

# SandMaster PLUS

Centrifugal-Action Sand Separators for Residential Water Well Systems



Stainless Steel Construction

When sand is a problem in your water system, consider the once-and-for-all solution that a LAKOS SandMaster PLUS Separator offers. Removes sand, silt & grit particles that settle in water within 3 minutes or less. Protects entire water systems from abrasive wear, clogging and premature replacement:

- Protects sprinkler nozzles from wear and clogging
- Extends the life & operating cycles of water softeners, under-sink R.O. systems & water treatment/cartridge systems
- Eliminates build-up in hot water heaters, ice-makers, toilet tanks and other water-related appliances
- Minimizes clogging of washing machine inlet screens and faucet aerators/screens
- Cleaner water for all your residential fresh water requirements

Model selection requires only matching the water system's pump flow (see reverse for model options). Oversizing is not recommended. Easy to install. Automatic valve options for maintenance-free operation.

### Performance tested

Independent testing confirms that SandMaster PLUS removes 200 mesh (74 micron) sand, silt and other settleable particle matter to protect water systems from troublesome, abrasive solids.

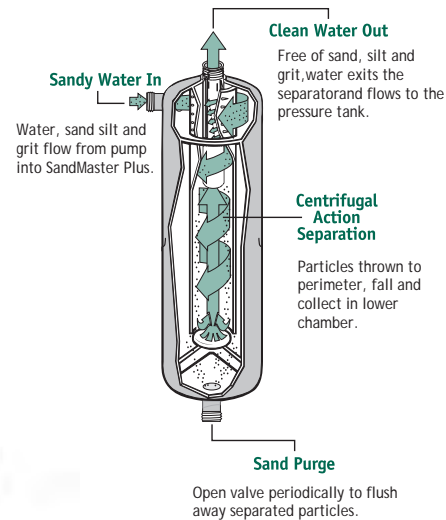
### No screens, cartridges or filter elements to clean or replace

Centrifugal action removes sand, silt & scale from water.

### Installs with no potential for system clogging or pressure loss

The SandMaster PLUS installs *between* the pump and pressure tank (see diagram on reverse), eliminating the potential for system pressure loss. Will not clog or reduce pump flow.

*SandMaster PLUS. Go stainless & grainless.*



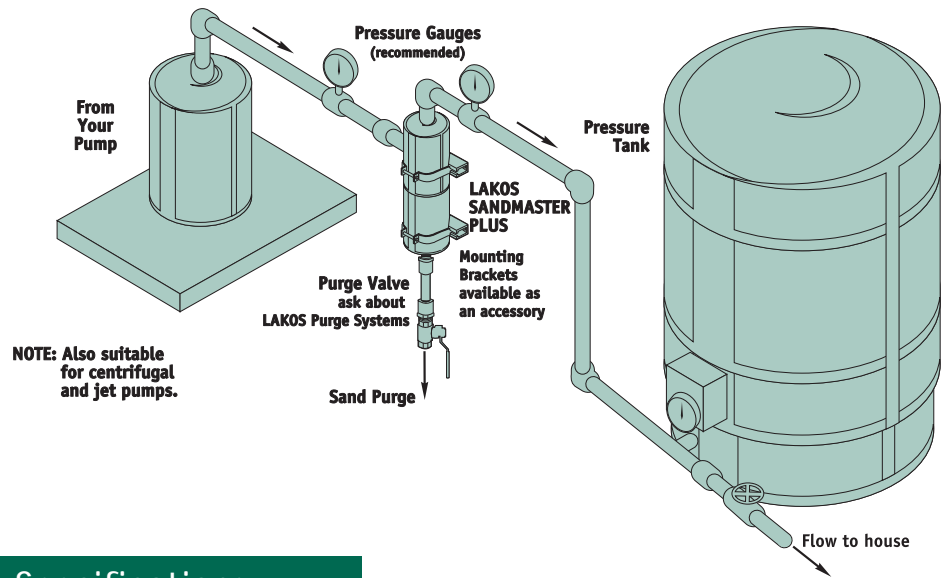
Flow range:  
5 - 70 U.S. gpm (70 - 265 liters/min.)

For Pump Protection:  
Models also available for downhole installation to protect submersible pumps from abrasive wear. Ask for details.



*Automatic Purge Valves and Mounting Brackets Also Available!*

## Installation Schematic



## Limited Warranty

The LAKOS SandMaster is warranted to be free of material or workmanship defects for at least *one year* from delivery date.

Extended 5-year coverage for separator body.

If a fault develops, notify us, giving a complete description of the alleged malfunction. Include the model number(s), date of delivery and operating conditions of subject product(s). We will subsequently review this information and, at our option, supply you with either servicing data or shipping instruction and returned materials authorization. Upon prepaid receipt of subject product(s) at the instructed destination, we will then either repair or replace such product(s), at our option, and if determined to be a warranted defect, we will perform such necessary product repairs or replace such product(s) at our expense.

This limited warranty does not cover any products, damages or injuries resulting from misuse, neglect, normal expected wear, chemically-caused corrosion, improper installation or operation contrary to factory recommendation. Nor does it cover equipment that has been modified, tampered with or altered without authorization.

No other extended liabilities are stated or implied and this warranty in no event covers incidental or consequential damages, injuries or costs resulting from any such defective product(s).

Lakos Separators are manufactured and sold under one or more of the following U.S. Patents:  
 3,289,608; 3,512,651; 3,568,837; 3,701,425;  
 3,947,364; 3,963,073; 4,027,481; 4,120,795;  
 4,123,800; 4,140,638; 4,147,630; 4,148,735;  
 4,305,825; 4,555,333; 5,320,747; 5,338,341;  
 5,368,735; 5,425,876; 5,571,416; 5,578,203;  
 5,622,545; 5,653,874; 5,894,995; 6,090,276;  
 6,143,175; 6,167,960; 6,202,543;  
 Des. 327,693; and corresponding foreign patents, including 600 12 329.4-08 (Germany) and EP 1 198 276 B1 (EU); other U.S. and foreign patents pending.

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## Specifications

Model	Flow Range		Inlet/Outlet Size* Male, N.P.T.	Dry Weight		Weight With Water	
	U.S. gpm	liters/min		lbs.	kg	lbs.	kg
SMP-05	5-10	19-38	1/2"	7	4.0	16	7.3
SMP-10	10-20	38-76	3/4"	8	4.0	16	7.3
SMP-20	20-32	76-120	1"	13	6.0	33	15.0
SMP-30	30-48	114-182	1-1/4"	13	6.0	33	15.0
SMP-45	45-70	170-265	1-1/2"	13	6.0	33	15.0

\*Caution: Do not size unit by pipe size (see below).

Maximum System Pressure: 100 psi (6.9 bar)

Maximum Temperature: 120 °F (49 °C)

Purge Connection: 3/4-inch male, N.P.T.

Material Construction: Stainless steel outer body; plastic internal

Models SMP-05 & SMP-10 - Height: 19-3/8 inches (492 mm)

- Diameter: 4-1/2 inches (114 mm)

Models SMP-20, SMP-30 & SMP-45 - Height: 24-3/4 inches (629 mm)

- Diameter: 6 inches (152 mm)

Note: Recommend 12 inches (305 mm) of space below separator's purge outlet for installation and use of manual and/or automatic purge valve below unit. See illustration above.

## How to Determine Sizing

Each SandMaster model operates best within a specific *flow range*. Do not simply use your system pipe size. To determine your pump's actual flow rate:

**If you have a valve between the pump and the pressure tank**, open it fully and record the volume of water in one minute to determine gallons or liters per minute.

**If you have no valve**, follow these simple steps:

1. Immediately *after* your pump shuts off, open faucet between pressure tank and house (make sure no other water is running), run water into a container and record the **Volume** (gallons or liters) of water it takes for pump to start up again. (You may have to refill container several times.)
2. Record length of **Time** (in minutes) pump runs before shutting off again.
3. Divide **Volume** by **Time** to determine *actual flow rate* (gpm or liters/minute).
4. Select your SandMaster model accordingly.