

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



4 POST WAX INJECTOR

MPI 35 Series 4 Post

The Model 35 Series wax injector is a 4 post hydraulic press designed for Large Pattern Production. The machine is available in 100, 200, and 300 ton clamping forces. The machine is supplied with shuttle tables and remote operator controls, ergonomic for the operator, providing unobstructed access to the wax die.

The unit is fitted with an impressive list of standard features and a wide range of options are available. Our engineering support staff is prepared to help determine the configuration that meets your needs and optimize your throughput.

MPI 35 Series

4 Post Wax Injector

The MPI 35 features:

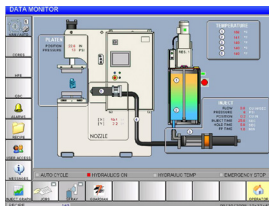
- Injection cylinder: 1130 cu.in. - 18.5 liter
- Smart Controls
- Nozzle : Horizontal FlexNoz®
- 3-Axis nozzle positioner
- Wax Conditioning reservoir with level control
- Accurate 5-zone Wax Temperature control
- CE Conformity
- Hydraulic Shuttle tables - One or Two Shuttles
- Platen Heating and Cooling
- Operator Interface Terminal

Optional Features:

- Second Conditioning reservoir with level control
- QuickChange Die Clamping
- T Slots - parallel or radial
- Hydraulic Pattern Ejection
- Wax Melter with level control
- Wax pellet Vacuum Loader
- Platen Guarding - Powered
- Jib Crane
- Many more...

Process Control

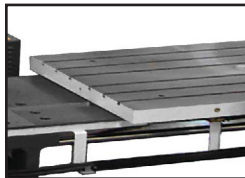
MPI 35 machines, models SA and SM, are equipped with Smart Controls™, our state-of-the-art process control technology that utilizes user-friendly, Windows-based, injection-control software and intuitive touch-screen display. MPI Smart Systems™ consistently monitor and control all variables in real time against your pre-established baselines for wax temperature, wax flow, wax pressure and injection time, resulting in patterns that are consistent and of the highest quality. This technology eliminates the possibility of accidentally making an out-of-tolerance wax pattern. No one else even comes close. Best of all, MPI's remote-access technology allows the MPI service department to troubleshoot, diagnose, update or provide new features remotely — anywhere, anytime.



Features & Options:

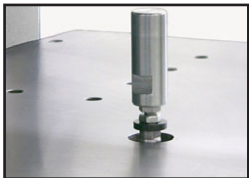
T SLOTS

T slots on each platen provide full coverage die clamping and eliminate stripped threads



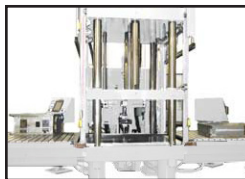
HYDRAULIC PATTERN EJECTION

Controlled pattern removal from the lower stationary platen



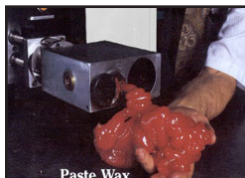
TWO SHUTTLE TABLES

Increase machine utilization by injecting one die while performing die disassembly and pattern removal on a second die



PASTE WAX

Accurately conditions wax to any viscosity from liquid to paste, providing consistency from pattern to pattern regardless of the input wax temperature



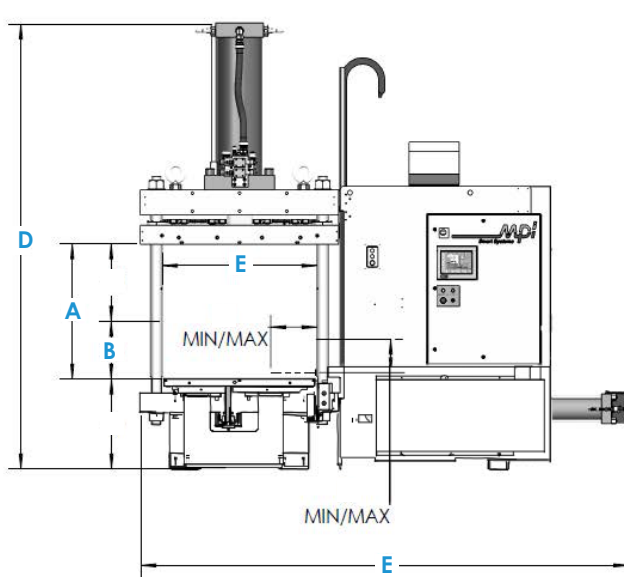
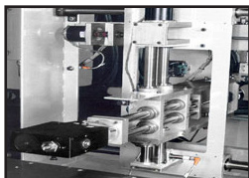
JIB CRANE

The unique combination of Jib Crane and Hydraulic Shuttle Table allow quick, safe pattern removal and die changeovers by a single operator

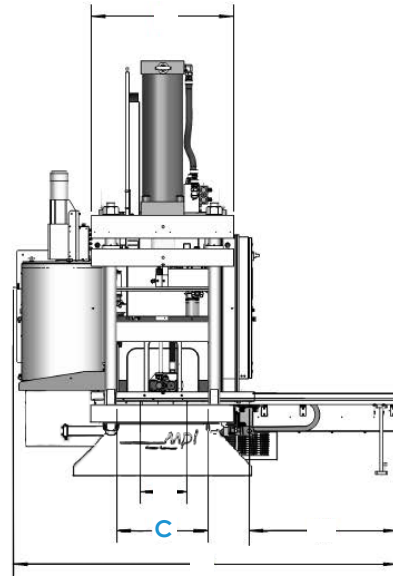


THREE AXIS NOZZLE POSITIONING

Total alignment Motor driven x-y-z nozzle positioning allows for die designs with the most direct wax flow path



FRONT VIEW



SIDE VIEW

MODEL	35-100 US (60 HZ)	35-200 US (60 HZ)	35-300 US (60 HZ)
Clamp Force	20-100 ton	40-200 ton	50-300 ton
A. Daylight Maximum	48 in		
B. Daylight Minimum	6 in		
C. Clamping Area (Width x Depth)	48 in or 60 in		60 in
D. Overall Height	148 in	154 in	164 in
E. Overall Width	145 in or 157 in		180 in
Wax Reservoir Capacity	30 gal		
Single Shot Capacity	1130 cu. in		
Injection Pressure	50-1,000 psi		
Injection Rate	0-15 cu in/sec		
Injection Time	0-999 second		
Electric Standard	460V, 60Hz, 3ph		
Air Requirements	6 CFM @ 90 PSI		
Machine Weight	30,000 lbs	42,000 lbs	56,000 lbs

Notes: Dimensions reference are approximations and may change based upon final configuration and design. Optional equipment may alter the machines overall dimensions, weight, and power requirements. Contact MPI Sales department for additional information. MPI reserves the right to change specifications without advanced notice.

DS-35-17- 07-26-21