

# Kinetico 2100s

## System Components

Media Vessel (qty) Size .....	(2) 10 x 54"
Media Vessel Construction .....	Wrapped Polyethylene
Empty Bed Volume .....	2.19 ft <sup>3</sup>
Media Type .....	Non Solvent Cation Resin
Media Volume .....	1.5 ft <sup>3</sup>
Bed Depth .....	39"
Free Board .....	15"
Riser Tube .....	1" ABS
Distributor Upper .....	0.014" Slots, ABS Basket
Lower .....	0.014" Slots, ABS Basket
Under bedding .....	None
Regeneration Control .....	Non-electric Use Meter
Regeneration Type .....	Countercurrent
Meter Type .....	0.30 - 25.00 gpm Polypropylene Turbine

## Inlet Water Quality

Pressure Range .....	15 – 125 psi Dynamic Pressure
Temperature Range .....	35 – 120° F
pH Range .....	5 – 10 SU
Free Chlorine Cl <sub>2</sub> (Max.) .....	2.0 mg/L
Hardness as CaCO <sub>3</sub> (Max.) .....	107 gpg

## Operating Specs

Flow Range (15 / 30 psig) .....	12.0 – 19.0 gpm
Flow Configuration .....	Alternating
Dimensions (width x depth x height) .....	21 x 10 x 60"
Weight (Operating / Shipping) .....	350 / 175 lbs.

## Connections

Inlet / Outlet Connections .....	Custom Adapter and E-Clip
Drain Connection .....	0.5" Tube
Brine Line Connection .....	0.375" Tube
Power .....	None

## System Part Numbers

Kinetico 2100s, 18 x 35 brine drum .....	11031
Kinetico 2100s, no brine drum .....	11050
Kinetico 2100s, no brine drum, no resin .....	11052

## Brine Tank Options

Tank Description .....	K-Spray .....	18 x 35
Brine Tank Part Number .....	9763A .....	7938
Tank Height .....	35" .....	35"
Tank Footprint .....	18" DIA .....	18" DIA
Material .....	.HDPE .....	.HDPE
Salt Capacity .....	250 lbs. ....	250 lbs.

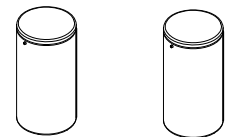
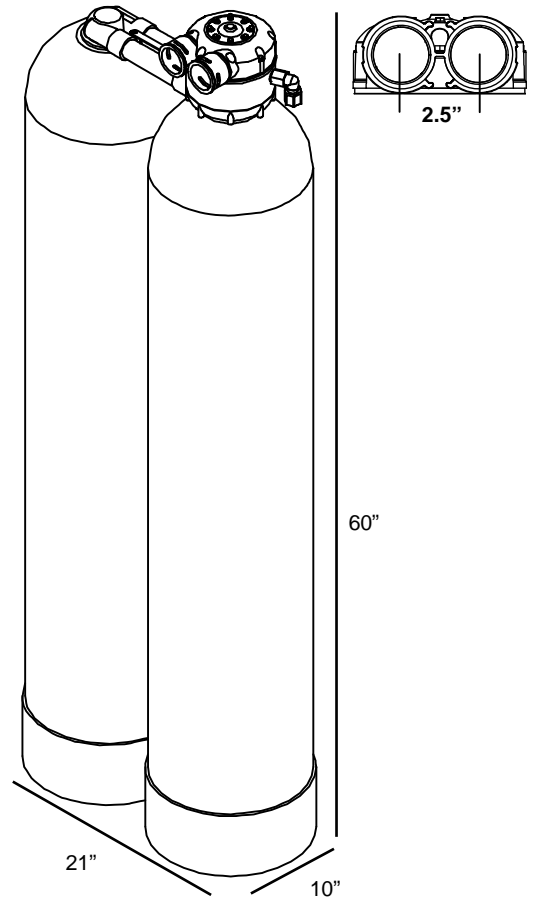
## Regeneration Specifications

Regeneration Volume .....	102 gallons
Regeneration Time .....	90 minutes
Backwash Flow Control .....	3.00 gpm
Brine Refill Flow Control .....	0.70 gpm

Setting	Capacity	Efficiency	Dosing	Meter Disc
**5.5 lbs.	25,253 grains	4,591 gr./lb.	3.7 lbs./ft <sup>3</sup>	
7.5 lbs.	30,843 grains	4,112 gr./lb.	5.0 lbs./ft <sup>3</sup>	
**10 lbs.	41,087 grains	4,108 gr./lb.	6.7 lbs./ft <sup>3</sup>	
15 lbs.	42,611 grains	2,840 gr./lb.	10.0 lbs./ft <sup>3</sup>	

**Gallons/Regeneration:**

\*\* Settings certified by NSF and or WQA



## Disc Selection

(Compensated Hardness\*)

1	2	3	4	5	6	7	8
11	21	30	38	--	--	--	--
14	26	38	48	--	--	--	--
17	31	46	58	67	76	85	94
19	37	52	66	76	88	98	107
1,715	858	572	429	343	286	245	214

\*Compensated hardness in gpg = Hardness + (3 x Fe in mg/L)

## Operating Profile

Softener shall remove hardness to less than 1/2 gpg when operated in accordance with the operating instructions. The system shall include two tanks. This duplex configuration shall operate with one tank on-line during service. During regeneration cycles, one tank shall provide water to service and to the regenerating tank. A water meter shall initiate system regeneration. The water meter shall measure the processed volume and be adjustable. Service flow shall be downflow and regeneration flow shall be upflow.

## Regeneration Control Valve

The regeneration control valve shall be top mounted (top of media tank), and manufactured from non-corrosive materials. Control valve shall not weigh more than four pounds. Control valve shall provide service and regeneration control for two media tanks. Inlet and outlet ports shall accept a quick connect, double O-ring sealed adapter. Interconnection between tanks shall be made through the regeneration valve with a quick connect adapter. Control valve shall operate using a minimum inlet pressure of 15 psi. Pressure shall be used to drive all valve functions. No electric hook-up shall be required. Control valve shall incorporate four operational cycles including; service, brine draw, slow rinse, and a combined fast rinse and brine refill. Service cycle shall operate in a downflow direction. The brine cycle shall flow upflow, opposite the service flow, providing a countercurrent regeneration. Control valve shall contain a fixed orifice eductor nozzle and self-adjusting backwash flow control. The control valve will prevent the by-pass of hard water to service during the regeneration cycle.

## Media Tanks

The tanks shall be designed for a maximum working pressure of 125 psi and hydrostatically tested at 300 psi. Tanks shall be made of polyethylene and reinforced with a fiberglass wrapping. Each tank shall include a 2.5 in. threaded top opening. Each tank shall be NSF approved. Upper and lower distribution system shall be of a slot design. Distributors will provide even flow of regeneration water and the collection of processed water.

## Conditioning Media

Each softener shall include non solvent cation resin having a minimum exchange capacity of 30,000 grains/ft<sup>3</sup> when regenerated with 15.0 lbs/ft<sup>3</sup>. The media shall be solid, of a proper particle size and shall contain no plates, shells, agglomerates or other shapes, which might interfere with the normal function of the water softener.

## Brine System

A combination salt storage and brine production tank shall be manufactured of corrosion resistant, plastic. The brine tank shall have a chamber to house the brine valve assembly. The brine float assembly shall allow for adjustable salt settings and shall provide for a shutoff to the brine refill. The brine tank shall include a safety overflow connection to be plumbed to a suitable drain.