

Process Solutions

Water and Process Fluid Purification

New Year, New Website!

It's taken a while (and three different design companies) but our new website is finally **live!** We think it's a big improvement over the old one, which dated back to 2012. It's updated, more user-friendly, and can be viewed from a variety of devices including mobile phones and tablets.

When you have a few minutes, we invite you to take a look. If you have any feedback or suggestions, we welcome you to send them our way!

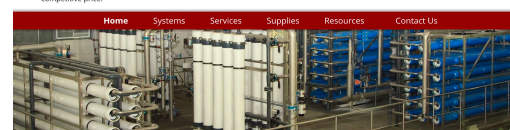


Want to talk to us about products or services?
Call Now: (513) 791-3338



Your Needs Are Unique:

At Process Solutions, our goal is to provide you with **personalized service** and **high quality products**, in a timely manner... all at a competitive price!



We Have Your Solution:

Systems

One size doesn't fit all. We listen carefully, then work with you to customize a system for your specific budget, water quality, and performance requirements.

- Water Softening
- Media and Membrane Filtration
- Reverse Osmosis
- Desalination
- Electrodeionization

Technical Services

Like our systems, our services are tailored to your requirements. We offer on-site and remote service options for start-up, maintenance, and continuous performance improvement.

- Turnkey Installations, Retrofits, and Upgrades
- Startup and Troubleshooting
- Technical Support

Supplies

Cost-effective, maintenance, repair and operation supplies to achieve and maintain peak performance of your water treatment system. We can also help you maintain your system with our flexible service contracts.

- Specially Chemicals
- Consumables
- Resin
- Replacement Parts &

Good to the Last Drop – Rescheduled!!

Well, this shouldn't come as a surprise to anyone. *Good to the Last Drop...A User's Guide to Membrane Technology* has been rescheduled for the week of August 24, 2020 at the following locations:

August 25, 2020
August 26, 2020
August 27, 2020

Louisville, KY
Indianapolis, IN
Cincinnati/Dayton, OH

These are practical and technical seminars for those trying to get the most productivity from their membrane systems. The presentation will focus on optimizing membrane life and system performance; and will address such topics as system operating guidelines, pretreatment, optimizing your cleaning techniques, troubleshooting, and controlling biological contamination.

As always, *Avista Technologies* and *DuPont Water Solutions (a.k.a. Filmtec)* will be participating, sharing their insights and expertise in membrane applications.

Invitations will be going out when the time gets closer, but please pencil in these dates on your calendar. In the meantime, if you have questions or want further information, please contact us at **513-791-3338!**

About Our Organization...

At **Process Solutions, Inc.** we're committed to being your full-service supplier of water treatment products, systems and services. We do this by providing our customers with high quality products, great service and *all at competitive prices*. Please feel free to call us with your feedback and suggestions as to how we can be of service to you.

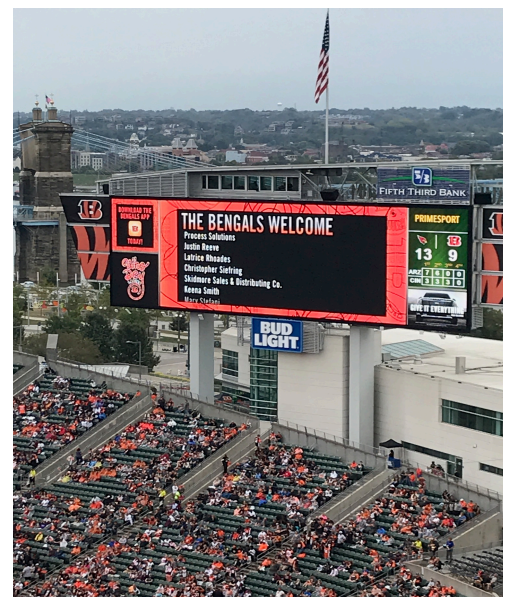
Our Silver Anniversary Celebrations!



2019 was a big (and busy!) year for **Process Solutions Inc.** as we celebrated our 25th anniversary. As we celebrate this milestone, we want to extend a special thank you to all of our amazing customers, partners, manufacturers and employees over the last 25 years! We attribute our success to all of you.

As part of the celebration, we hosted several Customer Appreciation Events all over our region. There were a couple of Bourbon Tastings, an outing at the horse races, and a Cincinnati Bengals game with a tailgate party at our office. We thought we'd share a few photos.

Here's to the next 25 years!



Upper left: Exceptional Service Award from Avista Technologies;

Top center and right: Afternoon at the Races at Ellis Park;

Bottom left: Tailgate Party, Bottom right: Official Welcome at Paul Brown Stadium

Fouling Resistant Membranes – The Next Generation!

We've all heard about fouling-resistant membranes for a number of years now. The initial generation was a slight improvement over conventional membranes, but not by a lot. The membrane manufacturers have continued to work on this, developing better feed channel spacers as well as improved membrane chemistry to produce the desired results. Today's fouling-resistant membranes do, in fact, offer better resistance to a variety of foulants as well as improved cleanability.

More and more plants are looking to reclaim/recover process streams and move toward minimum liquid discharge (MLD). These streams tend to be more challenging and less consistent in quality than most raw water supplies, particularly with respect to particulates, organics, and biological material.

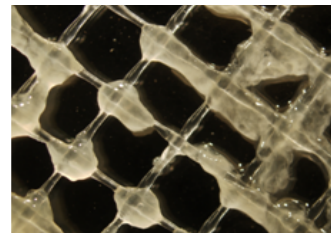
Biofouling still tends to be the biggest culprit, and one of the most difficult to manage. To address this issue in particular, *Filmtec* (DuPont Water Solutions) has developed the *Fortilife CR100* element with advanced antifouling technology. This element offers an innovative feed spacer, which translates to lower differential pressure, improved hydraulic balance, lower energy costs, and a reduction in cleaning frequency. In side-by-side testing with prior generation 8" fouling-resistant elements they were able to demonstrate a 30-50% reduction in the frequency of cleaning. The *Fortilife CR100* also demonstrated improved resistance to organic fouling, which can be just as difficult to manage – if not more so.

This is **not** to imply that system engineers shouldn't design with adequate pretreatment considerations, or that plant operators don't need to maintain their pretreatment equipment!!! You can, however, design for lower pressure differentials and expect longer runs between cleaning events.

The *CR100* is only one product in *Filmtec's Fortilife* line of membranes, however, it is also capable of being used in process water makeup applications where the water supply is challenging and the system requires frequent cleanings. Those applications can be evaluated for retrofit opportunities and potential economic benefits. And by the way, there is **no** significant price difference between the *CR100* and conventional membranes.

We want to point out that *Filmtec* is not the only manufacturer to offer fouling-resistant elements. Other membrane companies have their own versions as well.

For further information or to evaluate fouling-resistant elements for **your** application, please contact your **Process Solutions Inc.** sales representative at **(513) 791-3338!** We're always available to help!



Biofouling in membrane feed spacer



The Fortilife CR100 has been demonstrated to reduce cleaning frequency by up to 50%!



Who Says It's Not Easy Being Green ?

If you would prefer to save a tree and receive our newsletter electronically, please email us at sales@psewater.com and we'll add you to our electronic distribution list. Thank you!

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We're on the Web!
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