

# General System Sizing Information



## Media/Resin Specs

Media Type	Pounds Per Ft. <sup>3</sup>	Service Rate GPM Ft. <sup>2</sup>	Backwash Rate GPM Ft. <sup>2</sup>	Bed Depth Inches	Bed Expansion %
Anthracite #1	50	5	12 - 18	24 - 36	20 - 40
Birm	36 - 38	3.5 - 5	10 - 12	30 - 36	20 - 40
Carbon (CS - HAC)	28	5	10 - 12	26 - 30	30 - 40
Carbon (CAT - HAC)	28	5	8 - 10	26 - 30	30 - 40
Calcite	90	3 - 6	8 - 12	24 - 30	12 >
Corosex	75	5 - 6	10 - 12	24 - 30	20 - 40
Filter-Ag	25	5	8 - 10	24 - 36	20 - 40
Filter-Ag Plus	50	6 - 15	14 - 18	24 - 36	30 - 40
Filter Ox	84	2 - 12	12	30	20 - 40
Filter Sand	100	1.5 - 5	15 - 20	18 - 30	20
Garnet*	140	1.5 - 5	12 - 20	4 - 6	20
Greensand Plus	90	2 - 12	12	30	40
KDF 55 & 85	171	15	30	10	10 - 15
Resin - Cation Standard Mesh**	50	5 - 20	4 - 7	24 - 36	50
Resin - Cation Fine Mesh**	52	5 - 15	2.5 - 4	24 - 36	50

\*30-40 Mesh in Multi-media Bed

\*\*Consult Manufacturers' specification rates for temperature compensation

WS1 3/4" Flow Controls GPM:

0.7, 1.0, 1.3, 1.7, 2.2, 2.7, 3.2, 4.2, 5.3, 6.5, 7.5, 9.0, 10.0

WS1 1" Flow Controls GPM:

9.0, 10.0, 11, 13, 15, 17, 20, 25

## Control Valve Flow Specs

Control Valve	Service @ 15 PSID	Backwash @ 25 PSID
WS1	27	27
WS1TT	28	15
WS1.25	34	32
WS1.5PB	48	43

Control Valve	Service @ 15 PSID	Backwash @ 25 PSID
WS1.5TT	54	22
WS1.5P	60	43
WS1.5	70	52
WS2P	95	85

Control Valve	Service @ 15 PSID	Backwash @ 25 PSID
WS2	115	80
WS2QC	125	85
WS2HF	165	175
WS3	250	220

## Mineral Tank Specs with GPM Flow Rates per Sq Ft

ChargerPro™ Series

Mineral Tank				Flow Rates in GPM per Ft. <sup>2</sup> of Bed Area								
Diameter Inches	Ft. <sup>2</sup> Bed Area	Ft. <sup>3</sup> Per Inch of Height	Ft. <sup>3</sup> Dome Volume	3 GPM Per Ft. <sup>2</sup>	5 GPM Per Ft. <sup>2</sup>	6 GPM Per Ft. <sup>2</sup>	8 GPM Per Ft. <sup>2</sup>	10 GPM Per Ft. <sup>2</sup>	12 GPM Per Ft. <sup>2</sup>	15 GPM Per Ft. <sup>2</sup>	18 GPM Per Ft. <sup>2</sup>	20 GPM Per Ft. <sup>2</sup>
6	0.20	0.016	0.015	0.6	1.0	1.2	1.6	2.0	2.4	2.9	3.5	3.9
7	0.27	0.022	0.022	0.8	1.3	1.6	2.1	2.7	3.2	4.0	4.8	5.3
8	0.35	0.029	0.030	1.0	1.7	2.1	2.8	3.5	4.2	5.2	6.3	7.0
9	0.44	0.037	0.050	1.3	2.2	2.7	3.5	4.4	5.3	6.6	8.0	8.8
10	0.55	0.045	0.080	1.6	2.7	3.3	4.4	5.5	6.5	8.2	9.8	10.9
12	0.79	0.065	0.140	2.4	3.9	4.7	6.3	7.9	9.4	11.8	14.1	15.7
13	0.92	0.077	0.170	2.8	4.6	5.5	7.4	9.2	11.1	13.8	16.6	18.4
14	1.07	0.089	0.220	3.2	5.3	6.4	8.6	10.7	12.8	16.0	19.2	21.4
16	1.40	0.116	0.320	4.2	7.0	8.4	11.2	14.0	16.8	20.9	25.1	27.9
18	1.77	0.147	0.610	5.3	8.8	10.6	14.1	17.7	21.2	26.5	31.8	35.3
21	2.41	0.200	0.880	7.2	12.0	14.4	19.2	24.1	28.9	36.1	43.3	48.1
24	3.14	0.262	1.340	9.4	15.7	18.8	25.1	31.4	37.7	47.1	56.5	62.8
30	4.91	0.409	2.550	14.7	24.5	29.5	39.3	49.1	58.9	73.6	88.4	98.2
36	7.07	0.589	4.440	21.2	35.3	42.4	56.5	70.7	84.8	106.0	127.2	141.4
42	9.62	0.801	5.320	28.9	48.1	57.7	77.0	96.2	115.5	144.3	173.2	192.4
48	12.57	1.047	7.830	37.7	62.8	75.4	100.5	125.7	150.8	188.5	226.2	251.3
63	21.65	1.803	18.600	64.9	108.2	129.9	173.2	216.5	259.8	324.7	389.6	432.9