

## 120 TPD Ammonia Plant for Sale

### **Capacity**

90 – 120 tons per day

### **Feedstock**

Natural Gas

### **Product**

Ammonia of 99.97% purity

### **Process Technology**

C&I Girdler ammonia process  
N-Ren Amopak design

### **Raw Material and Utility Consumption**

Natural Gas 38,000 SCF per ton  
Steam 3,500 lbs per ton  
Electricity 740 KWH per ton  
Cooling Water 75,000 Gallons

### **Major Equipment**

Primary Reformer  
Secondary Reformer  
Ammonia Converter  
High Temperature Shift Converter  
Low Temperature Shift Converter  
CO2 Absorber  
Clark Compressor  
Worthington Compressor  
Methanator  
Regenerator  
Condensator Separator  
Condensor  
Reboiler  
MDEA Cooler  
Acid Gas Cooler



### **BRIEF PLANT DESCRIPTION**

The plant is built as modular and mounted on skids. It is easy to dismantle, transport, and re-install. The installation time and cost are significantly lower than regular type ammonia plants. This complete plant includes the process sections of (a) Natural gas desulfurization (b) Catalytic steam reforming (c) Carbon monoxide shift (d) Carbon dioxide removal (e) Methanation (f) Ammonia synthesis (g) Purification. Operation pressure in reforming and purification section 240 psig; in synthesis loop 4850 psig, maximum 5150 psig. Worthington electric motor driven reciprocating compressors consisting of (4) stages for synthesis gas, (3) stages for process air and (1) stage for ammonia refrigeration. The main compressors are built on a single crank shaft of a multipurpose and multistage one compact unit. Primary reformer has 64 catalyst tubes. Major equipment and process sections had revamps in 2012. Plant dismantled. Equipment is stored for quick loading and shipping.

**For more information contact -**  
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