



MEMBER PROFILE

MPI, Inc.

Year Founded: 1972

Location: Poughkeepsie, NY

Number of Employees: 68

Principle product: Wax-injection equipment and Automation for the Investment Casting industry. MPI has sales agents in the US, UK, Europe, Israel, Japan and Far East, China, India and Central and South America

Website: www.mpi-systems.com

MPI is a great American success story. Over the past forty plus years, MPI has become the global gold standard in wax-room equipment manufacturing. MPI was founded by President Bruce Phipps and his partner in 1972 as a three-man manufacturing company. Bruce bought out his partner in 1984, and MPI has since become the most technically advanced supplier of wax-room equipment in the investment casting industry.

The company has more than doubled in size over the past three years and over time has expanded their manufacturing facility to over 47,000 square feet; including a fully functioning laboratory, showroom, engineering suite and production facility. MPI offers the most sophisticated wax injection machines in the world, generating higher-casting yields, more patterns per hour, and increased productivity and throughput. To date, they have developed and introduced more systems and products than all of their competition combined.



Much of MPI's growth has been fueled by their commitment to innovation which is firmly embedded in their DNA. Driven by the idea that things are only "impossible" until they've been done, Bruce and the team at MPI have introduced many wax-room innovations over the years. Over the past ten years, they have been taking the concept of innovation to a new level by introducing automation in the wax room. MPI has developed fully automated robotic cells for both wax injection and pattern assembly.

MPI introduced its first automated pattern assembly system (APAS) over 10 years ago. In 2012, MPI introduced its newest generation, the Model 20-14. Built on MPI's patented wax-welding process, APAS has the flexibility to perform high-quality, precision robotic assemblies from the simplest commercial jobs to the most complex and demanding projects found in the medical and aerospace industries, including single-crystal turbine blades. It incorporates the use of versatile six-axis robots that can easily handle larger, multi-plane, multi-part assemblies.

MPI automated injection cells are equipped with an MPI wax injector integrated with a six-axis robot and a number of secondary systems including a pattern/core conveyor, automatic tool change station, and six-axis robot. MPI has incorporated its industry best process controls into every automated function from inserting ceramic cores, wax injection, and pattern removal to pattern setting, injection runner trimming and inspection. MPI has consistently proven that an automated process can outperform operator-controlled injection and assemblies in accuracy, repeatability, and efficiency.

MPI's contract pattern production and assembly department allows customers interested in automation to experience firsthand the results that they can achieve, prior to investing in automation for themselves. By incorporating automated injection and assembly capabilities into the contract pattern and assembly department, MPI cost-effectively produces high-quality wax patterns and assemblies and ships them directly to customers. Operating a fully automated pattern production facility has also given MPI the unique opportunity to gain firsthand knowledge and experience making wax patterns and assemblies on their own equipment, allowing them to constantly evaluate and improve performance levels.

MPI is also proud of its substantial commitment to furthering education in the investment casting industry. In the summer of 2013, MPI donated a state-of-the-art 25-ton wax injector to Pittsburg State University in Kansas, home to the only Investment Casting Institute (ICI) certification program in the world. The \$150,000 machine was installed in the metal casting lab at the Kansas Technology Center and was fully integrated into the investment casting curriculum. In addition, MPI executives give of their time and expertise as volunteer instructors at the Investment Casting Institute's certification and process control courses.

MPI firmly believes that automation is the future of the industry. As the company continues to work on new and emerging technology, MPI never loses sight of the need to maintain their position as the leading manufacturer of traditional wax-room equipment and to be the premier service provider in the industry. MPI is proud to be able to contribute to the economic vitality of the Hudson Valley and to support the local manufacturing community.