

SMART CONTROLS TECHNOLOGY

SMART CONTROLS

MPI's Smart Controls Technology offers the most advanced controls system in the industry, allowing you to take Control of the Injection Process.

Smart Controls provides a total solution for wax injection, controlling the process, informing the operator, and providing feedback via real time graphing of the injection cycle.

SMART CONTROLS

Control Your Injection Process

PLATEN CONTROL

- Digital Platen Pressure Readout
- Digital Platen Position Control

INJECTION CONTROL

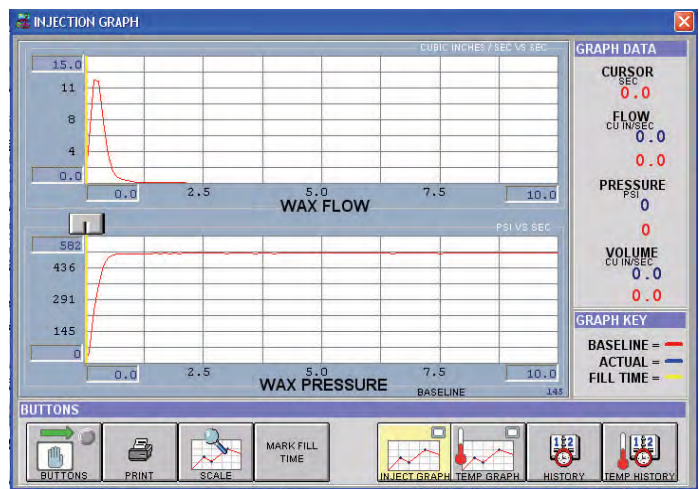
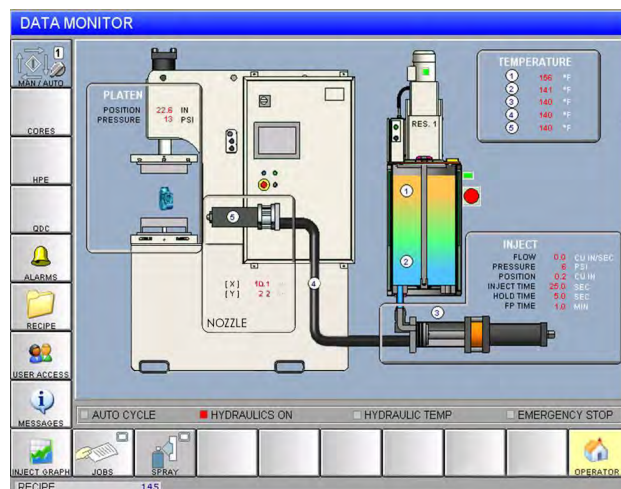
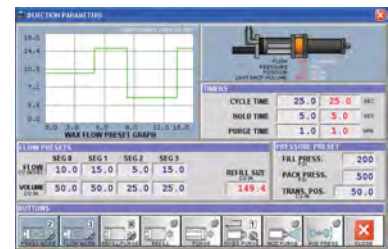
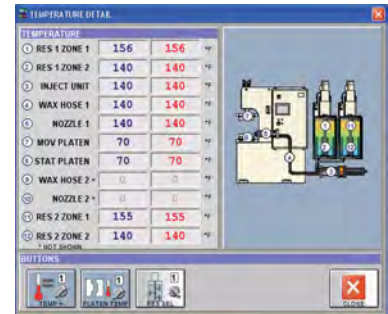
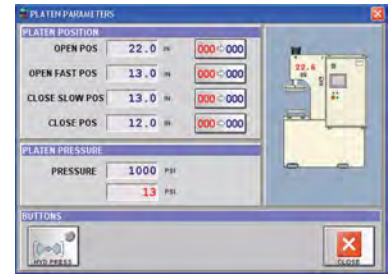
- Real Time Wax/Ceramic Injection Graph
- Records actual Wax/Ceramic Pressure
- Records Wax/Ceramic Temperature at the nozzle tip
- Records actual Wax/Ceramic Flow (Requires Injection Control Option)

TEMPERATURE CONTROL

- 5 Zone (Wax) 6 Zone (Ceramic) Control provides the most accurate temperature control in the industry
- Paste wax capability

OPERATOR CONTROL

- 12" Touch Screen Operator Interface running in a Windows Environment
- Easy to use graphical interface
- Process Control Limit Alarms - Notifies and or prevents machine operation anytime the process is outside of its control limits
- Alphanumeric Injection Recipes with unlimited number of stored recipes
- 10 Level User Access Security
- Network ready with remote VPN connectivity



SMART CONTROLS FEATURES & OPTIONS	SMART SERIES (M)	SMART SERIES (A)
Wax Injection Control		
Manual Flow Control	Standard Features	
Programmable Flow Control (Single Flow, Time Based Flow)		Standard Features
Manual Pressure Control	Standard Features	
Programmable Pressure Control (1 Pressure)		Standard Features
Real time graphic display of the actual injection pressure (with Process Control Alarms)	Standard Features	Standard Features
Injection Control Option (M) 2 Pressures Manually Adjusted Real time graphic display of the actual injection flow (with Process Control Alarms)	Optional Features	
Injection Control Option (A) Programmable Flow Control (Single Flow, Time Based Flow, Volume Based Flow) Programmable Pressure Control (2 Pressures) Real time graphic display of the actual injection flow (with Process Control Alarms)		Optional Features
Smart Purge (Unique MPI feature that provides the most accurate injection process control in the industry)	Optional Features	Optional Features
Injection Nozzle Control		
Programmable Nozzle Positioning	Optional Features	Optional Features
Platen Control		
Programmable Platen Pressure Control (with Platen Open Slow Feature)	Optional Features	Optional Features

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.



SA55-25-24
C-Frame Wax Injector



SA20-06-06
Automated Pattern Injection Cell

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.

MPI = ROI

