



Well, the automotive industry must be perfect as it is ever-changing and to survive we must change with it. What was good enough yesterday is not good enough today. The industry is requiring tooling that is more complex, built at a faster pace and at a lower price. Proper Tooling Warren has established a Process Improvement Team to address our ever changing business. The team consists of representatives from all areas of engineering and manufacturing. They are challenged with meeting the industry expectations while producing tools at a faster pace and at a lower cost.

One of the projects they are working on is the transformation of electrode manufacturing.

Darren Mack, Scott Fair and the Electrode team have taken on the mission of producing electrodes faster and at the lowest cost possible. They are using the principles of Lean Manufacturing and 6S to guide them on their mission. A new Makino F5 milling machine was added replacing an older machine to improve downtime and adding Stability to the process. The milling room has been painted, obsolete items are being removed and the remaining items are being organized in an efficient and effective

manner. The hard part comes next, Process Improvement; what is the most effective way of producing electrodes? The team is mapping the current process and work flow to understand the costs and identify areas for improvement. Using this study they will focus on the large cost items first. They have already identified milling as a large item and have integrated Cimatron's VoluMill software into the process. The initial findings are showing a 45% reduction in electrode milling time with Volumill. This reduction is great but the cost of the software, cutters and cutter life must be taken into the equation before we know that it is truly a cost savings. A second area they are focusing on is lights out manufacturing during the nights. The electrode milling machines are robotically loaded, by programming and setting up the robots during the days, the robots can run unmanned at night. For this to happen a structured process must be created and followed. It appears the Electrode team is on the right path for success and I look forward to seeing what they will come up with next.

If you have ideas or items you think the Process Improvement Team should look at please let us know.

David Karnes