Mold Tips: Heart Casting Mold (8976)

Mold preparation: Apply 5 coats of primer/separator with a soft bristle brush. Tilt the mold as you apply to prevent fluid primer from collecting in one spot. Kiln dry as you would any other small ceramic mold. Once dry, gently smooth the surface and tap out any excess primer. This mold should be re-primed before each casting.

Glass selection: It takes 50 grams of glass to make a heart casting that is approximately 0.7" (18 mm) thick. We’ve had success using various grain sizes of frit, as well as bits of 3mm sheet glass. Note that the form of glass used will impact the clarity of the casting. The form of glass may also be evident on the surface of the final casting as the shape of the material imprints against the mold. (To learn about selecting glass for casting, see TipSheet 8: Basic Lost Wax Kilncasting at bullseyeglass.com.)

For smoother edges around the fired base, heap material in the center. Some coldworking of the fired piece may be required.

SUGGESTED FIRING SCHEDULE

To promote even heating and cooling, place the Heart Casting Mold in the center of the kiln and elevate 1–2" (2.5–5 cm)

Suggested Firing Schedule following a 0.75" (19mm) annealing profile:

<table>
<thead>
<tr>
<th>Rate (Degrees/Hour)</th>
<th>Temperature</th>
<th>Hold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 400°F (222°C)</td>
<td>1225°F (662°C)</td>
<td>1:30</td>
</tr>
<tr>
<td>2 600°F (333°C)</td>
<td>1500°F (816°C)</td>
<td>:10*</td>
</tr>
<tr>
<td>3 AFAP**</td>
<td>900°F (482°C)</td>
<td>3:00</td>
</tr>
<tr>
<td>4 45°F (25°C)</td>
<td>800°F (427°C)</td>
<td>.00</td>
</tr>
<tr>
<td>5 81°F (45°C)</td>
<td>700°F (371°C)</td>
<td>.00</td>
</tr>
<tr>
<td>6 270°F (150°C)</td>
<td>70°F (21°C)</td>
<td></td>
</tr>
</tbody>
</table>

Fire gold-bearing styles with an appropriate hold of 2:00 at 1225°F.

*Plan to be present when the kiln is at process temperature, and visually inspect the piece. Skip to the next segment once cast is complete.

**As Fast As Possible. Allow kiln to cool at its natural rate with the door closed.

Fire gold-bearing styles with an appropriate hold of 2:00 at 1225°F.

Expect matte surfaces where the glass is fired in contact with the mold. Apply a small amount of Clean Shield Gel to impart a subtle sheen.

Re-preparation: Due to the heatwork involved, this mold must be re-primed before each use. Primer is no longer effective once fired to this temperature. To re-prime, gently remove the old primer with a dry scrub pad and reapply as directed.

Helpful Resources
Clean Shield Gel product use
Frit Tinting (article)
Frit Tinting (video)
Mold Tips: Suggested Slumping Schedules
Tips for Using Bullseye Slumping Molds