



# Correctional Facilities

## Modular Utility Solutions

Site security and safety can be important considerations when planning jobs for correctional facilities. Systecon's modular systems are the perfect solution for these projects. Modular systems are factory-built and delivered ready for installation, so there is limited site disruption. Our ability to factory test systems allows for an even more efficient installation process since many items required for start-up and commissioning are accomplished before the system reaches the job site. This all means fewer people and tools at the project site, for less time. It also means a safer process with reduced liability. Plus, you get the highest-quality, efficient system possible, custom designed for your specific project requirements.

### Proven Success

#### VariPrime® Chilled Water System

**Systecon Solutions** - Factory-built and tested, systems are delivered ready for installation. Factory testing allows any issues to be addressed before the system leaves the factory. Single point hydronic, electrical, and control connections require less field labor and trade coordination resulting in faster, simplified field installation.

#### System Data

- Total Chilled Water Flow: 1200 GPM
- Total Condenser Water Flow: 2100 GPM
- Total Capacity: 700 Tons
- Fluid: Water

**Mechanical** - Pumps, pipe, valves, strainers, air separator, expansion tank, make-up water, chemical shot feeder (Chillers not provided by Systecon.)

#### Electrical -

##### Power Distribution

- Single Power Feed – IFS switchboard (distributes power to entire enclosure)
- Voltage: 460 Phase: 3 Hertz: 60
- Equipment braced for 65,000 AIC
- Fused disconnect

#### Controls -

- VFDs, UL listed control enclosure, controller w/HMI; pump sequencing for additional pump(s) start based on Systecon's Wire-to-Water Efficiency calculations; chiller and tower sequencing by Systecon; chiller interface hard-wired and BACnet MSTP



Alachua Co. Jail, Gainesville, FL

Outdoor application with enclosure



## Modular Hot Water / VariPrime® Chilled Water / Condenser Water / Energy Recovery System

**Systecon Solutions** – Single Source Responsibility. Systecon provides a one stop solution for your project. Unlike the fragmented, piecemeal ways of field-built systems where you have to manage multiple sub-contractors and vendors each step of the way, Systecon takes responsibility and manages every aspect of your system - sourcing and managing all components of the system so there is less risk and project management for you.

### Hot Water System Data

Total Flow: 450 GPM  
Fluid: Water

### VariPrime® Chilled Water System Data

Total Flow: 840 GPM  
Fluid: Water

### Condenser Water System Data

Total Flow: 645 GPM  
Fluid: Water

### Energy Recovery System Data

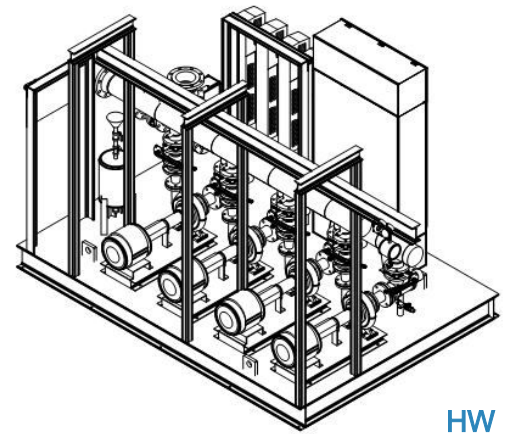
Total Flow: 645 GPM  
Fluid: Water

**Mechanical** - Pumps, pipe, strainers, valves, pressure transmitters, differential pressure transmitters, flow transmitters, temperature transmitters, chemical shot feeder, air separators, expansion tanks, make-up water

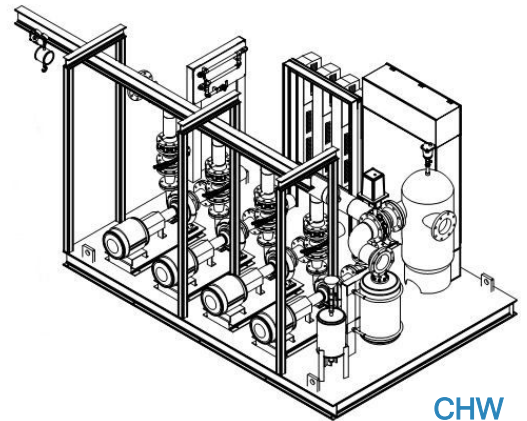
### Electrical - Power Distribution

Voltage: 460 Phase: 3 Hertz: 60  
Equipment braced for 65,000 AIC  
Main inline fuses

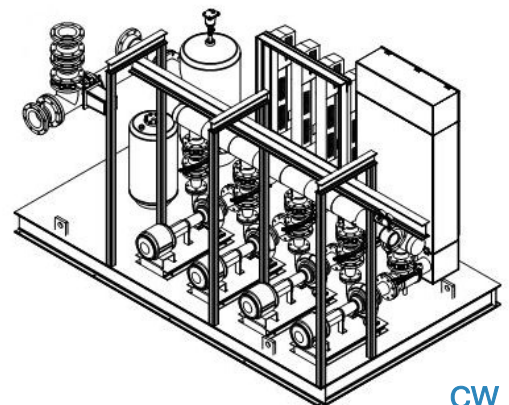
**Controls** - VFDs, HMI, cULus listed control enclosure.  
Chiller, closed-circuit cooler and pump sequencing by Systecon.  
Additional pump(s) start based on Wire-to-Water Efficiency (WWE) calculations with deviation and speed as backups.



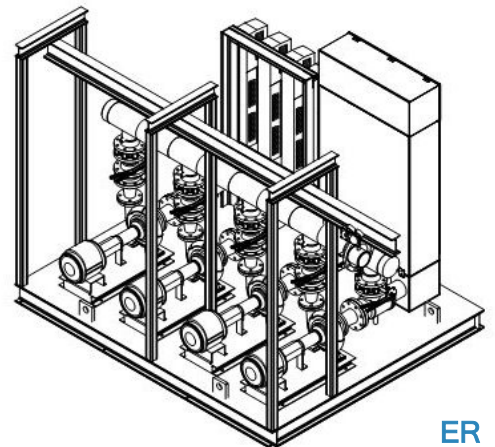
HW



CHW



CW



ER

RSW Jail, Warren County, VA

Indoor application