



AUTOMATED PATTERN ASSEMBLY SYSTEM

MPI 20-14

The 20-14 Automated Pattern Assembly System allows you the flexibility to perform high quality, precision robotic assemblies from the simplest commercial jobs to complex multi-piece wax assemblies required by the medical and aerospace industries including single crystal turbine blades.

MPI 20-14

Automated Pattern Assembly System (APAS)

OUR AUTOMATION PARTNERS EXPERIENCE

- Perfect assemblies 100% of the time
- Cycle times 2-5x faster
- Increase casting yields 10-30%
- Reduced scrap by an average of 50%
- Fragile assemblies are no problem
- Round-the-clock productivity
- Relentless quality and consistency

AUTOMATE YOUR WAY TO INCREASED PROFITABILITY

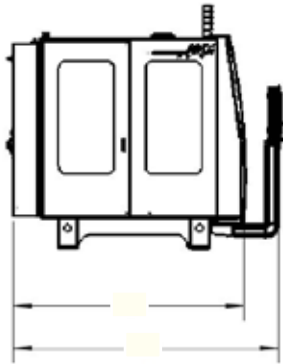
Automation has proven time and again that a robotics-based machine outperforms manually created assemblies in accuracy, repeatability and efficiency.

ASK ABOUT OUR FREE WAX-ROOM EVALUATION AND ROI ANALYSIS

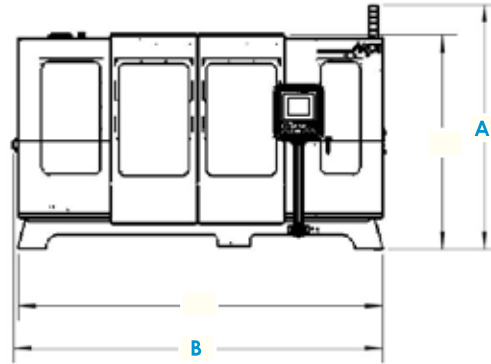
The Revolutionary Automated Pattern Assembly System

- Built on MPI's patented wax welding process
- Versatile 6-axis robots can easily handle larger, complex, multi-plane, multi-part assemblies
- Large pattern loading station with increased pattern capacity
- Large, robust runner station ergonomically designed for easy loading and unloading
- Second-Generation intuitive Smart Controls insures 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 System allows wax assembly "recipes" to be automatically entered into system This ensures that the proper robotic tools, wax runner and wax patterns are loaded for the job
- Standalone system that can be integrated into a fully automated wax room

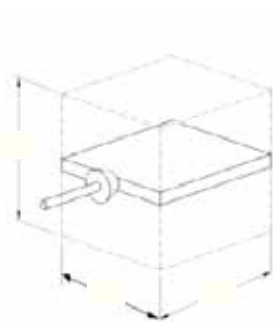




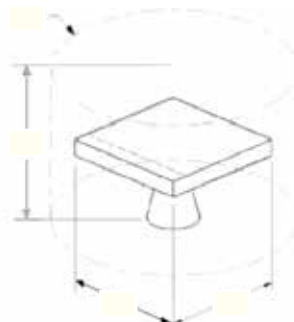
LEFT VIEW



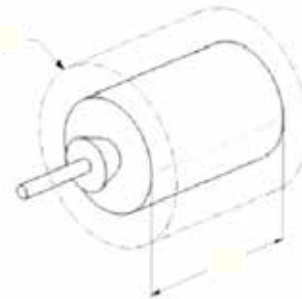
FRONT VIEW



**Multi-Sided Runner Specifications
(Maximum Size Populated)**



**Single-Sided Runner Specifications
(Maximum Size Populated)**



**Round Runner Specifications
(Maximum Size Populated)**

	US (60Hz)	METRIC (50Hz)
A. Overall Height (with OIT & Beacon Light)	105 in	2,656 mm
B. Overall Width	160 in	4,075 mm
Electric Standard	460V, 60Hz, 3ph	380V, 50Hz, 3ph
Air Requirements	90 psi	6.2 bar
Machine Weight	7,500 lbs	3,402 kg

Notes: 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 as required.

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

