

Hydrogen Plant 90,000 scfh Asset 6530

Latest Inspection Report & Condition Dec 6, 2021

- 1. Feedwater system only and condensate pots are on site, no pumps.
- 2. Waste Heat Boiler tubes were not leaking to my knowledge. It was retubed sometime in the 90's.
- 3. Fans not aware of any major concerns with fans. May need bearings and belts.
- 4. HTS relatively new catalyst, could be reused if desired. Desulfurizers actually 2 of these, should be emptied and new catalyst installed
- 5. Burner there are 2 of these. One on the reformer now is smaller, sized for 50% rate. Original was shipped to Decatur IL but was not installed as of Aug 2021. Might be able to include that with purchase.
- 6. The PSA valves are all in place and could be reused after being pressure tested and rebuilt as needed. Some control valves were repurposed to other areas.
- 7. Natural Gas Compressor None. They were on a high pressure pipeline.

General comments -

Reformer is a 20 tube can, 15 tubes are on site. Solid sprayed refractory installed in top/ ceiling, provided good service over the years, might need some work after transporting to another site. Quench pot plant design, unsure of condition of quench pot, should be inspected through quench nozzle.

Was running at half capacity at 45,000 scfh. When it was modified, a smaller burner was installed. The original larger burner was moved to Decatur, IL and is still available.

Only heat exchanger on site is the air exchanger on top of waste heat boiler.

Waste heat boiler should be checked for wall thickness of shell and tubes checked for leaks. Pressure test prior to use.

HTS, Desulfurizers and Deareator should have internal visual and thickness check to verify continued use.

PSAs were replaced in 1995. Higher pressure rating (400psi) and stress relieved. Should provide good service life. Could be shipped with adsorbent in place.

Vent tank is on site in lay down area. Inspection recommended prior to use.