

Waterplus™ Filtration Solutions – SANDPLUS 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 SandPlus 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. A common application of SandPlus filters is the creation of 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.
- Reduced system footprint sizes for SandPlus due to the hydrophilic properties of the media allow for high filter loading rates while maintaining high treatment efficiency.
- Unique straightforward design allows each vessel to operate via a single three-way valve eliminating the need for a dedicated backwash pump.
- Higher particulate removal efficiency to 3 to 5 microns.
- 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.

| SandPlus Model Specifications | | | | | | |
|-------------------------------|---------------------|---------------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|
| Model Number | (Tank Qty) and Size | Total Surface Area (ft ²) | Flow Range (gpm) | | | Backwash Rate 17.2 (gpm) |
| | | | 8.00 gpm/ft ² | 12.00 gpm/ft ² | 15.00 gpm/ft ² | |
| SP024060 | (3) 24x60 | 9.42 | 75 | 113 | 141 | 54 |
| SP024060 | (4) 24x60 | 12.57 | 101 | 151 | 188 | 54 |
| SP030060 | (3) 30x60 | 14.73 | 118 | 177 | 221 | 84 |
| SP030060 | (4) 30x60 | 19.63 | 157 | 236 | 295 | 84 |
| SP036060 | (3) 36X60 | 21.21 | 170 | 254 | 318 | 122 |
| SP036060 | (4) 36x60 | 28.27 | 226 | 339 | 424 | 122 |
| SP042060 | (3) 42x60 | 28.86 | 231 | 346 | 433 | 165 |
| SP042060 | (4) 42x60 | 38.48 | 308 | 462 | 577 | 165 |
| SP048060 | (3) 48x60 | 37.70 | 302 | 452 | 565 | 216 |
| SP048060 | (4) 48x60 | 50.26 | 402 | 603 | 754 | 216 |
| SP054060 | (3) 54x60 | 47.71 | 382 | 573 | 716 | 274 |
| SP054060 | (4) 54x60 | 63.62 | 509 | 763 | 954 | 274 |



SANDPLUS

Introduction

SandPlus is a high rate filter media with improved filtration performance when compared to other media. The hardness, stability, uniformity and microporous character all help the media perform in both water and wastewater applications. While most filtration media filters down to 8-15 micron nominal size, SandPlus can filter down to 3-5 micron particle removal.

Application

SandPlus can be used for industrial applications like cooling tower turbidity removal or 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: High Purity Alumino-Silicate

Bulk Density: 55 lb/ft³ (0.67 kg/L)

Mesh Sizes: 14x40 mesh (0.4-1.4mm)

Packaging: 1ft³ bags, 1m³ supersacks

Operation

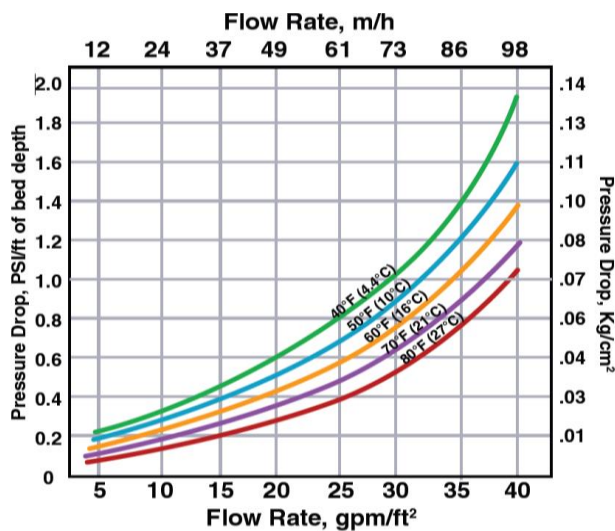
pH: 1.0 – 12.0

Bed Depth: 24"- 48" depending on application

Freeboard: 40% of bed depth (min)

Typical Treatment Loading Rate: 10-20 gpm/ft²

Backwash Rate: 13-22 gpm/ft², 5-15 minutes, temperature dependent



Backwash Flow Requirements

| Flow | 80°F (27° C) | 70°F (21° C) | 60°F (16° C) | 50°F (10° C) | 40°F (4.5° C) |
|--------------------------|-----------------|-----------------|-----------------|-----------------|------------------|
| U.S. gpm/ft ² | 22.3 | 19.8 | 17.2 | 14.8 | 12.5 |
| m/h | 54.5 | 48.4 | 42 | 36.2 | 30.6 |
| *40% bed expansion. | | | | | |