

## 2,350 Nm<sup>3</sup>/hr Hydrogen Plant for Sale

### Capacity

Hydrogen 2,350 Nm<sup>3</sup>/hr

### Feedstock

Natural Gas

### Process Technology

Howe Baker Engineering of USA

### History

Build in 1992

### Major Equipment

- Feed Gas Compressor
- Desulfurizer
- Flue Gas Steam Generator
- Reformer
- Steam Drum
- Blow Down Drum
- Process Steam Generator
- Process Gas Cooler
- Process Condensate Separator
- PSA Adsorbers
- Off Gas Drum
- Waste Gas Steam Generator Boiler
- Shift Converter
- Deaerator



### **BRIEF PLANT DESCRIPTION**

Phoenix Equipment has this used Hydrogen Plant for sale. Natural gas enters the plant at approximately 30 PSIG and 90 degrees F, and is compressed to approximately 300 PSIG at 160 degrees F before it goes into desulfurizer. The desulfurized stream is preheated to 950 degrees F, and then mixes with steam. The mixture reacts with a catalyst to generate a stream of hydrogen, carbon dioxide, carbon monoxide, water, and methane as the gas passes through the reformer. The gas flows into the Shift Converter vessel where steam and carbon monoxide are catalyzed forming more hydrogen and carbon dioxide. The process gas stream is cooled before entering the condensate drum and then enter the Pressure Swing Absorption (PSA) System, which mixes the cold condensate and boiler feedwater for the deaerator. The PSA purification system uses absorption to remove all impurities such as carbon monoxide, methane, carbon dioxide and nitrogen, producing a high purity hydrogen product. All steam is generated by recovering waste heat.

### **For more information contact -**

Edward Zhang, Plant Sales

[plants@phxequip.com](mailto: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](mailto:plants@phxequip.com)

+1 732.709.7157 (Direct Dial)

+1 908.902.8854 (Mobile)