

Success story

Industry: Water/Waste water



The Unitronics Jazz was easy to program, with a good number of useful features, and had a great price-performance ratio



PLC
+ HMI
ALL IN ONE™

How can a PLC reduce user error? Automation and alarms make it possible.

Summary:

Group7 LLC was installing a reverse osmosis water purification plant. They wanted to automate the process in order to reduce the risk of user error, so they installed a JZ20-R16 all-in-one PLC from Unitronics. Not only did Group7

successfully automate the reverse osmosis system, but they were able to use the Jazz PLC's alarm management system to be notified of any potential problems.

Group7 LLC is a Russian-based company specializing in water treatment and purification technologies. One of the techniques they implement in their plants is reverse osmosis; in this process, pressure is applied to water to push it through a semipermeable membrane, separating out larger particles and molecules. Reverse osmosis is a fairly complex process, involving vertical multistage pumps, solenoid valves, pressure switches and measuring equipment. Group7 wanted to implement PLC control to the entire process. They hoped that by having fully automated operation, they would reduce the risk of user error in their treatment plants.

Group7 selected a Unitronics Jazz PLC+HMI to handle their reverse osmosis system. This PLC has an integrated HMI with an ASCII text display and keypad. The specific model Group7 uses, JZ20-R16, has onboard analog and digital inputs, digital outputs, and a USB programming port; the Unitronics Jazz was more than capable of handling Group7's complex system.

The Jazz series PLC+HMI also had the best price to quality ratio compared to other PLCs Group7 considered. Moreover, the Jazz is programmed in an all-in-one programming software. Alexander Bakhtin explains that this software is "easy to program, with a good number of useful features." One feature that Group7 found particularly valuable was the alarm management system, which allowed them to receive notifications if any alarms are triggered, as well as log information about alarms. These features help Group7 with their goal to implement protection against user error and mistakes.

