

Patti Perspective January 2016

This year we'll be celebrating Patti Engineering's 25th Anniversary. In reflecting on the big milestone, we've been thinking a lot about the base of our success: our customers. We are so fortunate to be surrounded every day by people and organizations who are driving innovation and being assets to their communities.

In this month's Patti Perspective, we're announcing our first ever Customer of the Year Award recipient. Read on to find out who we chose and why they were chosen.

Announcing Our First Annual Customer of the Year

Manufacturing is on the rise and there are countless examples of solid, thoughtful companies that are leading the charge. Working with our customers, we have the opportunity to see this on a daily basis. There's a lot to celebrate and we appreciate the opportunity to be part of our customer's contributions to advancing manufacturing in the U.S. In support of the innovators among us, Patti Engineering is starting a new tradition to annually select and recognize one of our customers making a big impact on both our company and the progress of manufacturing in the U.S.

The FCA US LLC Transmission and Casting Division is our first annual Customer of the Year Award recipient. FCA US, formerly Chrysler Group, is a member of the Fiat Chrysler Automobiles N.V. (FCA) family of companies. Our management team voted on nominations submitted by our team



members, and chose this year's recipient based on four criteria:

Forward Thinking
Innovative Solutions
Trusted Relationships
Fair and Ethical Business Practices

"FCA US was a very compelling choice for our first Customer of the Year Award," said Sam Hoff, CEO of Patti Engineering. "They are leading the way in manufacturing innovations. We have the privilege of seeing that up-close as an integration supplier."

Our work with FCA US has been specifically with the Transmission Manufacturing Engineering Center (TMEC) organization. TMEC was formed just three years ago to drive standardization across all of the engineering processes for the FCA US Transmission and Casting

Division. TMEC has 270 engineers covering all of the advanced manufacturing programs, as well as the day to day operations support for all seven plants within its division. While still early in development, it is supporting a large volume of transmission production, as well as successful new model launches such as the eight-speed transmission and nine-speed transmission.



What we noticed from the get-go with the TMEC group is that they certainly do NOT subscribe to the old adage, "If it ain't broke, don't fix it." Rather, their approach is forward-thinking. For TMEC, it's all about the process and how it can be improved. Standardizing equipment's functionality and utilizing advanced technology to refine and error-proof processes is an ongoing effort leading to innovative solutions.

"New technology allows us to more efficiently, more effectively and more assuredly build products following our process which will meet the high standard of quality we strive for," commented Steve Burris, TMEC ME Manager for FCA US. "We look to new technology to continuously tighten control of the process."

In an effort to control cost, many customers try to delay control upgrades as long as possible to get the maximum useful life out of older control technology. Often, however, the legacy controls are obsolete, parts are not readily available and as a result, equipment downtime becomes an expensive side-effect. TMEC does not wait for this problem to occur; rather, control upgrades are strategic. Upgrades are completed for a variety of reasons:

- improve cycle times and/or improve throughput characteristics
- improve diagnostics and/or operational control characteristics, examples include:
 - More advanced barcode scanning operations where they have had difficulty
 - Error proofing operations improvements with vision systems or laser dimensioning systems
 - o improve product genealogy, which tracks products all the way through the system
 - improve the gathering of critical process metrics for continuous operational improvements

Working with FCA US on these innovative projects has always a pleasure for our team. There is a level of mutual trust, respect and open collaboration which our engineers thrive on. We appreciate the opportunity to add value to the TMEC team.

"We are honored to receive this award from Patti Engineering," says Larry Bosley, Director of Manufacturing for FCA US.

Patti Spotlight - The TMEC Team

For our spotlight, we usually highlight one of our own team members, but we are changing it up this month to spotlight our customer of the year's team! FCA US Transmission Manufacturing Engineering Center (TMEC) team members that Patti Engineering has had the pleasure of collaborating with include: Kenneth Augustine, Steve Burris, Jeremy Davis, Ron Haas, Tony Keller, Dajuan Marshall, Phil McLane, Allen McVay, Paul Norris, Barry Troxell, Seth Vega, and Wayne Waite.



Some of the TMEC team. Left to Right: Wayne Waite, Paul Norris, Steve Burris, Mike Taylor

In speaking with members of the TMEC team, you can tell the values of innovation and trust radiate throughout the culture of their organization. The steps they take to nurture this culture are deliberate and effective.

Larry Bosley, Director of Manufacturing at FCA US, attributes this team culture of innovation to their World Class Manufacturing (WCM) program. WCM was first implemented by Fiat in 2006 and introduced to Chrysler Group as part of the alliance between the two companies in June 2009. The program is a worldwide initiative for FCA and focuses on eliminating waste, increasing productivity, and improving quality and safety in a systematic and organized way. It's based on each individual understanding loss and all of the factors that contribute to loss. Through a variety of improvement tools and methods, employees are consistently looking for ways to achieve zero loss. All employees, right down to the plant floor level, are given license to solve whatever problems they have. "We are here to support them," says Bosley.

FCA US has annual innovation projects - an opportunity for engineers from all areas to stretch their wings and strive toward the cutting edge of technology. Groups of



Larry Bosley, Director of Manufacturing

engineers attend technical conferences, and perform benchmarking visits to other manufacturers to seek out the latest uses of technology. The team is encouraged to give input, and it embraces a spirit of innovation.

This culture makes FCA US a great place to work, and it's also producing results. The Transmission and Casting Division successfully launched the eight- and nine-speed transmissions over the last three years, and continues to plan and execute ongoing projects.

While driving innovation and results within their own company, the team makes giving back a priority as well by working to support and solve problems within the community. Joining forces with charitable organizations and initiatives, FCA US and the TMEC team works to help empower people, and build strong, viable communities. The team consistently gives time and monetary donations to charitable organizations such as:

- The United Way
- Mittens for Detroit
- Holiday Toy Drive
- Toledo Machining Socks Drive
- The Special Olympics Polar Plunge
- Food Drives at each plant for local food pantries

From our team here at Patti Engineering, 'Hats-off' to FCA US and the TMEC team!



Steve Burris, Transmission Manufacturing Engineering Center (TMEC) ME Manager

We work as partners with our clients. When you need an expert to help solve automation challenges, we are here to add value to your solution - enhance efficiency, increase productivity, and work with your team as a trusted resource. Visit our <u>website</u> for more information on our areas of expertise, or call us (248)364-3200 for a free initial consultation.

Thank you for your interest in Patti Engineering.

Best regards,

Georgia H. Whalen Director of Marketing

Patti Engineering















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