



NaOH In-line Dilution BioPharma Customer

- System supplied as part of a very large greenfield biologics project. Flow technology supplied over 20 process skids on this project.
- This NaOH Dilution System was designed and built to allow in-line preparation of buffer solutions by diluting 8N sodium hydroxide solution to 1N, 0.5N and 0.1N solutions for Process and Clean-In-Place operations.
- System design included the ability to dilute caustic solution concentrations directly by volume using mass flowmeters and/or conductivity measurements. System constructed with 1.4435 (316LSS) product contact parts, built on a 304 SS frame.

System Overview

Materials	1.4435 (316L) SS
Equipment	Quattroflow pumps Sartorius filter housings
Instruments	Emerson, E&H,
Valves	GEMU, Festo, SVF
Codes	ASME BPE, CE
Electrical	Stainless VFD/MCC Emerson Delta V RIO
Automation	DCS integrator

flow technology[™]