**Eclipse Product:** Special ThermJet 025, Packaged Panel, Dungs valve train and VeriFlame.

**Submitted by:** Brian Shepard, Eclipse, South Carolina

**Application:** Preheat ceramic foam filters

**Description:**

Selee manufactures ceramic foam filters for the molten metals industry. Selee first designed the ceramic foam filter in 1974. Consistent and uniform preheat of the filter and filter bowl is required prior to casting.

The customer uses a special TJ0025 manufactured in Rockford. The burner air housing has been modified from the original design to include a JetFlow AirMover as the combustion air source. The burner is fired with fixed air and fuel for a predetermined time to heat the filter to 1,300 F. The burner has a special combustion tube that is inserted into a filter bowl. The flame is contained in the combustion tube so that only hot air penetrates the filter.

The burner/air mover is connected to the valve train by hose to allow the operator to apply the heat directly to the filter bowl. Once the heating cycle is completed the burner is removed and molten metal is poured through the filter.

The first HVB610 heater was sold in 1993. Since that time there have been several modifications to keep current with N.F.P.A. The present TJ burner was designed by Martin James of the UK office. Eclipse has built over 300 units to date. Selee sells its filters globally and the heaters are built in 3 locations.

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Eclipse UK
Eclipse Calgary