

SKU - SSM812 Stainless Steel 7 1/2" X 11 1/2" Oval Slump Mold





# How To Prepare and Slump into a Stainless Steel Mold

### **Create Your Flat Design Disk**

The first step is to design and create an 7-1/2" X 11-1/2" diameter flat design disk. Your design disk can be a single layer base glass (1/8" thick) then add a design using the Glass Tattoo Stencil System or you can create a 2 layer design (1/4" thick) if you would like a thicker tray.

### Prepare the Stainless Steel Mold

- New stainless steel molds have a smooth and shinny surface making it difficult for the mold release to stick. So the first step is to prepare the mold using fine grit emery cloth or super fine (400 grit) sandpaper to remove the shinny surface. Don't be too aggressive; you don't want to leave heavy scratches that could imprint onto the glass.
- The next step is to coat the mold with Boron Nitrite spray release. There only 2 brands that we recommend, Mo-Re<sup>\*\*</sup> or ZYP<sup>\*\*</sup> (formerly MR-97). They both come in a convenient spray can and work fabulously for both stainless steel or ceramic casting or shaping.
- Spray 4 light coats allowing a 10 minute drying time between each coat. Try to make each coat smooth and even, so you don't get too much in one area. Thick areas of boron nitrite will tend to stick to your glass. After each firing, sweep the mold gently with a soft bench brush to remove any debris then spray 2 light touch-up coats of boron nitride.

## Slump Your Pre-fused Oval Design

- Place the stainless steel mold on a shelf in your kiln. Then carefully center your fused design disk on the mold, be very careful that you don't scratch the Boron Nitrite as you're placing the glass. The glass can stick to any exposed stainless steel during a shape firing.
- Close the kiln lid and set your controller for a slump firing. Here is the schedule we used in our fire-brick kiln.

## **Slump Firing Schedule**

- Segment 1: Ramp at 250°FPH to 500°F and hold for 20 min
- Segment 2: Ramp at 500°FPH to 1260°F and hold for 10 min
- Segment 3: Ramp 9999 (AFAP or Full) to 900°F (COE90) or 950°F (COE96) hold for 90 min
- Segment 4: Ramp at 200°FPH to 200°F and power off



#### This is the Top Left section of the full-size pattern

Print this page on your desktop printer at 100% (be sure to read the ProTip below), then trim the right and bottom edge only following the blue dash lines. You will be trimming away some of the pattern lines but don't worry those areas will be added back in when you attach the other sections. Then match these trimmed sections together at the blue dash lines and attach them using clear craft tape. Do this for all 4 sections to create the complete full-size pattern.



#### ProTip: Are You Sure You're Computer is Printing at 100% Full-Size?

This PDF file will print on standard letter sized paper on any desktop printer (ink jet or laser) that is connected to your computer. These pattern pages must be printed at full-size (not reduced). That may seem obvious but the problem is Acrobat PDF Reader (the software on your computer) is automatically set to "Fit to Printable Area" and that setting will reduce the size of your patterns. It's very easy to fix this problem. When you ask the computer to print, a dialog box opens where you choose the printer, the page range, the number of copies, and the Page Scaling – **you must change this from "Fit to Printable Area" to "None"** - the pages will now print at full-size. Unfortunately the PDF Reader software will revert back to "Fit to Printable Area" and that means each time you want to print out full-size patterns you must remember to reset the Page Scaling to "None".

#### This is the Top Right section of the full-size pattern

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### This is the Bottom Left section of the full-size pattern

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