

Resin Fouling - Iron Heavy Metal Fouling of Cation Resins

Cation resins may become fouled with iron and other heavy metals. The quickest method of removing these heavy metals is with hydrochloric acid.

NOTE: Before using hydrochloric acid to clean resin, make sure that the equipment (the tank, piping, etc.) can withstand exposure to concentrated hydrochloric acid. This procedure calls for the use of 10% HCl.

1. Backwash the resin bed at 50% expansion for at least twenty minutes to remove any debris or resin fines that may be present.
2. Draw 10 lbs/cu. ft. of 10% HCl into the resin bed at a flow rate of 0.25 to 0.5 gpm/cu. ft. Heating the HCl solution (to approx. 100°F) should improve results of this procedure. You should have a minimum of fifteen minutes contact time.
3. Rinse the resin bed with soft water or decationized water until all the acid has been removed from the resin bed.
4. For softening resins, perform the usual brine regeneration.

