

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



TWO-STATION WAX INJECTOR

MPI 105-12

Two 12-ton clamping units on a single frame, utilizing common wax conditioning, electrical and hydraulic systems. Independent wax flow control, wax pressure control and cycle time provide each unit with the ability to create quality wax patterns independent of each other. Shown above with optional Operator Work Lights and Airline Blow Guns.

ONE OR TWO OPERATORS

When injection cycle time exceeds pattern removal time, one operator can easily run both stations (two dies). This doubles your operators efficiency.

...Innovative engineering that doubles your output, doubles your productivity

MPI 105-12

Two-Station Wax Injector

Innovative Features

THE MPI 105-12 FEATURES:

- Two independent Injection Stations
Injection capacity: 75 cu. in. (1.2 liter)
Horizontal Flex-Noz® Injection nozzle
2-Axis nozzle positioner
- CE conformity

WAX CONDITIONING RESERVOIR

Our reservoir does it all... from liquid to paste. Accurately conditions wax to optimum viscosity + 2°F (+1°C) providing consistent results from pattern to pattern regardless of source wax temperature. These units are designed to condition up to 200 lbs. (90 kg.) of wax per hour.



ACCURATE 7-ZONE WAX TEMPERATURE CONTROL

For maintaining constant, accurate temperatures throughout the system. Consistent, optimized wax quality maximizes pattern output.



Optional Features

VERTICAL INJECTION NOZZLE

Replaces standard horizontal nozzle. Machine can be supplied with vertical up or vertical down injection nozzle(s).



PNEUMATIC DIE CORE PULLS

Automatic sequencing of the die core pulls allow full automation of the die - saving time, and increasing throughput.



FULL MANUAL PLATEN GUARD

Exceeds CE requirements. The guard must be closed in order to activate auto cycle clamp and injection.



TWO PLATEN COOLING

Superior die temperature control is achieved with each platen being controlled separately.

PATTERN EJECTION

Automatic pattern ejection is integrated into the lower stationary platen(s).



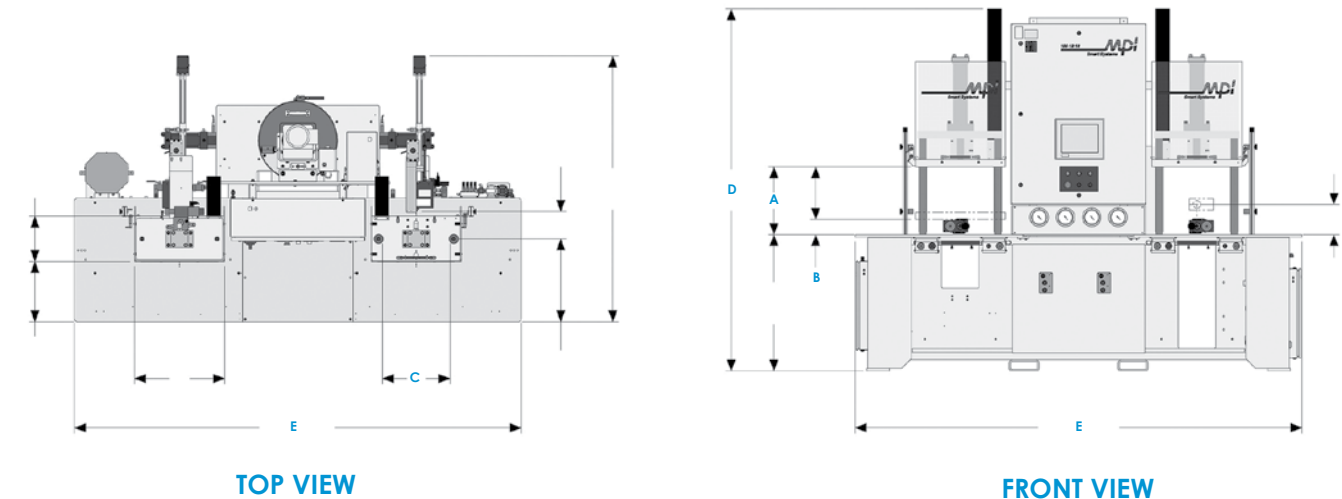
QUICKCHANGE DIE CLAMPING

Simple, one minute, die mounting with rapid hydraulic clamping of the die to the platens. Nozzle to die alignment is achieved at the same time.



WAX MELTER

Mounts directly to Wax Conditioning Reservoir and is activated by the Wax Conditioning Reservoir level control. (MPI Model 97)



MODEL	US (60HZ)	METRIC (50HZ)
Clamp Force	12 ton	10.9 ton
A. Daylight Maximum	18 in	457 mm
B. Daylight Minimum	4 in	102 mm
C. Clamping Area (Width x Depth)	18 in x 12 in	457 mm x 305 mm
D. Overall Height	96 in	2,438 mm
E. Overall Width	119 in	3,023 mm
Wax Reservoir Capacity	30 gal	1131
Single Shot Capacity	75 cu. in	1.2
Injection Pressure	50-1,000 psi	3.5-70 bar
Injection Rate	0-15 cu in/sec	0-.24 l /sec
Injection Time	0-999 sec	0-999 sec
Electric Standard	460V, 60Hz, 3ph	380V, 50Hz, 3ph
Air Requirements	90 psi	6.2 bar
Machine Weight	6,000 lbs	2,722 kg

Notes: Optional equipment may alter the machines overall dimensions, weight, and power requirements. The daylight described herein is a nominal dimension. The actual daylight for your machine may be up to 3/8" (9.5mm) less than this dimension. Contact MPI sales department for additional information. We reserve the right to change specifications without notice.

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