

**Reliable Connections**<sup>®</sup>

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# INNOVATIONNEWS

New products and developments from the leading supplier of water distribution



### **Solid State Meter**

Mueller Systems® Solid State Meter (SSM) provides outstanding low flow accuracy down to 0.05 GPM and is available in 5%" X ¾" through 2" sizes. The meters provide 8-digit visual and electronic resolution for billing granularity and leak detection required with the latest AMR/AMI system technology in standard encoder protocol, with a choice of 0.1 standard gallons or 0.01 cubic foot resolution. All meters are available with a choice of 18" Nicor connectors or 5' flying lead wires for connection to Mueller Systems' migratable AMR/AMI solutions. The meter's lack of moving parts ensures that the original granular accuracy will be maintained over the 20-year life of the meter. The meter total, rate of flow, backflow indicator, temperature and other data is all available visually at the meter. Electronic output includes the meter serial number and the total. The SSM meter utilizes a low-lead bronze body on the 5%" X 3/4" through 1" sizes and a stainless steel body on the 1.5" and 2" sizes. A composite measuring tube, sensors and reflectors utilize an O-ring seal for robust construction. The display is enclosed in a polymer enclosure with heat-treated glass lens combined with the body to prohibit

tampering.

### Mi.Net<sup>®</sup> Fixed Network Collector



Mueller Systems<sup>®</sup> Mi.Net Fixed Network Collector enables efficient, robust data acquisition across the Mi.Net Mueller Infrastructure Network for utilities by supporting long range wireless communications from originating Nodes to the utility's Mi.Host software platform. The device's wide range provides an extended coverage area and dramatically reduces system cost and maintenance. Each collector is

monitored by the Mueller Network Operations Center (NOC) to ensure that your network is running at maximum efficiency. In addition, each collector is field serviceable, allowing a service technician to easily upgrade or repair a unit with minimal downtime.

The fixed network collector enables full two-way radio frequency (RF) communication between water meters equipped with encoder registers, radio transceivers and the Mi.Host software application. Collectors are equipped with a large array of non-volatile memory in addition to 511 days of hourly data stored in each node. This capacity results in resilient communications, a robust network and peace of mind for the user. A variety of options for collector communication are available, while wired network connections (Ethernet, fiber, DSL), wireless cellular or any existing network infrastructure are supported to fully utilize available utility assets to communicate to users. Mi.Hub communications are heavily encrypted (AES 256-bit) to ensure security and guard against theft or corruption of data

### **Two Way Mi.Net Mobile Transceiver**



The latest Mueller Systems vehicle-based, two-way communication solution is the Mi.Net Mobile Transceiver, providing full two-way communication to all Mi.Net M endpoint-equipped meter products. The Mobile Transceiver is also capable of one-way reception from all legacy Hot Rod transmitters to

provide a migration path for continued mobile meter reading as your AMR system expands. When coupled with the latest EZ Reader suite of software, the lightweight, vehicle-based Mobile Transceiver utilizes a single-mast powered antenna to provide outstanding communication range. Mi.Net M endpoints can be contacted to initiate valve activation on our remote disconnect meters (RDMs), gather 5-minute interval data for meter right sizing, and collect hourly or daily data logging information to help resolve billing complaints and determine usage patterns and compliance with mandatory restrictions.

#### INNOVATION NEWS JULY 2018

### Singer<sup>®</sup> Control Valve Lab Opens in Chattanooga; Training Dates Released

We recently opened a new laboratory in downtown Chattanooga designed for hands-on training of utility operators, supervisors, engineers, distributors, sales staff and other water professionals interested in gaining experience with control valves and water distribution system hydraulics. Working in our distribution lab, attendees get to interact with pressurized water systems and understand first-hand the importance of pressure monitoring, leak detection and flow-based pressure management.

For customers based in the Southeast U.S. that can't come to Chattanooga, we are able to provide a nearly identical training experience through our mobile training lab. The Singer mobile training lab allows attendees to understand how control valves solve common issues such as over/under pressurization, excessive water leakage, inadequate storage tank turnover, cavitation, water hammer and surge.

For a list of training dates and/or to register, please visit www.singervalve.com/trainingseminar-2018



Mueller Co. is expanding its 350psi, AWWA/UL/FMrated resilient wedge gate valve (RWGV) product line with a new end design that conforms to the ASME/ ANSI dimensional requirements for Class 250/300 valves. Typical applications include mechanical rooms of high-rise buildings, pump stations, reservoirs, and water processing facilities that operate at higher pressures. Specifically, the flange and lay length (end-to-end) of the new Class 250/300 RWGV complies with ASME/ANSI B16.1, B16.42, B16.10, and PN25 drilling standards. This ductile iron valve is available in standard sizes from 3 to 12 inches, complies with the requirements of AWWA C509/

C515 and NSF 61/372, and retains all competitive features of other 350psi-rated RWGVs including integrated lift lugs, a self-activating wedge seal, and grade 316 stainless steel fasteners. Class 250/300 RWGVs are available in non-rising stem (NRS), post indicating (PI), and outside screw & yoke (OS&Y) configurations, provided by brands including Mueller<sup>®</sup> and U.S. Pipe Valve & Hydrant<sup>®</sup>.

### Super Centurion® A-403 Fire Hydrant

Class 250/300 Resilient Wedge Gate Valves



Designed to be installed and maintained by one person, the new Super Centurion A-403 fire hydrant from Mueller Co. features a two-piece ductile iron upper barrel. The nozzle section can be separated from the traffic section by removing two high strength bolts, making seat replacement or traffic repair quick and easy. This lightweight dry barrel fire hydrant has a UL/AWWA 350psi operating pressure and has been factory tested to 700psi. The A-403 features a traffic flange, 5-1/4" fully encapsulated reversible main valve, a durable polyurethane top coat and automatic oil lubrication. In addition, all internal components, nozzles, and repair parts are fully interchangeable with the Super Centurion 250 hydrant. The A-403 is available with a 3-way opening configuration (2 hose nozzles / 1 pumper nozzle).



### **The Smarter Fire Hydrant**



James Jones Company is debuting a smarter hydrant which not only provides life-saving fire protection but also detects leaks in the water distribution system and monitors pressure 24 hours a day, 7 days a week. The Jones<sup>®</sup> J-4038 and J-3038 wet barrel fire hydrants can be equipped with a Hydro-Guard<sup>®</sup> pressure monitoring sensor installed in the dome top and an Echologics<sup>®</sup> leak detection node as the nozzle cap. Utilities are now able to use existing hydrant assets as a hub for communication and technology deployment. New Jones hydrants be purchased with these smarter features, while any existing wet barrel fire hydrant with a dome top can be converted to detect pressure and leaks in the distribution system.

## FEATURED PROJECTS

### Farmington Hills Reduces Water Costs & Boosts Distribution with Singer<sup>®</sup> Control Valves

Hixson The City of Farmington Hills (Michigan) is the second largest city in Oakland County, with a population of over 80,000. Most of the city maintains good water pressure and adequate fire protection, but as the name suggests, the hilly terrain presents some pressure challenges in certain areas. While the city's average daily consumption is strong, their peak hour factor of 4.4 and maximum day of 21 MGD comes at a high cost. Singer control valves were installed in the water distribution system to: (1) control flow and pressure in the event of SCADA control or power loss; and (2) lower pressure during off-peak times. The ability to tightly control water usage has allowed Oakland County to renegotiate rates from their supplier, savings \$3.3 million annually. To read the entire case study, visit http://waterhq.world/issues/aww-december-2017/



### EchoShore<sup>®</sup> DX Finds Leaks Immediately After Alberta Installation



The Canadian city of Medicine Hat, Alberta is like thousands of other cities around the world, troubled by water leaks and failures of aging infrastructure. These cities must remain vigilant to reduce water loss, avoid potential damage caused by pipe failures and reduce unnecessary pipeline replacement costs. To solve this issue, Medicine Hat's water utility installed EchoShore® DX permanent

leak detection "nodes" on more than 150 fire hydrants. The technology features sophisticated acoustic sensors and proprietary processing algorithms to detect and pinpoint the source of faint noises emitted by pipeline leaks. The acoustic nodes in Medicine Hat are linked using a Bell broadband wireless network, the first wide-scale wireless leak detection project of its kind in Canada. Immediately after installation, the system detected three leaks in the water distribution system. To read the entire story, visit www.echologics.com.

### AWWA ACE18 a Great Success



ACE has historically been an exciting industry show for many years, and 2018 continued that tradition. At the Mueller booth, we were excited to showcase all our water product brands including Mueller Systems<sup>®</sup>, Mueller<sup>®</sup>, Echologics<sup>®</sup>, Hydro Gate<sup>®</sup>, Hydro-Guard<sup>®</sup>, Jones<sup>®</sup>, Milliken<sup>®</sup>,

Pratt<sup>®</sup>, Singer<sup>®</sup> and U.S. Pipe Valve and Hydrant<sup>®</sup>. Virtual and Augmented Reality product displays demonstrated how our product lines work together to provide exceptional value to our customers. Our big announcement was the introduction of our new "smarter hydrant" that not only provides life-saving fire protection, but also monitors pressure and detects leaks in the water distribution system 24 hours a day, 7 days a week. To top it off, the Mueller booth's water curtain was the talk of the show!

### Jones J-4038 Wet Barrel Fire Hydrant



We have added a new style, the J-4038, to our Jones<sup>®</sup> Triton<sup>™</sup> fire hydrant product line. The J-4038 is a ductile iron, double pumper, dome top wet barrel available with 3-inch through 4-½" NST nozzles. The dome top feature is the same 2-½" pipe thread as found on the J-4048 and J-4065 models.

The J-4038 is UL/AWWA-rated for 250 psi and the J-4038HP is UL/AWWA-rated for 350 psi. Because the J-4038 is cast in the Albertville, Alabama plant and assembled in our Ontario, California warehouse, the new J-4038 is fully compliant with AIS requirements.

### 2"- 3" Gate Valves Now Rated 350psi



All Mueller<sup>®</sup> Series 2361 and U.S. Pipe Valve & Hydrant Series USP1 types including non-rising stem (NRS), post indicator valve (PIV), outside screw & yoke (OS&Y), and tapping resilient wedge gate valves (RWGVs) now feature a 350psi operating pressure in sizes 2", 2.5" and 3" per AWWA, UL &

FM standards. These smaller sizes have the same features and benefits of the Series 2361 and USP1 in sizes 4"-12". Joining sizes 2" to 3" are sizes 4" to 12", resulting in the entire range of Series 2362/USP2 RWGVs from 2" to 12" featuring a 350psi operating pressure.



### Have a Product Development Idea?

Have an idea for a new product or service? See a gap in our offering? Submit your idea today! Simply visit our website, complete the form and we will be in touch: www.muellercompany.com/products/request/



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### **Need More Information?**

If you need additional information, please contact your Mueller sales representative or Customer Service at (800) 423-1323, or send an email to moreinfo@muellercompany.com. If you are not certain who your Mueller sales representative is, please visit http://muellercompany.com/sales/



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