

PREMIER MAGNESIA - GILES CHEMICAL

COMPANY PROCEDURE

Plant:

Operating the Komline-Sanderson Filter Press

Patrick

Owen

Author:

Page : 1 of 3

Waynesville

Revision : 03 Date : 9/6/2011

Area:

Manufacturing



Personnel responsible:

1. Lead Operator, Material Handler, Assistant Operator

Safety equipment:

Safety glasses and safety shoes.

Summary:

This press is computer automated. It has been pre-programmed to execute a complete cycle from start-up at the push of the start button, cycle end when the flow drops below 30 gallons per minute, through filtration to rinsing and squeezing of press cake. Dumping of press cake of press and surface washing of the filter cloths after each cycle is done manually and the press is left open for the next cycle.

Procedure:

1) ARRANGE INLET AND DISCHARGE PIPES

- a) Using a clean hose with a good gasket, attach the "Filter Press Inlet" to the "Mud to Press" line.
- b) Also using a clean hose with a good gasket, attach the "Filter Press Discharge" to the "Brine to Brine Tank #2" line.
- c) Open the associated manual valves on these four lines.

2) FILTERING WITH K-S PRESS

- a) Close the press by pushing the button marked "Close Press"
- b) Push the "Start" Button on the control panel
- c) The press will begin the heat up cycle by using hot water from the wash tank.
- d) If the water is too hot for the press to start, drain some of the water from the tank and add some cool water with a hose. Then press "Start"
- e) Allow the press cycle to continue (usually several hours) until the message to open the press is displayed on the panel.
- f) Record the press run information on the Press Log

3) OPEN THE PRESS

- a) Press "Open Filter" to back off the press closing mechanism.
- b) Open the drip tray by pushing the square marked "Open Drip Tray"
- c) When the press is fully open, press "Start the Conveyor"
- d) Proceed to separate the press plates, thus dropping the press cakes to the conveyor. This may be done manually, one at a time, or, Press the square on the control panel labeled "Start Shifter" and allow the machine to drop all of the cakes to the conveyor.

4) WASH THE PLATES

- a) Press "Close Drip Tray"
- b) Using the hose provided on the cat-walk wash any cake residue adhering to the filter cloths to the drip pans and thus to waste.
- c) Do not close the press. Leave it open until the next cycle.



PREMIER MAGNESIA - GILES CHEMICAL

COMPANY PROCEDURE

Operating the Komline-Sanderson Filter Press

Author:

Page : 2 of 3

Revision : 03 Date : 9/6/2011

Patrick Owen Plant: Waynesville Area: Manufacturing



TRAINING DOCUMENTATION

| | EMPLOYEE | TITLE | SIGNATURE | DATE |
|----|----------|-------|-----------|------|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | | | | |
| 23 | | | | |
| 24 | | | | |
| 25 | | | | |
| 26 | | | | |
| 27 | | | | |
| 28 | | | | |



PREMIER MAGNESIA - GILES CHEMICAL

COMPANY PROCEDURE

Plant:

Operating the Komline-Sanderson Filter Press

Patrick

Owen

Author:

Page : 3 of 3

Waynesville

Revision : 03 Date : 9/6/2011

Area: Manufacturing



| Revision Number | Revision Date | Revision Author | Revision Description |
|--------------------|------------------|--------------------|--|
| 00 | 10/31/05 | РО | New Document |
| 01 | 12/15/06 | РО | Update from Operator Training |
| 02 | 06/04/2009 | РО | Updated format and reviewed |
| 03 | 12/02/11 | РО | Added to summary: It has been pre-programmed to execute a complete cycle from start-up at the push of the start button, cycle end when the flow drops below 30 gallons per minute, through filtration to rinsing and squeezing of press cake |
| | | | |
| | | | |
| | | | |