

Back to Basics

BY ED BIGGAR

*more bang and
education for the buck*



I OPENED THE LID OF MY NEW FIREFLY KILN AND THE GLASS BITS THAT I PLACED IN IT WERE GLOWING BRIGHT ORANGE AND HAVE FLOWED INTO PERFECT CABOCHONS WITH ROUNDED EDGES IN LESS THAN 45 MINUTES. I BELIEVE IF MARTHA STEWART WERE HERE AT THIS MOMENT SHE WOULD LOOK AT ME AND SAY, "ED, THIS IS A GOOD THING," AND SHE'D BE RIGHT!

SUCCESS ON A BUDGET

This was my first time using the new economy kiln designed by Paragon for the hobbyist on a budget. As I understand it, Tonya Davidson from 'Whole Lotta Whimsy', an art clay studio in Tucson, Arizona suggested to Paragon that they make a small, portable, 110V kiln using firebrick and high fire elements for an affordable price. Well, I've been using Paragon products for many years now and this family-owned company never ceases to amaze me. I think I am up on everything they are making and POOF, along comes another innovation to pique my imagination.

The Firefly is capable of firing up to 2350-degrees in a very short time. It will fire glass, ceramics, metal clay, and more. I believe it to be perfect for beginners with a limited budget who don't mind learning the art of kiln sitting. This process gets you acquainted intimately with your materials and builds character to boot!

KILN SITTING

According to Paragon's information, the infinite control switch allows the heating element to cycle on and off to regulate heat. Setting the switch to High allows the element to stay on continuously; setting the switch at Low allows for a slower heating rate. As Paragon states, the switch settings do not correspond to a particular heating rate or temperature hold. This is why you need to observe the add-on digital pyrometer which comes with the kiln, and keep a firing log and use a timer to remind yourself to check the kiln periodically to make sure you are on target. In another words, you will need to become adept at kiln sitting.

A ROAD TEST ON THE ROAD

Recently my wife and I took the Firefly to the Bead and Button Show in Milwaukee and to UrbanGlass in NYC. At the Bead and Button Show, we tried metal clay in the Firefly for the first time, firing a pair of earrings made with PMC3. Starting with a cold kiln and our metal clay on a shelf in place, we put the switch on High and watched. By turning the knob back and forth between Medium and High, we were able to fire our pieces using the lower time setting for PMC3. This allowed us to kiln sit for only 10 minutes. Although you could fire regular PMC as well, the kiln sitting time would increase greatly. During later experiments at UrbanGlass and in our studio, using the Firefly kiln to cab and anneal glass bits, we found that setting the control knob on Medium gave the slower ramp speed necessary for firing these pieces of glass. Depending on the thickness of your glass, you may want to set the control knob between Medium and Low. (Note: we used a fired ceramic shelf in all our tests, with kiln furniture and shelf paper for glass tests. The Firefly does not come standard with a shelf)

PARAGON PLANS AHEAD AND OFFERS OPTIONS


Some years ago I provided a new flame working studio with three Caldera kilns which are also made by Paragon. They too, are designed with economy in mind and are built along the same lines as the Firefly. They come with an un-hinged lid and are made to be set on refractory legs. The models I installed had infinite switches and an analog pyrometer to keep track of the temperature. I ordered these with a bead door collar, and when set up they were easy to cruise at annealing temperatures for glass. The difference between the

two kilns is that the Firefly has a hinged lid (I like this feature a lot), a bimetallic timer that cycles on and off to regulate heating, and a permanent base which is also a nice feature. Although the Caldera is made to stack in sections, the Firefly comes as one piece with a sturdy 3 inch tall steel base with mar-proof rubber feet supporting the entire fire brick bottom.

TECH DETAILS

The Firefly operates on regular household current and plugs into any 110V grounded circuit (normal household current). It requires 14 amps, 1680 watts, and uses a 5-15R receptacle. The interior is 8 inches square by 4 ½ inches high: 0.16 cubic feet. The exterior dimensions are 15-inches wide x 18 ½ deep x 12 high, including the stand. Shipping weight is 45 pounds and is easily shipped via UPS. The easy-to-read liquid crystal display on the handheld pyrometer reads to 1999F, and comes with a stand to place beside the kiln for convenience. The kiln itself is well-constructed from 2 ½ inch firebrick, with dropped, recessed grooves for the heating elements. The Firefly's manual comes with basic procedures as well as starting points for various applications.

PARAGON SUPPORTS THEIR PRODUCTS AND THE INDUSTRY

Whether or not you choose to purchase a Firefly, be sure to check out Paragon's website and sign up for Arnold Howard's Kiln Pointers, a free informative topic and question/answer bulletin sent to you by email each week. Remember, no matter how you work your glass, always watch it and keep gravity on your side, it will work for you if you let it... 

BIO: Ed Biggar and his wife Martha teach flame working, kilnforming, and neon as well as metal clay while creating their own work in their studio in Southwest Virginia. Check them out at www.edandmarthabiggar.com.