## **DI** Water Generation Options

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DI water generation systems are available from several local sources on a rental basis from companies such as Culligan and US Filter (now Siemens Water). Normally, there are no purchase requirements:

Plan 1A: Four resin tanks (all mixed bed resins)

Plan 1B: Four resin tanks (Cation, Anion, Mixed Bed, Mixed Bed)

Plan 1A or 1B would be up the service provider as not all providers offer separate Cation an Anion. Mixed Bed resin is a mixture of Cation and Anion resin.

A four tank system (either Plan 1A or 1B) will yield the highest quality water.

Plan 2: Two resin tanks (Mixed Bed, Mixed Bed)

TWO BED TWO BED TRI-BED FOUR BED

A FOUR BED

TRUBED

JUEOUS®

A two tank system will produce good water quality but will need to be changed out more frequently. A better recommendation would be a four tank (all Mixed Bed) configuration.

Configuration	Resistivity
Cation - Anion	300,000 ohms
Cation - Anion - Mixed Bed	10-15 megohm
Cation - Anion - Mixed Bed - Mixed Bed	18 megohm
Single Mixed Bed	Depends on feed water quality
RO - Single Mixed Bed	15-18 megohm
Mixed Bed - Mixed Bed	18 megohm
Mixed Bed - Mixed Bed - Mixed Bed - Mixed Bed	18 megohm

The frequency that the tank will require exchanges is determined by two factors, volume of water use and quality of your feed (tap) water. Your provider will know the local water quality (normally expressed in PPM, TDS, or grains per gallon). Each resin tank configuration has the ability to "absorb" a set amount of contamination (based on the resin's grain capacity). Your local resin provider can accurately determine the life span of the resin tanks. One key factor is the volume of water required by the cleaning system. In your case, about 15 gallons of water is required to clean one load of boards. Use this number to estimate the volume of water that will be traveling through the resin tanks. In "normal" installations, a tank configuration would last between 1-2 months between exchanges. Extra tanks can be on site to allow for rapid change over if required. A DI status light is normally installed on the final tank to confirm that the tank's output exceeds the minimum requirement (normally 1 MOhm).

## Trident Flow / Quality / GPD Requirements:

Flow Rate: 3 GPM (minimum) Gallons per Day (per chamber): >300 Gallons Minimum Water Quality: 5 M-OhmsCause: Wash Tank Loaded