

AUTOMATED SOLVENT DELIVERY SYSTEM

BACKGROUND

GTH was called in by a mechanical contractor partner to assist with the design and implementation of an automated solvent delivery system for their manufacturing facility. They had recently experienced accelerated growth which facilitated the need to streamline its production processes.

CHALLENGE

The facility operated their processes manually including the mixing of chemicals, batching, storing, and reporting. Increased demand for their product meant they needed to grow production as well as visibility into their process. To maximize their efficiencies, they introduced bulk chemical storage. This mandated a process for storage and the safe transport of the chemicals to the labs for processing.

SOLUTION

The GTH engineering team designed a solution consisting of a Modicon M340 based main control panel with a Schneider Magelis touchscreen HMI for local control at the bulk storage facility. In the lab areas, we provided HMI control panels so operators could control the flow of solvents into the production area. With the help of GTH's skilled programmers, the UL control panel we built managed the operation of pneumatic pumps, and control valves as well as the pressure and level instruments. To give the end user visibility into their processes, we provided a Wonderware SCADA system. This also allowed them to generate custom reports on a schedule or on demand as needed. The flexibility and scalability of this system was a perfect fit for this ambitious organization.



BENEFITS

The end user was ultimately able to increase production capacity and repeatability while also improving the safety at their facility. From raw materials to the final product, their system now benefits from automation and integration. Features of the new system include:

- System scalability
- Greater ease-of-use for operators
- Increased plant-wide visibility
- Improved transportation efficiencies
- Custom reporting capabilities

