PM personality: James P. Adams, MPIF Executive Director/CEO

Joseph Capus

Newly appointed Executive Director/CEO of MPIF, Jim Adams, sat down with MPR’s consulting editor Joseph Capus during the MIM2017 Conference in Orlando, Florida. Adams explained that he had no knowledge of the PM industry until a school visit to the Hennepin Technical Center inspired him to make a career in the industry. He joined the staff of MPIF in 2004 after spending nearly 20 years in PM parts manufacturing and powder production companies, and today is the first Executive Director/CEO of MPIF to have had first-hand experience of PM. He sees an extremely exciting future for the industry.

Jim Adams (Fig. 1) is the youngest of four brothers, whose father operated one of the most highly-respected cabinet making businesses in Minneapolis, Minnesota. Adams broke away from the family wood-working tradition and switched to metal-working with machine-shop and welding classes while at high school. His interest in auto mechanics and auto body repair earned him one of the top prizes in a Minnesota State Auto Body Competition.

As a senior in high school he was introduced to powder metallurgy during a field trip to the Hennepin Technical Center in Brooklyn Park, Minnesota (now Hennepin Technical College). He was amazed at the speed parts could be produced by PM compared with shaping by lathe-turning or on a milling machine. He recognized PM was “an up-and-coming process” and wanted to be a part of it. Shortly after, he enrolled at Hennepin and became an APMI member in 1983.

“I graduated from Hennepin in 1985 and headed east to Connecticut where I accepted a process engineering position with American Powdered Metals. I selected APMI because they were owned by Alcoa at the time and were the premier aluminum PM company in the world. Near the end of my first year I was re-assigned to the APM Conover North Carolina plant (presently GKN Sinter Metals Conover). An opportunity arose with Trico Products, Buffalo, New York who were searching for technical support for a new maquiladora operation in Brownsville, Texas/Matamoros, Mexico. I took advantage of the opportunity and soon after joining the new Trico Technologies I was named supervisor over the powder metallurgy and heat treat departments. I honed my managerial skills during this time with over 30 employees reporting to me. While at Trico I was able to increase my knowledge of bronze bearings and was approached by Greenback Industries, Greenback, Tennessee, to become their national sales manager. While at Greenback I became more active in APMI through its Southeast Chapter and started to attend regional APMI meetings and golf outings. Through my networking activities I was noticed by Kobelco Metal Powder of America, who offered me a sales specialist position. I worked for Kobelco until joining MPIF in 2004 as Director, Technical Services. Prior to becoming Executive Director/CEO I was Vice President, Technical Services.”

**MPR:** What was the attraction of leaving the industry and joining the trade association?

“Having been a member of APMI International since 1983, I knew of the good work that MPIF/APMI did, and I was interested in being part of that, giving back to the industry. By giving back to the industry I would be able to advance the industry, and at that time MPIF was looking for someone who had a technical background, as they really had no prior employees with a strong powder and parts manufacturing background or knowledge. Jim Trombino had just taken over and in his first year he hired me to help out on the technical side.”

**MPR:** What major trends in the PM industry have you seen during your time with MPIF?

“Obviously the biggest trend that I have recognized would be the adoption of metal AM as a metal-forming solution. Metal AM has been around for over 25 years but it has gained acceptance in
the past 5 years. MPIF took notice and launched our successful AMPM Additive Manufacturing with Powder Metallurgy in 2014 and its annual Call for Presentations submissions have more than doubled over this period. I have also recognized the need for lightweighting. The PM process lends itself nicely to weight reduction without major machining. Core rods can be used to eliminate weight, as can general design. Lean alloys also continue to be developed, something that other metal forming techniques cannot easily accomplish. And I certainly can’t forget metal injection molding. Back in the early 1980s I had to write a paper on MIM. There were limited documented resources that I could use. Today there are text books on MIM and we need to get to this point with metal AM.

On the negative side, I anticipate the ‘pounds per vehicle’ in the US automobile will decline for the next several years. As the 8-cylinder engine falls from grace due to fuel efficiency and increased horsepower in 6-and 4-cylinder engines, the production of powder forged connecting rods and main bearing caps will be reduced. These parts consume a large amount of powder and will impact metal powder producers until new applications offset the decline in shipments. The MPIF Technical Board estimates that over 350 PM applications, comprising about one thousand parts, exist in today’s US automobiles. The PM parts fabricators will continue to see increases in new parts applications.”

**MPR:** How do you see the industry and MPIF/APMI developing from here?

“MPIF is the federation of trade associations, comprising over 240 member companies, presently covering six different sectors of the PM industry, while APMI International is the professional society formed by MPIF for individual members. Within the next year I anticipate MPIF will have a seventh trade association—Metal Additive Manufacturing. MPIF/APMI International will continue to support the PM industry in many ways—conferences, exhibitions, seminars, publications, standards, etc. But we will also focus on building a strong foundation for the future. For the first time, the National Science Foundation will provide grants to 40 students to attend the POWDERMET2017 and co-located APM2017 conferences in Las Vegas. It would be great to think that all 40 of these students will enter the PM industry, but my vision is wider. If 10% of these 40 students stay in the PM industry and the remaining 90% enter the engineering field, hopefully these 36 remaining future engineers will be called upon suggesting or designing a metal part and consider PM as the solution. These 36 students are what is needed to grow the PM industry.”

“We also have to realize that the PM industry is global. MPIF will continue to support other global PM associations. EPMA, JPMA and MPIF were successful in funding and launching the collaborative Global PM Property Database. Our joint work has helped advance the PM industry and we will continue to cultivate these activities. As we move forward I think it is an extremely exciting time for the industry and I look forward to us continuing to grow.”

**MPR:** Outside of work, your current interests, hobbies, etc.?

“Outside of work, most of my time is spent with my family. My wife Gina is a Registered Nurse working full-time as an operating room nurse while studying for a master’s degree in nursing. She is also highly involved in State Nursing Associations. We have 3 daughters, one graduating shortly with her Bachelor’s degree in accounting, and the others attending high school. As a family, we enjoy the outdoors and travel, and I never turn down an opportunity to do home improvements where I can use my woodworking skills.”

**MPR:** Thanks, Jim, and best of success in your new role.