

# Case Study

## QTY 3 Chromatography Skids with QTY 1 Column Packing Skid

### TECHNOLOGY OVERVIEW

- Buffer/Product Feed Pump
- AWFJ Feed Pump
- Chromatography Guard Filter & Eluate Filter
- Advanced Couplings Bubble trap
- Sartorius sanitary filter cartridge with ABC Sanitary Filter housing
- Alfa Laval SX Series Rotary Lobe Pumps
- Chemineer In-line Static Mixers
- Equipment with Remote I/O Panels for integration to Clients Delta V DCS.

### FLOW TECHNOLOGY DESIGN

- Development of detailed P&IDs
- Full 3D modelling for layout and detailed piping design
- Platform & skid frame design with structural calcs.
- Fabrication, FAT protocol generation and full testing
- Automation developed in partnership with Client

**flow**  
**technology™**





# Case Study

## Unique Refrigerated Chromatography System

- A Biotech customer was introducing a new process which required the chromatography column and bags to be chilled.
- A purpose-built cold room would be cost prohibitive.
- Flow Technology developed the novel solution of utilising a commercially available refrigerator, and designing the chromatography system to be mobile, and wheeled in and out of the cold area.
- This reduced capital and maintenance costs, while also reducing the system footprint.
- Heat-generating components (e.g, pumps) were kept outside of the refrigerated area

### System Overview

- Quattroflow Pump (50 - 450 l/hr)
- Sartorius Process Cartridge Filter housings, UniBloc-pump bubbletrap.
- 2000L Pre-Fabricated Refridgerator
- GEMÜ Diaphragm Valves, SVF Ball Valves.
- Conductivity, pH, UV, Air, Flow, Level, Pressure and Temperature sensors.
- RIO and MCP Panels
- System fully tested at FT Workshop

**flow technology™**



# Chromatography Liquid Handling Systems Capabilities

- Every Chromatography skid is unique. We work with clients to design, build and test a system to exactly meet their requirements.
- Many of our Chromatography skids integrate inline Dilution .
- Construction in 316L, AL6XN & Hastelloy.
- Experience ranging from small mobile refrigerated systems, to skids feeding large diameter columns.

**flow  
technology™**



## Further Information

### Contact

Ian Shanahan  
Business Development Manager  
M: +353 83 428 3994  
T: +353 63 815 60  
E: [ishanahan@flowtechnology.ie](mailto:ishanahan@flowtechnology.ie)