



REACTOR REPLACEMENT PROJECT

CHEMICAL PLANT – NORTH CAROLINA

TOTAL INSTALLED COST \$1,400,000

PENTA provided detailed design engineering for a project to remove and replace two reactors. The existing reactors had to be replaced because it was determined they were at the end of their useful lives.

Initially PENTA completed a Total Installed Cost estimate of the project so the client could receive project approval and funding. A new reactor was designed with a half pipe jacket and internal cooling coil to replace the 6,000 gallon reactor. A used 9,500 gallon reactor was used to replace the 10,000 gallon reactor.



PENTA's scope of work included P&IDs to reflect the new system, revising the reactor instrumentation requirements, modifying the platform structure as required to support the reactors on load cells and providing engineering assistance associated with construction and installation per client requirements. Reactor piping design was performed in the field by PENTA engineers and designers.