

## ☐ Sprue Crusher – Energy Savings ☐

Full Scale Implementation    OR     Pilot Scale/Study

### **1. Description of the project: What is the issue and how did you fix it?**

Installed crusher to reduce mean free volume of gates and sprues to be fed into furnace yielding shorter charge times, lower melt energy required, more efficient crane operation, and dramatically decreased chance of furnace bridging.

### **2. Environmental Benefits: Conservation of raw materials or energy, reduction or elimination of emissions, wastes, toxics, water discharges, etc.**

We realized an estimated 900,000 kWh reduction in electric consumption.

### **3. Other Benefits: Productivity, health and safety, employee morale, etc.**

### **4. Cost Savings: Capital cost, operating cost, ROI or other pertinent cost information.**

The cost of this machine came to roughly \$400,000. We received a rebate from Pennsylvania's Act 129 program for \$55,000. The annual savings came to over \$20,000

### **5. Applicability to other foundries and additional Comments**

Yes

**6. Applicable Environmental Categories and Foundry Processes. Select all that apply.**

**Environmental Categories**

- Carbon (GHG) Emissions Measurement and Reduction
- Air Quality       Water Use and Discharge       Waste Management
- Beneficial Use     Stormwater       Material and Resource Conservation
- Community Engagement

**Foundry Process(es) Impacted**

- Melt       Pour       Mold       Core       sand system/reclaim
- Shakeout     Heat Treat     Quench       Finishing       Shipping
- Maintenance     Pattern Shop     Casting Design
- Management Systems and Metrics
- Other, explain:

**7. Add photos to enhance your application, if applicable.**

Photo on Next Page

