

GeoSpring Profiles

Every expert featured here has been involved in making GeoSpring a reality. All are available for interviews. To coordinate those, please contact Julie Wood at julie_wood@ge.com or 502.452.5914.



TOM ZIMMER

Product Manager, Water Heaters

"I've been with GE for 23 years. Earlier in my career, I was part of the team that found ways to save GE money through outsourcing," says Tom Zimmer. Tom is now part of the shift toward bringing jobs back to the U.S. through GE's \$1 billion investment in American manufacturing.

Tom conducted the initial scope study to see if it would be feasible for GE to move GeoSpring production from China to the U.S. "It's really exciting to see GE bring manufacturing back to Louisville during my career here," says Tom.

As GeoSpring's product manager, Tom has encouraged his team to get creative through fewer constraints on design and Lean's continuous improvement process. "The energy-saving benefit is a huge 'wow' factor for the consumer. We designed the GeoSpring to be the best in the industry for a 50-gallon hybrid water heater," says Tom.



KEN STONE AME Generalist

Ken Stone, who worked as a corporate engineer for a company that made exhausts for major automakers, was laid off two years ago due to the downtrend in industry.

"After 35 years, I wanted to get out of automotive," says Ken. "I wanted more stability and GE provides that." Ken believes his experience in tube forming and new product launches landed him the position in GE's GeoSpring launch team.

Ken was responsible for designing the way the tubes coil around the GeoSpring's tank. "It started out taking four machines to wind the tubes, but with my idea, it's down to two," says Ken.



PATTI BEYL

Kaizen Process Operator (KPO)

Hourly employee Patti Beyl believes the Lean process used to create and produce the GeoSpring is the future of GE and Louisville's Appliance Park, the new home of GeoSpring assembly. Patti has worked at GE for 24 years.

When GE adopted the Lean process, Patti was one of the first employees to jump at the opportunity to work as a KPO, a position that helps find efficiencies through the Lean process. "I know someone putting forethought into ergonomics and safety would have made a difference in my life 20 years ago when I was a new hire on the factory line," says Patti.

Patti started her career as a KPO three years ago on GE's dishwasher line. She switched teams 18 months ago and has worked solely on improving job stations and processes for GeoSpring.

Patti has helped develop the material flow for the GeoSpring assembly line by actually performing the steps herself. "I have to physically put my hands on it and drive the screws," says Patti. With her insight, she helped reduce the time for assembly of one GeoSpring part from 107 seconds to 45 seconds.





SCOTT STOUT Kaizen Process Operator (KPO)

Scott Stout has worked on various lines during his 17-year tenure at GE. He worked on the dishwasher and refrigeration lines before becoming a Kaizen Process Operator for GeoSpring. "This is my favorite job so far," says Scott. "This is the first time I've watched GE put a line in since I've been here."

In this position, Scott appreciates that the people in charge of designing the line heed his advice. "They actually listen to me," says Scott. The designer, who uses a computer to determine how the assembly line will operate, now runs his or her ideas by Scott.

"I do the job the designer's way, and then I do it my way," says Scott. "I tweak the process to find the little things that make the operator's job so much easier."



JOHN WEBSTER Maintenance Moonshiner

The ringtone on John Webster's cell phone is the Mission Impossible theme song, but it could just as easily be the theme from MacGyver. John is one of the first maintenance moonshiners in Appliance Park in Louisville.

He previously worked as an electrician for companies such as Pepsi and Eli Lilly, and in the automotive industry. He joined GE in November 2009 and started as a moonshiner two months later. Moonshiners are a critical part of the Lean team. They create quarter-scale models and mock-ups of products and production equipment out of cardboard, foam and other everyday materials. Using the 3D models helps the team find cheaper, easier and faster ways to do things, and offers a chance to fine-tune ideas.

"If a machine flops and falls on its face, we've lost a lot of money. If we can save money using models, then the consumer saves money on the final product," says John. "It feels great to be a part of it."



ROD CUNDIFF Maintenance Moonshiner

Rod Cundiff used to work in the automotive industry making brakes. He joined GE in October 2009 and within a few months he joined the Lean team as a maintenance moonshiner.

Rod and other moonshiners create quarter-scale models and mock-ups of products and production equipment out of cardboard, foam and other everyday materials. Using the 3D models helps the team find cheaper, easier and faster ways to do things, and offers a chance to fine-tune ideas. Rod and the rest of the GeoSpring Lean team came up with a range of ideas to reduce costs and make the water heater more efficient.

Appliance Park started with two moonshiners; now more than a dozen are working on various projects.

"This department didn't exist before," says Rod. "Now each building with a moonshine team wants more moonshiners. Our work allows the engineers to concentrate on what they do best and we help them by doing what we do best."





CHRIS RISSLER

Water Products Technology, Lead Design Engineer

Chris Rissler joined GE on the GeoSpring Lean team in May 2011. Chris has a degree in industrial engineering technology and previously worked at Hitachi Cable in New Albany, Ind., and also worked in automotive supply.

At GE, he works on structural and mechanical engineering issues.

Chris wasn't familiar with Lean concepts and experienced some culture shock when he joined the Lean team. He was used to work environments where work functions were physically separate.

"Here everyone on the team is in the same room," he says. "There's a lot more teamwork here." He notes that communication is more open and cooperation is easier as a result of co-locating.

"I'm excited about everything here. It's an exciting environment to be in, and it's great to be on the edge of something new," Chris says. "Being a part of this has given me hope for the future and even for the economy."



ALEX SIGMAN Materials Manager

Alexandria ("Alex") Sigman joined the GeoSpring Lean team in August 2011. Her role is to get materials from suppliers into the facilities and get finished products out the door.

Alex studied aerospace engineering at Indiana State University, and previously worked at other major manufacturers. She was attracted to GE because of the company's reputation.

"When I think of GE, I think of one word-innovation," she said.

Alex enjoys the team approach. "We have different backgrounds, cultures, hierarchy, and are hourly and salaried. We make collaborative decisions to make a great unit. Not many places allow you to be part of a project from concept to completion."

She believes that by using Lean, GE has developed a redesigned water heater that will allow more people to afford the heat pump technology.

"It's exciting that GE is bringing products back to America. We want to come back to the glory days; we all want that. We believe in GE, in the product, and in Louisville."



GREG THOMAS Sealed Systems Leader

Greg Thomas joined GE in 2002 and started on the hybrid electric water heater team in late 2009. The team was created to transfer GeoSpring production from China using the product's original design.

"When we got to the Lean journey, we realized that the way the water heater was designed wasn't very cost-effective," he says. Within about a month, the team had outlined what they wanted in a redesign and had created a plan to reduce costs.

"We had a good footing and an idea of what the product would look like," Greg says. "Once the decision was made, we went after it gung-ho. We collectively made the decisions that were needed to move it forward. We quickly honed in on what we needed to do."

There was plenty for the team to do and they used the Lean "seven ways" technique exhaustively. The Lean approach facilitated the speed of the redesign and improved competitiveness of the final product.

"I really truly believe in this product. The beauty of it is that it makes financial sense," says Greg.





RICHARD M. CALVARUSO Lean Leader

Richard Calvaruso has been at GE for more than 20 years – his entire career in manufacturing. He is the lead teacher and coach for Lean thinking within GE Appliances.

"The old process involved lots of handoffs between functions. The new approach is all about one team," he says. "The idea was to have all of the people together in one room so they can collaborate and develop the water heater product and processes."

"Lean thinking can help us be competitive," Richard says. "Lean is a set of concepts, principles and tools used to create and deliver the most value from the customer's perspective while consuming the fewest resources."

The goal of the Lean team has been to develop a culture of problem solvers who see problems as an opportunity to improve a product or process. Richard is clearly proud of their accomplishments.



JENNIFER BOLTON Lean Leader, Hybrid Water Heater

Jennifer Bolton has a degree in electrical engineering and joined GE 12 years ago. She held several positions, including working in the GE Answer Center, designing refrigerator controls, and working as a Black Belt in a Lean Six Sigma group focused on washer quality.

"I enjoyed the fast pace of manufacturing and took a role as a business team leader for washer production and then, lastly, my current role," she says.

Jennifer assumed her role as Lean Six Sigma Black Belt and Lean Leader on the hybrid water heater project in January 2010.

"Lean focuses on operators and allows them to solve problems," she says. "The Lean teams operate at a very fast pace and sometimes it can be stressful. Over the past two years, I have found myself as the sounding board on several occasions. The work is demanding, but very rewarding, and my team is like a second family to me."



JERRY CARNEY President, IUE-CWA Local 83761

According to Jerry Carney, president of IUE-CWA Local 83761, Appliance Park's involvement with Lean manufacturing started when Tommy Spires was the local president in 2008. Jerry notes that from 2008 to the present, 50 jobs associated with Lean have been added to the workforce.

"Taking waste out doesn't always mean taking out headcount," he says. According to the union's agreement with Appliance Park, there's no headcount loss from Lean. "If Lean takes a job out on one line, it creates another one somewhere else. The headcount stays the same and no one loses their job."

In May 2009, the local passed a competitive wage agreement by an 80-percent affirmative vote. Less than one week later, GE decided to move manufacturing to the U.S.

"We need to be embracing Lean, looking at it as job production, not job loss," Jerry says. "We also need to be looking at continuous improvement. In order for our union members to make more money, we have to be competitive."



JASON CONRAD Human Resources Manager, Appliance Park Manufacturing

Jason Conrad, human resources manager at Appliance Park, may become much busier over the next few years. GeoSpring has brought at least 70 new hourly jobs to Appliance Park, as well as new salaried jobs. Ultimately, Appliance Park could have hundreds of new hires over the next few years as workers retire and as production grows. Lean has made it possible for GE to bring GeoSpring production back to the U.S.

"We need to continue to work together to stay competitive," he says. "We've put the hourly workers first and need to be sure we're supporting them. People have to see Lean in action to believe it."

He notes that the operator is now the focus of production. Team leaders support the operators and try to resolve problems or escalate them to upper management for resolution.

"The whole world is watching us to see if we can pull this off or not-if we can bring product back to the U.S.," says Jason.