

# Large Scale Cell Culture Harvest Clarification Depth Filtration

**Confidential Client**



## MANDATE

Exentec Biopharma Solutions (EBPS) was retained to design & fabricate a harvest clarification depth filtration process skid for a confidential client as part of a large expansion project encompassing around (2) 10,000L bio reactors 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 integrating (4) stages of depth filtration onto one process skid (eight pieces of filtration equipment total). Project challenges included multiple stages of filtration mandating a lot of real estate, so Exentec 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.

**exentec**

BioPharma Solutions

Pharmaceutical /  
Biopharmaceutical

SECTOR OF ACTIVITY

Biopharmaceutical

CLIENT:

Confidential Client

YEAR OF COMPLETION:

2018

SKID DIMENSIONS:

~ 12' x 5' x 9'

EXENTEC PROJECT VALUE:

Confidential Value

## Equipment Includes

- 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
- 13
- Mechanical engineering
- Multi-port block valve engineering
- 3D design modeling
- Hold-up volume calculations
- Electrical / pneumatic wireway design
- Vibrations and seismic control
- Hygienic 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

Please contact our sales department  
for details or for a quote

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