New vs. Regenerated Resin

The quality of treated water coming from a two bed deionizer depends on many factors. New, virgin, regenerated resin from ResinTech is highly regenerated. The cation resin (ResinTech CG8-BL-H) is converted to greater than 99% in the hydrogen form and the anion resin (ResinTech SBG1P-OH) is converted to more than 90% in the hydroxide form. The initial service cycle with the resin will produce outstanding results.

When the initial service cycle is over, the resin is brought back to the regeneration plant and treated with acid and caustic to convert the resin to the hydrogen and hydroxide form. The water quality, conductivity and silica levels during the subsequent service cycle are dependent on this regeneration procedure. Typical conversions for cation resin using hydrochloric acid may be in the 80% range, and for anion resin using caustic in the range of 55 to 65%.

The more chemical applied, the higher the percent conversion. The higher the percent conversion, the better water quality produced during the next service cycle. The higher the percent conversion, the higher the capacity and the longer the service cycle.

