

Desert City Gravitates to Savings

Tempe, Arizona is known as one of the most progressive cities in the Phoenix metropolitan area. A major reason for this reputation is the emphasis placed on high standards for future development and planned growth. An integral part of this planned growth includes the efficient delivery of potable water by the most economical means for the citizens and businesses that choose Tempe as their home.



The City of Tempe's Johnny G. Martinez Water Treatment Plant is a 50 million gallon per day (mgd), entirely gravity-fed plant that treats the majority of the City's Water due its lower operating cost since the process requires no electricity. The facility has recently undertaken a \$46 million expansion project to increase facility capacity to 80 mgd by November 2005 to meet increased system demands due to Tempe's rapidly growing population. Currently, the output of the Martinez plant has been surpassed by the South Tempe Water Treatment Plant due to plant construction modifications. However, once the

Martinez Plant expansion is complete, it will once again be the largest operating plant in Tempe.

Allen Bessanson, Instrument and Controls Technician for the City of Tempe's Water Operations Division, chose the Multi-Mag Magmeter after application discussions with MMI local sales representative Ted Cameron of The Cameron Group. The Water Operations Division, a sub-division of the Water Utilities Department of Tempe, is also responsible for the operation of the South Tempe 40 mgd water treatment facility, the Kyrene wastewater treatment facility, and a 3.5 mgd reclaimed water tertiary treatment facility. The division oversees all capital improvement projects and provides engineering and technical support for 750 miles of water line and 460 miles of sewer line.

Three Multi-Mag's have been ordered for potable water applications within the Martinez Plant. The Multi-Mag Insertable Electromagnetic Averaging flowmeter is a revolutionary instrument that provides unprecedented accuracy even in the most difficult flow conditions - low flows, wide flow ranges, flows containing sand and grit, vertical pipes, and locations near bends and elbows.

A 36" Multi-Mag (circled at right) was chosen to replace a Venturi meter that monitored flow in a filter backwash application located near a butterfly valve. This difficult application was further complicated by a restricted piping arrangement. "I am very proud of this application," Bessanson beams, "The Multi-Mag was easily installed



and has been trouble-free in this line.” Two additional Multi-Mag's (36" and 42") are installed on two separate effluent lines in the plant; one is installed on a new line and the other is located on a line installed in 1966. Both of these meters are providing flow data for plant efficiency reporting statistics. Bessanson further states that “The Multi-Mag's certainly have been reliable. We basically put the meters in and haven't had to visit them since.”

For additional information contact McCrometer, Inc.
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