# **Capacity**

180 STPD

# **Product Concentration**

57 %

#### **Process Technology**

Chemico mono high pressure process

#### Catalyst

90% platinum 10% rhodium

#### **Major Equipment**

- Air intake Filter
- Air Compression System
- Compressed Air Filter
- Ammonia Evaporator
- Ammonia Superheater
- Heat Exchanger Train
- Absorption Tower
- Tail Gas Mixer
- Weak Acid Pumps
- Condensate Cooler
- Catalytic Combustor
- Turbine Gas Boiler
- Blowdown Tanks
- Tail Gas Mist Eliminator
- Ammonia / Air Mixer
- Chemical Feed System
- Ammonia / Mist Separator
- Condensate Tank
- Condensate Pumps
- Boiler Feedwater Pumps
- Catalyst Recovery Filter

# 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)

# 180 STPD Nitric Acid Plant for Sale







# **BRIEF PLANT DESCRIPTION**

Phoenix Equipment has a used 180 TPD Nitric Acid plant for sale immediately available. The Nitric Acid plant produces 57% concentrated Nitric Acid (HNO3). The plant has been properly mothballed and shutdown, with the compressor train being turned monthly. Plant was operated by a major corporation and is in great condition. All plant documentation regarding operation and maintenance is currently available. This is a great opportunity to relocate a Nitric Acid plant for a fraction of the cost of building a new one and in significantly much less time.

The three main chemical reactions involved in the formation of Nitric Acid are: 1) The oxidation of Ammonia to Nitric Oxide (NO), 2) The Oxidation of Nitric Oxide to Nitrogen Dioxide (NO2), and 3) The absorption of Nitrogen Dioxide in water to form Nitric Acid (HNO3). Filtered atmospheric air is compressed to 110 psig and 450 F degree in the motor and gas turbine driven centrifugal compressor and mixed with filtered superheated ammonia vapor. The process gas leaves the catalyst gauze at about 1,650 F degree.