



Dycor Technology Application Whitepaper

Municipal Water Pressure Management

Background

Dycor Technologies specializes in creating custom Data Acquisition and Industrial Control solutions using a combination of proprietary technology and off-the-shelf components. Applications for our products are deeply varied, and this whitepaper presents a functional example of a solution that can be developed and tailored for your specific needs.

Abstract

This paper discusses the implementation of a **water pressure management system** for Municipal water operations at multiple locations.

Problem

Community water pressure is generally controlled through a network of pumps and valves. Damage or obstruction to valves or pumps can cause inconsistent pressure to residences causing frustration and even damage to equipment along the flow path. Municipalities need the ability to monitor and act quickly when issues arise.

Application Design

To solve the problems associated with inconsistent pressure in a municipal environment, Dycor identifies the baseline expectations of the system. Working with the municipality, optimal flow volume and static pressures are defined and a set of output boundaries defined.

Dycor Custom Solution

Dycor works with MasterFlo to design an electronically-actuated valve replacement system to drop into the existing infrastructure that contains both the necessary flow and pressure sensors to ensure inbound and outbound monitoring.

Integration of a control system using Dycor SmartVue technology provides a real time monitoring, logging, and control system using built-in PID Control capabilities.

- In-line control valve with electric actuator (sized for system)
- In-line flow sensor (multiple)
- In-line pressure sensor (multiple)
- Custom SmartVue Software Package (to calculate flow and control flow or pressure)



Contacting Dycor

It doesn't matter if you're looking for help on a simple configuration issue with your data logger, or require custom developed, complex software programming for data acquisition systems to manage the data coming back from several hundred sensors – Dycor's technical team are here to get you up and running quickly and effectively.

Give us a call or [contact us on-line at www.dycor.com](http://www.dycor.com) requesting more information on how we can help you design and implement a data acquisition system that works for you.