



Triplex Carbon Filters

VANTAGE® PRE-TREATMENT - INDUSTRIAL (PTI) SERIES CARBON FILTERS

LOW/MEDIUM FLOW SYSTEMS

The Vantage® Pre-Treatment - Industrial (PTI) series carbon filters by Evoqua Water Technologies offer a flexible, reliable and featurerich way to remove Chlorine, Chloramines and reduce organics from your feed water. PTI systems are available in Simplex, Duplex or Triplex configurations that are all skid mounted, and these preengineered, pre-assembled and factory-tested units minimize installation and startup time. Each configuration shares a common control platform and is available in either PVC or 316L Stainless Steel face piping. Vessel diameters range from 24" to 60" for low and medium flow systems. Each carbon filter contains granular activated carbon media.

Vantage PTI Carbon Filters are available in four models:

- **Economy (E)** - Controlled by a stager, PVC face piping, Simplex and Deluxe, non code vessel
- **Plus (P)** - Controlled by Evoqua PLC and touch screen HMI, PVC face piping and internals
- **Deluxe (D)** - Controlled by Evoqua PLC and touch screen HMI, 316L SS face piping and PVC internals
- **Select (S)** - Controlled by Evoqua PLC and touch screen HMI, 316L SS face piping and internals; Chlorine monitor comes standard with this model.

The Plus, Deluxe and Select models are available in all three vessel configurations - Simplex, Duplex and Triplex - and can be ordered in noncode or ASME code vessels.

The Plus, Deluxe and Select models are available in five operational flow configurations depending on the number of vessels:

- **Simplex Operation** - single vessel operation
- **Deluxe Alternating** - one vessel on, one vessel in standby
- **Parallel** - all vessels working together
- **2 + 1** - two vessels working and one vessel in stand by for back wash support
- **Pro Flow** - Duplex 1+1 or Triplex 1+1+1. One vessel will be active, and the second vessel (Duplex configuration) and third vessel (Triplex configuration) are in standby. When flow set points are reached, the additional vessel(s) will come on line, and as the flow drops the vessel(s) will revert to standby mode. These set points are configurable.

The Economy model will only operate in the following flows:

- **Simplex Operation** - single vessel operation
- **Duplex Parallel** - two vessels working together

Features

- Reversible feed connections
- Separate source backwash manifold option
- Adjustable drain line flow control for maximum efficiencies
- 2006 IBC Seismic rating for anchorage
- Chlorine monitor option on Plus & Deluxe models
- Thermal pressure relief valve
- Carbon Steel - epoxy lined and coated vessels
- Common control available in either Siemens® or Allen-Bradley® PLC/HMI

Benefits

- Condensed footprint to save space
- Automated vent for maximum efficiencies
- Sight glass on drain line to minimize backwash water usage
- Fast delivery to meet demanding schedules

SPECIFICATIONS LOW/MEDIUM FLOW SYSTEMS

	Carbon - Plus, Deluxe and Select			Carbon - Economy	
	Simplex W x D x H	Duplex W x D x H	Triplex W x D x H	Simplex W x D x H	Duplex W x D x H
PTICxxx24x48	41 x 49 x 91 in	70 x 49 x 95 in	98 x 49 x 95 in	47 x 46 x 75 in	103 x 46 x 75 in
Operating Weight	1,658 lbs	4,723 lbs	5,611 lbs	1,507 lbs	2,830 lbs
PTICxxx30x60	46 x 59 x 108 in	89 x 59 x 112 in	129 x 61 x 112 in	48 x 52 x 91 in	190 x 56 x 91 in
Operating Weight	2,841 lbs	5,503 lbs	7,928 lbs	2,604 lbs	5,049 lbs
PTICxxx36x60	50 x 61 x 110 in	92 x 65 x 115 in	132 x 67 x 115 in	57 x 59 x 94 in	128 x 61 x 94 in
Operating Weight	3,793 lbs	7,449 lbs	11,162 lbs	3,626 lbs	7,080 lbs
PTICxxx42x60	60 x 76 x 117 in	114 x 76 x 121 in	166 x 76 x 121 in	57 x 59 x 101 in	133 x 61 x 101 in
Operating Weight	5,089 lbs	10,075 lbs	15,120 lbs	4,739 lbs	9,358 lbs
PTICxxx48x60	65 x 82 x 121 in	117 x 82 x 125 in	169 x 83 x 125 in	65 x 66 x 116 in	135 x 69 x 116 in
Operating Weight	6,446 lbs	12,722 lbs	19,022 lbs	6,043 lbs	11,943 lbs
PTICxxx54x72	70 x 88 x 137 in	137 x 90 x 143 in	202 x 92 x 143 in	70 x 74 x 120 in	138 x 75 x 120 in
Operating Weight	9,114 lbs	18,151 lbs	27,219 lbs	8,778 lbs	17,515 lbs
PTICxxx60x72	69 x 99 x 140 in	140 x 99 x 146 in	207 x 100 x 146 in	70 x 80 x 124 in	141 x 81 x 124 in
Operating Weight	11,346 lbs	22,633 lbs	33,986 lbs	10,840 lbs	21,641 lbs

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Plus, Deluxe and Select - Low/Medium Flow Systems*

	Pipe Size PVC	Pipe Size SS	Nominal Flow for Chloramine Removal @ 1 gpm/cuft	Nominal Flow for Chlorine Removal @ 3 gpm/cuft	Tank Diameter (in)	Tank Shell Height (ft)	Area (sqft)	% Media Free-board	Active Media Depth (in)	Actual Media per Vessel (cuft)	Backwash Flow @ 14.8 gpm/sqft @ 85°F
PTICxxx24x48	1.5	1.5	7	22	24	4	3.1	47%	28	7.3	45
PTICxxx30x60	2	2	15	45	30	5	4.9	44%	36.5	15.0	70
PTICxxx36x60	3	2	21	63	36	5	7.1	47%	35.5	21.0	101
PTICxxx42x60	3	3	28	84	42	5	9.6	50%	35	28.0	138
PTICxxx48x60	3	3	38	114	48	5	12.6	47%	36	38.0	180
PTICxxx54x72	4	3	58	174	54	6	15.9	47%	43.75	58.0	227
PTICxxx60x72	4	4	72	216	60	6	20	47%	44	72.0	281

Economy - Low/Medium Flow Systems

	Pipe Size PVC	Pipe Size SS	Nominal Flow for Chloramine Removal @ 1 gpm/cuft	Nominal Flow for Chlorine Removal @ 3 gpm/cuft	Tank Diameter (in)	Tank Shell Height (ft)	Area (sqft)	% Media Free-board	Active Media Depth (in)	Actual Media per Vessel (cuft)	Backwash Flow @ 14.8 gpm/sqft @ 85°F
PTICExx24x48	1.5	n/a	8	24	24	4	3.1	45%	30.5	8	31
PTICExx30x60	1.5	n/a	12	36	30	5	4.9	47%	29	12	49
PTICExx36x60	2	n/a	18	54	36	5	7.1	50%	30.5	18	71
PTICExx42x60	2	n/a	24	72	42	5	9.6	52%	30	24	96
PTICExx48x60	2.5	n/a	32	96	48	5	12.6	52%	30.5	32	126
PTICExx54x72	3	n/a	40	120	54	6	15.9	55%	30	40	159
PTICExx60x72	3	n/a	50	150	60	6	20	60%	30.5	50	196

* For Duplex systems, double flows / quantities; for Triplex systems, triple flows / quantities

CONVERSION FACTORS:

1" = 2.54 cm

1 gpm = 3.79 liters per minute

1 gpm = .2271 meters³ per hour



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