

Large Scale Cell Culture Harvest Clarification Depth Filtration

Confidential Client

Pharmaceutical and
Biopharmaceutical

MANDATE

Biopharm Engineered Systems LLC (BPES, a CPS Group Company) was retained to Design & Fabricate a Harvest Clarification Depth Filtration process skid for 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 traveller vaccines.



PROJECT SCOPE

BPES's main project scope included integrating (4) stages of depth filtration on to one process skid (eight pieces of filtration equipment total). Project challenges included multiple stages of filtration mandated a lot of real estate, so BPES needed to ensure the skid was compact enough to ensure operator access among all areas of filtration both on and around the skid boundary. Additional challenges included ensuring positive slope amongst all stages of filtration across multiple elevation changes.

Process Equipment (Including but not Limited to)

- Five (5) 3M Cuno Filters
- 2-H Millimore Millistack POD Filter
- 3-H Millimore Millistack POD Filter
- .2 Micron ABC Filter, 3 Round
- .2 Micron ABC Filter, 9 Round
- Davit Crane
- Stainless Steel Platform, Stairs & Railings
- Sanitary Rotary Lobe Pump

Software / Communications

CHARMS I/O

Equipment / Services Provided (Including but not Limited to):

- Mechanical Engineering
- Multi-port block valve engineering
- 3D Design Modeling
- Hold Up Volume Calculations
- Electrical / Pneumatic Wireway Design
- Vibrations and Seismic Control
- Hygenic System Specialties
- Filter Housing
- Low Voltage Induction Motors
- Pumps
- Electrical Engineering
- Variable Frequency Controllers
- Basic IC Reqs and PCS Controls
- Pneumatic Instrument Tubing
- Instrument Calibration and Commissioning
- Instrument and Control Panels
- Factory Acceptance Testing (FAT)
- Tagging and Identification
- Enhanced Turnover Package
- GMP Documentation

SECTOR OF ACTIVITY

Biopharmaceutical

CLIENT

Confidential Client

YEAR OF COMPLETION

2018

SKID DIMENSIONS

~ 12' x 5' x 9'

BPES PROJECT VALUE

Confidential Value



BioPharm Engineered Systems
A Critical Process Systems Group Company