





www.lakos.com



## **Filtration Solutions for Residential Systems**

#### For Residential Domestic Water

"My water was so bad that the toilets and washing machine would plug up and not work. Now I don't even have to worry about drinking sand in my house."

Recommended

**Solution** 

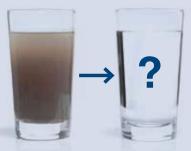
Paul Harper Shepherd, MA

Flow Range: 5-70 U.S. gpm (1.1-15.9 m<sup>3</sup>/hr) -Maximum Pressure: 100 psi (6.9 bar)

Model SMP

## The 3-Minute Settling Test

A simple approach to understanding which types of solids are removed by a LAKOS Centrifugal Separator is to think of them as "settleable solids". In other words, the solids (sand, dirt, etc.) that are heavy enough to settle in the bottom of a drinking glass in less than 3 minutes. Everything that settles in less than 3 minutes can usually be removed by a single pass through a LAKOS Centrifugal Separator.



3 Minutes Later... How Much Has Settled?



 Clean Water Out Free of sand, silt and grit, water exits the SandMaster and flows to the pressure tank.

Sance Masterplus-



Sand Purge Open valve periodically to flush away separated particles (can be automated).

#### ACCESSORIES FOR SANDMASTERS AND ILB/ILS

Sand Master



#### Features and Benefits:

Sand Master

#### SandMaster Plus

- Centrifugal Separator
- Durable stainless steel outer body construction (Model SMP)
- Limited 5-year warranty
- For more technical information, refer to LAKOS form LS-679

### FOR SAND AND SEDIMENT

#### Heavy Duty/Higher Pressure Range

## **Sand Separators** ILB/ILS

#### For Submersible Pumps

## **Pump Protection Sand Separators SUB-K**

## Specialty **Applications**

"Our sand trap didn't keep the sand from coming through the plumbing fixtures. Your separator solved the problem."

> **Richard Adams** Oklahoma City, OK

**Flow Range:** 3-290 U.S. gpm (0.5-66 m3/hr) **Maximum Pressure:** 150 psi (10.3 bar)

Model ILB

Model ILS

Much like the LAKOS SandMaster products, the ILB/ILS offers the added benefits of greater pressure capabilities, higher flow rates, and much higher temperature resistance.

Inle

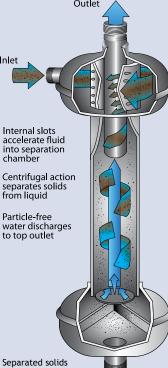
Heavy duty construction typically withstands even the toughest environmental conditions. Available in carbon and stainless steel.

#### **Features and Benefits:**

Centrifugal Separator

LB/ILS Leas

- Greater temperature resistance
- Heavy duty construction
- Higher pressure capability than **SandMasters**
- Available in rugged carbon steel (Model ILB) or stainless steel (Model ILS)
- · For more technical information, refer to LAKOS form LS-289



purge here (can be automated)

## Extend Life of **Submersible Pumps**

"A LAKOS Separator more than doubled the life of my submersible pump."

Ed Hull, Owner, Operator Dixon Ridge Dairy, Dixon, CA

Flow Range: 3-99 U.S. gpm (0.7-23 m<sup>3</sup>/hr)



PUMP PROTECTION

PUNP PROTECTIO

Reduce sand abrasion and wear to submersible pumps and extend pump life by 5X or more. The SUB-K uses controlled centrifugal action to prevent sand from entering the pump, reducing wear to impellers and other vital components. Easy to install into water

wells, the SUB-K attaches to the end of a submersible pump. Pump flow is not affected, but a 2-7 psi pressure loss can be expected.

#### **Features and Benefits:**

- Centrifugal Separator
- Protects submersible pumps from sand abrasion wear
- Dramatically extends pump life
- Saves on pump energy costs by maintaining optimum efficiency
- Injection molded composite materials
- For submersible pumps with flows above 99 U.S. gpm (23 m<sup>3</sup>/hr) and for all turbine pumps, refer to the LAKOS **PPS Separator**
- For more technical information, refer to LAKOS form LS-304

Pump enclosure

UMP PROTECTION

PUMP PRC

Submersible pump motor

#### O

Sandy water enters through tangential inlet slots and begins to swirl inside

#### ๏

Centrifugal action

"Sand-free" water is drawn by the swirling vortex to the pump's intake

### 4

Sand particles fall to the bottom and are purged through flexible "flapper valve deep into well

## FOR SANDY WELLS

shell

pushes sand to outer wall 3

## Which solution is right for you?

# Application Selection Guide

FILTRATION SOLUTIONS					
Contamination	Problem	Recommended Filtration	Benefits	Flow Range	LAKOS Solution
Sediment (sand, silt, rust and scale) in the water well	<ul> <li>Excessive wear to pump's impellers and bearings</li> <li>Expensive repairs and replacements</li> <li>Excessive energy usage</li> </ul>	Pump protection separator installed on suction of submersible pump	<ul> <li>Eliminates excessive wear to pump's impellers and bearings</li> <li>Helps maintain pump's efficiency and saves money by reducing energy costs</li> <li>Extends pump life by 5 times or more</li> </ul>	3-99 U.S. gpm 0.7-23 m <sup>3</sup> /hr	Submersible Pump Protection Sand Separator Model: • SUB-K
Sediment (sand, silt, rust and scale) pumped from water well	<ul> <li>Clogged faucet aerators and screens</li> <li>Plugged inlet screens to home appliances</li> <li>Malfunctioning or worn sprinkler nozzles</li> <li>Fouled water conditioning equipment</li> <li>Inefficient operating water heaters</li> <li>Worn pumps leading to excessive pumping and high energy costs</li> <li>Unscheduled shutdowns for maintenance</li> </ul>	Centrifugal sand separator for residential domestic water installed between the pump and pressure tank	<ul> <li>Centrifugally removes sand and other sediment up to 98% of 200 mesh</li> <li>No moving parts to wear out; no screens or filter elements to clean or replace</li> <li>Keeps home appliances and lawn sprinkler systems operating effectively and efficiently</li> </ul>	5-70 U.S. gpm 1.1-16 m³/hr	Centrifugal SandMaster in stainless steel with plastic internals Model: • SMP
Excessive Sediment (sand, silt, rust, scale) pumped from water well	All the problems listed above, and also: • Excessive sediment • Corrosive water • Higher pressures up to 150 psi (10 bar) • Flow rates in excess of 70 gpm. (15.9 m <sup>3</sup> /hr)	Heavy duty centrifugal sand separator installed between the pump and pressure tank	All the benefits of the LAKOS SandMaster Series (see above), and also: • 150psi operating pressure • Higher flow rate capability	3-290 U.S. gpm 0.5-66 m³/hr	Centrifugal Sand Separator in carbon or stainless steel Models: • ILB • ILS



LAKOS products are protected under multiple U.S. and foreign patents and trademarks. For details contact LAKOS.

## www.lakos.com

1365 North Clovis Avenue Fresno, California 93727 USA Telephone: (559) 255-1601 FAX: (559) 255-8093 info@lakos.com

