

The Hawkesbury Institute for the Environment is a research centre that studies many different aspects of our environment including soil types, climate change, animal habitats and behaviour, and many other areas.

Building L9 of the Hawkesbury Institute for the Environment had a major problem with the water pressure at their facility. The pressure was extremely low and provided no more than a trickle of water through the taps during times of peak water usage. Due to the nature of the sophisticated experiments being carried out by the researchers, more water pressure was required.

General Pump Company worked along with the plumbing contractor to investigate the pressure issue and after a number of tests, it was concluded that the mains water supply to the building needed to be boosted by approximately 400kpa to get it to a satisfactory pressure.

General Pump Company designed, manufactured and supplied a dual pump mains booster system consisting of:

- Two vertical multistage pressure pumps which achieve high efficiencies, minimising energy consumption. By installing two pumps, there is back-up in the event that one pump is off line. Also in the event that one pump is not sufficient for the demand, the second pump will assist.
- The pumps are fitted with custom designed stainless steel pipe manifolds and brass valves.
- Two variable speed controllers. These controllers speed the pump motors up and down according to the demand. This eliminates the pump running at full speed when there is only a small demand for water. Variable speed driven

pumps offer very significant energy savings - which is money savings – while at the same time, provides constant pressure.

 The pumps, pipework, controller, pressure vessel were all mounted on a base plate and pre-tested prior to delivery.

The system was installed and the pumps provided excellent pressure and flow – exceeding the expectations of the personnel at the facility. The system has been operating successfully and has aided researchers with their experiments and increasing the efficiency of the operation at the site.

What our customer says...

We would like to take this opportunity to thank you for providing your expertise from design to supply.

The detailed quotation that was provided by General Pumps gave us an advantage, in providing our estimate to supply and install the proposed pressure system, for the new Institute for the environment at UWS Hawkesbury campus.

- B.C - Orchard Hills



Research and design



Pump system assembled, factory preset, tested and ready for despatch.



The pressure boosting pumping system installed and operating.