

Edstrom

 **Indigo RO™**
Reverse Osmosis



Advanced.
Sophisticated.
Efficient.

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What is the importance of having an Edstrom Reverse Osmosis System?

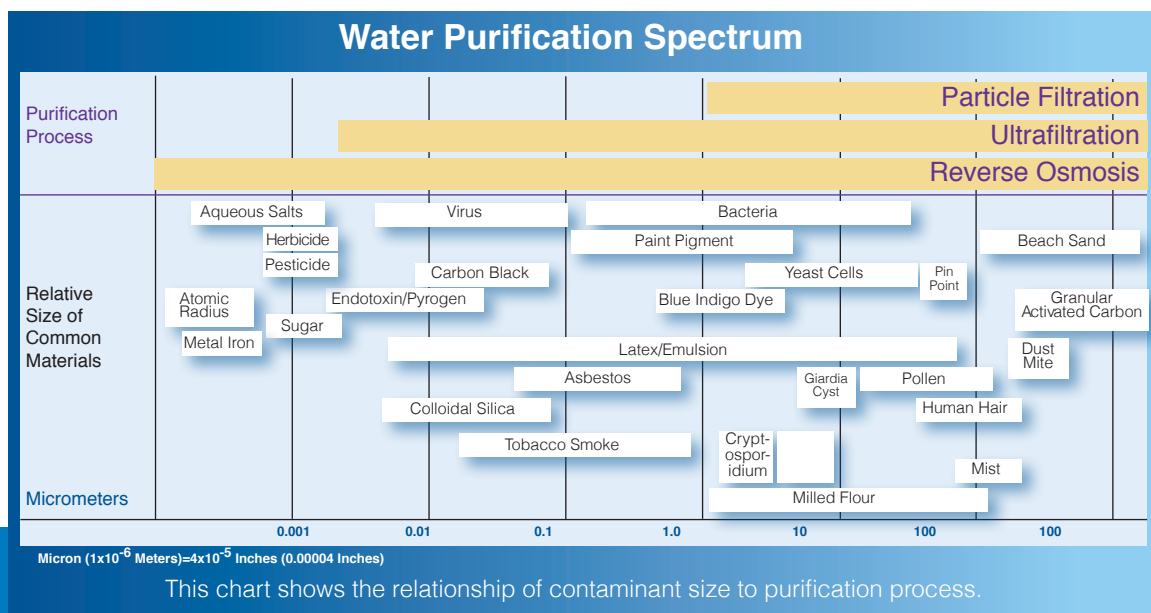
A reverse osmosis system removes 99.99% of contaminants in animal drinking water. In contrast, filtering and disinfecting alone may not provide water of a reliable and controlled quality necessary for laboratory animals. By continuing to supply consistent high water quality, you protect animal health and prevent the introduction of variables into your studies. For example, trace amounts of copper found in drinking water fed to rabbit models developed for highly refined applications throughout Alzheimer's research study* induced the affects of Alzheimer's disease.

The Indigo RO is a modular water purification system with advanced capabilities and modern, user-friendly features. This modular design provides the ability to expand the system as research needs grow.

How does Reverse Osmosis work?

Reverse Osmosis is a purification process in which non-processed inlet water (feed water) is forced by pressure through a semi-permeable membrane from a more concentrated solution to a less concentrated solution. In the process, the purified water (permeate) is delivered and retained in a storage tank, while a portion of the rejected contaminant water (concentrate) is recycled back through the Indigo RO while the remaining concentrate water is sent to a drain. The percentage of feed water that is recovered as permeate is called percent recovery. The Indigo RO has a 50 percent water recovery rate which is above the industry average.

**Trace amounts of copper in water induce B-amyloid plaques and learning deficits in a rabbit model of Alzheimer's disease*, D. Larry Sparks and Bernard G. Schreurs, PNAS September 16, 2003, vol. 100, no. 19, pgs 11065-11069.



Monitor and Control with a touch of a screen

The Indigo RO offers a complete graphical view of the entire water production system from the user-friendly touchscreen display. With a simple touch of the screen, you can easily access valuable information, giving you more control over your facility.

MONITOR with the Indigo RO:

- View current water tank level, permeate conductivity, and water percent rejection from main Dashboard screen
- Select Alarms tab on touchscreen to easily identify any active alarms; the active alarms will be highlighted with the current value and alarm limit
- Detailed screens to monitor Pre-Treatment, RO Machine, and RO Distribution details, such as permeate flow and water temperature
- Additional system operation information is collected and can be easily monitored such as pH and chlorine solution metering between Indigo RO and storage tank

CONTROL with the Indigo RO:

- Set the automatic membrane flushing features including frequency and duration
- Assign alarm set points for post RO pH and recirculation pH on Distribution Settings screen
- Add pre-treatment filters, such as an Edstrom Ultrafilter with the ability to activate a Ultrafilter flush beyond the preset flush schedule
- Additional control options are available and can easily be completed from the touchscreen display such as specifying the unit of measure for calculation from either English or Metric

Features and Benefits

Removes 99.99% of Most Water Contaminants

Protect animal health by removing contaminants in their drinking water and prevent the introduction of variables into research studies

Membrane Protection

Includes a replaceable 1-micron spun polypropylene filter to help protect the membrane by filtering incoming water before passing through the membrane

Produces More Water with Fewer Membranes

The Indigo RO can produce from 200 to 1,267 gallons/day (757 to 4,767 liters/day) with one polyamide (PA) membrane and up to 5,500 gallons/day (20,823 liters/day) with four PA membranes

Reduces Time, Labor, and Energy

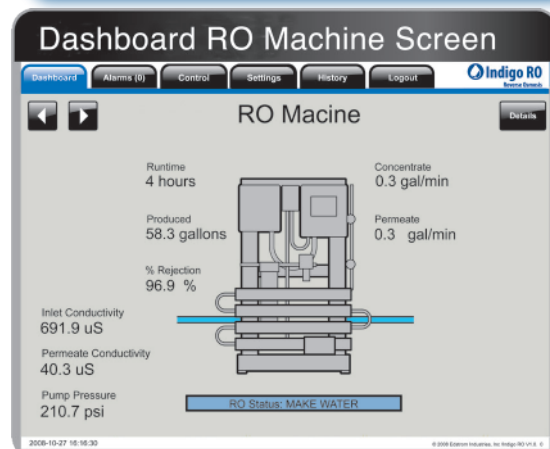
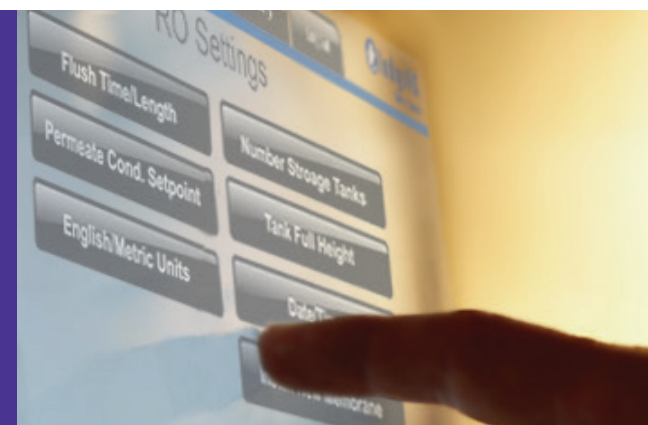
The automatic flushing feature will flush the Indigo RO one to three times a day to protect the system against microbiological growth. A variable frequency drive provides more energy efficiency allowing the system pump to flush at a lower speed

Edstrom Patented Clean Joint Fitting

The patented Clean Joint Fitting provides a smooth internal pipe profile that is free of dead spaces which can harbor bacteria and biofilm

Easy-to-Use Touchscreen Display

A large touchscreen display makes it easy to retrieve valuable information along with the capability to set main functions and alarms



We welcome the opportunity to talk with you about your facility's needs and how the Indigo RO will simplify your facility.

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