

Large Scale Cell Culture Single Column Chromatography System

Confidential Client

exentec

BioPharma Solutions

Pharmaceutical / Biopharmaceutical

SECTOR OF ACTIVITY:

Biopharmaceutical

CLIENT:

Confidential Client

YEAR OF COMPLETION:

2023

TOTAL PROJECT COST US \$:

Confidential

EXENTEC PROJECT VALUE US \$:

Confidential

SERVICES PROVIDED

Exentec scope of work included:

Process engineering

- Product loading
- Washing & equilibration
- Isocratic or gradient elution
- Elution fractionization
- System CIP/SIP plan & manifolds

Electrical engineering

- Electrical enclosure design
- Interconnecting wiring design

Equipment, valve & instrumentation selection

Mechanical skid designs

- 3D model
- Equipment layout
- ASME BPE compliant piping design
- Piping sloped for gravity draining

System fabrication

- Skid frame fabrication
- Pipe manifold fabrication & documentation
- Instrumentation installation & wiring

Quality documentation

- Material test reports
- Video borescope
- Weld mapping
- Factory acceptance testing

please contact our sales department
for details or for a quote

Email: sales@bpesys.com

Phone: 978-483-0943

MANDATE

Exentec was retained to design and construct a single column chromatography unit with product/buffer feeds.

Buffer feed and product paths were designed to be chemical sanitizable and capable of clean-in-place (CIP) with the installation of buffer feed and a column CIP manifold.

The unit was designed to fit on a single skid frame that ensured maintenance accessibility to all system components.

DESCRIPTION | FEATURES | BENEFITS

The single column chromatography unit with product/buffer feeds included the following parameters:

- 0.5 – 20 LPM multi-diaphragm feed pumps
- Feed static mixer
- Tempered water feed heat exchanger
- Bubble trap
- Feed filter (with 10" or 30" cartridge)
- Pre-column air sensor
- Pre- & post-column conductivity & pH
- CIP rinse conductivity
- Post column dual UV sensors
- 2-5 port block diaphragm valve
- Customer supplied DeltaV programming

