WEFTEC 2009 - show preview

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Nova Dudley-Gough

Working with Water spoke to some of the exhibitors who will be attending the US water event, about their new products and what they hope to gain from the water quality exhibition and conference.

The following is an excerpt from that feature article.

Meurer Research Inc

Interview with Lonnie Meurer, President

Working with Water: *What is driving the water marketplace currently?*

Meurer: Increased regulations and more stringent water quality standards are requiring treatment facilities to improve efficiency, reliability, and economy. Old systems need to be updated and capacity increased, yet there is often limited space and building new facilities is challenging.

Working with Water: *What new developments are you working on to address this?*

Meurer: We have engineered the new MRI Bio-Cel® Membrane Bioreactor for wastewater. It offers an ultra compact design, requiring a 50% smaller footprint, produces significantly higher quality effluent, and enables increased capacity. To achieve these advantages we used large, flexible sheet Bio-Cel® membranes, which are patented and manufactured by Microdyn-Nadir, GmbH. We also offer a new chemical-free granular bead mechanical cleaning process, the Bio-Cel® – MCP. All of these advancements are significant solutions to today's challenges.

MRI has also developed advanced Flocculation Systems™, which integrate flocculation components into multi-stage systems with a self-cleaning hydraulic final stage. This approach allows operators to utilise the full-range of G-values to optimise effectiveness, and even to mix and match, incorporating turbine, paddle wheel, and hydraulic flocculators in one system.

Working with Water: *What products are you showcasing at WEFTEC?*

Meurer:
MRI Bio-Cel® MBR
MRI Plate Settlers
MRI Hoseless Cable-Vac™ Sludge Collector
MRI U/S Ultra-Scraper Sludge Collector
MRI Mix & Match Flocculators

Working with Water: *What applications are these suitable for?*

Meurer: These products are ideal for domestic wastewater treatment in small- and large-sized installations. They also benefit difficult-to-treat industrial applications.

What makes these products innovative and better suited to applications than past products?
In the MRI Bio-Cel® MBR, we used the Bio-Cel® flat sheet membranes, which are easier to clean and have a full sheet permeable bond that makes them very strong so they can be back-pulsed unlike other flat sheet membranes. The pore size is .04 microns, which makes it a true ultra-filter, and it has high-packing-density properties. Also the chemical-free granular bead mechanical cleaning process, the Bio-Cel® – MCP, is a huge improvement over chemical cleaning. The beads remove the fouling layer without decreasing permeability or putting chemicals into the environment.

MRI Flocculation Systems™ offer a new approach to flocculation that up-levels pretreatment performance, which hasn't seen much advancement in years. Yet, it's a key part of the process and treatment outcomes improve when all pretreatment stages act in concert, including chemical feed, flocculation, sedimentation, and filtration. This is particularly important with increasingly stringent regulations and the quick adoption of membrane filtration.

Working with Water: ***What does the future hold for your company?***

Meurer: Meurer Research, Inc. is growing rapidly due to the development of new products as well as the formation of successful strategic partnerships, such as our exclusive strategic partnership with Microdyn Technologies, Inc., USA. Our strategic partnership positions MRI to exclusively provide Bio-Cel® Systems to American municipal water treatment operations. The future looks bright!

Working with Water: ***What are you looking for at WEFTEC?***

Meurer: WEFTEC offers the best opportunity to network with sales reps and designing consulting engineers. We're looking forward to the technical presentation on MRI Bio-Cel® MBRs.