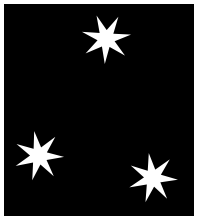


HYDRUS™

Softening Systems





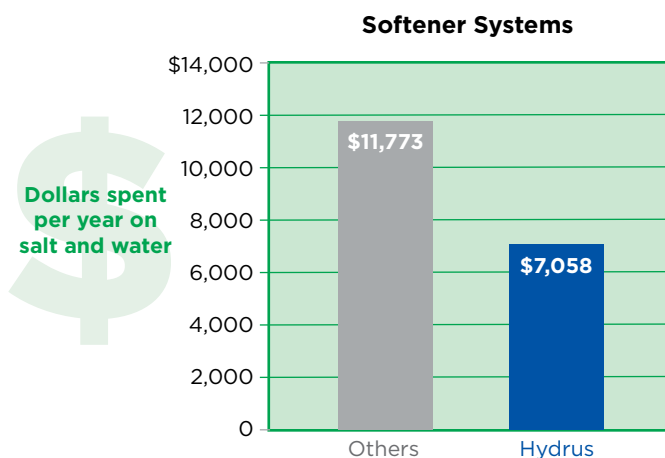
HYDRUS™

Countercurrent Regeneration

Experience the Kinetico Difference

Until now, all industrial water softeners have been the same; they use large amounts of salt to regenerate and simultaneously allow some hard water to leak into service. Kinetico's Hydrus water softeners are different. For more than 30 years, Kinetico has designed and built the most cost-effective softeners that provide the best water quality possible.

Typical Cost of Operations*



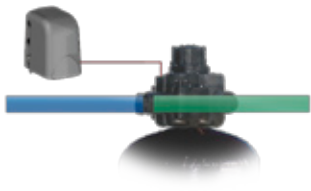
* Based on 30 gpm, 16 hours per day on 20 gpg raw water hardness, multi-tank installation—savings may be greater or less than indicated.



The Hydrus water softener is the only multi-port system to use countercurrent, soft water regeneration right out of the box. This proven and trusted method of operation results in up to a 40 percent reduction in salt use when compared to other units. In addition, waste water volumes are reduced by as much as 30 percent, making Hydrus a more environmentally responsible water treatment product than others.

Water quality from a Hydrus water softener is significantly better than the water quality from traditional co-current or hard water regenerating systems. With a Hydrus system, hardness leakage will be reduced by as much as 95 percent.

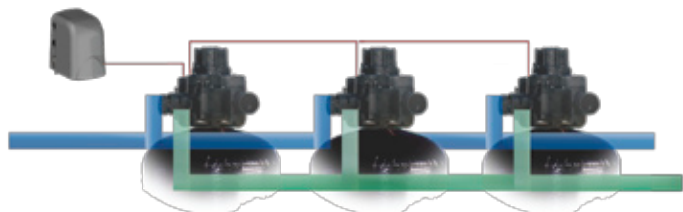
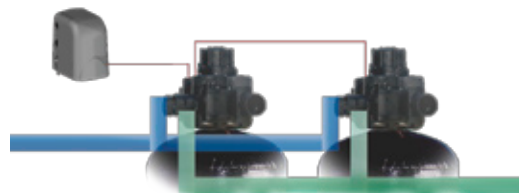
Single-Tank Configuration



Simplex—Uses raw water to regenerate. This configuration is the most economical to purchase and the most space efficient; however, operational costs and waste production are not the lowest. Additionally, it does not offer the highest water quality.

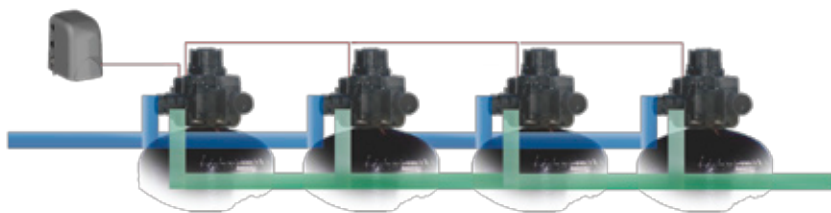
Multi-Tank Configurations

Duplex—Uses soft water to regenerate. This design is suited for intermittent higher flow designs needed by laundry, hotel, motel and large food preparation facilities. Duplex flow rates range between 8 gpm and 200 gpm.



Triplex—Uses soft water to regenerate. This configuration is ideal for continuous high flow rate applications where water quality and regeneration efficiency are vital like in chlorine production, batch filling operations, boiler feed and other critical applications. The triplex design effectively regenerates one tank at a time with only a slight pressure drop. Triplex system flow rates range between 12 gpm and 300 gpm.

Multi-Tank—Uses soft water to regenerate. This configuration ensures high flow rates with almost no detectable pressure drop during regeneration. The design offers high salt efficiency and the softest water possible. Multi-tank design flow rates range between 16 and 400 gpm.



Kinetic multi-tank water softener systems carry the WQA Gold Seal for NSF/ANSI 44 performance certification. This third party certification is your guarantee that the systems will perform as specified. NSF/ANSI 44 certification includes:

- + passing a cycle test >100,000 cycles
- + hydrostratic test—300 psi for 15 minutes
- + performance testing

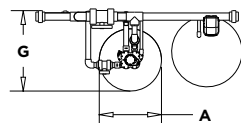
Hydrus valves have WQA approval for NSF/ANSI 61 certification for materials compatibility with drinking water.

	Flow @ 15 psi Loss (gpm)	Flow @ 25 psi Loss Preliminary (gpm)	Backwash Flow Rate Per Tank (gpm)	Resin Volume Per Tank	Regeneration Volume Per Tank (gal)	Regeneration Efficiency	Regeneration Time Per Tank (min)	By-pass	Tanks
SIMPLEX									
H118s	45	64	8	5 ft ³	391	3,333	120	HW	(1) 18" Ø 65
H121s	55	78	10	6 ft ³	441	3,333	120	HW	(1) 21" Ø 62
H124s	65	92	15	8 ft ³	563	3,333	120	HW	(1) 24" Ø 65
H130s	72	101	20	12 ft ³	853	3,333	150	HW	(1) 30" Ø 72
H136s	78	110	30	18 ft ³	1,264	3,333	150	HW	(1) 36" Ø 72
H142s	81	115	40	26 ft ³	1,587	3,333	150	HW	(1) 42" Ø 72
DUPLEX									
H218sOD	90	128	8	5 ft ³	304	>4000	120	None	(2) 18" Ø 65
H221sOD	110	156	10	6 ft ³	347	>4000	120	None	(2) 21" Ø 62
H224sOD	130	184	15	8 ft ³	453	>4000	120	None	(2) 24" Ø 65
H230sOD	144	202	20	12 ft ³	807	>4000	150	None	(2) 30" Ø 72
H236sOD	156	220	30	18 ft ³	1,187	>4000	150	None	(2) 36" Ø 72
H242sOD	162	230	40	26 ft ³	1,640	>4000	150	None	(2) 42" Ø 72
TRIPLEX									
H318sOD	135	192	8	5 ft ³	304	>4000	120	None	(3) 18" Ø 65
H321sOD	165	234	10	6 ft ³	347	>4000	120	None	(3) 21" Ø 62
H324sOD	195	276	15	8 ft ³	453	>4000	120	None	(3) 24" Ø 65
H330sOD	216	303	20	12 ft ³	807	>4000	150	None	(3) 30" Ø 72
H336sOD	234	330	30	18 ft ³	1,187	>4000	150	None	(3) 36" Ø 72
H342sOD	243	345	40	26 ft ³	1,640	>4000	150	None	(3) 42" Ø 72

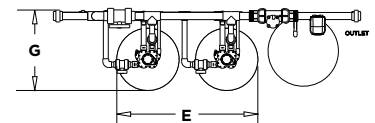
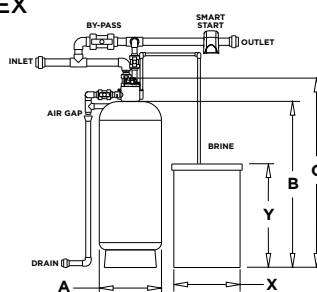
System Type	A	B	C	D	E	F	G
HS X18s	18	67	79	4	40	62	28
HS X21s	21	67	79	4	46	71	31
HS X24s	24	67	78	4	52	80	34
HS X30s	30	86	98	4	64	98	40
HS X36s	36	86	98	4	76	116	46
HS X42s	42	98	109	4	88	134	52

Note A: The "X" in the system size description refers to the number of tanks: Simplex = 1, Duplex = 2, Triplex = 3

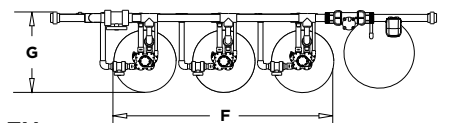
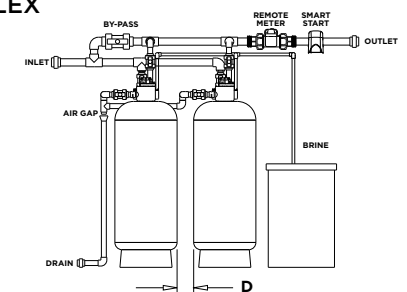
Brine Tank Size	X	Y	Pipe Schedule	Pipe Size (in.)
24 x 50	24	50	Inlet	2
30 x 48	30	48	Outlet	2
50 x 60	50	60	Drain	2
39 x 60	39	60	Brine	1/2 tubing



SIMPLEX



DUPLEX



TRIPLEX

