

500 STPD Ammonium Nitrate Plant for Sale

Capacity

500 STPD

Product Concentration

83%
97.5%

Process Technology

Kaltenbach-Thuring of USA

Plant History

1992 – Built
2010 – Shut down

Raw Material Consumption

Nitric Acid 0.7875 tons
Ammonia 0.2125 tons
per ton of Ammonium Nitrate

Major Equipment

- Ammonia compressor
- Ammonia superheater
- Ammonia evaporator
- Evaporator exchanger
- Primary evaporator condenser
- Neutralizer
- Dryer
- Prill tower scrubber
- Prills coater
- Evaporator separator
- Rotary prills coater
- Dryer scrubber
- Remelt mixer
- Sump tank mixer
- Product conveyer



BRIEF PLANT DESCRIPTION

The plant was built in 1992, when all the equipment except prill tower was manufactured new. The prill tower was a used one relocated from another plant. In 2010, because the mining industry in vicinity reduced the demand of ammonium nitrate, this plant stopped production and has been idled since then. The prill product has quality parameters: friability less than 20%; AT 500 – 700 ppm; ATH 600 – 850 ppm; pH 5.5 – 6.5. This complete plant includes process sections: vaporization, neutralization, concentration, prilling, cooling and drying, and coating. The core process is neutralization, where ammonium nitrate is produced by combining a 57% solution of nitric acid with vapor phase ammonia in a reactor vessel commonly known as a neutralizer. The plant has a pressurized neutralizer. This Neutralizer produces 55 psig process steam as well as up to 504 tons/day of ammonium nitrate. The ratio of ammonia and acid entering the Neutralizer is controlled to maintain a pH of 8-10 in the process steam. A pH slightly on the acid side is maintained in the Neutralizer.

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)