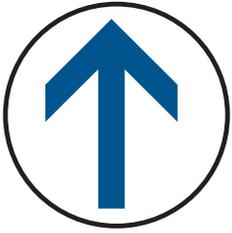




4 Steps to Guide Your Industrial Reverse Osmosis System Purchase





STEP ONE: UNDERSTANDING CURRENT RO TECHNOLOGY

Reverse osmosis has been used by many companies in the U.S. since the 1970s. It is the most widely applied water purification method today and is extremely effective. However, not all RO systems are created equally. Here are three things to look for when researching industrial reverse osmosis systems:

- Reverse osmosis systems should be capable of achieving a guaranteed high recovery. After all, this system should be providing you high quality water as efficiently as possible. Recovery is based on water chemistry and therefore you should be guaranteed that the system you purchase can achieve your desired recovery rate.
- The best RO system is one that you can forget about. It should operate smoothly and reliably. That means adapting to varying water conditions and offering a resistance to biological fouling and scaling so you never have to worry about hiccups in your operation.
- Online monitoring and remote system control is becoming increasingly more popular, yet not every RO system will be equipped with such software. Online monitoring allows the operator to be primarily "hands off" as RO providers can monitor the system remotely and address any potential issues. With remote system control, the operator is free to check the system from a mobile device and can even make changes to the system remotely.



STEP TWO: WHAT IS MOST IMPORTANT TO YOUR BUSINESS?

Now that you know what options to look for when choosing your RO system - let's talk about what is most important to your business. A self assessment is a great way to determine which factors are most important to your organization. Here are the questions to ask when evaluating an industrial reverse osmosis system for purchase:

What issues are causing your organization to make a change?

- Is this a new installation or replacement?
- What are your water concerns?

What factors are most important to you?

- Do you require high recovery? Or is adaptability most important?

What are your business goals?

- Increasing production? Decreasing downtime?

Do your water needs vary seasonally?

- Does the system need to be able adapt to incoming feed water?



STEP THREE: PLAN AHEAD WITH INTERNAL PROCESSES AND STAKEHOLDERS

When making a large RO system purchase, it's helpful to identify key stakeholders as well as roadblocks in advance to avoid potential setbacks.

Build an evaluation plan

Create a document which outlines all the steps you will need to go through with decision makers at your company. Talk to them and satisfy their questions or concerns with help from your RO provider. Your RO provider can eventually take ownership of this task, but your participation will be key to a successful partnership.

Make the business case

Once you are ready, leverage your preferred RO system provider to make the case for the RO system you have selected. If you need help putting together a document or presentation, they may be able to provide a substantial amount of assistance. For even more help, look at the ROI indicators in Step 4.

- **Engineering** – What KPIs are critical for the performance of the system? What are the electrical, mechanical and footprint specifications that would apply to this equipment?
- **Executive** – Ask to sponsor and tie to business goals; find out who needs to approve a potential project and solution implementation
- **Finance** – Obtains or states budget and offer project approval.
- **Legal** – Review and execute contract with RO provider.
- **Marketing/PR** – What value can water savings bring from a PR/sustainability perspective?
- **Procurement** – What are the internal RFQ/RFP processes and purchasing guidelines?



STEP FOUR: CONSIDER TOTAL COST OF OWNERSHIP & RETURN ON INVESTMENT

The final step in our guide helps you to understand if a particular solution makes fiscal sense for your facility. Implementing ways to save water, energy and other resources is the smart thing to do for our environment and your bottom line. Making the right decision on facility upgrades can easily improve operations and help you to achieve sustainability goals.

Things to Consider:

Initial Capital Cost
 Maintenance Costs
 Water Cost
 Sewer Cost
 Component Lifetime (membranes)
 Pre-treatment
 Upgrade costs
 Training Costs
 Costs of purchasing and/or maintaining
 Savings on replacing multiple systems with one new solution
 Savings from systems that integrate tightly
 Opportunity Cost - "The cost of doing nothing"

Tools to Calculate ROI:

It is important to look into your current situation when evaluating a RO system purchase. Things like:

Current Water Costs

- Are the current water costs prohibitive?
- How much water will the new system save?

Wastewater Disposal Fees

- Do you currently pay wastewater disposal fees?
- How much waste will the new system create?

Pretreatment/Chemicals

- Are you using chemical dosing in a current RO system?
- Will the new system be able to operate with less?