



Unused Hydrogen Liquefaction Plant - 30 TPD X 2

Capacity: 30 TPD X 2

Process Information: Never used, never installed hydrogen liquefaction plant, which includes two units, each having capacity of 30 TPD. Loading system for liquid H₂ product is included.

Major Equipment

- HP H₂ Compressors
- LP H₂ Compressors
- N₂ Compressors
- Cold Boxes
- H₂ Purification Vessels
- Aftercoolers
- Intercoolers
- Heaters
- Liquefaction Interconnect Modules
- Loading Bay Interconnect Modules
- DCS Control

Brief Plant Description

The liquefaction process commences with an initial cooldown of the gaseous hydrogen feedstock down to 80 Kelvin. This is achieved within the "80K Coldbox" utilizing a Nitrogen refrigerant cycle. Subsequently, the second stage involves liquefaction via a hydrogen refrigeration cycle, reducing the temperature of the hydrogen feedstock to 20 Kelvin within a vacuum-insulated "20K Coldbox". This process integrates cryogenic purification of the hydrogen and an ortho-para catalytic conversion of the hydrogen