

CONCRETE INSPECTION AND REPAIR

Problem: A customer required new reactors and associated equipment for liquid chemical production in order to keep pace with orders and increase reliability.

Solution: Project Technologies & Services (PTS) worked with the customer to design the system and create a cost estimate for the project which included: equipment, material, installation and engineering. Working with the client to finalize the budget, PTS was able to provide estimated capital and appropriation approval.

Design was refined with customer feedback and included:

P&IDs

Layout drawings

Equipment specifications

Electrical requirements

Preliminary instrumentation & controls design



Existing reactor area

Upon removing the existing reactors, the concrete floor was determined to not be structurally sound. PTS developed demolition drawings and designed a new, lined containment area for the new reactors. Sump pits and pumps were added to remove liquid from the containment area to the existing treatment system.

PTS worked with the customer to determine their equipment preferences. PTS then offered recommendations for all equipment within the project and provided quotes from local vendors. The customer used the equipment list and design documents to coordinate the purchase and installation of the new system.

The customer lacked drawings of equipment from the previous ownership. PTS provided drawings of existing equipment. The drawings will facilitate future changes to the process and ease maintenance of existing equipment.



*Floor
conditions
beneath
reactors*