# **LIMITLESS POSSIBILITIES**

### **EXPERIENCE THE DIFFERENCE**

MPI is the worldwide leader in wax-room and ceramic core equipment and the acknowledged leader in wax-room innovations. MPI has developed and introduced more systems and products than all its competitors combined and offers wax-room solutions that can't be found anywhere else.



#### WAX INJECTORS

MPI's wax and ceramic injection machines are the most sophisticated in the industry and generate higher casting yields, more patterns per hour, reduced scrap, and increased productivity. They're also the most reliable in the industry, which means higher system availability, lower maintenance costs, and better performance.

#### **AUTOMATION**

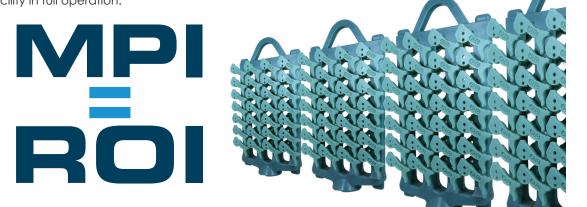
MPI is at the forefront of automation, having automated some of the most complex processes in the investment casting industry for well over a decade. MPI's automated injection and assembly cells provide the capability to make and assemble wax patterns from the simplest commercial parts to complex patterns required by the medical and aerospace industries, including single crystal turbine blades. MPI can automate a single process or implement full-scale automation for your facility.

### MPI TECHNOLOGY CENTER

MPI is at its best when it can innovate. MPI prides itself at being able to look at problems and then customize solutions that help clients achieve their goals. The MPI Technology Center is a state-of-the-art wax room that allows MPI to do just that. Located at MPI's world headquarters in New York, the Technology Center is a hub of innovation, ingenuity, and problem solving. Customers and suppliers visit this sophisticated facility to discover new ways to solve their unique wax-room challenges and to experience a totally automated facility in full operation.

#### **MPI EXCELS**

Most important, return on investment (ROI) is where MPI excels. MPI supports its customers' bottom line with creative, customized products and services that fit their evolving needs. Through collaboration, we innovate, design, build, and integrate solutions that deliver measurable results.





### **ROBUST PERFORMANCE FLEXIBLE CONFIGURATION**

By combining the highest levels of automation into our SMART injection systems, MPI is able to consistently produce high-quality, high volume, wax patterns. These self-contained automated injection cells are equipped with an MPI wax injector, pattern/core conveyor, automatic tool change station and a 6-axis robot.

SA20-06-06 Automated Pattern Injection Cell

### MPI 20-06-06

Our Automated Injection Cells also feature MPI's second generation Smart Controls which control every automated function from inserting ceramic cores, wax injection and pattern removal, to pattern setting, injection runner trimming and inspection.

## MPI 20-06-06 Series

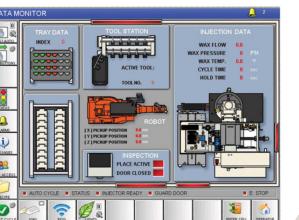
### AUTOMATED INJECTION DESIGNED TO MEET THE NEEDS OF YOUR APPLICATION

- From simple cell performing wax injection to full functional cell performing secondary operations
  - Lubricate/mold release spray
  - Pattern trimming
  - **Core insertion**
  - Programmable pattern trimming
  - Inspection
  - Pattern setting
  - Dip sealing
- Built with MPI 's world class wax injectors
- Versatile 6-axis robots can easily handle any pattern
- Second-Generation intuitive Smart Controls ensures consistent results with virtually no supervision
- Robot programmer is not required operator can be trained in one day
- Automated tool change allows for job changeover in less than a minute
- Automatic tool ID ensures the tools picked by the robot match the product being injected
- Standalone system that can be integrated into a fully automated wax room
- Optional barcode reader allows simple loading of recipes

### AUTOMATE YOUR WAY TO INCREASED PROFITABILITY

The benefits of automation are undeniable ... by eliminating operator variation and providing accurate process control you will not only see substantial increases in terms of productivity and uniformity, it will have a dramatic impact on profitability as well.

### ASK ABOUT OUR FREE WAX-ROOM EVALUATION AND ROI ANALYSIS.





.



#### **OUR AUTOMATION PARTNERS EXPERIENCE:**

- Increased casting yields by up to 30%
- Reduced scrap by an average of 50%
- Cycle times 2-5x Faster
- Perfect patterns 1 00% of the time
- Increased patterns produced per day by more than 100%
- Increased throughput by an average of 50%

