

# TowerMaster Filtration System

TMI

## Solids-control for small cooling tower systems

Featuring the centrifugal-action performance of a LAKOS Separator, the TowerMaster is a simple, complete, easy-to-install package for operators of small cooling tower systems. Reduces tower shutdown & cleaning routines. Reduces maintenance & servicing costs. Reduces blowdown, liquid loss & sewage/disposal costs. Reduces treatment chemical usage. Reduces energy costs. Reduces the potential for harmful bacteria growth in the tower basin.

Designed for cooling towers of 100 tons or smaller (consult LAKOS for larger systems), the TowerMaster system induces an agitated circulation within the tower basin, directing the flow through the LAKOS Separator for the removal of settleable-type particles (5-75 microns & larger). Protects the tower and the entire cooling water loop from abrasive/fouling solids.

## Fully-assembled, factory-tested & installation-ready

Minimizes valuable engineering, purchasing, plumbing & electrical responsibilities. Maximizes user confidence and operating performance. Installs quickly and easily.

## Compact design fits restricted spaces

A small footprint and short profile (see details on reverse) make this lightweight package easy to install almost anywhere.

## Exclusive basin agitator

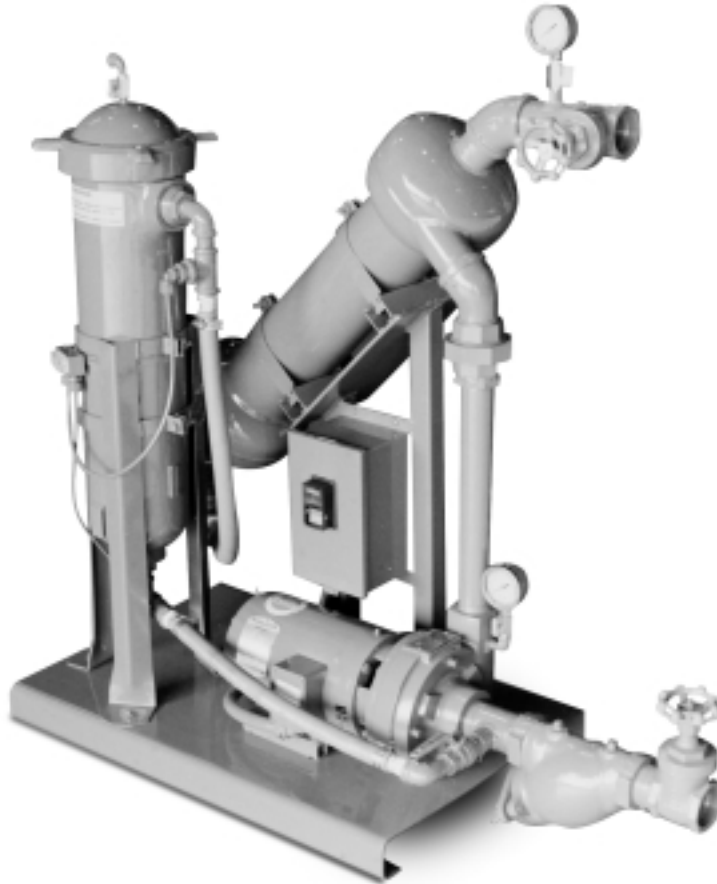
Directs particle matter out of the tower basin and into the TowerMaster for separation. Unique design incorporates nozzles in an easy-to-install piping wand.

## Concentrates separated solids for minimum waste

Captured in the integral solids-collection bag housing, solids are neatly and easily disposed of without shutting down the system and without liquid loss.

## Complete with electrical panel

No complicated electrical assembly required. Simple panel includes starter, overload and heaters. NEMA 12 enclosure. Available for 230/460 VAC, 3 phase power.



Inside

Description

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Dimensions

Specifications

## Flow Range

For cooling towers of  
100 tons or smaller  
Maximum Pressure Rating  
100 psi (700 kPa)

# General Specifications

## Limited Warranty

This product series is warranted to be free of defects in material or workmanship, given the following terms:

LAKOS Separator: 5 years

All other components: 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 instructions and returned materials authorization. Upon prepaid receipt of subject product(s) at the instructed designation, 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 products 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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**Pump:** 3 hp end-suction, single stage, T.E.F.C. motor, cast iron pump housing, iron impeller

**Suction Strainer:** Aluminum housing with 1/8-inch stainless steel basket

**Solids Collection Vessel:** Polypropylene housing and retainer basket; 25 micron fiberfelt bag; capacity of 300 cubic inches (6 liters)

**Indicator Package:** Identifies when solids collection vessel requires servicing. Includes pressure differential indicator, isolation ball valves & flow control orifice

**Electrical Control:** Manual pump starter; on/off switch with thermal overloads; NEMA 12 enclosure

**Paint:** Oil-based enamel, spray-on, royal blue

**Piping:** Schedule 40 carbon steel; reinforced rubber hose for solids collection vessel connections (Inlet/Outlet piping not included)

**Valves:** Gate valve on inlet/outlet; ball valves on purge lines

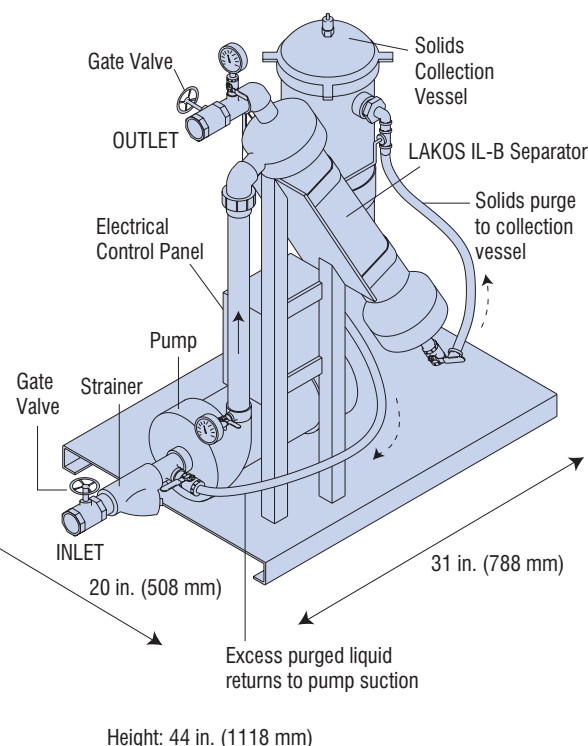
**Skid Plate:** Carbon steel, 1/4-inch (6.4 mm) thickness

**Maximum Working Pressure:** 100 psi (700 kPa)

**Maximum Operating Temperature:** 100°F (38°C)

**Power Requirement:** 230 or 460 volt AC, 3 phase. Please specify when ordering

**Basin Wand Length:** 4 ft. or 8 ft. (specify when ordering)

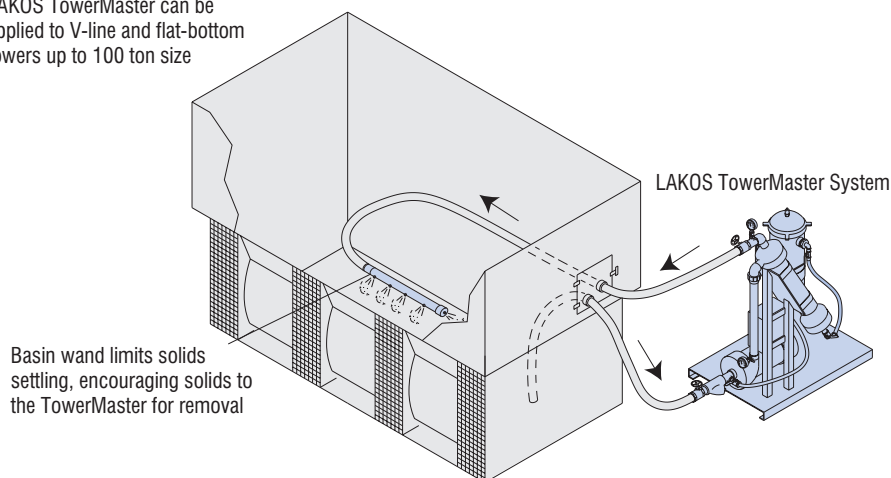


MODEL	FLOW RANGE		SEPARATOR	PUMP HP	FULL LOAD AMPERAGE		SYSTEM INLET/OUTLET	SYSTEM WEIGHT WITHOUT LIQUID	
	U.S. gpm	m <sup>3</sup> /hr			230V	460V		lbs.	kg.
TMI-0500-CRS	60-70	14-16	IL-0200-B	3	7.8	3.9	2-inch	255	115

## Sample Installation

### Cooling Tower Basin Cleaning

LAKOS TowerMaster can be applied to V-line and flat-bottom towers up to 100 ton size



Printed on recycled paper

LS-583C (rev. 6/02)

**LAKOS**  
Liquid•Solids Separation Systems

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