

Another Problem Solved by PipeServ

Location: Sulphuric Acid Plant - Australia

Application: Heat Exchanger

PipeServ was contacted by an Engineer at this acid manufacturing facility requesting our assistance to repair a failing heat exchanger converter boiler. This Sulphuric Acid Plant collects and then cleans sulphur dioxide before converting it first to sulphur trioxide, then to liquid sulphuric acid. Heat exchangers are a vital part of this process and if not working to their capacity can cause the shutdown of a facility.

The heat exchanger, converter boiler was a U-Tube style with the bundle consisting of 2310 tubes of a 304SS material. The tube OD was 63.50mm with 2.00mm wall thickness.

PipeServ recommended to re-sleeve the tube ends and using specialised tooling to hydro-lock individual sleeves into the existing tubes then finish off with mechanically rolling the individual sleeves to meet the specified expansion measurement.

Starting on the western side of the tube sheet (opposite side to the cold gas duct) 304 sleeves in total were inserted into the tube ends, hydro-locked and mechanically rolled.

The complete process was completed by two technicians from PipeServ and completed in two shifts. This work was conducted during the facilities planned shutdown.



Hydra-Loc™ Tube Sleeving

