

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

Introduction:

The temporary casthouse emission system portable baghouse is an interim measure to reduce casthouse emission until the new casthouse evacuation system is installed and operational. This procedure will cover start up, operation and shut down. Change out of the collection drum is also included.

Purpose:

Capture fugitive emissions produced from casting practices.

Scope:

- Adjustment of furnace operating conditions to reduce emissions during casting.
- Initiation of immediate repair(s) that returns the Cast House fan to operation.
- Reporting of excessive cast house emissions to environment.

Equipment Required:

50,000 scfm Portable Baghouse

Duties:

The Portable Baghouse is the critical piece of equipment in the Cast House ventilation system.

- Check the hydraulic oil level
- Ensure collection drum is in place and empty
- Casthouse personnel are notified that the baghouse will resume operation
- Ensure air valves are in the open position for auto pulse cleaning system
- Ensure all ducting is connected properly and fume extraction hood is in place
- Fan Damper to be in the closed position

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PROCEDURE

START-UP

1. Place selector switch in normal
2. Start up fan
3. Start hydraulic pumps
(Figure 1.1)

Figure 1.1



Figure 1.2

4. Start auto pulse cleaning system
(Figure 1.2)
5. Open fan damper when fan motor
has reached running speed.



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6. Start (AUGER) screw conveyor
(Figure 1.3)

Figure 1.3

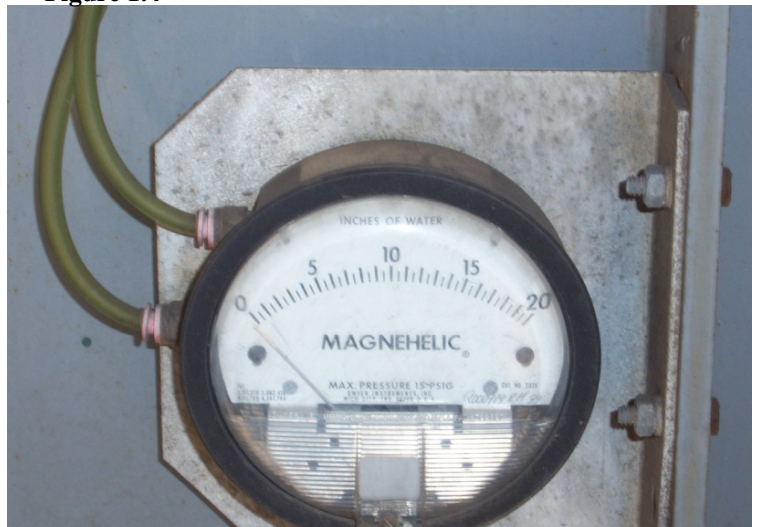


Magnehelic Gauge

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

See Figure 1.4

Figure 1.4



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Collector Drum Change Out

- 1. When the level indicator light turns on the collector bin will require changing**
- 2. Stop the screw conveyor**
- 3. Remove drum lid assembly**
- 4. Remove full drum and replace with empty**
- 5. Restart screw conveyor**
*****See Figure 1.3*****

Shut Down Bag House

- 1. Stop fan**
- 2. Stop auto pulse cleaning system**
- 3. Allow screw conveyor to purge material**
- 4. Stop screw conveyor**
- 5. Stop hydraulic pump**
- 6. Closed 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.