

Start-Up and Shut-Down of the Temporary Casthouse Emission System Portable Baghouse

Introduction:

The temporary casthouse emission system portable baghouse is an interim solution to reduce casthouse emissions until a new evacuation system is installed and operational. This procedure outlines the steps for start-up, operation, shut-down, and collection drum change-out.

Purpose:

To capture fugitive emissions from casting practices.

Scope:

- Adjusting furnace operating conditions to reduce emissions during casting
- Initiating immediate repairs to return the casthouse fan to operation
- Reporting excessive emissions to Environment

Equipment Required:

50,000 scfm Portable Baghouse

Duties:

- The Portable Baghouse is a critical part of the casthouse ventilation system.
- Before starting:
 - Check hydraulic oil level
 - Ensure the collection drum is empty and in place
 - Notify casthouse personnel of operation
 - Ensure air valves for auto pulse cleaning system are open
 - Ensure all ducting is connected and fume extraction hood is in place
 - Keep fan damper closed before fan start-up

Start-Up Procedure:

- Set the selector switch to "normal"
- Start the fan
- Start hydraulic pumps
- Start auto pulse cleaning system
- Open the fan damper only after the fan motor reaches running speed
- Start the screw conveyor (auger)



Operating Notes – Magnahelic Gauge Readings:

- New cartridges will register approximately 1/2" on the gauge. (inches of water). Normal operation will show 3"-5" on gauge.
- Over 10" on gauge, the collector must be shut down. This indicates clogged filters.

Collector Drum Change-Out:

- When the level indicator light turns on, the drum must be changed
- Stop the screw conveyor
- Remove the drum lid assembly
- Replace the full drum with an empty drum
- Restart the screw conveyor

Shut Down Procedure:

- Stop the fan
- Stop the auto pulse cleaning system
- Allow the screw conveyor to purge
- Stop the screw conveyor
- Stop the hydraulic pump
- Close the fan damper

Note: Iron runner collection hood should be removed from the runner if the baghouse fan is not running and casting must take place. Casting without the fan on will damage the hood.

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