

UAS Water Booster Pump Station

University's New Pump Station Keeps the Pressure Up

A new water booster pump station for the University of Alaska Southeast is on line with Boreal Controls Inc. providing the pumps and controls for the project.

The booster station services both the main campus at Auke Lake and nearby student housing with three 15-hp centrifugal pumps and a 200-hp high-flow pump.

BCI President Greg Smith said the company built five control panels and wrote the customized software for the booster station. The 15hp pumps are controlled by Allen-Bradley Powerflex 700 VFDs and the 200hp pump is controlled by a Benshaw Solid State Reduced Voltage Starter. The whole system is controlled by an A-B SLC 5/03 with a Panelview 600 color operator interface.



University Pump Station Interior with Controls and 200hp Pump.
UAS Booster Station, Juneau, Alaska.



PLC Control Panel with Three 15hp VFD cabinets.
UAS Booster Station, Juneau, Alaska.

The system was designed by the Juneau civil engineering firm Carson Dorn Inc.

“The pumps are staged on in a lead-lag sequence to maintain a PID-controlled output pressure,” Smith said. The station pressure is maintained within one or two psi of the setpoint.

The PLC communicates with a Siemens building automation system, allowing university maintenance and operations staff to monitor pressure, flow and alarms from their campus office.