

	GILES CHEMICAL		
	COMPANY POLICY / PROCEDURE		
	Remelt Heat Exchanger Operation	Page : 1 of 3	Revision : 11/24/2008 Date : 12/05/2006
	Author: Patrick Owen	Job Specific	

Personnel responsible:

Lead Operator

Safety: Safety Shoes and Safety Glasses are required in the Production Area. Avoid touching hot surfaces around the heat exchanger.

Purpose or Objective: The purpose of this procedure is to use the re-melt heat exchanger to aid in starting up a Crystallizer.

Procedure:

1. Fill Crystallizer as normal (see appropriate procedure).
2. Ensure Crystallizer discharge is set to go to Mother Liquor Pot.
3. Pull vacuum and let it cool to 30 C.
4. Start Brine into Crystallizer at 16 gpm.
5. Set the set point on the discharge control to 14 gpm.
6. At remelt exchanger, connect Crystallizer discharge to exchanger feed (open feed valve).
7. Close the exchanger sample and drain valves.
8. Open the valve to the Mother Liquor Tank.
9. Open Crystallizer discharge valve (and close Crystallizer Solids Sample valve) and let flow stabilize.
10. At exchanger, verify flow by opening the exchanger's sample valve.
11. Ensure the condensate valve is fully open.
12. Open steam valve completely.
13. Watch the controller screen and feel the pipe to ensure discharge is heating up.
14. When the density in the Crystallizer reaches 1.39, close the discharge valve and wash through the system.
15. Go to the exchanger, close the valve to the Mother Liquor tank, and open the valve to the Brine Feed Tank (middle valve).
16. Close the wash water and open the discharge valve
17. Add about 5 gpm of Mother Liquor and add or reduce brine as needed to maintain level.
18. Continue running until crystals are large enough to dry well.
19. When ready for dryer, stop discharge and open washout.
20. Open Solids sample valve and close feed valve (to centrifuge but connected to exchanger).
21. Swap hose to Centrifuge.
22. Close the steam valve.
23. Close the washout valve.
24. Open the discharge.
25. Close the sample and open the feed to centrifuge.
26. Check to ensure feed to centrifuge.
27. Ensure washout and sample valves are open to drain the system.



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Remelt Heat Exchanger Operation

Page : 2 of 3

Revision : 11/24/2008
Date : 12/05/2006

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TRAINING DOCUMENTATION

	EMPLOYEE	TITLE	SIGNATURE	DATE
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Page : 3 of 3

Revision : 11/24/2008
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Revision Number	Revision Date	Revision Author	Revision Description
00	12/05/2006	Patrick Owen	Original Document
01	4/9/2008	Patrick Owen	Modified procedure for automatic temperature controller
02	11/24/2008	Patrick Owen	Changed density for switching to feed tank from 1.41 to 1.39