

400,000 TPY Phosphoric Acid Plant

Capacity: 400,000 TPY

- (4) Production Lines x 100,000 TPY

Technology

- Prayon

Year Shut

- 2010

Raw Materials

- Phosphate Rock & Sulfuric Acid

Process Information

- Dihydrate Process – Wet Type
- (4) Stages: Grinding, Reaction, Filtration, Concentration
- Single Stage Filtration
- Wet rock grinding possible
- Easy transport of gypsum slurry

Major Equipment

- Phosphate Rock mills by Stein-Roubaix / Hardinge
- Vicarb Sulphuric Acid Diluter
- Reactor
- Phosphoric Acid Concentrator
- Slurry Filter
- Bag Filters
- Phosphate Rock Conveyor by Vidmar
- Phosphoric Acid Heat Exchanger
- Swenson Graphite Heat Exchanger
- Recirculation Pump
- Concentration Agitators



For more information contact -

Edward Zhang, Plant Sales

plants@phxequip.com

+1 732.520.2187 (Direct Dial)

+1 845.242.3378 (Mobile)

To discuss plants you are selling -

Jesse Spector

plants@phxequip.com

+1 732.709.7157 (Direct Dial)

+1 908.902.8854 (Mobile)

BRIEF PLANT DESCRIPTION

Each of the four production lines is capable of producing 100,000 tons/year of P_2O_5 and underwent major revamps between 1992 & 2004. A new Swenson phosphoric acid concentration unit was installed in 2004. The dihydrate process consists of four stages: grinding, reaction, filtration, and concentration. The dehydrate process offers several advantages: it can be used with all types of phosphates (sedimentary or igneous); phosphate can be supplied in slurry form (wet grinding); it is easy to control the water balance (recycle pond water, reduction/elimination of liquid effluents); it achieves good P_2O_5 yield.