

# Tower System Sand Filters

With Fiberglass-Reinforced Polyester (FRP) Construction

FTS

Exceeds industry specifications for keeping cooling water systems free of troublesome contaminants. Removes particles and floating debris. Controls build-up in tower basins and remote sumps. Helps maintain optimum operating conditions for reduced maintenance, servicing, downtime, energy costs, water loss and chemical usage.

LAKOS Tower System Sand Filters are designed exclusively for the demands of cooling tower operations, achieving to 5 micron performance. Either for side-stream or full-stream applications, Tower System Sand Filters offer a full range of systems to meet your specific needs.

## High efficiency, performance to 5 microns

Uniform, high porosity media for consistent, reliable performance at a low pressure loss.

## Fiberglass-reinforced polyester tanks

Durable, long-lasting and affordable.

## Effective underdrain design

Encourages uniform flow through the sand media. Field-serviceable. Provides high capacity backwashing for thorough media cleaning cycles. Prevents residual build-up and excessive backwash frequency. Choice of system water or city water for backwashing.

## Complete, packaged system

Includes filter, valves, pump and piping on a rigid rail frame. Media sand also provided. Optional automatic controls available. Easy installation and start-up.

## Compact, low-profile design

Minimum space requirements, easy handling and installation.

*Refer to LAKOS TC Systems for basin cleaning/sweeping applications.*



Flow range:  
45 - 100 U.S. gpm  
(10 - 23 m<sup>3</sup>/hr)

*For higher flow rates and/or stainless steel tank systems, see LAKOS STS Sand Filter Series.*

Description

Components

Dimensions

Specifications

Warranty



LAKOS is a proud member of the U.S. Green Building Council

**LAKOS**  
Liquid•Solids Separation Systems

## FTS Series

### Limited Warranty

All products manufactured and marketed by this corporation are warranted to be free of defects in material or workmanship for 12 months from date of installation; if installed 6 months or more after ship date, warranty shall be a maximum of 18 months from ship date.

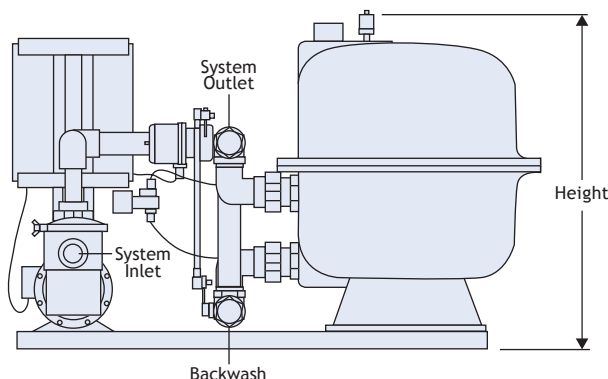
If a fault develops, notify us, giving a complete description of the alleged malfunction. Include the model number(s), date of delivery and operating conditions of subject product(s). We will subsequently review this information and, at our option, supply you with either servicing data or shipping instruction 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.

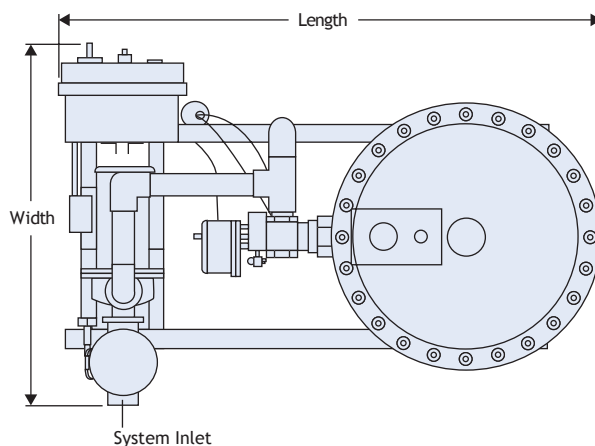
No other extended liabilities are stated or implied and this warranty in no event covers incidental or consequential damages, injuries or costs resulting from any such defective product(s).

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.

1365 North Clovis Avenue  
Fresno, California 93727 USA  
Telephone: (559) 255-1601  
FAX: (559) 255-8093  
Toll Free: (800) 344-7205  
(USA, Mexico & Canada)  
Internet: [www.lakos.com](http://www.lakos.com)  
E-mail: [info@lakos.com](mailto:info@lakos.com)



Note: Illustration shows piping for system water backwash. Photo on reverse shows city water backwash.



### Equipment Specifications

#### Maximum System Pressure:

50 psi (3.4 bar).

#### Filter Tank:

Molded FRP fiberglass reinforced polyester.

#### Pump/Strainer:

Stainless steel centrifugal pump (with non-overloading feature), TEFC; flooded suction required. Plastic pre-strainer.

#### Backwash Valves:

Electrically-actuated 3-way valves; bronze.

#### Underdrain:

PVC manifold with ABS hub and laterals.

#### Controller:

IEC starter with overload module; NEMA-4X enclosure; reset/disconnect/trip switch; 120 volt, single phase control voltage; manual backwash switch; pressure differential switch; backwash cycle timer.

#### Piping:

Schedule 80 PVC.

#### Filter Media:

Uniformly graded silica sand media; options:

- 10 microns at 95% efficiency
- 5 microns at 90% efficiency

#### Base Frame:

Stainless steel angle.

### Dimensions

Model	Length		Width		Height	
	in.	mm	in.	mm	in.	mm
FTS-20-045	56	1422	39	991	38	965
FTS-24-065	59	1499	39	991	38	965
FTS-30-100	62	1575	39	991	38	965

### General Specifications

Model	Maximum Flow Rate*		Filtration Surface Area		Inlet/Outlet Inches F.P.T.	Pump HP	Sand Volume		Operating Weight**	
	U.S. gpm	m <sup>3</sup> /hr	ft. <sup>2</sup>	m <sup>2</sup>			lbs.	kg	lbs.	kg
FTS-20-045	45	10	2.2	0.2	2	1	200	91	511	232
FTS-24-065	65	15	3.1	0.3	2	2	250	114	621	282
FTS-30-100	100	23	4.9	0.5	2	2	400	182	1023	464

\* Flow rate is based on 20 gpm/ft<sup>2</sup> (807 liters per minute/m<sup>2</sup>)

\*\* Includes media sand



誥鑫企業有限公司  
ARITH COMPANY LTD.  
地址：台北市復興北路427巷30號  
電話：(02)2717-5038  
傳真：(02)2717-5039  
e-mail: [taipei@arith.com.tw](mailto:taipei@arith.com.tw)  
網址： <http://www.arith.com.tw>