



AUTOMATED DUAL TURBO WHEEL WAX INJECTOR

MPI SA105T-5-24



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Through MPI's innovation, the model 105T Automatic Dual Turbo Wheel Wax Injection Cell is well equipped to handle the high-throughput, high-precision requirements of producing consistent wax parts for the investment casting industry. The massively expanding \$18 billion dollar turbocharger industry requires customers to produce a high volume of turbo wheels with high quality built in. The 105T is designed to operate 24 hours a day, 365 days a year, producing parts that make our customers profitable. Using MPI's two-station injection machine and three-robot handling system, backed up by MPI's global support staff, customers are realizing an immediate return on their investment.

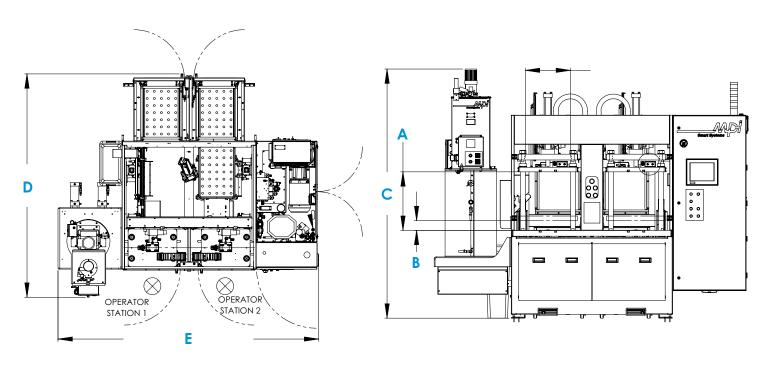
FEATURES

- Two fully independent, side-by-side injectors
- Automated die opening and closing
- Four platen temperature control
- Paste wax
- Process different-sized wheels per station
- Automated tray loading and unloading
- First in/first out tray loading
- Conveyor system (optional)
- Precision injection controls to include:
 - Temperature control
 - Injection flow rate
 - Injection pressure
- Automatic cleaning of die(s)
- Automatic lubrication of die(s)
- Automatic removal of patterns from die(s)
- Automatic trimming of injection runners
- Accurate placement of patterns on trays
- High-quality turbo wheel wax patterns
- Minimal operator tending
- Self-contained unit
- Easy access to maintenance points

BENEFITS

- 100% throughput; no waiting
- Fully automatic die operation
 - Repeatable patterns; no viscosity variation
 - --> Fastest cycle times; highest quality
- ---> Product selection flexibility
 - Trays changed and sorted in seconds
- --> Pattern cooling time before assembly
 - Integrated to customer automation process
 - MPI's world-class process control
- Menu-controlled, robotic cleaning of die
- Consistent robotic die-lubrication spray
- Reliable handling of parts
- ---> Precise trimming eliminates variance
- ----> Integration to downstream processing
- -----> Ready for assembly; no rework
- Operators available for other tasks
- Minimal floor space; safety; forklift compliant
 - ----> Reduced meantime to service





TOP VIEW FRONT VIEW

MODEL 105T-5-24		
	US (60Hz)	METRIC (50Hz)
Clamp Force	5 ton	4.5 ton
A. Daylight Maximum	24 in	609 mm
B. Daylight Minimum	4 in	102 mm
C. Clamping Area (Width x Depth)	18.5 in x 18.5 in	470 mm x 470 mm
D. Overall Height	97 in	2456 mm
E. Overall Width	128 in	3259 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	024 l/sec
Injection Time	0-999 second	
Electric Standard	460V, 60Hz, 3ph	380V, 50Hz, 3ph
Air Requirements	90 psi	6.2 bar
Machine Weight	8,500 lbs	3,856 kg



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.



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 lines with creative, customized products and services that fit their evolving needs. Through collaboration, we innovate, design, build, and integrate solutions that deliver measurable results.

