

LIMITLESS POSSIBILITIES



MPI

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



MODEL 55IGT-100 WAX INJECTOR
shown with optional crane, magnet, & thru-shuttle nozzle

C-FRAME WAX INJECTOR

MPI 55IGT

MPI 55IGT

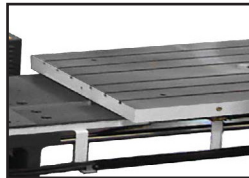
C-Frame Wax Injector

The Model 55 IGT Series wax injector is a C-Frame hydraulic press designed specifically for **Industrial Gas Turbine products**. The machine is available in 50 and 100 ton clamping forces. The C-Frame clamping unit is the most ergonomic for the operator, providing unobstructed access to their work area. The unique frame design allows the operator to remove large patterns without having to climb onto the machine.

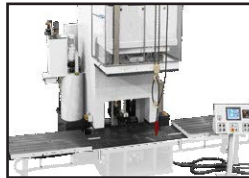
- Rigid C-Frame, Parallel Die Opening, Uniform Die Clamping, Easy Die Access
- Smart Controls Process Control, with real time injection graphing
- Injection System - Tightest temperature control in the industry
- Inject your wax into your dies at MPI and decide for yourself
- Safely remove wax patterns without climbing the machine
- The only C-Frame IGT press with 3-axis nozzle positioning

Innovative Features

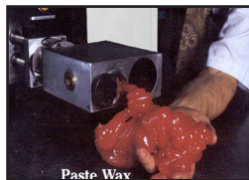
TEE SLOTS
Parallel tee slots on each platen, running perpendicular to the nozzle, provide full coverage die clamping and eliminate stripped threads.



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

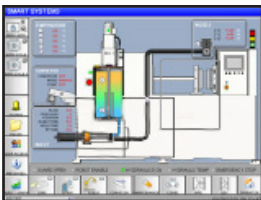


PASTE WAX
Accurately conditions wax to any viscosity from liquid to paste, providing consistency from pattern to pattern regardless of the input wax temperature.



Process Control

All MPI machines are equipped with Smart System Process Controls that provide state-of-the-art process control utilizing user-friendly Windows-based injection control software that features an intuitive touch-screen display.

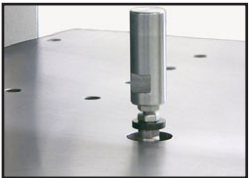


Our Smart System consistently monitors and controls all variables in real time against your pre-established baselines for wax temperature, wax flow, wax pressure, injection time and viscosity, resulting in patterns that are consistent and of the highest quality.

This technology eliminates the possibility of accidentally making an out-of-tolerance wax pattern.

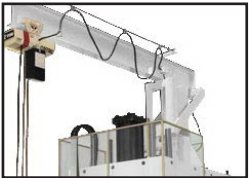
HYDRAULIC PATTERN EJECTION

Controlled pattern removal from the lower stationary platen.



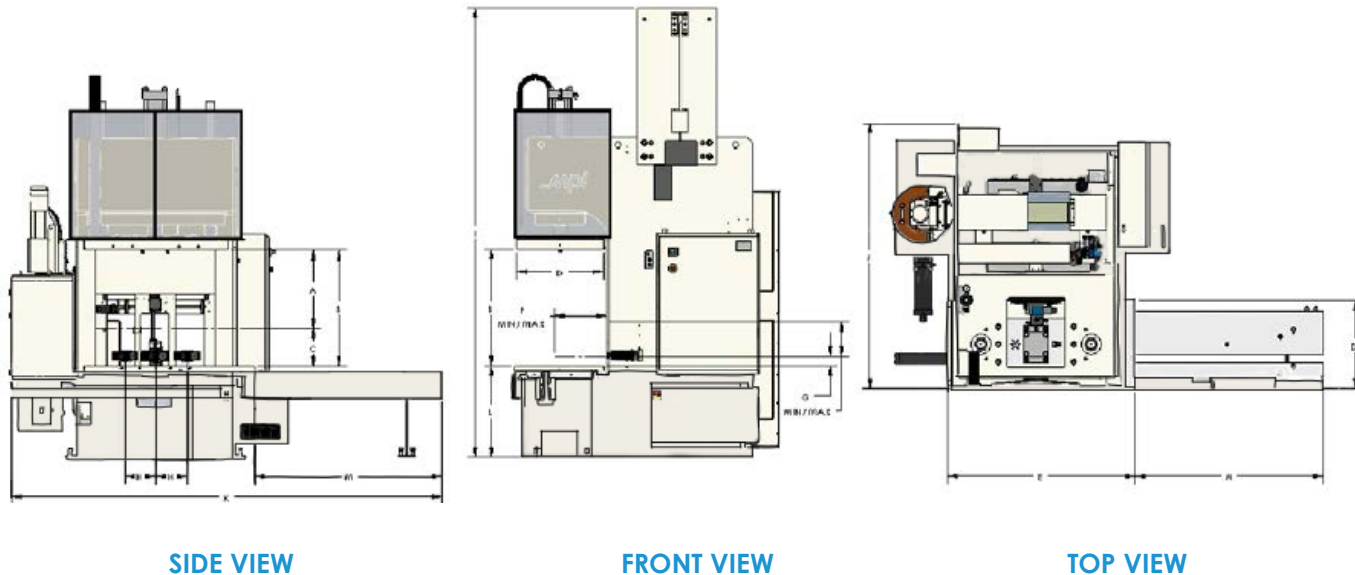
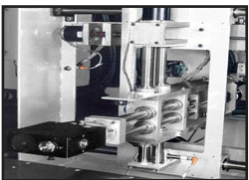
JIB CRANE

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.



MODEL	55-50 IGT US (60 HZ)	55-100 IGT US (60 HZ)
Clamp Force	12.5-50 ton	20-100 ton
A. Daylight Maximum	40 in	50 in
B. Daylight Minimum	6 in	
C. Width of Platens	50 in	60 in
D. Overall Height	132 in	151 in
E. Overall Width	116 in	116 in
Wax Reservoir Capacity	30 gal	
Single Shot Capacity	400 cu in	1130 cu in
Injection Pressure	50 - 1000 psi	
Injection Rate	0 - 15 cu in / sec	
Injection Time	0 - 999 sec	
Electric Standard	460V, 60Hz, 3ph	
Air Requirements	90 psi	
Machine Weight	23,000 lb	40,000 lb

Notes: Shuttle work table work area reduced when supplied with platen guarding. 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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