

GILES CHEMICAL CORPORATION		
COMPANY PROCEDURE		
Standard Operating Conditions	Page : 1 of 1	Revision : Date : 5/10/2006
Author: Patrick Owen	Title: (00) 80 Tons per Day Production Rate	

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Personnel responsible:

1. All

Safety equipment:

Safety glasses and safety shoes, other safety equipment as needed for each situation encountered

Summary:

This document outlines the process parameters for making 80 tons of Crystal per day. It is a guideline, not an absolute since it is hard to predict every situation you may encounter. The key to running this process correctly is consistency – keep it running. Do not run hard and then shut down.

Procedure:

Raw Materials

1. Ensure a sufficient supply of MgO and Acid are in their respective storage tanks at all times.
2. Use no more than 25% Baymag MgO to ensure that the press will run.

Digesters

1. **Use only 1 digester** for making 80 tons (assuming liquid tons average 25 per day) – it is hard to slow 2 digesters down enough to run only 80 tons per day.
2. Set MgO drive dial on or near “7”.
3. It is much better to run a “7” consistently, than to run “10” for a while and have to shut down.
4. Run about 17 gallons per minute of Mother Liquor.
5. Aim for a Density of 1.380.
6. Slow the Mother Liquor down if the density drops below 1.370.

Press

1. Kick the press off when the Mud Tanks get to 60%.
2. The press run may be extended by cutting back on the Press Pump Valve slightly.

Crystallizer

1. **Run only 1 Crystallizer** when making 80 tons per day (preferably #2 or #3)
2. Feed 28-30 gallons per minute of Brine
3. Feed 5-6 gallons per minute of Mother Liquor.
4. Keep solids below 160 if possible. Use more Mother Liquor if necessary.
5. Density should not exceed 1.44.
6. Keep discharge pump running as fast as needed to maintain the level.

Dryers

1. Run salt temperatures at 34-36 degrees C. **Do not exceed 36 C.**
2. Dryer rotation should be set to 1350 on the dryer speed drives.

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REVISION HISTORY

<u>Revision Date</u>	<u>Revision Number</u>	<u>Revision Description</u>
10/28/05	0	New Document
5/10/06	1	To include dryer conditions