A Pot *Melt?*  
A Pot *Drop?*  
A Shelf *Drop?*  
An Aperture *Pour...?*

*BY JUDITH CONWAY*

All photos courtesy of Steve Immerman, Steve Immerman Kilnformed Glass

What's a pot melt, you might well be asking?  
Well, a pot melt, as introduced to me by Roger Thomas (www.rogerthomasglass.com) when he first taught for us at Vitrum Studio, is a method of creating interesting visual effects and color combinations in fused glass by melting various colors of glass together in a crucible and letting the mixture get so hot that it "drips" out of the hole in the bottom of the crucible onto a prepared kiln shelf. Because of the surface tension of the glass it pours more like syrup than water, often resulting in spiral patterns. This rather simple process results in a disk of premixed glass colors in random patterns that can be used as a whole composition or cut up and used in kiln formed glass work in countless ways. The gorgeous sushi platters by Steve Immerman of Steve Immerman Kilnformed Glass (www.clearwaterglass.com) are excellent examples of creating a pot drop in a particular color palette that can then be used to add visual texture and interest to kiln formed glass work.
The history of this technique is somewhat hard to pin down - it appears that it is a technique that simply evolved as glass artists were trying to find new ways of creating patterns and colors in their fused glass. Keith Cumming’s book *Introduction to Glass Forming*, published in 1980, presented a detailed explanation of the process and ways to predict and vary the results.

Who first thought of using an ordinary flower pot instead of a “crucible” to contain the glass in the kiln? I don’t know — but Bullseye’s Lani McGregor says “As for using a flower pot to create an aperture pour, the first I recall hearing about that was from Rob Snyder and Eric Miller at Portcon in 1983.” Obviously, it was someone who “thought outside of the box”!

**Overview**

The basic process is very simple: fill the pot (crucible) with compatible glass, and then position it in a kiln so that when the glass melts it will stream out of the hole in the bottom of the pot and land on a well-prepared kiln shelf. Heat the glass to about 1650°F, let gravity work, then anneal and cool the resulting disk of glass.

Pot Melts can be done in any size kiln, as long as the volume of glass that is melted is not so great it will flow over the kiln shelf. At Vitrum Studio we use a UPS scale to weigh the glass that goes into the pot so that we know what size melt we’ll end up with, and we also weigh the different glass colors that go into the mix so that we have data to use to change ensuing mixes when we are trying to create a specific look in the melt.

---

**Pot melt set-up**

Filled pot in kiln on supports of kiln dams and posts.

**Pot with melt**

The emptied pot and the fused pot melt disk still in kiln.
**Process**

Fill a clean flower pot. (At Vitrum we use an Italian-made terra cotta flower pot which is less likely to crack than those made in Mexico. Go to a good garden center and buy several pots.....it is pretty addictive!) Use scraps of compatible glass - and use colors sparingly! We use a LOT of clear in our mixes; the clear helps separate the colors and keep the resulting mix from becoming muddy (remember the brown mess you got when you were young and tried to mix all the watercolor paint colors together.....?)

When you select colors for your Pot Melt, stay away from colors that are known to react with each other. I also recom mend that you first do a test firing of the colors that you want to use to see what will happen to those colors when they melt together. If you want to use black or other dark colors, use them very, very sparingly as these darker colors will tend to really dominate the mix.

Put the filled pot in the kiln, raising it above the kiln shelf with a support of kiln bricks or dams. Make certain that your kiln shelf is coated with a fresh coat of kiln wash (we use Bullseye kiln wash) and thoroughly dry. A simple firing schedule is:

1000 degrees per hour to 1650 - 1700°F, hold 90 min (or as long as it takes to empty the pot). Be sure to wear eye and face protection, thermal gloves and non-synthetic clothes when peeking into the kiln at these very high temperatures.

**AFAP (as fast as possible) down to 960°F, hold 1 hour 70 degrees per hour down to 700°F, hold 30 minutes**

**Turn kiln off**

As usual, you’ll need to adjust the firing schedule for your particular kiln.

You can usually get several firings from the same pot, so keep track of what colors were used in the pot and fill it with similar colors each time.
The above describes the basic process, but the resulting melt can be greatly varied with a number of factors:

- The selection of glass colors and the way they are positioned in the pot.
- The distance the pot is held above the kiln shelf.
- The shape, size and number of holes in the bottom of the pot.
- The surface onto which the glass drips will affect the pattern of the puddle of glass. You can let the glass drip freely onto the kiln surface or you can create a dam to contain the glass within a specific size or shape.

Once the melt has been annealed and cooled, it can be cut with a tile saw to the desired size and shape. Sandblast all surfaces of the cut pieces before using them in a fused composition because both the kiln wash and the saw marks can leave undesirable surface scum on the finished fused piece.

Judith Finn Conway is an award-winning glass artist, writer and educator in the Washington/Baltimore area. She has been a contributing editor to Glass Craftsman magazine since the early 1990s. Her work has been accepted in the Arts in the Embassies program of the United States Department of State and is shown in galleries nationwide. She and her partner Kevin O’Toole teach a wide range of glass classes and workshops in all aspects of warm glass in their studio, Vitrum Studio. You can contact her at:
www.judithconwayglass.com
or at the studio:

Rain Forest
sushi by Steve Immerman

La Jolla Tide Pool
A detail shot of “La Jolla Tide Pool” sushi by Steve Immerman showing pot melt used as a design element.