

Introducing:



# The Mix-Molder<sup>®</sup> System

“Mix molten polymers and make injection molded parts, right on your benchtop.”

*Your competitive advantage!*



Model M-100 mixing device  
& ECB-001 controller\*



Model S-100 Injection Molder  
& ECB-001 controller\*

**It's as easy as 1,2,3...**

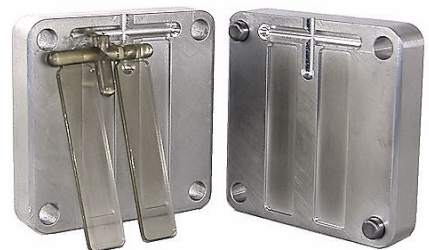
Pour resin pellets and a desired additive, colorant or filler into the removable melt chamber of Model-M device.



Melt the resin pellets and then mix materials with mixing tool.



Move the melt chamber to the Model-S machine and make an injection molded part with the mixed material.

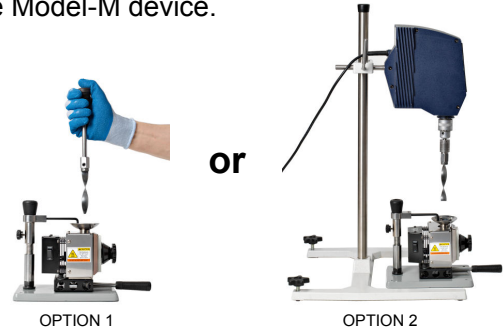


# Here's how it works...

1. Pour resin pellets and a desired additive, filler or colorant into the removable melt chamber of the Model-M mixing device.



2. Melt the materials in the chamber, and then mix them with the hand tool, or an overhead mixer positioned over the Model-M device.



3. Remove the melt chamber from the the Model-M mixing device.



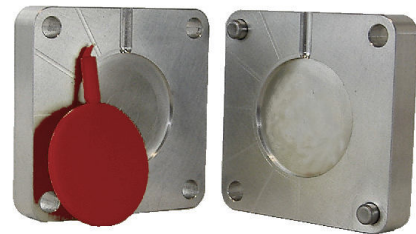
4. Insert the melt chamber into the Model-S Injection Molder.



5. Inject the mixed material into a desired mold by pulling down the handle of the model-S machine.



6. Remove the mold from the Model-S machine, and then remove the injection molded part from the mold.



## More details....

The mixing blade inserts through a material stripping assembly positioned over the melt chamber, which prevents the molten polymer from being pulled out of the chamber when the blade is withdrawn.

The slotted center element freely rotates during the mixing operation.



The helical mixing blade creates excellent laminar and chaotic flow within the melt chamber, allowing the entire melt to experience a uniform processing history.



**MODELS-100 INJECTION MOLDER - SPECIFICATIONS**

Maximum processing temperature	600 F (316 C)
Injection tube capacity	16 cm <sup>3</sup> /~1.0 cubic inch (about 16g by weight at 1.0 density)
Volts AC / Hz	120 V or 240 V 50/60Hz (See marking on machine)
Watts	600
Power switch w/ thermal breaker	10 AMP
Maximum mold size	2.50"D x 2.63"H x 4.00"W (64mm D x 67mm H x 102mm W)
Injection nozzle orifice	.125" dia. (3.175 mm )
Sprue center line	1.25" (~32mm) - from backing plate to nozzle orifice center line
Machine weight	35 lbs. (15.88 Kg)
Machine footprint	4"W x 8.25"D (10.2cm W x 21cm D)
Maximum machine dimension	9" x 14" x 25" (with handle up) (23cm x 35.5cm x 63.5cm)

1 Year Warranty



**Accessories included:** Practice Mold, Purge Block, Pour Tube, Wooden Craft Sticks, 1-lb. Resin Pellets (LDPE), Handle Extension, Mold Release Spray (2 oz. bottle), Sprue Cutter Pliers, Needle Nose Pliers, Sensor Jumper Wire (coiled), Power Input Jumper Cord, Instruction Manual.

**MODEL M-100 MIXING DEVICE - SPECIFICATIONS**

Maximum processing temperature	600 F (316 C)
Injection tube capacity	16 cm <sup>3</sup> /~1.0 cubic inch (about 16 g by weight at 1.0 density)
Volts AC / Hz	120 V or 240 V 50/60Hz (See marking on device)
Watts	500
Power switch w/ thermal breaker	10 AMP
Injection nozzle orifice	.125" dia. (3.175 mm )
Device weight	16 lbs. (7.26 Kg)
Device footprint	6.0"W x 9.0"L (15.2cm W x 23cm L)

1 Year Warranty



**Accessories included:** Hand Mixing Tool, Helical Mixing Blade\*, Blade Alignment Tip, extra Material Stripping Elements\* (2 qty.), Stopper Tool, Sensor Jumper Wire (coiled), Power Input Jumper Cord, Needle Nose Pliers, Instruction Manual.

**ECB-001 TEMPERATURE CONTROLLER - SPECIFICATIONS**

Power input / Hz	120 VAC or 240 VAC 50/60Hz (see control box label)
Power switch w/ thermal breaker	10 AMPS
Dimensions (approximate)	3.1"W X 4.1"D X 5.0"H (79mm W x 104mm D x 127mm H)
Weight (approximate)	2 lbs. (.91 Kg)

1 Year Warranty



**Accessories included:** Power input wire, Tilt Bracket, P.I.D. programming guide (from P.I.D. Mfr.), User's Guide

**CAPACITY CHANGE-OVER KIT - INCLUDES:**

<b>CCK-001-1 (10 cm<sup>3</sup> capacity)</b>	<b>CCK-003-1 (23 cm<sup>3</sup> capacity)</b>
1 - Injection Ram & clevis	1 - Injection Ram & clevis
1 - Helical Mixing Blade*	1 - Helical Mixing Blade*
1 - Injection Tube Assembly (a/k/a. melt chamber)	1 - Injection Tube Assembly (a/k/a. melt chamber)
1 - Alignment Tip	1 - Alignment Tip
2 - Material Stripping Element	2 - Material Stripping Element
1 - Hex wrench + hardware	1 - Hex wrench + hardware
1 - Bushing	1 - Bushing

\*NOTE: The mixing blade in this kit will fit both the hand mixing tool included with Model-M device and the machine tool (MMT-001-1) for use with overhead mixers, available for purchase separately.



**MACHINE MIXING TOOL (MMT-001-1) - SPECIFICATIONS**

Overall Length: 9.25" (23.5cm)	Shaft Length: 7.00" (17.8cm)
Shaft diameter: 3/8" (10 mm)	Features: Flexible Coupling

