

HICAP-S Datasheet

General Description

The HICAP-S Series is Robert B. Hill's offering for low-mid volume systems that require a custom solution for industrial, commercial, and municipal applications. Engineered for reliability and performance, this system can also be customized with single, duplex, and multi-tank arrangements to match specific flow requirements and operational demands.



System Sizes

HICAP_S-X(X)-	2054	2060	2454	2460	3054	3060
Volume	5 ft ³	6 ft ³	7 ft ³	9 ft ³	12 ft ³	15 ft ³
Area	2.2 ft ²		3.1 ft ²		4.9 ft ²	
Target Flow	18 GPM		25 GPM		40 GPM	
Max Flow	33 GPM		47 GPM		74 GPM	
Min Flow	4 GPM		6 GPM		10 GPM	
Backwash Flow	11 GPM		16 GPM		25 GPM	
Capacity @10lb Salt Dose	125k grain	150k grain	175k grain	225k grain	300k grain	375k grain
Capacity @15lb Salt Dose	150k grain	180k grain	210k grain	270k grain	360k grain	450k grain

HICAP_S-X(X)-	3660	3672	4260	4272
Volume	21 ft ³	26 ft ³	29 ft ³	35 ft ³
Area	7.1 ft ²		9.6 ft ²	
Target Flow	57 GPM		77 GPM	
Max Flow	107 GPM		144 GPM	
Min Flow	14 GPM		19 GPM	
Backwash Flow	36 GPM		48 GPM	
Capacity @10lb Salt Dose	525k grain	650k grain	725k grain	875k grain
Capacity @15lb Salt Dose	630k grain	780k grain	870k grain	1050k grain

- all items listed are just shown for reference specific system capacity may vary

* - since this series is build with steel tanks the sizing with not be directly comparable to the standard HICAP Series utilizing fiberglass tanks.

** - Target Flow based on optimal bed contact time range

*** - Max Flow based on max flux rate recommended with 5-8psi loss typical, higher flows can be achieved with higher pressure losses.

**** - Min Flow based on recommend rate to avoid channeling for continuous use flow

System Pressures

Standard Pressure ratings are:

- 100 PSI – (NON-CODE)

Arrays

- **Simplex** – great for periodic high flow application that can accommodate backwash down time
- **Duplex** – good for continuous flow applications
- **Triplex** – great for continuous flow applications, can accommodate an N+1 requirement or can be sized to accommodate a larger range of flow rates
- **Quad** – good for high continuous flow applications for high hardness targets
- *(larger arrays available but not standard)*

Skid Arrangement

- | | |
|---|---|
| <ul style="list-style-type: none">○ Fully Skidded<ul style="list-style-type: none">○ Softener Tanks and all piping and valves are skid mounted○ Brine Tank not skid mounted per standard. | <ul style="list-style-type: none">○ Valve Tree Skid<ul style="list-style-type: none">○ Face Piping and valves are skid mounted and the softener tanks are mounted adjacently on the floor. |
|---|---|

Piping

- PVC SCH80 - for standard use and applications
- 304SS SCH40 Threaded – for corrosive / harsh environments
- 304SS SCH10 Welded – for corrosive / harsh environments
- Copper L-Type – for municipal application to resist microbial growth

Standard Features

- NSF-61 Certified Tank Lining
- Skid Mounted Diaphragm Valves
- Paddle Wheel or Turbine Flowmeter(s)
- Inlet / Outlet Pressure Gauges
- Inlet / Outlet Sample Valves
- AquaMatic NXT Stager Control

Optional Features

Hard Water By-Pass

A hard water by-pass is a good option for systems that can handle the feed water quality and cannot handle any down time. Typical for less redundant systems or critical systems that cannot

Feed Pressure Relief Valve

If there is a risk of high feed pressure a pressure safety valve can be added on the feed of the softener system as an additional layer of protection.