

GILES CHEMICAL ~ PREMIER MAGNESIA

Company Procedure

Title: Fine Salt Loop Number: P12-PR-200-030

Owner: Patrick Owen Revision: 3

Effective Date: 05/13/13 Page: 1 of 2



1.0 Purpose

The purpose of this procedure is to define, how the fine salt loop, is the key to producing the proper size crystals. Simply explained, the "fines" are removed from the system, melted down, and pumped back into the system.

2.0 Scope

This procedure applies to all manufacturing workers.

3.0 Responsibility

Lead Operator, Material Handler

4.0 Safety Considerations

Steel-toed shoes and safety glasses are required when working in, on, or around the crystallizers.

Safety is a condition of employment. Employees are not authorized to work in an unsafe manner and are prohibited from harming the environment of the facility or community.

5.0 Materials/Equipment

N/A

6.0 Procedure

The fine salt loop is a key to producing the proper size crystals. Simply, the fines are removed from the system, melted down, and pumped back into the system.

A. Start Up

- 1. Close the fine salt loop return valve and open the drain valve
- 2. Open the fine salt loop washout to start water flowing.
- 3. Start the fine salt loop pump.
- 4. "Switch" the salt loop discharge and washout valves, so fines flow through the system instead of water.
 - After flow through drain valve is ensured, close the drain valve and open the return valve.

Controlled Document



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- 5. Open the steam valve for the heat exchanger.
- 6. Open the condensate drain valve, if so equipped.
- 8. Check the temperature gauge. It should read 34 -36 deg C.

B. Operation

- 1. Operational checks to be made every 2hrs minimum
- 2. Insure that there is still flow through the system, and that the temperature gauge reads 34 36 C

C. Shutdown

- 1. Shut the steam off of the fine salt loop heat exchanger.
- 2. Close the condensate drain valve, if so equipped.
- 3. Close the fine salt loop discharge valve.
- 4. Open the washout on the fine salt loop.
- 5. Open the drain valve temporarily to ensure water is flowing through the loop.
- 6. Close the fine salt return valve.
- 7. Close the washout valve.
- 8. Stop the fine salt loop pump.
- 9. Open the drain valve.

7.0 Reference Documents

N/A

8.0 Change Information

Document review- updated format using new template and numbering system.