



Waterplus™ Filtration Solutions – Sand/Anthracite Filters

Waterplus Pre-Engineered Filtration Systems are rugged, dependable water treatment solutions designed for the rigors of the industrial and municipal markets.

Combining industry leading filtration knowledge with the correct application of sand/anthracite media, Waterplus has created efficient and durable filtration systems that are designed to operate at high loading rates for use in the reduction of total suspended solids, silt density, and iron. Common applications of sand/anthracite filters include removing particulate, removing oxidized iron, and creating high purity water for industrial use.



Product Features

- Reduced installation costs for these pre-engineered, skid mounted pressure vessels that are pre-piped and pre-wired for economical installations.
- Time tested technology – this design has been in existence for over 50 years and it works!
- Unique straightforward design allows each vessel to operate via a single three-way valve eliminating the need for a dedicated backwash pump.
- Standard stainless steel distribution hub and laterals.
- Dual 11” x 15” clam style man-ways for ease of access and long life.
- Standard design has 100 psig non-code pressure vessels.

Sand/Anthracite Model Specifications						
Model Number	(Tank Qty) and Size	Total Surface Area (ft ²)	Flow Range (gpm)			Backwash Rate 15 gpm/ft ²
			3.0 gpm/ft ²	6.0 gpm/ft ²	9.0 gpm/ft ²	
SA024060	(3) 24x60	9.42	28	57	85	47
SA024060	(4) 24x60	12.57	38	75	113	47
SA030060	(3) 30x60	14.73	44	88	133	74
SA030060	(4) 30x60	19.63	59	118	177	74
SA036060	(3) 36x60	21.21	64	127	191	106
SA036060	(4) 36x60	28.27	85	170	254	106
SA042060	(3) 42x60	28.86	87	173	260	144
SA042060	(4) 42x60	38.48	115	231	346	144
SA048060	(3) 48x60	37.70	113	226	339	188
SA048060	(4) 48x60	50.26	151	302	452	188
SA054060	(3) 54x60	47.71	143	286	429	239
SA054060	(4) 54x60	63.62	191	382	573	239



Sand/Anthracite

Introduction

Sand/anthracite is a time tested filter media with increased run times when compared to single media filter beds. With this combination of media, a sand/anthracite system can effectively removal particles as small as 10-20 microns. Anthracite’s low density allows it to work well with higher density media like sand, which provides for a system that can outperform single-media systems.

Application

Sand/anthracite can be used for industrial applications like surface water treatment, cooling tower turbidity removal, and pretreatment prior to reverse osmosis. It can be used in gravity or pressure filters with lower pressure drops and improved filtration performance. It can also be used in potable and irrigation applications or in storm water or wastewater reuse applications.

Physical Properties

Composition: Silica Sand and Anthracite

Bulk Density: 100 lb/ft³ for sand and 50 lb/ft³ for anthracite

Effective Sizes: .35-.45mm for sand; .6-.8mm for anthracite

Packaging: 1ft³ bags, 1m³ supersacks

Operation

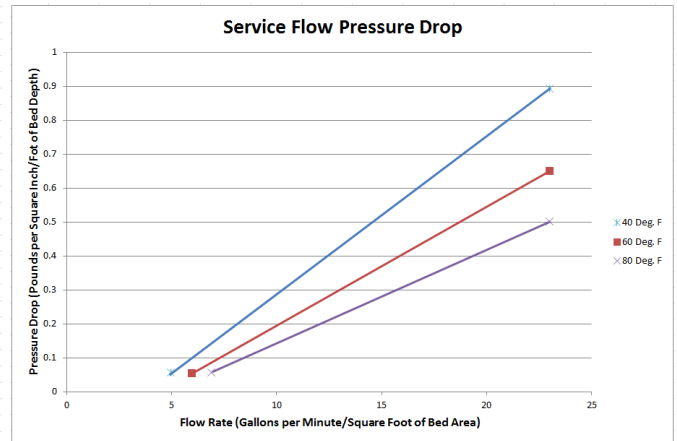
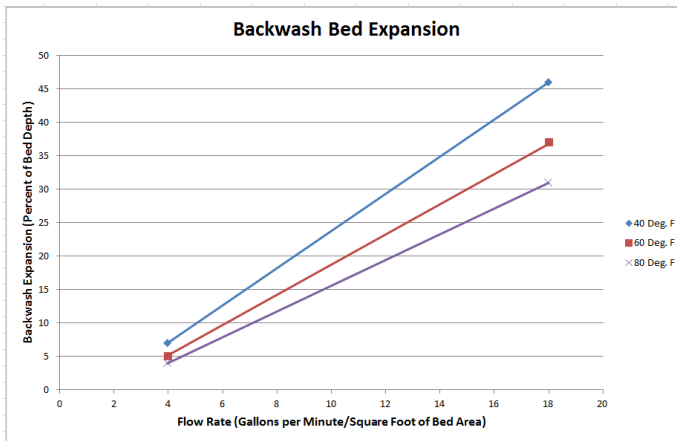
pH: 6.0 – 9.0

Bed Depth: 24”- 48” depending on application

Freeboard: 40% of bed depth (min)

Typical Treatment Loading Rate: 2-9 gpm/ft²

Backwash Rate: 12-19 gpm/ft², 3-5 minutes, temperature dependent



Recommended Backwash Rates:

Temp	80°F	70°F	60°F	50°F	40°F
GPM/ft ²	19	17	15	13.5	12