



LAKOS

Separators and Filtration Solutions

www.lakos.com

Agriculture Irrigation Filtration



AGRICULTURE IRRIGATION FILTRATION

Sand Separators ILB/ILS

Low Flow Solution

Flow Range:

3-290 U.S. gpm (0.7-66 m³/hr)

Maximum Pressure:

150 psi (10.3 bar)

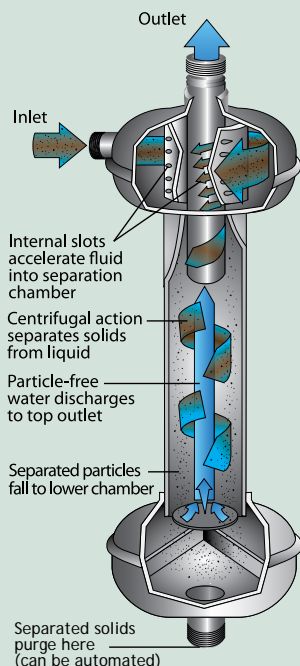


The ILB/ILS offers the benefits of high pressure capabilities and much higher temperature resistance. Heavy duty construction typically withstands even the toughest environmental conditions. Available in carbon and stainless steel. The ILB/ILS centrifugally separates up to 98% of particles 200 mesh (74 microns).

Innovative patented design. No moving parts to wear out or replace. Low and steady pressure loss. No routine maintenance. Minimal water loss.

Features and Benefits:

- Centrifugal Separator patented technology
- Heavy duty construction
- Available in rugged carbon steel (Model ILB) or stainless steel (Model ILS)
- For more technical information, refer to LAKOS form LS-289



Sand Separators IHB

High Flow Solution

Flow Range:

285-4,350 U.S. gpm
(65-988 m³/hr)

Maximum Pressure:

150 psi (10.3 bar)



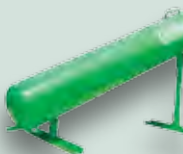
The IHB Centrifugal Separator is designed for high flow rate applications. The trouble-free operation of the IHB keeps water clean and concentrates separated sand.

Features and Benefits:

- Centrifugal Separator patented technology
- No screens or filter elements to clean or replace; no routine maintenance
- Low and steady pressure loss
- The in-line inlet/outlet configuration simplifies piping
- ASME code option available
- For more technical information, refer to LAKOS form LS-623

Backwash Reduction BRS

A pre-filter to sand media it reduces sand filter backwash by 50% or more, reducing water consumption and maintaining optimum flow to the irrigation system.



ACCESSORIES FOR ILB/ILS AND IHB



ILB/ILS Mounting Brackets



Visual Purge



Automatic Ball Valve



ILB/ILS Legs

FOR SAND, SEDIMENT, AND OTHER SOLIDS

Sand Media Filter **PROII**

Carbon Steel Media Tanks



Flow Range:
up to 3,140 U.S. gpm
(up to 715 m³/hr)

Sand Media Filter **SST**

Stainless Steel Media Tanks



Flow Range:
up to 3,140 U.S. gpm
(up to 715 m³/hr)

Injection Separator

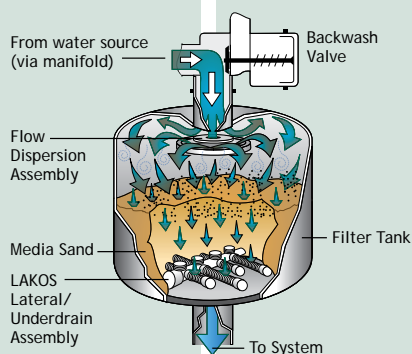
media filter systems,
backwashing cycles
reducing water loss and
maintaining flow and pressure
uniformity.



To protect drip and micro-irrigation systems, the PROII is made of rugged carbon steel construction with internal/external polyester powdercoating and injection molded PVC underdrain. Industry-best backwash characteristics for more thorough cleaning and longer operating cycles. The PROII Series can be manufactured to replace and fit the dimensions of any brand sand filter. Fully compatible with the LAKOS SST Series as well.

Features and Benefits:

- Fusion bonded powdercoated carbon steel
- Modular manifold design for easy installation and system expansion
- Exclusive Injection Molded PVC Underdrain
- No gravel or multi-media layering requirements
 - Industry-best warranty
 - Industrial grade powdercoated valve
 - For more technical information, refer to LAKOS form LS-675



LAKOS Stainless Steel Systems set the industry standard for operating performance, backwashing efficiency and the maximum use of sand media filtration surface area. Designed for the removal of small particles, organics and floating contaminants to protect drip & micro-irrigation systems. Capable of applications virtually wherever lightweight contaminants are a problem. Stainless steel tanks for long service life. Lightweight for shipping and installation handling.

Features and Benefits:

- Modular manifold design for easy installation and system expansion
- Exclusive Injection Molded PVC Underdrain
- No gravel or multi-media layering requirements
- Industrial grade powdercoated valve
- For more technical information, refer to LAKOS form LS-500



Exclusive LAKOS Underdrain Has 15 Year Warranty

- LAKOS underdrains have a larger surface area, leading to more efficient filtration, less channeling, and less frequent backwash cycles
- Lower pressure losses
- Encourage optimum/even flow access surface area

FOR ORGANICS AND OTHER FINE PARTICLES

Pump Intake Screen PC

Open Source Water Solution

Flow Range:

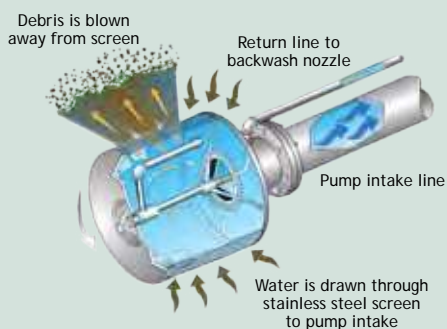
50-2,400 U.S. gpm
(11.3-545 m³/hr)



LAKOS Self-Cleaning Pump Intake Screens protect pumps and other water system components from algae, leaves, moss, sticks, and other troublesome organics and debris allowing water to flow freely to the pump. Provides a continuous defense against impeller clogging, lost suction, and other pump wear. Designed for use in open source surface water applications such as lakes, rivers, ponds, reservoirs, canals, irrigation ditches, etc. Rugged and reliable internal backwash system blows debris off and away from the screen, allowing water to flow freely to the pump intake.

Features and Benefits:

- Protects pumps
- Saves energy by maintaining pump efficiency
- Reduces maintenance by continuous cleaning
- Environmental protection
- Durable construction
- For more technical information, refer to LAKOS form PC-115



Pump Protection Separators PPS

Water Well Sand Damage Control

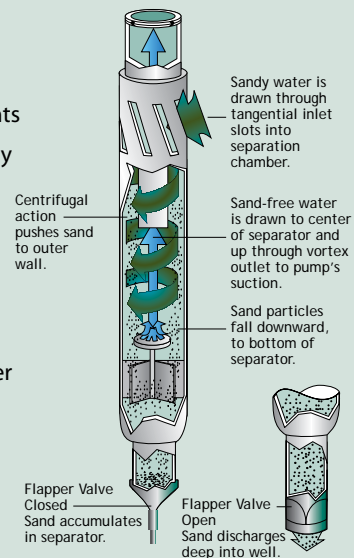
Flow Range: 100-3,180 U.S. gpm
(23-722 m³/hr)



LAKOS Pump Protection Separators (PPS) remove sand and grit that can shorten the life of a submersible or turbine water well pump. When sand threatens the performance of a pump, PPS Separators can help solve the problem and extend the life of the pump. Using a patented centrifugal design, the PPS controls the sand from entering the pump inlet, before it can chew up impellers and bearings and other pump components. This keeps the pump operating at maximum efficiency. Separated sand is left behind in the well.






Features and Benefits:

- Reduced sand wear on pump impellers and bearings
- Fewer repairs and replacements
- Longer lasting pump efficiency
- Lower energy use
- Lower operating costs
- Helps maintain optimum pump yield
- For submersible pumps with flows under 100 U.S. gpm, refer to the LAKOS SUB-K Pump Protection Sand Separator
- For more technical information, refer to LAKOS form LS-384



Application Selection Guide

FILTRATION SOLUTIONS

Contamination	Problem	Recommended Filtration	Benefits	Flow Range	LAKOS Solution
Sticks, leaves, algae and other debris found in open source surface water	<ul style="list-style-type: none"> • Impeller damage and wear • Lost suction • Messy and time consuming maintenance • Blocked water flow 	Self-Cleaning Pump Intake Screen	<ul style="list-style-type: none"> • Reliable self cleaning internal backwash system, keeps water intake area free of debris. • Improved pump performance • Energy savings 	50-2,400 U.S. gpm 11.3-545 m ³ /hr	Self Cleaning Pump Intake Screen Model: PC 
Sediment (sand, silt, rust and scale) in the water well	<ul style="list-style-type: none"> • Abrasive wear to pump's impellers and bearings • Expensive repairs and replacements • High energy usage 	Pump protection separator installed on suction of submersible pump	<ul style="list-style-type: none"> • Eliminates excessive wear to pump's impellers and bearings • Helps maintain pump's efficiency and saves money by reducing energy costs. • Extends pump life by 5 times or more 	100-3,180 U.S. gpm 23-722 m ³ /hr	Pump Protection Sand Separator for large submersible and turbine pumps Model: PPS 
Sediment, sand and silt found in water wells, canals, rivers, lakes	<ul style="list-style-type: none"> • Plugged or worn sprinklers or spray nozzles • Uneven water distribution • Excessive pumping • Costly premature replacement costs • High energy/operating costs • Unscheduled shutdowns for maintenance 	Centrifugal sand separator	<ul style="list-style-type: none"> • Centrifugally removes sand and other sediment up to 98% of 200 mesh • No moving parts to wear out; no screens or filter elements to clean or replace • Reduced operating costs • Increased productivity 	3-4,350 U.S. gpm 0.5-990 m ³ /hr	Centrifugal Sand Separator Models: <ul style="list-style-type: none"> • ILB (Low flow – carbon steel) • ILS (Low flow – stainless steel) • IHB (High flow – carbon steel) 
Organics, algae and fine particles in water used for drip and micro irrigation	<ul style="list-style-type: none"> • Clogged emitters and orifices • High maintenance costs • High replacement costs • Unscheduled shutdowns 	Sand media filter with precision-engineered underdrain	<ul style="list-style-type: none"> • Orifices and emitters stay open and clear for proper operation and performance • Engineered underdrain encourages optimum/even flow across the entire media surface area 	Up to 3,140 U.S. gpm Up to 715 m ³ /hr	Sand Media Filter Systems Models: <ul style="list-style-type: none"> • PROII (Carbon) • SST (Stainless) 
Excessive Sediment, Sand & Silt	<ul style="list-style-type: none"> • High containment load on sand media surface • Excessive backflushing/ loss of water 	Centrifugal sand separator with minimum pressure loss	<ul style="list-style-type: none"> • Maintenance free alternative to wasteful backwashing and water loss-50% less • Controls residual build-up and media sand maintenance/replacement • Low pressure loss-no system modifications necessary • Fits all makes of sand filters 	180-2,000 U.S. gpm 41-454 m ³ /hr	Backwash Reduction Separator pre-filter to all makes of Sand Media Filters Model: BRS 

Solving "Solids-from-Liquid" Operating Challenges

Founded in 1972 and based in Fresno, California, LAKOS Separators and Filtration Solutions is a leading provider of solids separation and filtration solutions for a variety of applications. In the groundwater, residential, and irrigation markets, we distribute our products through technically trained resellers in more than 40 countries around the world. Our commitment to continuous innovation has resulted in a patented product range that continues to evolve to meet the world's ever demanding filtration needs.

Other Filtration Solutions from LAKOS

TwistII Clean T2C

Sediment filter (spin-down) for organics, sand and sediment



SandMaster H2O/SMP

Centrifugal sand separator for residential usage



Sand Separator ILB/ILS

Heavy duty centrifugal separator for higher pressures, higher temperatures, and when dealing with more corrosive water



Pump Protection Sand Separator SUB-K

Submersible pump sand separator for low flows, extends life of pumps by reducing sand damage



For more information about these products, refer to the Residential Filtration Brochure, LS-847.



Lakos Separators are manufactured and sold under one or more of the following U.S. Patents: 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; 7,000,782; 7,032,760 and corresponding foreign patents, other U.S. and foreign patents pending.

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