NOTICE: *A complete water analysis is required before a quote can be processed. Customer to provide the following info.*

Applications for Chloride Anion Dealkalizers :

Softened water is passed through the dealkalizer reducing free carbon dioxide, bicarbonate alkalinity, and sulfates, and replacing these with an equivalent amount of chlorides. The resulting water keeps boiler and process equipment clean and scale free and also solves the problems of excessive boiler alkalinity and corrosive Condensate. Savings are obtained by lowering boiler blow-down requirement and virtually eliminating condensate line corrosion due to carbon dioxide.

Companion Equipment:

It is advisable to feed a dealkalizer with softened waler. The hardness ions in the feed water can combine with the sulfate ions attracted to the anion resin and form an insoluble calcium sulfate precipitate. This scale will tend to foul the dealkalizer over time as it accumulates on the resin bed. If this occurs, an acid regeneration may help to dissolve the scale and clean the bed.

Complete these calculations to determine size:

1. *Determine Total Anion Loading:*

Anions	Symbol	as ions	factor	as $CaCO_3$
Hydroxide Alkalinity	OH	_____	x 2.94 =	_____
Carbonate Alkalinity	CO_3	_____	x 1.67 =	_____
Bicarbonate Alkalinity	HCO_3	_____	x 0.82 =	_____
Sulfates	SO_4	_____	x 1.04 =	_____
Nitrates	NO_3	_____	x 0.81 =	_____
Carbon Dioxide	CO_2	_____	x 1.14 =	_____
Chlorides	Cl	_____	x 1.41 =	_____

Total Exchangable Anions = _____

÷ 17.1

Anions as grains per gallon = _____

2. *Determine Resin Capacity (Percent Alkalinity) =*

Total Alkalinty (OH + CO_3 + HCO_3) Divided by Total Exchangeable Anions

Location Notes:

Available Space:

Room Width _____ Ft _____ In

Room Height _____ Ft _____ In

Room Length _____ Ft _____ In

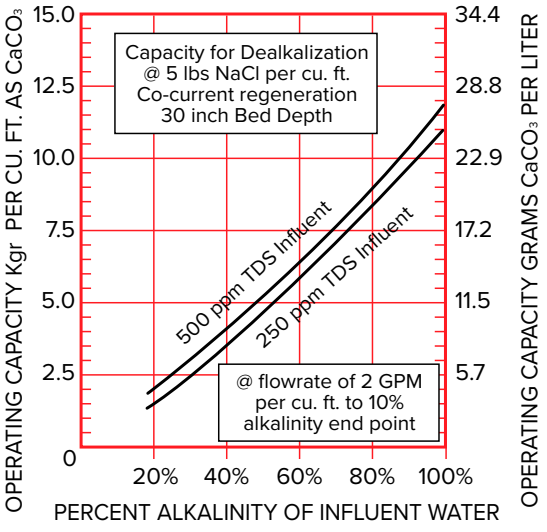
Door Width _____ Ft _____ In

Feed Water Pipe Size _____ Inches

Raw Water Hardness _____ gpg

Gallons per Day Required _____

Water Softener Capacity _____ Kgr



These charts illustrate the operating capacity of the anion exchange resin when regenerated with 5 lbs. of sodium chloride (salt) per cubic foot and approximately 0.25 lbs. per cubic foot of rayon grade sodium hydroxide (caustic). Addition of caustic to the regenerant solution will increase the resin capacity for alkalinity and CO2 due to a more efficient exchange with hydroxide ions as compared to chloride ions.