdowns meant countless hours of lost production.

"I was told the constant beating the part took was hard on it, and that it would wear out quite frequently," Rick Bahner said.

To get a clearer picture of the pounding the camshaft takes you have to understand just what Expanded Solutions does during day-to-day operations. The company provides quality expanded metals, security mesh, mini-mesh, and expanded grating for a plethora of uses. The products are manufactured from carbon, galvanized and stainless steel, aluminum, copper, and other metals. Mesh sizes range from three-thou-

sandth-of-an-inch silver for high-tech battery applications to quarter-inch steel and aluminum used for catwalks. Small-mesh products are produced in the company's Oklahoma City plant, while larger pieces are handled by the Wewoka factory

The Bahners purchased the company from Acker Industries, a company founded in 1956 by Eric O. Acker, a trained tool and die maker.

Acker was operating a tool and machine design and engineering firm in Chicago when he was approached to build a machine to manufacture mesh for Sears & Roebuck Co. Through the success of the equipment—one made for John Deere and one to produce ironing board tops—Acker machines began setting the standards for small-mesh production. Through the years, Acker's innovations led to machine sales throughout the United States and across the globe.

When the Bahners purchased the company, they saw a demand for their products, but they also understood the need to improve processes throughout the Wewoka plant. That's when they contacted the Oklahoma Manufacturing Alliance to help in several areas.

One of the first orders of business was improving the plant's large camshaft to reduce downtime and repair costs. In addition to assessing the large camshaft, OSU Applications Engineer Doug Enns was brought in to review the plant layout to improve efficiency.

"One of my main charges, though, was to determine the cause of fail-

“

*We are always looking to invest in the future of our business while continuing the traditions of innovation and excellence established over the past 50 years.*

—Rick Bahner

”



*Rick Bahner (right) at work with Cary Robinson, operations manager for Expanded Solutions' Wewoka factory. Bahner and his wife, Carol, own the company that manufactures expanded metal, security mesh, mini-mesh, and expanded grating for a variety of uses. Mesh sizes range from three-thousandth-of-an-inch silver for high-tech battery applications to quarter-inch steel and aluminum used for catwalks.*

ures in a high-speed camshaft,” said Enns, who works for the Oklahoma Manufacturing Alliance on short-term engineering projects. “Continual cracks and failures were leading to downtime, and this is one of the plant’s main machines.”

Enns studied the camshaft design and worked closely with an engineering class at OSU, who took on the challenge as a course project.

“I took the broken part to the class and we studied the metal,” he said. “After spending a great deal of time studying and testing the metal, we suggested a number of design improvements.”

The modifications proved successful as the machine, which at one time would break down every few months, went for more than four years without a major shutdown. It equates to hundreds of thousands of dollars in gained production time.

Besides making improvements with the camshaft and other equipment, Enns, along with OSU PhD student Rajesh Krishnamurthy, were

asked to help redesign the factory floor to help streamline operations.

“Doug and Rajesh came up with a design that made more sense for us from a production standpoint,” said Rick Bahner. “We essentially created space for a new machine. I was amazed. They carved that space out of what looked at the time to be thin air.”

Manufacturing Extension Agent Bob Smith also worked with the Expanded Solutions staff and management, one of his main challenges being to match up the right resources and personnel to make total operations more efficient.

Smith helped the plant implement Lean Manufacturing principles, which produces more with existing resources by eliminating non-value added activities while establishing a systematic approach to eliminating waste and creating flow throughout the whole company.

*Story continued on page 16* ➤

*From left are Rajesh Krishnamurthy, Josh Bahner, Drew Bahner, and OSU Applications Engineer Doug Enns. Krishnamurthy, an OSU PhD student, and Enns worked with Expanded Solutions to improve the reliability of one of its most important pieces of equipment. The family-oriented business includes Josh and Drew, sons of owner Rick Bahner. Josh is HR Manager and Drew is plant manager in Oklahoma City. Below, Glenn Neighbors in the Oklahoma City plant.*



It's not always what you know.  
It's knowing who can help.

Company-Wide Assessments



Lean Manufacturing



Engineering and Technical Assistance



Problem-Solving Resources



Business-to-Business Collaborations



Exporting Programs



New Products and Markets



State Incentive Applications



Eureka! Growth Programs

918.592.0722

[www.okalliance.com](http://www.okalliance.com)



**OKLAHOMA  
MANUFACTURING  
ALLIANCE**



*Small-mesh products are produced in Expanded Solutions' Oklahoma City plant, while larger pieces—like catwalks—are created on machines like this in the company's Wewoka factory.*



"They are great folks to work with," said Smith, who is sponsored by Metro Tech in Oklahoma City. "I would observe something and get the right people involved to get it done. They helped to identify and validate areas for action, and I would help them implement the changes. They really did become a lot more proactive and predictive, which has led to being more productive."

While production ultimately drives the success of Expanded Solutions, Rick Bahner has made safety a top priority throughout the company. After all, margin for error is slim when dealing with machines designed to expand heavy metals.

Extension agent Bob Carter helped with the effort.

"One of the first things Rick did was to impress upon the employees and to everyone who does business with his company the importance of safety," said Carter, who led Expanded Solutions through the process that helped the company qualify for the Oklahoma Department of Labor's SHARP program.

The SHARP certification exempts Expanded Solutions from programmed OSHA inspections. But it's far more important than that. It's a reflection of safe and reliable working conditions, which is manifested in reduced employee turnover and lower Workers' Compensation rates.

"The company now has monthly safety meetings to reinforce its com-

mitment to safety. The SHARP certification really speaks to this company's safety-driven operations," said Carter, who is sponsored locally by Oklahoma City Community College, Moore Norman Technology Center, and the South OKC Chamber of Commerce. He is one of 20 MEAs located in communities across the state. Through this network, the Oklahoma Manufacturing Alliance provides a full range of services to companies. Activities focus on improving the bottom line, while growing the entire operation. Carter added that despite the fact Expanded

Solutions works with an abundance of metal, it is one of the most environmentally sound companies he has ever worked with.

"This is a green company," he said. "There is virtually no waste. You are talking about a company that is expanding metal. Since steel plates are essentially stretched and not

punched, there is very little waste. What slight waste is produced is easily recycled into other applications or sold."

The MEAs also assisted with that process, helping to develop an extensive database used to better manage inventory. It helps evaluate and merge the company's supply chain by streamlining purchases.

"We are a steel intensive group, very raw-materials driven. Our labor is a small component compared to our raw material costs," said Rick Bahner. "The Oklahoma Manufacturing Alliance helped us manage our



supply chain a lot more efficiently. We are now able to turn our assets more quickly, and not have as much supply on hand as before. Our inventory turns considerably as a result of the database."

With technology, safety, and processes aligned to make the plant more efficient, it might be easy to proceed with business as usual. Don't expect as much at Expanded Solutions, however. Rick Bahner said his organization will continue to work with the Manufacturing Alliance to improve processes and drive business

"We are always looking to invest in the future of our business while continuing the traditions of innovation and excellence established over the past 50 years," he said. "And the Oklahoma Manufacturing Alliance will continue to be a part of that."



*To help evaluate the company's supply chain, Expanded Solutions developed an extensive database to better manage inventory. Above, Bryan Ahgoom operates an expanded metal machine.*

*From left are Doug Enns, OSU Applications Engineer; Bob Smith, Manufacturing Extension Agent for the Oklahoma Manufacturing Alliance; Rick Bahner, owner of Expanded Solutions; MEA Clarence Prevost; Owner Carol Bahner; OSU PhD student Rajesh Krishnamurthy; HR Manager Josh Bahner; and MEA Bob Carter.*



# Where Just Enough Is Not Enough



*From left, Brian Barrett,  
Trey Whatley, and Michale Haggard*





# TANKS

(800) 234-2329

SPRINGER,  
OKLA.

**V.E. ENTERPRISES, INC.**

Mobile Storage Tanks    PRAC TANKS    Tank Trailers

Every challenge  
is an opportunity  
for VE Enterprises.  
And it's the  
excitement of  
doing something  
that's never been  
done that really  
keeps this Oklahoma  
company moving  
forward. ➤

**L**ook past the bottom line and you'll see VE Enterprises. The company, with its 100 or so employees in Springer, manufactures tanks and trailers used to store and transport liquids. Its most basic products are single-walled, corrugated steel tanks and trailers that are modified to suit the needs of the oil and gas, construction, environmental, and waste management industries.

For the Whatley family, owners of VE Enterprises, the bottom line is just one measure of how well the company is doing. In fact, if you listen long enough to Trey Whatley talk about the company he leads, you start to get the impression profits are just a side benefit to the other rewards that come from success in business.

"We get a lot more joy out of just being able to serve our customers and take care of our employees than we do from making a ton of money," he said. Whatley took over as president of VE Enterprises when his father, Lonnie Whatley, retired June 2005.

When the company identified a need to reduce turnover about three years ago, then-human resources director Dale Wells developed a comprehensive proposal to improve employee benefits. The company's leaders reviewed the proposal and made some significant edits, but not in the way you'd expect. The final version of the new benefits package was better than what Wells had asked for. The plan included substantial improvements to benefits and pay, new training opportunities for managers and supervisors, and skills and safety training for workers. The company initiated paid life insurance, healthcare, and prescription plans for workers. Paid vacations already were included, as was a 401(k) retirement plan with 50 percent matching funds.

That was just the beginning.

"Most people leave because they're unhappy, not because of pay or benefits," Whatley said. In addition to increasing the pay scale and adding to the benefits packages, the company gave itself a comprehensive overhaul that made working at VE Enterprises a lot nicer for everybody. It's easy to assume benefits and pay are the enhancements that most significantly affect employee morale, but Whatley said that's not necessarily true.

"I think the indirect things have more of an impact," he said. "You have to be competitive in pay, to meet their needs. After that, you really have to meet their emotional needs." Respect is foremost among those needs, he said, noting that the old-style "boss" mentality is still out there, but it's headed for extinction. "I think that's a dying breed. Workers don't want to put up with a lack of respect, and they shouldn't have to."

At VE, they don't. Respect for employees is evident in every aspect of the company. From benefits and pay to company-sponsored events for employees and their families, to continuous training opportunities and special recognition for tenured workers, VE Enterprises has established



*We get a lot more joy out of just being able to serve our customers and take care of our employees than we do from making a ton of money.*

—Trey Whatley



over and over that when it comes to taking care of its workers, just enough is not enough.

Among the most significant new amenities for VE employees is the company's on-site cafeteria. Providing workers with a place to get hot meals was important, since the only other nearby food option also serves diesel and unleaded. The company could have gotten by with a conventional, austere factory break area, but it didn't.

Inside the company's new cafeteria, elegant brickwork and artfully stained concrete floors envelop numerous round tables at which workers can take their meals, enjoy a cup of coffee or simply escape for a break from the heat or cold. A high ceiling and warm, earthy colors add to the peaceful ambience of the place. It's welcoming, it's cheerful, and it's clear the company spared no expense. A local family operates the cafeteria, and VE doesn't make a nickel from the operation. Providing a service to workers was the company's sole motive.

Improvements to the company's safety record was another big part of making VE a better place to work, said VE executive vice president Michale Haggard. "You want to do anything you can to keep safety in front of people, to get them thinking about it more often," Haggard said. Faith Phillips is VE's environmental, health and safety coordinator, and Haggard said her creative approach to the company's safety culture has made a measurable difference. "When it starts to get mundane, she comes up with something new," he said.

Phillips said it's a challenge to keep safety on the minds of workers who are conditioned to focus on productivity and quality.

"In manufacturing, the focus is on production," she said. "We want to encourage them to think about safety at the same time, while they're working. Because we definitely want to protect our employees." In case injury prevention isn't always sufficient reason to think about safety, the company decided to offer another incentive: cold, hard, cash. Recently, the company started playing Safety Bingo. Every worker gets a card. A number is drawn each day that passes without an injury or inci-

dent report, and \$100 is added to the pot. When somebody gets a bingo, the company writes a check. The first big winner was paint department employee Ray Presley, who won \$1,600 in January. Phillips said the game is so popular, her phone will start ringing if she's late posting that day's number.

The company's safety record already had made great strides before the bingo program got started, she said. Injuries in general have dropped to about half what they once were. "We're really proud of the progress we've made," Phillips said. Beyond its obvious benefits to workers and to the company, promoting safety also provides one of those intangible benefits Whatley banks on: it's another way to remind the individual worker he or she is important.

Instilling in each worker a sense of pride for the contribution he or she makes to the company can lead to numerous benefits, Haggard said. When employees are proud of what they do, better products are a result. "Our painters are very proud of their work, and so are our welders," he said. "You won't find a tank with better welding on it." Regarding his management philosophy, Haggard's approach is pure golden

rule.

"You treat people the way you want to be treated," he said. "That's the way I train my management team, and it's the way I try to live my life. Customers, employees, vendors—if you do it that way every time, you can't lose."

That philosophy contributes to the three fundamentals upon which the company's past and future success depends, according to sales & marketing vice president Brian Barrett: quality, experience, and innovation. Its commitment to those principles is what has kept VE competitive in an industry dominated by much bigger companies, and it represents the key to staying on top in the future.

Listening to customers is vital to every aspect of that philosophy.

"When you have the opportunity to get out into the field and talk to customers, you learn a tremendous amount," Barrett said. After a visit to a chemical company that needed a secure way to store hydrochloric acid, VE developed a double-wall tank that ensures the environment is protected from leaks. As simple as it sounds, the double-wall tank had never been done before, so the result was a truly unique product with



*VE Enterprises in Springer manufactures tanks and trailers used to store and transport liquids. Its most basic products are single-walled, corrugated steel tanks and trailers that are modified to suit the needs of the oil and gas, construction, environmental, and waste management industries.*



Even though  
things  
business  
they, a

applications for many industries that store caustic materials.

“That visit opened the door to other things we might do,” Barrett said. “If you don’t get out and visit, you don’t learn.” Paying visits to customers in the field is key to discovering new ways in which the company’s equipment might be used, and to identifying modifications that could broaden the scope of a product’s applications.

**To boldly go where  
no competitor  
has gone before...**

According to the New Oxford American Dictionary, ‘to diversify’ means ‘to bring variety to.’ VE Enterprises is working hard to bring variety not only to its market, by increasing its customer base and spreading it out over many different industries, but also to the methods by which it might do so. Among the things company leaders are brainstorming: New uses for the company’s core products. New users for those products. New products. Also, the company is exploring new ways of serving customers to ensure they can extend the same high service standards developed for domestic business to customers in Africa and the Middle East.

They’re not out there exploring on their own. VE Enterprises is utilizing programs that exist for the purpose of helping companies do exactly what they’re trying to do. One resource they’re considering is *Eureka! Winning Ways*, a program coordinated locally by the Oklahoma Manufacturing Alliance.

“This program can help us flesh out new product ideas, bounce them off an expert panel and find out which idea is most likely to



**Brian Barrett  
and Michale Haggard**

*Although we are a heavy metal manufacturer, we still appreciate that are aesthetically pleasing...Today, we're one of the first in our industry to put rounded handrails on liquid storage tanks. Not because they are necessarily any more functional, but because they look better!*

*—Brian **Barrett***





be successful," Barrett said. Identifying appropriate target markets and the best methods of reaching those markets are other goals of the program.

When he joined the company in 2007, Barrett was unfamiliar with the Manufacturing Alliance. At his first meeting with manufacturing extension agent Kay Watson, he asked what the organization could do for VE Enterprises.

"Since then, things have just exploded," he said. "The Manufacturing Alliance has been a huge help to me because they've made me aware of opportunities out there that we weren't taking advantage of."

Haggard said VE's relationship with Watson and the Manufacturing Alliance helps the company keep moving forward as it explores new ways to ensure future success. Watson is one of 20 manufacturing extension agents working in communities across Oklahoma. She is sponsored locally by Murray State College and the Chickasaw Nation.

"You have a tendency to put things on the back burner, and she (Watson) is always quick to remind us when we need to get back on track," Haggard said.

Demand for liquid storage and transport tanks and trailers can change quickly, and that's a big challenge, Barrett said. In two months last year, oil prices dropped from \$140 a barrel to less than \$44—and two months is the average time it takes the company to build and deliver a tank. "That's how quickly things change," he said. "The business can shift overnight into having literally no demand for your product."

So the company doesn't wait for hard times to begin thinking about innovation and diversification. In the past, manufacturers sat back and took orders when times were good, and only shifted into innovation mode when markets dropped. VE was no different, Barrett said.

"We've got to get away from that. It's old-school thinking, and that's the opposite of what we want to be," he said. "We're not an order-taker, we're an innovator. That's the difference with our new philosophy, and it's part of what we're trying to convey to our market and to our employees."

Notwithstanding his assumption that new customers won't materialize without a great deal of effort on his part, Barrett said he has to be ready for anything. One day not long ago, he pulled into the company parking lot to find a man browsing among the tanks as if he were on a showroom floor. Barrett said it reminded him of his long-ago stint as a car salesman.

"I walked up to him and asked if he had any questions I

could answer," he said. Turns out, the man was familiar with VE tanks, but didn't know they were manufactured in Oklahoma. He went on to tell Barrett that his oil company engaged in directional drilling operations. Drilling wells that are not vertical poses unique challenges, Barrett said, and the man's company had experienced problems using traditional tanks. Three hours later, the two had identified some minor modifications that could be made to the tanks, resulting in a new design addressing that company's specific needs.

A nagging problem had been solved for an oil company, VE Enterprises had a new customer, and Barrett had a new project: how to target other directional drillers?

"Proving the advantages to the customer is what it hinges on," Haggard said.

Establishing any new market traditionally has taken about a year, he said, since the company's products are anything but impulse buys. "It's one thing for a salesman to say you need this, and it's something else when someone who uses the product says you need it."

A good example is the new market that could open up following the development by FedEx of a new use for VE tanks. FedEx has begun using the tanks at its Memphis hub airport to store the glycol it uses to de-ice planes. Haggard said that market is poised to grow, and the company hopes to begin delivering tanks to other airports in about a year. OG&E discovered another use for VE tanks last year, when it began using them to store the mineral oil it uses during repairs to electric transformers. By reaching out to other companies that could benefit from these new applications, VE Enterprises aims to eliminate the vulnerability inherent to heavy reliance upon a single industry.

That vulnerability is another thing of the past the company is working hard to change. When the oil and gas industry took a hit last year, VE's efforts to diversify its market paid off.

The company still could depend upon business from construction, environmental and waste management customers, industries to which it had become an established supplier.

But because oil and gas customers still represented a majority portion of the company's business, it wasn't enough. Demand from that industry stalled, and as a result, the company went through two job cuts.

Barrett said when it comes to getting motivated to diversify and innovate, nothing is more powerful than watching good employees walk

out the door following the announcement of a layoff. "These people had the character to reach out and shake my hand and say they hoped to come back, and that they wished us the best of luck," he said. It's an experience Barrett said he's not keen to repeat, and it has fired him up more than ever to find new markets for the company's products.

"I want to get those people back," Barrett said. "We take this very seriously. We're going to prove that we can do it."

## **Small markets mean big opportunities, bigger challenges**

When a small company like VE provides products to an industry also served by big manufacturers, the best chance for success can come from markets not served by mainstream providers. Niche markets are tough to establish—the potential customer base is small, and customers aren't used to buying equipment designed especially for them. Finding those potential customers is just the first step up a climb that gets steeper as you go. You have to get their attention. You have to demonstrate how your product can help them. You have to convince them to do something differently from the way they've been doing it. And in the case of VE Enterprises, you have to do it all so well, they'll be willing to buy something that costs around \$40k.

It's a task Barrett said he's ready to take it on. "I get excited about the idea of doing something that's never been done before," he said. "There is so much potential here. Every day, there's a new challenge, a new opportunity."

Despite the economic downturn and an unprecedented spike in the price of steel, VE Enterprises has managed to continue moving steadily forward. Last year, the company enjoyed its second consecutive record-setting year. Looking to the future of his family's company, Whatley said he sees new products, new markets, and a diverse array of customers. Beyond that, what he envisions is a company that looks more or less the way VE looks today.

"My hope is that we will still be a family-owned operation, that we've ventured into a few more products, and that we're known as both a great supplier and a great employer," he said.

"We'll keep on treating our employees and customers the same as we do now, with respect, and we hope we'll be able to make a really positive impact in the community."



Story by Rebecca Barnes  
Photos by Broderick Stearns



# Energy Efficiency

## Simple steps to implement power-saving projects

*The following six steps can help you and your facility achieve greater energy and water efficiency.*

### Step 1: Identify Your Opportunities

Inspect your facility to identify opportunities for saving energy and water. This step includes collecting data on current energy and water consumption. You can do this by analyzing a year's worth of gas, electric, and water utility bills and calculating the number of electric fixtures and appliances your facilities use. If you are planning a new commercial facility for your agency, you will probably be incorporating many of the energy- and water-saving measures called for in federal regulations for new construction.

Using energy management software or auditing experts can help you choose an optimum mix of efficiency measures and new technologies that will work together to increase energy savings.

### Step 2: Develop an Action Plan

Preparing an action plan has three important elements: selecting appropriate energy efficiency, water conservation, and renewable energy measures; building project partnerships to implement these measures; and exploring financing opportunities.

One way to set priorities among several energy and water efficiency measures is to compare them on the basis of their cost-effectiveness, as well as on how they will affect each other. For example, installing new energy-efficient lighting in a building reduces the heating load, which in turn allows you to purchase a smaller cooling system.

### Step 3: Conduct a Detailed Feasibility Study

This involves obtaining detailed estimates of what it will cost to purchase, install, and maintain the energy- and water-efficient equipment and renewable energy technologies identified in the action plan. Estimating energy and cost savings allows you to verify that the planned efficiency measure is an appropriate, cost-effective priority. The results of these studies will help you make a "go" or "no-go" decision for each potential project.

### Step 4: Design the Project

In this step, your project team begins working with engineers, architects, and agency personnel on a specific design. To develop a good project design, your team may want to use a comprehensive approach where energy efficiency, water conservation, and renewable energy measures identified in the action plan are considered in relation to their effect on each other and in relation to their combined effect on the facility. For example, installing new energy-efficient windows allows more sunlight to enter the building while reducing its lighting and heating loads.

Your team can also establish measurement and verification (M&V) goals for energy performance and savings in this step. This will help you measure, evaluate, and verify project results (Step 6).

### Step 5: Implement the Project

Contracts are put in place, construction begins, new equipment is installed, and energy and water efficiency measures are implemented.

### Step 6: Evaluate and Verify Project Savings

Calculating and verifying energy and water savings is essential to proving the success of your project. Project team members address some important questions in this step.

- ▲ Did everything work as planned?
- ▲ What are the actual energy, water, and cost savings resulting from this project?
- ▲ If savings are not as significant as estimated, what can be done to get better results?

Some projects, such as energy-efficient lighting retrofits, are relatively easy to measure and evaluate in terms of energy and cost savings. Others, like new cooling towers or a new PV-wind-diesel energy system, may require more complex measurement, evaluation, and verification.

*For more information on energy audits and energy-saving projects, phone your local manufacturing extension agent. (See page 31)*

Whoever said you can't be all things  
to all people, never called us.

Company-Wide Assessments



Lean Manufacturing



Engineering and Technical Assistance



Problem-Solving Resources



Business-to-Business Collaborations



Exporting Programs



New Products and Markets



State Incentive Applications



Eureka! Growth Programs

918.592.0722

[www.okalliance.com](http://www.okalliance.com)



**OKLAHOMA  
MANUFACTURING  
ALLIANCE**

# Council offering new workers' compensation program

The Central Oklahoma Manufacturers' Association is offering a new workers' compensation program for state manufacturers. The program may save Oklahoma companies as much as 30 percent in annual premiums. COMA is working with Arthur J. Gallagher Risk Management Services, the fourth largest insurance broker in the world. It's an effort to help Oklahoma manufacturers be more competitive and, at the same time, have a safer workplace.

"Oklahoma has some of the highest workers' comp rates in the country," said Jory Gromer, COMA president. "This has been a hindrance to the growth of local manufacturers, putting us at a disadvantage when competing with businesses in surrounding states. Higher workers' compensation rates also have been a roadblock to others who might be considering moving their operations to Oklahoma. We felt it was time to address this issue head on and develop a new comprehensive program that would provide substantial savings over what is currently available."

Gromer says the key factors in the development of the program were flexible pricing, acceptance of most manufacturing codes, and a low premium requirement. "Usually, larger employers receive more favorable pricing than smaller employers due to volume. This program allows manufacturers to take advantage of volume pricing simply by being a member of COMA. Monthly and quarterly payment plans are available."

Gallagher has committed a fulltime team of program administrators

“We felt it was time to address this issue head on and develop a new comprehensive program.”

—Jory Gromer

to assist member companies in expediting their applications. Gallagher will work directly with manufacturers or with their current agent.

Another unique aspect of COMA's workers' comp program is loss control services are available to members at no charge. These services include development of safety handbooks or written safety guidelines, and return-to-work programs.

"The workers' comp program is the latest in a line of programs we offer our members," Gromer said. "We also offer healthcare and long-term care programs, all of which represent significant savings."

COMA currently has 367 member companies throughout Oklahoma. More than 200 of these members, representing 10,000 employees and family members, have taken advantage of COMA's healthcare plan. To become a member, a manufacturer must be located in Oklahoma and have an SIC code between 2000 and 3999. Annual membership fee is \$50. For more information, contact Bob Carter at 405-682-7543 or e-mail [bob.carter@okalliance.com](mailto:bob.carter@okalliance.com).

## Enterprise Excellence Group to promote Lean efforts

The Enterprise Excellence Group is refocusing its efforts as a networking organization for Oklahoma businesses interested in improving their operations through Lean Manufacturing and Lean Enterprise.

The foundation of EEG is a collaborative effort among many Oklahoma manufacturers. The organization is supported through the Oklahoma Manufacturing Alliance and Francis Tuttle Technology Center.

"The EEG serves as a key venue for businesses and organizations to share best practices and experiences, and learn from each other, as they strive to improve their operations through the implementation of Lean principles," said John Carnuccio, General Manager of Transformer Operations for Southwest Electric Company in Oklahoma City, and president of EEG. "Everyone is struggling with the challenges of the current economic crisis while trying to maintain and improve competitiveness in order to keep their businesses alive and—at the same time—continuing to keep jobs in Oklahoma."

Through membership in the EEG, organizations can learn from each other, tour each others' plants, offices, and facilities and hear presentations from guest speakers and panel discussions of those with first

hand experience in Lean implementation. Lean Enterprise is a business strategy that drives out waste in organizations thereby improving productivity, quality, and capacity which in turn improves profitability and competitiveness.

"Implementing Lean concepts into any organization's value stream remains one of the most important business strategies in sustaining and improving profitability and competitiveness, and is especially important in this very difficult and tough economic climate," Carnuccio said. "The sole purpose of the EEG is to provide an important resource to businesses and organizations who wish to learn successful Lean techniques directly from their peers who have actual, hands-on experience."

Membership in the EEG is offered at a nominal expense. It is \$50 for up to three individuals from a qualifying organization, and \$50 per year for each additional individual. Membership is open to any Oklahoma manufacturing company or factory, and any non-manufacturing organization pursuing adoption of Lean processes.

For more information about the meeting or membership, please contact Kevin Barber at 405-717-4133 or e-mail [eeg@okalliance.com](mailto:eeg@okalliance.com).

# Local Manufacturing Councils

Councils are affiliated with the Oklahoma Manufacturing Alliance and provide a network for manufacturers to talk about common challenges and share ideas and resources. Councils are established by region, industry, or professional discipline. For more information, contact a specific council below or locate your local manufacturing extension agent on the opposite page.

## Aromatic Cedar Association

Paul Todd, Custom Grinding  
405-745-6819      [Statewide](#)

---

## Broken Arrow Manufacturers' Council

Deb Marshall  
918-251-1518      [Broken Arrow Area](#)

---

## Business and Industry Networking Group of Oklahoma

Dave Hammond, Superior Fabrication, Inc.  
580-332-9300      [Pontotoc County Area](#)

---

## Central Oklahoma Manufacturers' Association

Jory Gromer, Green Bay Packaging Inc.  
405-222-2306      [Canadian, Cleveland, Grady, Logan,  
and Oklahoma Counties](#)

---

## Enterprise Excellence Group

John Carnuccio, Southwest Electric Company  
405-736-8632      [Statewide](#)

---

## Grand Lake Manufacturers' Council, Inc.

David Mitchell, Cinch Connectors  
918-256-5581      [Northeastern Oklahoma](#)

---

## Greater Muskogee Manufacturers Alliance

Hubie Lontz, O-I, Inc.  
918-684-4502      [Muskogee Area](#)

---

## Green Country Manufacturers' Council

Tom Perrine, Siemens Applied Automation  
918-662-7110      [Nowata, Eastern Osage,  
and Washington County Areas](#)

---

## Manufacturers for Progress

Randy Sanders, Chaffin Manufacturing, Inc.  
405-379-3343      [Hughes, Lincoln, Okfuskee,  
Pottawatomie, and Seminole Counties](#)

---

## Mid-America Business & Industry Council

Allie Burgin, Dem, LLC  
405-740-5131      [South Central Oklahoma](#)

---

## Oklahoma Sign Association

Gene Russell, Russell Management Resources  
918-272-2192      [Statewide](#)

---

## Sapulpa Manufacturers' Council

Cindy Wahl, Wahlco Fabricators  
918-512-6616      [Creek and Tulsa Counties](#)

---

## Southern Oklahoma Business & Industry Council

Stephen Hadwin, IMTEC Corporation  
580-223-4456      [Carter, Love, and Murray Counties](#)

---

## Southwest Oklahoma Manufacturers Association

Dexter Stockstill, Fletcher Gypsum  
580-549-7126      [Southwestern Oklahoma](#)

---

## Tulsa Area Manufacturers Association

Franklin Herndon, Ideal Specialty Company  
918-834-1657      [Tulsa Area](#)

---

## Western Oklahoma Manufacturers' Association

Doug Schones, Dyna Turn of Oklahoma  
580-243-1291      [Western Oklahoma](#)

---

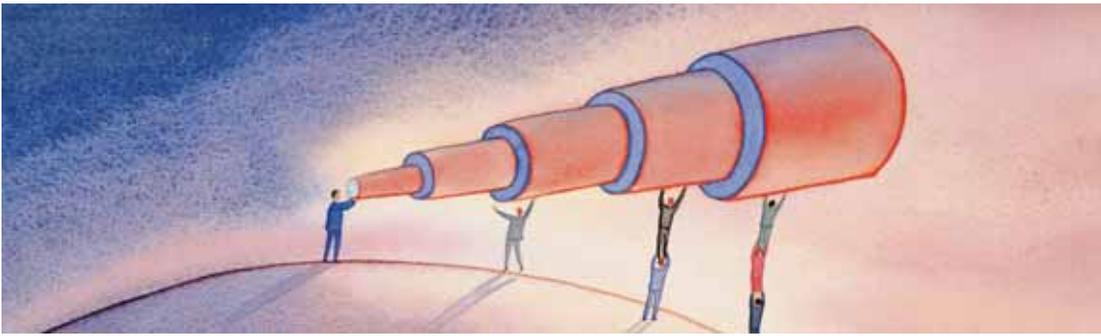
## Free assistance available to manufacturers planning to add jobs

Reports of new participants in the state's Quality Jobs incentive program have generated some confusion, with consultants offering to help companies complete the Quality Jobs application process for a fee. But the Oklahoma Department of Commerce, through its partnership with the Oklahoma Manufacturing Alliance, offers all the free assistance you need to apply for the Quality Jobs incentive program.

Basically, the nationally recognized Quality Jobs incentive

program gives qualifying Oklahoma firms money for expanding and creating new jobs. The Oklahoma Manufacturing Alliance provides interested companies free one-on-one consultations and works with companies through every step of the application process.

For more information on Quality Jobs program or other business incentives, contact your local MEA (see opposite page) or phone 918-592-0722.



# Leveraging a Legacy:

## Successful transitions in family-owned businesses

Many people are surprised to discover that family-owned enterprises make up 95 percent of all businesses in the US.

Most would be shocked to learn less than 40 percent survive a transition to the second generation.

Why do so many families struggle to leverage the entrepreneurial spirit so evident in a first generation business? The three most common causes are a lack of thoughtful planning, uninformed decision-making, and mismanaged communication within the family.

First, few family-owned businesses realize the importance of a family business transition plan, compared to strategic plans, marketing plans, and financial plans, which are considered essential for their business. Yet the family business needs a well thought out “road map” for negotiating the problems that are inherent in the naturally evolving family unit. A family transition plan should include:

- ▲ A family vision and statement of commitment.
- ▲ A list of business values and family values.
- ▲ Policy and protocol concerning governance—including the role of the board and the family.
- ▲ A family mission.

One of the big advantages of developing a transition plan is that merely having the discussion can help avoid some of the most common problems associated with a transition phase, including confusion over the role of the retiring family members, disagreements about how the company will be managed, and conflicting roles between new generation management and previous generation management.

However, it is rare for families to come together and discuss these issues. Most families believe that, as long as the business is successful, somehow these problems will take care of themselves. The reality is that the business may well fail to be successful as long as these issues remain unresolved.

Secondly, a family needs to ensure that decisions made—particularly regarding the development of estate plans, trusts, distributions, reinvestment, etc.—are based on sound legal and financial advice. Not all

lawyers understand the intricacies of estate planning in the context of the family business. Not all accountants understand the implications and benefits of the variety of legal options, such as G-DOT or GRAT trusts. Be cautious when purchasing services and avoid those firms that seem more intent on pushing a particular “line” of products. Instead, look for a firm that acts as a consultant—one that really understands your family’s needs and offers a range of solutions for you and your family to consider.

Finally, develop both the skills and the common sense practices that enable honest, constructive communication to take place within the family. Two of the most common communication problems are:

1. Failure to recognize that early family patterns of communication will be carried into the business setting—consciously or not. This may manifest itself in a range of inappropriate behaviors that stem from early life experiences such as a deep-seated sense of competition between siblings.
2. Also common is the failure to communicate honestly out of fear of creating conflict in the family. If a weak employee is a younger brother or a sister-in-law, we will often fail to respond appropriately.

Problems like these can be avoided if a family company has a set of agreed practices that are understood and utilized by all employees, whether they are family or not.

Family businesses have the added benefit and challenge of a rich history of relationships and in-depth knowledge. Managed well, a family owned business can be a source of pride, income, inspiration and healthy interdependence—a true legacy for generations to come.

*Lisè Stewart is the Managing Partner of Galliard Group, a Boise-based consulting firm specializing in the issues facing family-owned and closely-held businesses. For more information on succession planning, phone the Oklahoma Manufacturing Alliance at 918-592-0722.*

# Manufacturing Extension Agents

The Oklahoma Manufacturing Alliance provides leadership and local assistance to manufacturers to help them become progressively more successful in their marketplace. Through a network of extension agents and applications engineers, we provides real, hands-on resources for improving productivity, increasing sales, and reducing costs.



## Representing counties as indicated

*Alfalfa, Beaver, Cimarron, Ellis, Garfield, Grant, Harper, Kay, Major, Noble, Texas, Western Osage, Woods, and Woodward Counties*

**Johnny Thornburgh** 580-716-3747 johnny.thornburgh@okalliance.com

*Eastern Osage, Nowata, Rogers, and Washington Counties*

**Bill Shortridge** 918-261-5182 bill.shortridge@okalliance.com

*Craig, Delaware, Mayes, and Ottawa Counties*

**Marsha Cole** 918-257-4033 marsha.cole@okalliance.com

*Adair, Cherokee, McIntosh, Muskogee, Sequoyah, and Wagoner Counties*

**Connie Cunningham** 918-348-7942 connie.cunningham@okalliance.com

*Atoka, Choctaw, Haskell, Latimer, LeFlore, McCurtain, Pittsburg, and Pushmataha Counties*

**Chuck Prucha** 405-833-1584 chuck.prucha@okalliance.com

*Bryan, Carter, Johnston, Love, and Marshall Counties*

**Kay Watson** 580-504-7537 kay.watson@okalliance.com

*Caddo, Comanche, Cotton, Greer, Harmon, Jackson, Jefferson, Stephens and Tillman Counties and the cities of Gotebo, Mt. View, and Snyder*

**Bill Cunningham** 580-704-9009 bill.cunningham@okalliance.com

*Beckham, Custer, Dewey, Roger Mills, Washita, and Western Kiowa Counties*

**Paul Walenciak** 580-774-7071 paul.walenciak@okalliance.com

*Blaine, Canadian, Grady, and Kingfisher Counties*

**Mike Raymond** 405-422-1284 mike.raymond@okalliance.com

*Oklahoma County*

**Bob Carter** and the cities of Moore and Norman in Cleveland County 405-682-7543 bob.carter@okalliance.com

**Kevin Barber** 405-717-4133 kevin.barber@okalliance.com

**Bob Smith** 405-605-4411 bob.smith@okalliance.com

**Jannetta Clark** 405-945-3396 jannetta.clark@okalliance.com

*Creek, Logan, Payne and Pawnee Counties*

**Joe Genet** 405-269-6463 joe.genet@okalliance.com

*Okmulgee and Tulsa Counties*

**David Wheeler** 918-510-1632 david.wheeler@okalliance.com

**Bart Pickens** 918-671-0646 bart.pickens@okalliance.com

**Curtis Evans** 918-449-6559 curtis.evans@okalliance.com

**Christine Allison** 918-595-8445 christine.allison@okalliance.com

*Hughes, Lincoln, Okfuskee, Pottawatomie, and Seminole Counties*

**Clarence Prevost** 405-273-7493, ext. 255 clarence.prevost@okalliance.com

*Coal, Garvin, McClain, Murray, and Pontotoc Counties and the cities of Noble and Little Axe in Cleveland County*

**Dan Asklund** In Ada: 580-310-2227 dan.asklund@okalliance.com

In Wayne: 405-449-3394, ext. 314

## Applications Engineers

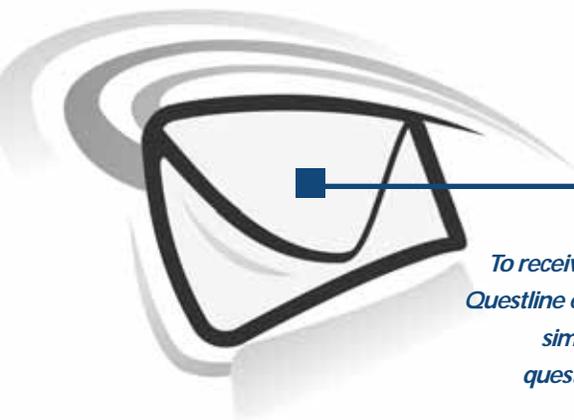
**Doug Enns** 405-744-3740 enns@okstate.edu

**Win Adams** 918-341-2736 winone@okstate.edu

**Clay Buford** 580-237-0500 bufordh@okstate.edu

**Shea Pilgreen** 580-924-5094 shea.pilgreen@okstate.edu

**Don Lake** 580-774-7163 don.lake@okstate.edu



To receive our twice-monthly Questline electronic newsletter, simply send a request to [questline@okalliance.com](mailto:questline@okalliance.com)



## Electronic newsletter offers timely information, technical advice

A variety of resources—straight from the desktop—are available to Oklahoma manufacturers through the Questline electronic newsletter. The service is offered free by the Oklahoma Manufacturing Alliance. The twice-monthly electronic newsletter is a valuable source for technical advice and timely information regarding the industry.

Each issue contains at least four relevant stories to help you plan, manage, and grow your business. An archive of past newsletters is searchable by keyword, allowing readers to access news and reports in numerous areas like government regulations and process improvement. The newsletter's e-library feature is organized by category and

lets companies find data on energy processes, materials, operations, human resources, and facility management. The newsletter is linked to a benchmarking tool, allowing users to find the latest data on heating, cooling, lighting, and ventilation for a particular industry segment. The "Ask An Expert" component is a one-on-one link to researchers, development experts, and engineers. The experts are available to answer any industry-related question—from how to reduce overhead costs in your plant to finding workforce development resources. For more information or to sign up for this twice-monthly electronic newsletter, e-mail a request to [questline@okalliance.com](mailto:questline@okalliance.com).



Information on the Oklahoma Manufacturing Alliance is available 24 hours a day, seven days a week. Just log onto...

[www.okalliance.com](http://www.okalliance.com)



# Sponsors

The Oklahoma Manufacturing Alliance coordinates with local sponsors to provide Manufacturing Extension Agents who work under Manufacturing Alliance's direction to provide assistance and support to the state's nearly 4,000 manufacturers. MEAs work at the grassroots level to help manufacturers increase their competitiveness and adopt new technologies

## CareerTech

Caddo-Kiowa Technology Center, Ft. Cobb  
Canadian Valley Technology Center, El Reno  
Francis Tuttle Technology Center, Oklahoma City  
Gordon Cooper Technology Center, Shawnee  
Great Plains Technology Center, Lawton  
Indian Capital Technology Center, Muskogee  
Kiamichi Technology Center, Wilburton  
Meridian Technology Center, Stillwater  
Metro Technology Centers, Oklahoma City  
Mid-America Technology Center, Wayne  
Moore Norman Technology Center, Norman  
Northeast Technology Centers, Afton  
Pioneer Technology Center, Ponca City  
Pontotoc Technology Center, Ada  
Red River Technology Center, Duncan  
Southwest Technology Center, Altus  
Tri County Technology Center, Bartlesville  
Tulsa Tech

## Higher Education

Murray State College, Tishomingo  
Northeastern State University, Broken Arrow  
Northeastern State University, Tahlequah  
Northern Oklahoma College, Tonkawa  
Oklahoma City Community College  
Oklahoma State University,  
New Product Development Center  
Oklahoma State University-OKC  
Oklahoma State University, Stillwater  
Redlands Community College, El Reno  
Rogers State University, Claremore  
Southwestern Oklahoma State University, Weatherford  
Tulsa Community College

## Government

National Institute of Standards and Technology,  
Gaithersburg, MD  
Oklahoma Center for the Advancement  
of Science and Technology  
Oklahoma Department of Career & Technology Education  
Oklahoma Department of Commerce  
Oklahoma State Regents for Higher Education

## Corporate

Arvest Bank  
Bank of Oklahoma  
Blue Cross and Blue Shield of Oklahoma  
Oklahoma Gas & Electric  
Oklahoma Natural Gas Company  
Public Service Company of Oklahoma  
UMB Bank

## Economic Development

The Chickasaw Nation  
Grand Lake Manufacturer's Council, Afton  
Muskogee Development  
Muskogee Port Authority  
South OKC Chamber of Commerce  
The State Chamber

## Oklahoma Center for the Advancement of Science and Technology

The Oklahoma Center for the Advancement of Science and Technology (OCAST) provides state funds to match federal funds in support of the Oklahoma Manufacturing Alliance.

The Oklahoma Manufacturing Alliance fulfills a distinctive role in OCAST's Mission, facilitating the transfer of technology into real-world commercialization.

OCAST works to boost Oklahoma's success in today's economy. It is a small, high-impact agency governed by a board of directors with members from the private and public sectors. OCAST works in partnership with the private sector, higher education, career technology education, and the Oklahoma Department of Commerce.

OCAST-funded projects, which range from research and development to commercialization, are reviewed by panels of science and business experts and ranked according to scientific merit and commercial potential. In this way, OCAST ensures state funds are wisely invested where they will have the most impact.

In addition, OCAST is uniquely suited to serve as the "bridge" between the public and private sectors. OCAST provides key financial, technical, and information resources to private sector and university innovators at critical points along the technology pipeline.

# Board of Directors

## Central Office

**Roy Peters** 918-592-0726  
*President*  
roy.peters@okalliance.com

**John Lingenfelter** 918-592-0727  
*Vice President*  
john.lingenfelter@okalliance.com

**Jerry Isaacs** 918-592-0728  
*Director of Finance*  
jerry.isaacs@okalliance.com

**Pat Desormeau** 918-592-0725  
*Director of Administration*  
pat.desormeau@okalliance.com

**Joe Epperley** 918-592-0736  
*Director of Communications*  
joe.epperley@okalliance.com

**Maureen Quinn** 918-592-0722  
*Executive Assistant*  
maureen.quinn@okalliance.com

**Kim Norrell** 918-592-0762  
*Finance Assistant*  
kim.norrell@okalliance.com

**John Bernardine** 918-592-0744  
*Director of Craftsmanship Program*  
john.bernardine@okalliance.com



**OKLAHOMA  
MANUFACTURING  
ALLIANCE**

525 S. Main, Suite 210  
Tulsa, Oklahoma 74103

Fax: 918-592-1417

www.okalliance.com

*The Alliance is a non-profit  
partnership of federal, state,  
local, and private interests.*

### *Chairman of the Board*

**Evan Hudson**  
Tulsa Centerless Bar Processing  
Tulsa

### *Vice-Chairman*

**Dexter Stockstill**  
Fletcher Gypsum  
Fletcher

### *Treasurer*

**Janet Smith**  
Public Service Company  
of Oklahoma  
Tulsa

### *Class S Director*

**James Love**  
Rosewood Industries  
Stigler

**Billy McCullers**  
Freightliner Specialty Vehicles  
Clinton

**Chris Tietz**  
Kirtz Shutters  
Stillwater

### *Class L Directors*

**Richard Clements**  
OG&E  
Oklahoma City

**Martie Oyler**  
ONG  
Enid

**Tim Sheehan**  
Bank of Oklahoma  
Tulsa

### *Associate Directors*

**Martha Gregory**  
Research Wizard  
Tulsa

**Rex Smitherman**  
i2E, Inc.  
Oklahoma City

### *Public Sector*

**Phil Berkenbile**  
Oklahoma Department of Career  
and Technology Education

**Michael Carolina**  
Oklahoma Center for the  
Advancement of Science  
and Technology

**Vikki Dearing**  
Oklahoma Department  
of Commerce

**Connie Lake**  
Oklahoma State Regents for  
Higher Education

### *Secretary of the Board*

**Terry Doverspike**  
Pray, Walker, Jackman,  
Williamson & Marlar  
Tulsa

### *Federal Liaison*

**Gary Thompson**  
NIST/MEP  
Gaithersburg, MD



*Photo: Cookshack in Ponca City*

## Working and living in communities across Oklahoma. Supporting the manufacturers that support our economic growth.

*Through our statewide network of manufacturing extension agents and applications engineers, we provide a full range of services to companies. The Oklahoma Manufacturing Alliance is the go-to source for assessing needs and finding solutions available through public and private resources.*

*We offer free technical assistance and business advice, helping manufacturers become progressively more successful. Services focus on improving the bottom line, while growing the entire company.*

*We live and work in communities across Oklahoma, taking our support to your workplace on your schedule.*

Company-Wide Assessments

---

Lean Manufacturing

---

Engineering and Technical Assistance

---

Problem-Solving Resources

---

Business-to-Business Collaborations

---

New Products and Markets

---

State Incentive Applications

---

Eureka! Growth Programs

---



**OKLAHOMA  
MANUFACTURING  
ALLIANCE**

918-592-0722  
[www.okalliance.com](http://www.okalliance.com)

MARK  
YOUR  
CALENDARS!



Tuesday, September 22  
Doubletree Warren Place in Tulsa

Sponsored by the Oklahoma Department of Commerce  
and presented by the Oklahoma Manufacturing Alliance



Oklahoma Alliance for Manufacturing Excellence  
525 S. Main, Suite 210  
Tulsa, Oklahoma 74103-4503  
(918) 592-0722 / Fax: (918) 592-1417  
[www.okalliance.com](http://www.okalliance.com)

Non Profit  
U.S. Postage  
PAID  
Tulsa, OK  
Permit No. 1536