

Systecon has provided successful solutions for numerous industries including the automotive, consumer products, pharmaceutical, plastics manufacturing, and semiconductor fabrication industries. We know that many process cooling and heating systems require integration into the manufacturing process control systems, customization to the plant's standard equipment list and specialized control strategies to operate the process equipment. Systecon can customize a system to include components specific to your industrial process, including stainless steel piping, shell and tube heat exchangers, plate and frame heat exchangers, electrical equipment with various voltage supplies, and custom control sequences.

Proven Success

Modular Process Cooling Water System

Challenges - Global company requiring consistency/standardization of product in order to have the same system at any location around the world. Ability to pass extensive vetting process.

Systecon Solutions - Three identical equipment skids, each shipped in two sections with start-up by Systecon. After in-depth interviews, several factory visits and business review, Systecon was selected for this job and has delivered additional systems with orders for more. Fully detailed/documented designs and industry-leading construction standards ensure we provide the expected quality system every time.

Cooling Water System Data

Total Flow: 5,000 GPM

Fluid: Process Chilled Water @ 62° F

Chilled Water @ 43.5° F



Mechanical - Pumps, pipe (stainless steel for hot side), filter housing, plate & frame heat exchangers, strainer, valves, flex connector, pressure transmitters, differential pressure transmitter, pressure gauges, temperature transmitters

Electrical -

Power Distribution

Voltage: 460 Phase: 3 Hertz: 60 (Domestic Application) Hertz: 50 (International Application)

Equipment braced for 100,000 AIC

Fused disconnect (lockable)

Controls - VFDs, CULUS listed Point I/O panels. Control panels pre-designed, pre-fabricated to match what owners currently use for their other systems. Panels supplied and programmed by third party, mounted and wired to skids by Systecon.

Modular Primary/Secondary Chilled Water System (Expansion)

Challenges - Schedule, need to meet set delivery date to hit production target.

Systecon Solutions - Since our systems are factory-built, there are no unexpected delays due to weather and all necessary tools are onsite. Factory building also allows systems to be built in parallel with other work at the job site. We were able to maintain the schedule for this project and meet the delivery date requested by the project engineer.

Chiller #2 System

Total Flow: 150 GPM
Fluid: 30% PG
Suction Pressure: 125 PSIG
Working Pressure: 150 PSIG
Maximum Pressure: 150 PSIG

Chiller #3-6 System

Total Flow: 3,790 GPM
Fluid: 30% PG
Suction Pressure: 125 PSIG
Working Pressure: 150 PSIG
Maximum Pressure: 150 PSIG

Secondary Loop #2

Total Flow: 750 GPM
Fluid: 30% PG
Suction Pressure: 125 PSIG
Working Pressure: 150 PSIG
Maximum Pressure: 150 PSIG

Mechanical - Pumps, pipe, valves, strainers, air separator, expansion tank, glycol feeder (Chillers not provided by Systecon and not included on pump pkg.)

Electrical -

Power Distribution

Single Power Feed - pumps, controls, GFU, and enclosure utilities
Voltage: 460 Phase: 3 Hertz: 60
Equipment braced for 65,000 AIC
Fused disconnect

Controls -

VFDs, UL listed control enclosure, controller w/HMI
Chiller sequencing by Systecon, chiller interface hard-wired



Mane, Lebanon, OH

Outdoor application with enclosure

