Art Glass Supplies
Create Inspire Fuse

# The Casting Companion Glass Kiln - HS-360G


AMPERAGE/VOLTAGE: 15amp is equipped with an 1800W element and the 20amp is equipped with a 2000W element. The 20amp version will get up to temperature faster than the 15amp. The 20amp/240V is more efficient.

| | 20Amp/120V | 20Amp/240V |
|---|---|---|
| Max Temperature | 2000°F | 2000°F |
| Plug Voltage | 120V | 240V |
| Max Amp Draw | 17 Amps | 9 Amps |
| 1-Phase Circuit | 20 Amps | 20 Amps |
| Break-in Period | 4-5 Hours | 4-5 Hours |
| Length of Cord | 3ft | 3ft |
| Warranty | 12 Months | 12 Months |

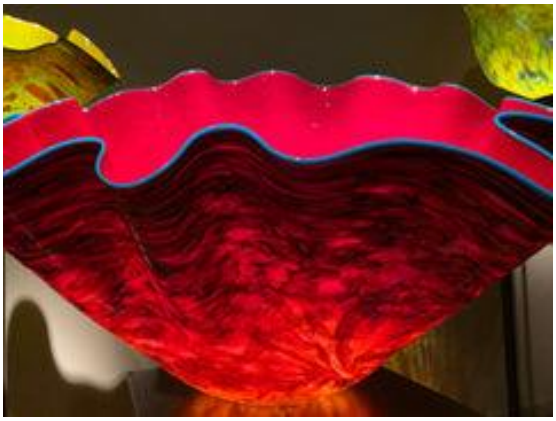
## The World of Glass

**IMPORTANT**: The most important thing when working with glass is to make sure the glass is compatible with the project you are working on. Glass is rated off of a Coefficient of Expansion (C.O.E.) rating. This rating is given to glass based on how it expands and contracts. Therefore, you cannot fuse glasses with differing C.O.E. rates together or it will break!

The world of glass is a beautiful form of art. Creators make sculptures bowls and other magnificent and unique pieces detailing the vision of their artistic mind. Glass kilns are perfect for all your glass projects. Most glass projects need temperatures to go up to 1700F with many processes being done at lower temps. Hot Shot Ovens can achieve all of the processes of annealing, fusing, slumping and casting in order to turn your idea into a beautiful piece of art.

## The Different Stages of Glass Making Explained

### Annealing & Soaking



Annealing is the process of slowly cooling glass after it has been formed. Annealing glass is typically done at roughly 950-960F°. Annealing helps the glass not to crack. It makes the molecules in the glass vibrate to get the stress out of them. This is done in bead making as well. It allows the beads to become strong and not brittle. This process takes about an hour to fully soak the glass.
Soaking is a term used frequently in these processes and it means to hold the product at a certain temperature for a certain period of time.

## Fusing

Glass fusing is simply the process of stacking two or more layers of compatible glass together to make a design, and then placing the stacked glass into a kiln, where it melts (fuses) together.

Tack Fuse: This process is done at the lowest temperature of 1350-1370F which will allow the glass to stick together but keeps its edges and form until it starts to exceed this temperature.

Medium/Soft Fuse: This is done at 1400-1450F and will cause all the glass to have softened rounded edges.

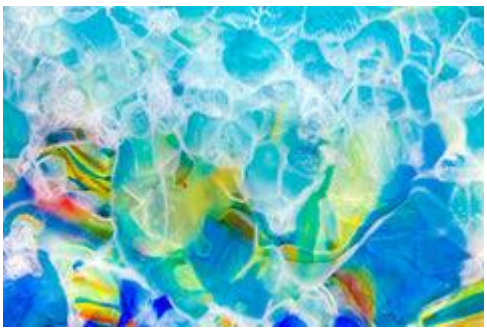
Full Fuse: This is the process where the glass becomes fully fused together. This allows the surface to be fully smooth without any texture. This process is done at 1450-1470F.

## Slumping & Casting

**SLUMPING** : The forming stage of warm glass work that allows you to shape your fused projects into beautiful and functional items by heating them just enough to bend or 'slump' them into ceramic or metal forms. This process is normally used to make plates, bowls, platters and other decorative art. Slumping range of most glass 1200°F to 1300°F.

**CASTING**: A glass firing technique using hollow or open faced molds to contain and shape the melting glass. Glass Pasting or also known as Pâte de Verre is done at 1300°F to 1400°F. This casting technique uses finely crushed glass and produces a textured or frosted surface look. Cavity or Open Face is done at 1450°F to 1700°F. These firing temperatures for casting range significantly based on sizes and thickness of both the molds and the glass that is being used.

## Temperatures used to make glass art:



1200°F Draping – glass softens enough to bend over a mold.

1250°F Slumping – glass softens enough to bend into a mold.

1300°F Fire Polish – glass melts enough to produce a surface polish.

1350°F Tack Fuse – pieces of glass will permanently fuse together.

1450°F Full Fuse – pieces of glass will fuse and melt to a single level.

- **The Hot Shot Oven empowers artists and craftsmen to create without limits.**

Hot Shot Oven & Kilns are equipped with Cool-Touch Technology that provide a safe external temperature to allow for safer operation and protection of its surroundings. Having a cool oven allows for your shop to stay cool too. We all know Machine Shops can get hot from all of the equipment running, this oven will not add to that! Keep your shop cool while Heat Treating!

## Constructed to last

Hot shot ovens are specifically designed with the end user in mind. Hot Shot ovens feature a full swing side opening door to allow safe and easy insertion and removal of material as well as a cool-to-touch one-handed handle made from high quality stainless steel for easy opening and closing.

Hot Shot ovens are constructed with a high quality powder coated shell. The high density fiber insulation in a Hot Shot oven is machined to high tolerance specifications so that each piece fits perfectly together to provide a proper seal, ensuring that it will maintain its temperature and work efficiently to prevent loss of heat. Each oven comes with a removable high density floor. This is ideal to assist with project setup or if it needs to be replaced.

Hot shot uses Kanthal A1 heating elements, a type K thermocouple and every oven comes standard with a solid state relay at no additional charge.

## Advanced Features

**Solid State Relay:** Unlike many other ovens & kilns all Hot Shot ovens come standard with a solid state relay. Having a solid state relay eliminates the distractive clicking noise that a mechanical relay makes. A solid state relay is also more dependable and provides a longer life expectancy than that of a mechanical relay.

**Programmable Alarm:** Each unit comes standard with an integrated alarm that can be set to alert the user when a desired point or temperature is reached in the program.

**Safety Door Switch**: We also have integrated a safety door switch that will de-energize the heating element when the door is open.