The Continuous Improvement Issue

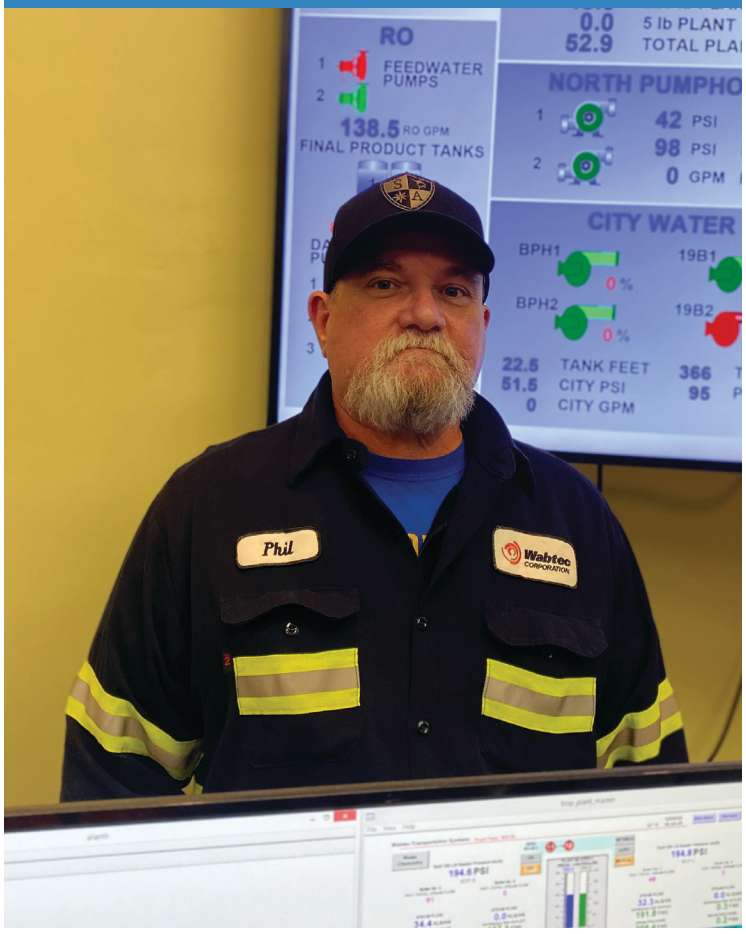
January 2023

# SAME TRACK

THE CULTURAL NEWSLETTER FOR WABTEC EMPLOYEES

## Frontline Spotlight

For Phil Lindsley, Powerhouse Technician and one of four employees on the continuous improvement team at Erie, the process is about growing every day.




## Leader's Letter

Justin Downs discusses how we can push ourselves to raise the bar as a team and see growth in our careers with consistent collaborative effort.

## Competitive Edge

Damon Frenn discusses how a culture of continuous improvement helped greatly reduce utility costs in Erie.

## Managers' Roundtable

Managers around the globe share how they've grown in their careers since starting with Wabtec.

## Employee Excellence

Employees on the shop floor in Erie implemented two ergonomic changes that improved safety and lowered costs for everyday tasks.

Wabtec CORPORATION

**Leader's Letter**

# Cultivating Continuous Improvement

## Sustained effort to get better

Justin Downs discusses how we can push ourselves to raise the bar as a team and see growth in our careers with consistent collaborative effort.

Team,

The start of a new year is always a great time to review our priorities and goals for professional development. It's an opportunity to think about where we might be able to make improvements, such as on safety or product quality. Even slight changes can lead to major enhancements down the road.

In this edition of *Same Track*, the focus is on continuous improvement — which is often reflected by greater productivity and efficiency in our operations. Thanks to your efforts, progress has been made at our locomotive plants regarding performance and on their competitiveness. Having the flexibility to adapt to changes in today's market environment remains key in being able to capture new business and driving long-term growth.

Continuous improvement is also critical when it comes to how teams respond to challenges as well as skill set development. Whether it's building a FLXdrive locomotive or producing a part through additive manufacturing, Wabtec's success is directly attributable to fostering a culture that encourages creative thinking and a determination to solve problems. It requires a sustained effort from all of us each and every day.

There are examples in this edition of personal empowerment and effective collaboration. I hope they encourage you and highlight what can be attained through learning, sharing, and implementing.

I am optimistic about the year ahead. By maintaining a collaborative spirit and remaining focused on continuous improvement, we can achieve our goals and deliver positive results.

Thank you for all the work you do,

Justin Downs

**TAKE THE SURVEY**

We want to hear your thoughts on the *Same Track* newsletter, so we've created a survey for you to speak your mind. Follow the QR code to share your feedback.

Competitive Edge

# A Culture of Continuous Improvement

## Getting our hands dirty for cleaner operations

Damon Frenn discusses how a culture of continuous improvement helped greatly reduce utility costs in Erie.


It takes consistent attention and teamwork to truly deliver on continuous improvement. Here, Damon Frenn, Campus Services Plant Manager, shares how he and his team have used Lean principles to improve sustainability and safety across facilities in Erie.

### Taking on the challenge

For Damon, coming to the facilities team in Erie meant there would be obstacles to overcome. “Sustainability is a big focus for Wabtec. As a company, we’ve got a lot of work to do to reach our target of 30% reduction of emissions by 2030,” he says. “With Erie being the largest site and having that much history, there’s a large gap between where we are and where we want to be in terms of sustainability.”

Damon’s team knew that these important changes would require consistent effort and collaboration over time. “Ever since I joined the team, we’ve been trying to lead with driving continuous improvement, and the whole team of 130 people, both hourly and salaried, has been really great,” he says. “The way the team tries to drive improvement is with Lean principles.”

> **We call it going to the place of action and getting your hands dirty. You have to go see and understand what’s truly happening to make changes.**

### A problem-solving culture

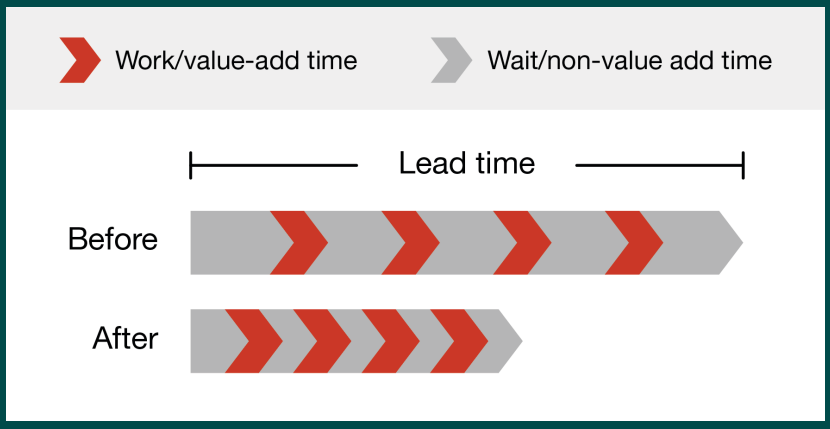
Damon knows that making continuous improvements takes investigation into how things are currently working. “We call it going to the place of action and getting your hands dirty. You have to go see and understand what’s truly happening to make changes,” he says. “You can’t just do it in your office. It’s important to go and ask questions of the people in that area and learn from them.”

When you create a problem-solving culture and focus on continuous improvement with alignment across teams, new opportunities open up, and that is how we deliver results. “We have a team that started as three people, now it’s almost 20, and we work with cross-functional teams in different areas,” Damon says. When his team goes out to these areas, many employees on the front line have brought to their attention inefficiencies that went on to bring savings and better utilization of our resources.

For Damon, working across teams makes it possible for the whole organization to adopt a continuous improvement mindset. “When we think about reducing inefficiencies and driving continuous improvement, we focus on culture first,” he says. “We make sure that we’re aligned across different teams and sharing best practices, and that we’re making problems visible to everyone. That’s how we get results.”

### Improvement in action

Some of the challenges Damon’s team has tackled may seem simple, but they have big impacts. “One of the biggest projects we’ve worked on is improving our natural

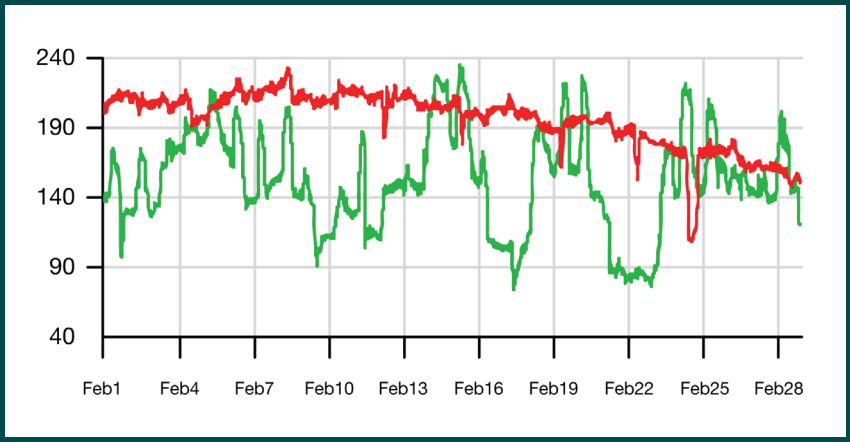



Damon and his team look to eliminate inefficiencies in the value stream for continuous improvement. Their team’s goal is to reduce the gray bars, and connect the value-add parts of the process, the red bars, closer together. By focusing on the gray bars, it helps everyone in a nonthreatening way get what their customer needs when they need it; safer, faster, and with better quality.

gas usage. In the past, we would wait for it to get really cold, then we'd turn the boilers on and leave them on until April before shutting them off," he says. "We'd just open and close the doors and windows to regulate temperature, which is not an efficient process for 4 million square feet of our manufacturing spaces."

The team asked the question: Is this the best way to heat the buildings? "I don't think anybody leaves their furnace blaring at home 24/7 when they leave for work or vacation, but that's essentially what we used to do here," Damon says. "We placed temperature sensors around the 20 buildings here in Erie, and they tell us when to open or close the valves. Just making this modification has led to a 30% reduction in our natural gas usage and saved us over $500,000 per year."

Over the course of the year, as Damon's team improved resource usage, the savings they were driving were noticeable even beyond Wabtec's walls. "With the ways that we were reducing waste, we started hearing from all three utility companies that our meters must be broken. It's not the meters, it's the improvements we're making," he says.




This graph shows the monthly natural gas usage from before the sensors were installed (red) and after Damon's team started using sensors to adjust furnaces (green). The old usage was very steady and consistently high, but the new usage varies as valves open and close to maintain a target temperature zone.

> **With the ways that we were reducing waste, we started hearing from all three utility companies that our meters must be broken. It's not the meters, it's the improvements we're making.**

This is good for the company, and it's just as good for employees. "Better resource usage also makes us more competitive. It improves our fully burdened labor rate and how we measure our costs, helping the company, employees, and the local community," he says. Metrics like this can influence where assignments are handed out across the company.

## Keeping up momentum

Damon knows there are opportunities for people around the company to drive continuous improvement in their work. "Oftentimes, we just try to fix problems, but we may not make a significant impact," he says. "When we think about continuous improvements, it's important to understand the landscape and attack the waste by prioritizing and executing. Small wins add up, 1% better every day. Sometimes, you find a big one that can reduce significant waste and solve a lot of problems all at once."

Ultimately, in Damon's eyes, it all comes back to the mindset. "We have to be humble enough to learn how we can all get better to make an impact for our teams, our customers, our communities, and Wabtec."

Managers' Roundtable

# Full Steam Ahead

## Career progress within Wabtec

Managers around the globe share how they've grown in their careers since starting with Wabtec.

### How have you seen continuous improvement in your career with Wabtec?

**Sarah:** I started here as an intern on the Link Challenge in 2018, and I was an intern for two years. After that, I started as an Analyst on the Link team, and now I'm a Specialist on the Link team. It's been a lot of continuous improvement.

**Gabe:** Nine years ago, I came to Wabtec as a welder. Within the first year, I was given the opportunity to join the Quality team. Then I was able to become a coach, then joined new product introduction in a Senior Manufacturing Engineer role. You see continuous improvements at Wabtec through different roles and the challenges within them. I've been able to improve as an individual and in my career with those new opportunities.

**Nick:** I've been here 17-and-a-half years, starting as a painter. I'm currently in heavy fabrication, which is where I've spent half my career, and a year and a half ago I moved from the floor to a supervisor position. The learning curve was a challenge, but like anything, you make some mistakes and then you get rolling. My direct supervisor has been really helpful through the transition, which has been an absolute blessing. I've really enjoyed the growth, and I'm enjoying what's in front of me right now.

**Vimlendra:** I started with Wabtec five-and-a-half years ago when this was a greenfield project, so I got to set up the new plant. Then I took on a broader role, which was manufacturing engineering plus the configuration control role. And most recently I took over in a site quality leadership role, which is a very exciting and challenging opportunity that I'm honored to have. I've gotten to continuously improve in terms of my skill set and career.

> **Opportunities come through challenges. A big part of manufacturing is to mitigate problems and learn to resolve them.** — Gabe

### How can Wabtec employees move forward in their careers?

**Sarah:** The secret to success is to work on behavior and to do so with continuous improvement. Learn to be an executor. Plan more, think more, question more, and then execute. Wabtec is always giving us new projects to get us out of our comfort zone, and it's our job to embrace them and accept them. That helps us grow really quickly.

**Gabe:** Again, I think opportunities come through challenges. A big part of manufacturing is to mitigate problems and learn to resolve them. Those are a chance to show our current skill and abilities, and to build on our weaknesses. There are also opportunities with education that Wabtec will support you through.

**Nick:** There are opportunities for schooling with Wabtec, which is really beneficial. For me, I got to work on my green belt in the safety program. You never have to go stale.

**Vimlendra:** Wabtec is a growing company, and we have all kinds of

**Sarah Aguiar**
Lean Manufacturing Specialist
Contagem, Brazil

**Gabe Stevenson**
Senior Advanced Manufacturing Engineer Manager
Fort Worth, Texas

**Nick Vella**
Production Technical Advisor
Erie, Pennsylvania

**Vimlendra Yadav**
Operations and Manufacturing Engineering Leader
Marhowrah, India

activities and work, from engineering to design, manufacturing solutions, supply, and quality. There are ample opportunities for each and every employee to grow. It's on us to put the effort forward and see how we want to grow.

### Q How can employees think about continuous improvement in their own abilities?

**Sarah:** Just go for it. Every process can be improved. Explore things and count on your team, your leader, and your managers. Have a sense of ownership about your own work. Share your ideas and be a part of change. Keep thinking forward.

**Gabe:** Look at everything as an opportunity; don't dwell on the negative. You can choose whether to look at something negatively or positively. When you look at it positively, you can build your character, skills, and abilities. It's important to show initiative. Go beyond what your responsibilities are, and do more than what's asked of you, so you can stand out.

> **Be teachable and treat people as you want to be treated. Never stop learning or listening.**
> — Nick

And when you know you have strengths, show them as much as you can.

**Nick:** You can always build new skills here. On a daily basis, there's going to be some new challenge. Be teachable and treat people as you want to be treated. Never stop learning or listening. Set the bar slightly higher than you can reach. There's always a big accomplishment around here if you want to move forward.

**Vimlendra:** There are lots of opportunities to grow with hands-on skills, and we're also working to upskill with people on the front line with their software skills so they can grow as leaders and managers. Take self-assessments and come up with a development plan based on that. Talk to your managers about new ways to grow in your own career.


Marhowrah, India

**Check out the Managers' Roundtable video on the digital version of *Same Track*.**


Contagem, Brazil

Frontline Spotlight

# Finding Better Ways

## Continuous improvement means continuous learning

For Phil Lindsley, Powerhouse Technician and one of four employees on the continuous improvement team at Erie, the process is about growing every day.

Phil Lindsley

"Continuous improvement means learning new things and growing every day," says Phil Lindsley, Powerhouse Technician in Erie. He and the other three members of their continuous improvement team have addressed issues ranging from energy leaks to water usage.

Phil's manager Terry Skarzenski, Lead Operations Manager and Campus Services Utility Manager, says the improvements on water usage have been particularly impressive. The first step was digging into the data on how and where the facility was using water.

"Once we learned where it was all going, we set a plan in motion to start eliminating or utilizing it smarter," Terry says. "We started using less and recovering more for reuse. As a result, we went from purchasing over 376 million gallons of water per year down to a bit over 209 million."

Another example of the team's ongoing success is reducing energy waste by locating leaks. "For instance, we've found places where we were losing oxygen, nitrogen, or argon. When we know where we have leaks, we can repair them." Phil says. "All the energy savings we have accomplished, and are continuing to accomplish, are crucial to the success and future of Wabtec."

> **All the energy savings we have accomplished, and are continuing to accomplish, are crucial to the success and future of Wabtec.**
> — Phil

### Change is hard

"The feedback from colleagues hasn't always been popular," according to Terry. "We field a lot of emotional complaints when we make a change. When we were experimenting with more sustainable variables for the steam heat, a lot of people were very upset that their areas were colder than they used to be."

Trial and error are part of the process, however. Terry says that Phil and the others on the continuous improvement team are "not afraid to make a decision and own the result. If they have learned something, they take it and evolve for next time."

Phil says working productively as a team is an important element for success in continuous improvement. "We have to communicate and work as team to reach a better goal."

"We talk through every idea," Terry says. "We try things out. Sometimes we win, sometimes we don't. If we learn something, we've won."

### Getting ideas from the front line

Phil says that frontline employees are important to identifying "improvements that can make us much more efficient and competitive. For instance, frontline people can help us improve by reporting leaks when they find them."

"We try to get everyone involved," Terry adds. "This summer we put together a program that incentivized frontline workers to report energy waste. For every 10 entries submitted, we would randomly draw one and give away a really nice flashlight."

"Continuous improvement involves learning from the occasional failure," Terry says. "The resilience of this team is inspiring. We're never afraid to try something. You'll never know if it works unless you try."


Terry Skarzenski

> **We try things out. Sometimes we win, sometimes we don't. If we learn something, we've won.** — Terry

Employee Excellence

# Ergonomic Improvement in Erie

## Increasing safety and lowering costs

Employees on the shop floor in Erie implemented two ergonomic changes that improved safety and lowered costs for everyday tasks.

## High side pipe installation

Bob Joyce, Peter Kuzma, and Bud Zdunski

For the high side pipe installation, the old process involved one employee resting the pipe on top of their head to work with their hands. This brought a high risk of acute injury, and was causing neck pain for Peter. To solve these problems, the team designed and built a bracket to support the pipe on one end. The savings from injury prevention were over $67,000, and with the low cost of the solution, the simple payback period was just half a day.



## O-ring installation

Dan Mentley and Bob Joyce

For this process, employees previously had to insert the O-ring into the flange with their thumbs, which caused thumb pain, had a high risk of injury, and took over two-and-a-half minutes to complete with frequent assembly errors. The team went through three phases of process improvement, learning something each step of the way, ultimately improving with a tool and a refined insertion process that eliminated the risk of injury with 70% better speed and a reduced chance of failure. The simple payback period on this low-cost, high-savings improvement was just 0.125 days.