



# Tapping Vendor Knowledge

*Cambridge Metals and Plastics is not afraid to turn to their vendors for success.*

"Risk isn't terrible," says Mike Glomski, vice president of operations for Cambridge Metals and Plastics (CMP) and one of four owners of its umbrella company, Water Works Manufacturing (WWM).

Just short of the truth is the perception that the owners of WWM woke up one day and decided to get into hydroforming. "Jumping in as we did may seem a bit unusual, according to the way business is typically done today" says Mike. "But we had many years of experience in manufacturing under our belt, a doorway into the industry and a strong relationship with a high-powered vendor, Productivity Inc."

## THE COMPANY

WWM is a Twin Cities-based engineering design and production company focused on the rapid design, development, prototyping and production of formed metal parts. Using state-of-the-art hydroforming processes developed in-house, WWM assists companies with these complex processes quickly and cost-effectively. The company utilizes CAD design software, in conjunction with 3D simulation and FEA software, to design and simulate the metal forming processes, perform structural analytical stress assessments of parts or subassemblies, and to check and optimize metal forming processes to determine feasibility before expensive tools are manufactured.

In a slightly upside down fashion, WWM with 12 employees bought the much larger CMP (over 90 employees) in 2007. Mike laughs, "Yeah, it was a bit backward, but there were many reasons including the facility and the manufacturing process that could support the growing hydroforming opportunities."

A leading manufacturer of high quality ATV, snowmobile and motorcycle parts and accessories, serving both OEMs and the aftermarket, CMP is a full-line manufacturer offering everything from product development and design engineering to complete steel fabrication, including stamping, tube bending, robotic welding and assembly. The company utilizes its own state-of-the-art powder coating line and does custom-finished product packaging for many of its own proprietary products, for private labeled products and even for OEM customers.



*Russ Hane, Productivity Inc. and Mike Glomski discuss the lights out machining time.*



## Today we enjoy a consistent nine hours of lights-out machining

CMP is the second largest ATV accessory builder in the world. According to Mike, if a company makes an ATV or motorcycle, then that company is likely a customer of CMP.

### THE ISSUE

Hydroforming has provided some very unique opportunities for this growing company. In fact, currently one of the three most difficult parts in the world to hydroform is handled right here. This difficult part has moved a few times over the years and was manufactured in China before CMP decided to create the process that would bring it back to the US. CMP knew that if they were going to win this quote they would have to be cost-efficient and provide a necessary machining process not currently provided by their foreign competitor. "We had the hydroforming process down, but we needed to add automation and cost-effective machines that could run close to lights out," explained Mike.

### THE SOLUTION

This is where the long-time personal relationship with Productivity Inc sales representative Russ Hane came into play. Knowing that it will take a certain amount of "clever" automation, Mike and Russ set up a meeting with Don Engles, Productivity's Robotics & Automation Manager, and Andy Archer, Productivity's Machine Tool Sales Manager, to brainstorm solutions for the many hurdles that would lie ahead. One such challenge was the ability to rack a sufficient number of parts to allow for eight to ten hours of unmanned run time given the limited square feet available for the footprint of the machine and conveyor system needed to run the job. It was Andy who suggested stadium seating and the engineers took it from there.

### THE RESULT

Sixteen months after winning the quote, a plane load of executives flew to Minnesota to see how CMP was able to provide such high level of secondary services and extreme quality for the cost they quoted. The previous supplier delivered the formed part; now the customer receives the finished part from CMP. Mike says, "We could have never done it without the support of Productivity Inc. We use our vendors to the best of their capabilities. We are not going to take our time to learn something they can bring to the table right away. This helps get new jobs going quicker with less of a learning curve."

"The final proof of success is always measured in the unmanned run time", says Mike, "and today we enjoy a consistent nine hours of lights out machining in that department".

### OUTSIDE THE OFFICE

Mike Glomski is a shop guy. He loves the shop and although his position does not afford him much "shop time," he does remember, as a machinist, looking back at the end of a day and surveying all he has built. Mike gives back to the community and is a mentor to a younger machinist. "Whether it is with the Chamber or the high school, I have the ability to go out and make a difference. My heart of hearts is in being a trainer/mentor" says Mike. "We have a young kid out there now that I am working with to grow from a production machinist to a one-shot machinist responsible for a \$5000 block." Mike should know – CMP just finished a job where a block had 32 machine operations with \$6200 dollars in the block to start. If the last operation is wrong then the whole thing is a waste. Suddenly, it is easy to see why training/mentoring is so very important to Mike.



*The solution.*



Productivity Inc

