Foundry
Policies & Procedures

General Procedures

General Safety Apparel

All foundry safety apparel will be used only for pouring purposes. All safety apparel will be checked, maintained and inventoried by the professor of note at the beginning and end of each semester. This same procedure will take place each time any safety gear is checked out for any off campus activity. 0 g0 G[t)-4(i)5(905)-24.13 procott

During non pouring times, i.e., P R O G P D N L Q J I X U Q D F H S U H S D U D W L R Q

Iron Furnace

Description

A cupola furnace and a cupolette furnace both have three main sections; well, wind

Iron Pre-pour Procedures and Requirements

- All iron charges will be completed well in advance of a scheduled pour.
- All mold making will be completed the day before the scheduled pour.
- Furnace preparation will be completed the day before the scheduled pour.
- All student participation will require proper instruction regarding safety gear, furnace operations, and pouring procedures prior to scheduled pour.
- All student participants are required to participate in a practice pour clearly demonstrating all activities that take place during a scheduled pour.
- All student participants must be present during both the orientation session and the scheduled pour unless authorized by the professor of note.
- All participants, number of molds, and estimated weight to be poured must be posted prior to the pour. This will facilitate a safe and organized pour.
- The safety apparel monitor will facilitate safety gear fitting properly and emergency operations.
- The Department of Art & Design will supply drinking water and ice for all participants during a scheduled pour.

Prior to the scheduled pour, participants will be organized into furnace and pouring teams, as well as general areas of responsibilities. Team leaders will be assigned from experienced participants to maintain cohesive order within these smaller groups and direct their operations during the pour.

If you have been assigned to an operation that you do not feel comfortable performing, speak up in a timely manner. , W L V L P S R U W D Q W W R H Y H U \ R that you are comfortable in your own capabilities. Everyone can participate, there are many duties that do not include intimate contact with metal pouring depending on the type of foundry operation; i.e., mold captain to direct the pouring crew, safety apparel monitor, record keeper, someone to ensure that the participants N H H S D G H T X D W H O \ K \ G U D W H G F U R Z G F R Q W U R O D Q G D someone to inform the observers about the process.

Prior to the actual operation of the furnace there will be an organizational meeting of all participants with the professor of note who will double check proper number of participants and safety attire.

Pouring Crew and Responsibilities

- While operating the 300# cupola, a pouring crew will consist at minimum of the following participants:
  - 1 mold captain
  - 1 crane operator
  - 4 participants operating the furnace
  - 3 participants pouring the metal (bull ladle)
  - 3 participants pouring the metal (small ladle)
  - 1 safety apparel monitor

- While operating the 100# cupola, a pouring crew will consist at minimum of the following participants:
  - 1 mold captain
  - 2 participants operating the furnace
  - 3 participants pouring the metal (small ladle)
  - 1 safety apparel monitor

Safety Apparel during Furnace Operation

A sculpture professor must be present during all furnace operations.
All safety equipment must be worn in the furnace and mold areas when furnaces are in operation or metal is being poured. All students, professors and guest artists must adhere to the following safety requirements:

- Close woven cotton shirt
- Long, loose fitting denim jeans
- Safety glasses with side shields. Prescription glasses can be purchased at Texas State Optical. Welding supply stores and most hardware stores stock proper eye ware. **Sun glasses are not proper eye protection**
- Cap or hat (not synthetic material) to cover your head and keep your hair tied back.

Clean up

A brief clean up will take place after the pour. This will consist of turning off all gasses and placing all equipment in a safe location. Safety apparel will be stored and inventoried in proper location. A final cleanup will take place the next class period after the pour. This will consist of putting away all tools and equipment in proper location, disposing all mold waste, sweeping floor sand, and cleaning furnace area.

All students who participated in the pour must be present during clean up procedures.

Bronze and Aluminum Furnace

Clean up

A brief clean up will take place after the pour. This will consist of turning off all gasses and placing all equipment in a safe location. Safety apparel will be stored and inventoried in proper location. A final clean up will take place the next class period after the pour. This will consist of putting away all tools and equipment in proper location, disposing all mold waste, sweeping floor sand, and cleaning furnace area.

All students who participated in the pour must be present during clean up procedures.