



**Equipment Manufacturers International, Inc.**

Foundry Equipment...By Design

## **AUTOMATIC MATCHPLATE SOLUTIONS**

High Performance Matchplate Molding Machines

### **Machine Highlights:**

- Reduce cycle times and improve mold quality
- Reduce maintenance costs
- Available in all HMP matchplate sizes
- Enhance performance and machine reliability

### **Mechanical Benefits:**

- Draw guides with linear shafts and precision bushings
- Tapered mold pins that center the bottom board in the same location every time
- Tapered mold pins accurately center the bottom board on the squeeze platen and eliminate board movement
- Bin gate operated by single cylinder using extended force to close gate

### **System Components:**

- Eliminated mold shift related to squeeze station misalignment
- Reduced machine cycle time, typically 25-40%
- Existing matchplate patterns and tooling can be used
- Prepared sand feeder, spill collection, mold handling system, etc. can all be used with little or no modification
- New machine is plug and play with your existing system, and can be installed during a weekend

### **Electrical Components:**

- Control system can be remotely located to reduce vibration and extend electronic component life
- Position transducer installed within the platen and hopper car cylinder
- Hydraulic and pneumatic
- Pressure transducers
- Integrated light curtains for easy access and increased operator safety
- Proximity sensors with quickconnect wiring harnesses.
- Position transducer for rollover control

### **Hydraulic & Pneumatic Components:**

- Dual pump hydraulic system
- Hydraulic system simplified to standard OEM components (pumps, manifold, valves and tubing)
- Troubleshooting is greatly simplified
- Large capacity oil reservoir with proportional valves for fast and smooth control of drag flask, hopper car, platen, board feeder, and rollover
- Oil temperature control to maintain maximum operational performance for the entire production period
- Lower compressed air requirements

### **Operator Interface:**

- Cycle time breakdown
- Productivity measurement tools
- Motion alarms to warn against problem cylinders
- Alarms and diagnostic tools
- Maintenance reminders
- Recipe management



**American Made  
American Owned**

***At EMI we have specific solutions to your  
molding and core room production requirements***

## Specifications

MODELS	1419 355 x 483mm	2024 508 x 610mm	2026 508 x 660mm	3032 762 x 813mm
<b>Mold Size</b>				
Width	<b>14.0"</b> (355mm)	<b>20.0"</b> (508mm)	<b>20.0"</b> (508mm)	<b>30.0"</b> (762mm)
Length	<b>19.0"</b> (483mm)	<b>24.0"</b> (610mm)	<b>26.0"</b> (660mm)	<b>32.0"</b> (813mm)
Cope Height	<b>5.5"</b> (140mm)	<b>Shallow/Deep 6.5" / 8.5"</b> (165mm / 216mm)	<b>11.5"</b> (292mm)	<b>12.0"</b> (305mm)
Drag Height	<b>4.5"</b> (114mm)	<b>5.5" / 7.5"</b> (140mm / 190mm)	<b>9.0" / 11.0"</b> (229mm / 280mm)	<b>11.0"</b> (280mm)
Molding Speed Cycles/Hour	<b>160</b>	<b>150</b>	<b>120</b>	<b>60</b>
Sand Requirements lbs. (kg) / Mold	<b>150 lbs.</b> (68 kg)	<b>400 lbs.</b> (181 kg)	<b>630 lbs.</b> (285 kg)	<b>1200 lbs.</b> (544 kg)
Squeeze Surface Pressure Variable to Maximum	<b>140+ psi</b>	<b>140+ psi</b>	<b>140+ psi</b>	<b>140+ psi</b>
Pump Motor (horsepower)	<b>20</b>	<b>40</b>	<b>50</b>	<b>60</b>
<b>Machine Dimensions</b>				
Length	<b>137"</b> (3485mm)	<b>157"</b> (3990mm)	<b>160"</b> (4064mm)	<b>200"</b> (5085mm)
Width	<b>62"</b> (1575mm)	<b>62"</b> (1575mm)	<b>68"</b> (1727mm)	<b>62"</b> (1575mm)
Height	<b>116"</b> (2950mm)	<b>125"</b> (3190mm)	<b>160"</b> (4064mm)	<b>157"</b> (3990mm)
Weight	<b>9980 lbs.</b> (4536 kg)	<b>15,000 lbs.</b> (6804 kg)	<b>17,000 lbs.</b> (7710 kg)	<b>27,000 lbs.</b> (12273 kg)

**Other Machine Sizes Available: 16 x 20**

### EMI's Growth Continues...

EMI is your trusted resource for best in class automatic matchplate molding machines and custom mold handling solutions.

EMI is well-positioned to support the automatic matchplate molding requirements of customers, having served the foundry industry for 40+ years with a broad range of high-quality, market-leading product lines such as EMI, Osborn, SPO, Sutter, +Impact+, and Herman along with an equally diverse range of core competencies, including design engineering, turnkey installations, manufacturing, and long-term service support.



Since 1982

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**Osborn, SPO, Sutter, Herman, Harrison, and Savelli**