

High Temperature Short Time (HTST) System

Confidential Client

exentec

BioPharma Solutions

Pharmaceutical /
Biopharmaceutical

MANDATE

Exentec was retained to design, engineer & fabricate a "high-temperature, short-time (HTST)" process skid for a confidential client in Carlsbad, CA to replace older, outdated, non-fully automated equipment. Confidential client specializes in serving customers in molecular and cell biology, clinical applications and in applied markets such as human identification, biosecurity and quality and safety testing.

PROJECT SCOPE

Exentec's main project scope included designing a fully automated HTST skid with data collection, new instrumentation and Delta V communications to double the capacity of an existing skid. Project challenges included fitting all instrumentation and process piping into a spatially constrained envelope that was to be fully enclosed for washdown, while remaining accessible for maintenance. Physical constraints dictated that the new high-capacity system had to fit within the footprint of the existing system. Schedule constraints included successfully accommodating the electrical and automation design with alternate hardware components due to longer than anticipated lead times.

Services included

- Heat exchanger sizing
- Pump sizing
- Pipe sizing
- Process temperature assessment
- Process flowpath development
- P&ID development
- Component selection
- Component submittal logs
- 3D model reviews
- Valve manifold detailed drawings
- Custom manifold design
- Custom removable cladding design
- Polishing procedures
- Electrical schematic design
- Automation coordination
- Sequence of operation review
- TOP review with QA & validation
- Simulation phase testing
- Selective FAT testing
- Steam testing
- Passivation
- Dedicated air ride shipping

Equipment includes

- EXERGY heat exchangers
- Unibloc COMPAC pump
- Ethernet based instrumentation
- Delta V controls

Software / Communications

- Delta V



SECTOR OF ACTIVITY:

Biopharmaceutical

CLIENT:

Confidential Client

YEAR OF COMPLETION:

2018

SKID DIMENSIONS:

~ 12' x 5' x 9'

EXENTEC PROJECT VALUE:

Confidential Value

Please contact our sales department for details or for a quote.

Email: sales@bpesys.com

Phone: 978-483-0943