

## HICAP-F Datasheet

### General Description

The HICAP-F Series is Robert B. Hill’s offering for low-mid volume systems that require a custom solution for industrial, commercial, and municipal applications using commercially available fiberglass tanks. 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_F-X(X)-	1865	2162	2472	3072	3672	4272
Volume	5 ft <sup>3</sup>	6 ft <sup>3</sup>	10 ft <sup>3</sup>	13 ft <sup>3</sup>	20 ft <sup>3</sup>	30 ft <sup>3</sup>
Area	2.2 ft <sup>2</sup>	2.4 ft <sup>2</sup>	3.1 ft <sup>2</sup>	4.9 ft <sup>2</sup>	7.1 ft <sup>2</sup>	9.6 ft <sup>2</sup>
Target Flow	18 GPM	20 GPM	25 GPM	40 GPM	57 GPM	77 GPM
Max Flow	33 GPM	36 GPM	47 GPM	74 GPM	107 GPM	144 GPM
Min Flow	5 GPM	5 GPM	7 GPM	10 GPM	15 GPM	20 GPM
Backwash Flow	11 GPM	12 GPM	16 GPM	25 GPM	36 GPM	48 GPM
Capacity @10lb Salt Dose	125k grain	150k grain	250k grain	325k grain	500k grain	750k grain
Capacity @15lb Salt Dose	150k grain	180k grain	300k grain	390k grain	600k grain	900k grain

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

\*- Target Flow based on optimal bed contact time range and flux rates

\*\*- 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)

### Piping

- PVC SCH80 - for standard use and applications
- 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
- NXT Stager Control
- Fully Skidded

## Optional Features

### ASME Code Stamped Fiberglass Vessels

Switching to an ASME Code stamped pressure vessel ensures compliance with recognized safety and quality standards. ASME certification provides assurance of proper design, material selection, and fabrication practices. It also simplifies inspections and approvals for industrial and municipal projects.

### Hard Water By-Pass

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

### 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.

### PLC & HMI

Switching to a PLC and HMI control system offers improved automation, reliability, and process visibility. PLCs support future scalability and remote monitoring capabilities. Integrated HMIs allow operators to monitor system performance in real time, quickly identify faults, and make adjustments efficiently. This upgrade enhances system visibility and process control, improving overall operational efficiency.