

1,500 Nm³/hr Hydrogen Plant for Sale

Capacity:
1,500 Nm³/hr

Raw Materials:
Natural Gas

Product Purity:
99.99%

Year Started:
1995

Year Shut Down:
2006

Equipment List:

- Natural gas compressor
- Intercooler and aftercooler
- Feed desulfurizer and heater
- Reformer
- Reformer effluent boiler
- Waste heat boiler
- Boiler water heater
- Blowdown separator
- Steam drum
- Economizer
- Deaerator
- Process gas cooler
- Condensate separator
- Waste gas surge tank



PLANT DESCRIPTION

The plant uses steam methane reforming (SMR) process. The first step of SMR involves a light hydrocarbon reacting with steam to produce a synthesis gas, which is a mixture primarily made up of hydrogen and carbon monoxide. This gas mixture is heated up and then distributed on the catalyst-filled reformer tubes. The plant has a vertical SMR reactor which can hold up to ten reforming tubes. The second step is water gas shift reaction. The carbon monoxide generated from the first step is reacted with steam over a catalyst to form hydrogen and carbon dioxide. The plant has a waste heat boiler for steam export. A pressure swing absorption (PSA) hydrogen purification system is included to produce high purity final product. Most equipment is skid-mounted for easy relocation. The plant is currently mothballed and under nitrogen blanket.

For more information, contact

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