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Water Softeners

Frequently used to provide softened water for heavy commercial, industrial, and municipal applications. Water containing calcium and magnesium (i.e. hardness) is not suitable for many uses because of its tendency to form mineral scale, soap scum, and chemical sludges. Water softeners use ion exchange resin to exchange the calcium, magnesium, and other scale forming minerals for sodium. Since sodium does not form hard mineral scale the process is referred to as water softening.

De-Mineralizers

These units will remove virtually all salts. It involves passing raw water through both cation and anion exchange resins. Sometimes the resins may be contained in one vessel which is termed a 'mixed bed' system. The process removes virtually all the minerals and produces very high quality water containing almost no dissolved solids.

Dealkalizers

Sometimes referred to as 'polishing softeners' because they are always installed downstream of the softener therefore requiring softened water. Chloride cycle dealkalizers are similar to water softeners except that instead of using sodium zeolite resin, they use a strong anion resin to remove negatively charged ions from the raw water supply. These include bicarbonate, sulfate, nitrate, and silica. These are replaced with chloride ions. Used to remove more than 90% of the bicarbonate alkalinity which effectively controls carbon dioxide formation in the boiler, the major cause of condensate line corrosion.

Water Heaters

Heaters are available in the following styles: Atmospheric and Sealed Combustion, Fired and Unfired (including semi-instantaneous), and 99% efficient Direct Contact.

Tanks

Storage and expansion tanks can be ASME certified if required.