

Large Scale Cell Culture Single Pass Tangential Flow Filtration

Confidential Client



exentec

BioPharma Solutions

Pharmaceutical /
Biopharmaceutical

SECTOR OF ACTIVITY:

Biopharmaceutical

CLIENT:

Confidential Client

YEAR OF COMPLETION:

2018

SKID DIMENSIONS:

~ 16' x 7' x 12'

EXENTEC PROJECT VALUE:

Confidential Value

EQUIPMENT INCLUDED

Process Equipment

- 500L tulip vessel
- Magnetically coupled agitator
- 2 TFF feed pumps
- TFF retentate vessel CIPR pump
- TFF recirculation pump
- 2-high ultrafilter holder (20-40 m2 capacity)
- (4) SPTFF holders (8-20 m2 total capacity)

Software / Communications

- CHARMS I/O

Equipment / Services Provided

- Mechanical engineering
- TFF retentate vessel & agitator
- Tangential flow filtration skid
- Single pass tangential flow filtration
- Filter housing
- Multi-port block valve engineering
- Hangers and supports
- Vibrations and seismic control
- Hygienic system specialties
- Piping systems
- Low voltage induction motors
- Pumps
- Electrical engineering
- Variable frequency controllers
- Basic IC reqs and PCS controls
- Pneumatic instrument tubing
- Instrument calibration & commissioning
- Instrument and control panels
- Factory acceptance testing (FAT)
- Tagging and identification
- Enhanced turnover package
- GMP documentation

MANDATE

Exentec was retained to design & fabricate a single pass tangential flow filtration process skid for a confidential client as part of a large expansion project encompassing around (2) 10,000L bioreactors including both upstream and downstream equipment. Confidential client specializes in pharmaceutical medicines, vaccines and consumer healthcare products & has the broadest portfolio in the vaccines industry including pediatric, adolescent, adult and traveler vaccines.

PROJECT SCOPE

Exentec's main project scope included merging both a tangential flow filtration (TFF) process and a single pass tangential flow filtration (SPTFF) process all on to one skid. Project challenges included interlacing three individual systems on to one skid as well as designing a skid break to accommodate accessibility into the suite. This included meticulous consideration of instrument placement, minimizing tri-clamp placement, designing a hinged ladder & considering routing paths for the breakage of electrical and pneumatic wireways.

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

Email: sales@bpesys.com

Phone: 978-483-0943