How to buy a water softener...

There are four things to consider when buying a softener.

- The qualifications, reputation, experience and the service of the company that will care for you and your new purchase.
- The type of softener you want to purchase.
- The type of regeneration co-current or counter current.
- The softener's certification.

Qualifications, reputation, experience, and service -

We encourage you to view our web site to see our qualifications. We also encourage you to ask some of our customers about us. Our customers are our best advocates. We even encourage you to talk to those who had problems and see how they feel about how we handled their situation.

Types -

There are three basic types of water softeners.

- · Single tank time initiated
- Single tank demand initiated
- Twin tank demand initiated

All of these systems consist of at least one tank where the actual treatment takes place (media tank) and a salt storage container. The difference between a single tank system and a twin tank system is the twin tank system has *two* media tanks and one salt tank.

Single Tank Time Initiated -

Time initiated system perform their regeneration at fixed time intervals. An estimate of water consumption is used to calculate how often the system needs to perform a regeneration. This regeneration occurs in the early morning hours when there is not likely to be any water use in the house.

Disadvantages-

- Because the systems regenerate based on a time interval and not on actual water consumption. As a result they will either
 - waste salt regenerating too often.

or



- provide untreated water because they did not regenerate often enough.
- They pass raw water to the house during regeneration
- There clocks must be reset after power outages to prevent regeneration from occurring during water use.

<u>Single Tank Demand-Initiated Regeneration (DIR) Water</u> <u>Conditioners -</u>

These systems measure water usage with a water meter and regenerate only when the meter counts down to zero. These systems do a better job of providing treated water than time initiated systems because they regenerate more closely to the time they need to.

Disadvantages-

- Because these systems still have to wait to regenerate during the early morning hours, they must maintain a reserve capacity that will allow them to wait to the end of the day for regeneration. This means as much as one days capacity is wasted each regeneration cycle.
- They pass raw water to the house during regeneration.
- Their clocks must be reset after power outages to prevent regeneration from occurring during water use.

<u>Twin Tank Demand-Initiated Regeneration (DIR) Water</u> <u>Conditioners -</u>

Twin tank systems consist of two softening tanks. Two softening tanks provide conditioned water, 24 hours a day, even during regeneration. When one tank is exhausted, the other is activated to continue softening your water. The exhausted tank is cleaned with the conditioned water produced by the on-line tank for optimum results This means there is never an interruption of treated water and there is never any wasted capacity because regeneration does not occur until there is complete exhaustion of the capacity.

Advantages-

- Never allows untreated water into the plumbing
- No clocks to set
- Provides highest possible efficiency of water and salt use

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- Clean water regeneration provides for extended resin life
- Lower maintenance because valve control surfaces only see treated water.
- Simpler because they do not have to use electronic control circuits or in some cases no electricity at all.

Type of regeneration -

The regeneration of a softener is done by placing sodium on the media. This is done by drawing brine (salt solution) from a salt container. The brine is introduced either in the same direction (co-current) as normal flow or the reverse direction (countercurrent).

Countercurrent regeneration improves the system's effectiveness and efficiency. The counter current regeneration is the only way to effectively and reliably remove iron with a softener. With this method, salt usage is reduced to less than half of that of a system with co-current regeneration while still effectively removing iron. This type of regeneration is recommended by most resin manufacturers and is found on high quality modern softeners.

System certification -

To be assured that the softener you purchase will perform as advertised we recommend that you consider whether or not it is certified by both NSF and the WQA. These are third party organizations that confirm the performance of the softener. Be sure to ask if the softener has these certifications.