



## PACKAGED SEPARATOR SYSTEMS

- Energy-Efficient, Environmentally-Friendly Designs
- Reduce Biofouling and the Risk of Legionnaires Disease
- Eliminate Manual Basin Cleaning
- Minimize Maintenance and Downtime
- Virtually Eliminate Underdeposit Corrosion
- Optimize the Effectiveness of Water Treatment Programs
- Maximize Equipment Life
- Increase Thermal Performance of Your Heat Exchanger or Chiller



WATER USAGE	SOLIDS METER	MAINTENANCE
<p>Zero Water Loss Options Available</p>	<p>Micron (µm) Removal</p>	<p>Zero Maintenance</p>

# TOWER CLEAN SYSTEMS

Water Filtration for Cooling Towers

### TCX SERIES

Featuring Accessible Separator

With Solids Recovery Vessel



### TCI SERIES

Featuring Non-accessible Separators

With Automatic Ball Valve (optional)



#### FLOW RANGE:

30-1,670 U.S. gpm\* (7-379 m<sup>3</sup>/hr)

#### STANDARD PRESSURE RATING:

150 psi on TCX/TCI (10.3 bar)

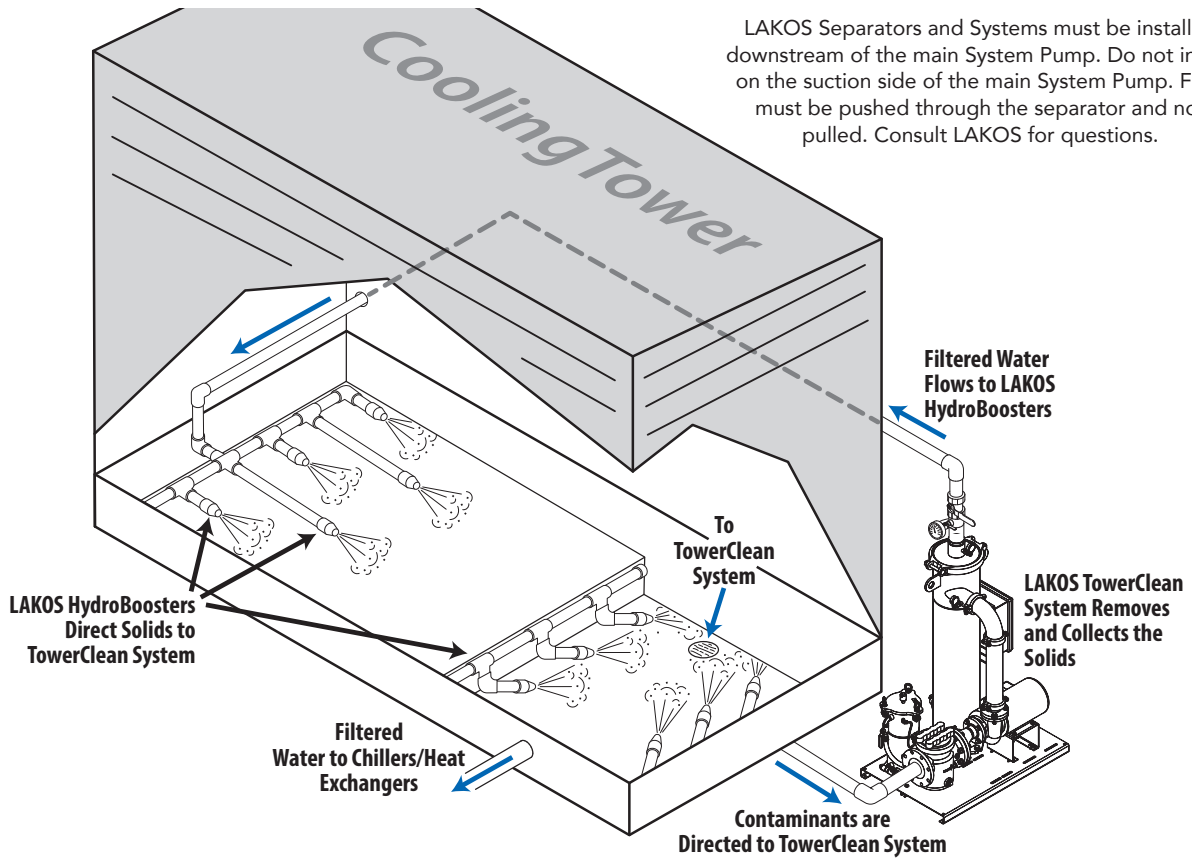
#### MAX. FLUID OPERATING TEMP:

140°F (60°C)

\*Contact LAKOS for higher flow rate options

# TYPICAL INSTALLATIONS

## TOWER BASIN CLEANING with TowerClean System and HydroBoosters



## MODEL SELECTION

Since active and directed circulation of basin/sump liquids is required for effective solids removal, model selection for the TowerClean system is based upon the size of the basin or remote sump. This is best determined with these calculations:

FOR PACKAGED COOLING TOWERS			FOR REMOTE SUMPS With Water Depth Greater Than 3 feet**		
<b>Flow Rate</b> =	Length of Basin (in feet)	X Width of Basin (in feet)	<b>Flow Rate</b> =	Length of Basin (in feet)	X Width of Basin (in feet)
		X 1			X 1.5

\*\*Please confirm system selection with factory.

After determining the required Flow Rate, refer to the Max Basin Size column in the Performance section on the next page. Select the model that has an equal or next larger Flow Rate. For Flow Rates larger than those shown, two or more systems are needed or a custom system must be configured. Please consult the factory.



# GENERAL SPECIFICATIONS

## CONFIGURATIONS

TCI/TCX Model	Separator Model TCI TCX		Flow GPM m3/hr		Inlet (flanged)	Outlet (grooved)	Inlet Piping to use*	Empty Weight						Pump HP	Full Load Amperage 230V 460V 575V		
								TCI			TCX						
								SRV lbs	ABV kg	SRV or ABV lbs	ABV kg	SRV or ABV lbs	ABV kg				
0030	ILB-0100	HTX-0016	30	7	1-1/2" thd	1"	2"	270	122	219	99	320	145	1	4.2	2.1	1.7
0065	ILB-0150	HTX-0038	65	15	2" thd	1-1/2"	2-1/2"	390	177	323	146	424	192	3	9.6	4.8	3.9
0100	ILB-0200	HTX-0060	100	23	3"	2"	3"	452	205	387	176	577	262	5	15.2	7.6	6.1
0145	ILB-0250	HTX-0085	145	33	3"	2-1/2"	4"	475	215	407	185	631	286	5	15.2	7.6	6.1
0200	ILB-0300	HTX-0130	200	45	3"	3"	4"	512	232	439	199	662	300	7.5	22	11	9
0280	ILB-0350	HTX-0200	280	64	4"	4"	6"	642	291	569	258	820	372	10	28	14	11
0400	HTH-0285	HTX-0285	400	91	6"	4"	6"	1065	483	1065	483	1153	523	15	42	21	17
0525	HTH-0285	HTX-0285	525	119	6"	4"	6"	1235	560	1235	560	1318	598	20	54	27	22
0600	HTH-0450	HTX-0450	600	136	6"	6"	6"	1535	696	1535	696	1580	717	20	54	27	22
0825	HTH-0450	HTX-0450	825	187	8"	6"	8"	1793	787	1793	787	1771	803	30	80	40	32
1100	HTH-0500	HTX-0500	1100	250	8"	6"	10"	1794	815	1794	815	1847	838	40	104	52	41
1670	HTH-0810	HTX-0810	1670	379	10"	8"	12"	3405	1544	3405	1544	3598	1632	50	154	77	62

\* LAKOS recommended inlet pipe size. All TowerClean Systems are rated for 150 psi (10.3 bar) maximum pressure.

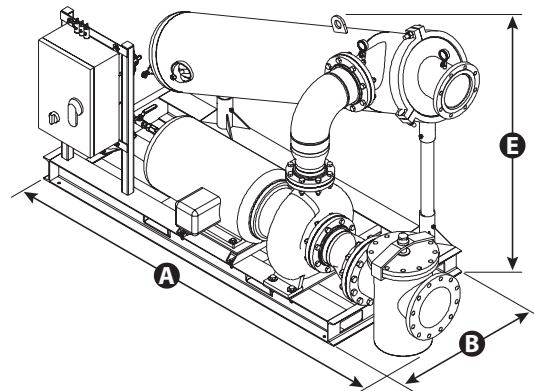
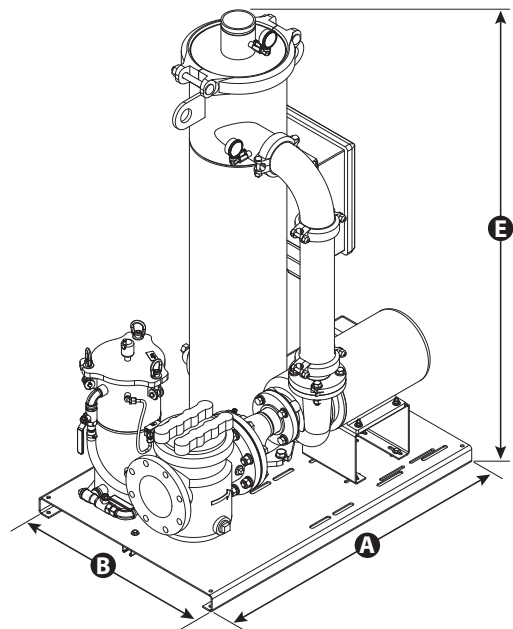
## DIMENSIONS

TCI Model	Dimension A: Length		Dimension B: Width		Dimension E: Height	
	Inches	mm	Inches	mm	Inches	mm
0030-SRV	41	1041	24-1/2	622	55-5/16	1405
0030-ABV	32-1/2	826	24-1/2	622	55-5/16	1405
0065-SRV	41	1041	24-1/2	622	54-15/16	1395
0065-ABV	32-1/2	826	24-1/2	622	54-15/16	1395
0100-SRV	41	1041	24-1/2	622	56-3/16	1427
0100-ABV	33-5/8	854	24-1/2	622	56-3/16	1427
0145-SRV	41	1041	24-1/2	622	55-13/16	1418
0145-ABV	33-5/8	854	24-1/2	622	55-13/16	1418
0200-SRV	42	1067	33-1/4	845	61-3/4	1568
0200-ABV	36-7/8	937	33-1/4	845	61-3/4	1568
0280-SRV	42	1067	33-1/4	845	61-3/4	1568
0280-ABV	36-15/16	937	33-1/4	845	61-3/4	1568
0400	48	1219	30	762	69-3/16	1757
0525	48	1219	30	762	69-3/16	1757
0600	60	1524	36	914	84-15/16	2157
0825	60	1524	36	914	84-15/16	2157
1100	60	1524	36	914	84-15/16	2157
1670	117-3/8	2981	46-1/2	1181	67-3/16	1707

TCX Model	Dimension A: Length		Dimension B: Width		Dimension E: Height	
	Inches	mm	Inches	mm	Inches	mm
0030	39-3/4	1010	24	610	46-1/8	1172
0065	39-3/4	1010	24	610	46-1/8	1172
0100	39-3/4	1010	24	610	46-1/8	1222
0145	39-3/4	1010	24	610	49-3/8	1251
0200	39-3/4	1010	24	610	51-3/8	1302
0280	39-3/4	1010	24	610	67-1/16	1703
0400	48	1219	30	762	69-3/16	1764
0525	48	1219	30	762	69-3/16	1764
0600	60	1524	36	914	84-15/16	2157
0825	60	1524	36	914	85-1/16	2161
1100	60	1524	36	914	85-1/16	2161
1670	117-3/8	2981	46-1/2	1181	63	1600

More detailed CAD drawings and CSI specifications are available at [www.lakos.com](http://www.lakos.com).



TC Models 0825, 1100 and 1670 are available in low profile.

# SYSTEM PURGE OPTIONS

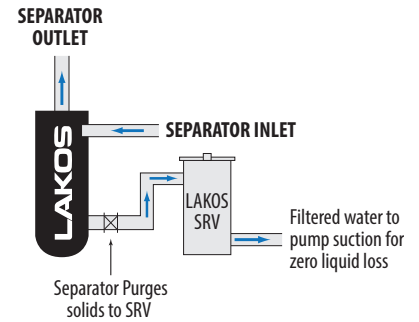
## SOLIDS RECOVERY VESSEL (SRV)

### Features and Benefits

- Capture separated solids easily and return clean liquid back to TC pump suction; eliminating liquid loss
- Continuous operation; remove collected solids without interrupting system flow for service
- Lower waste treatment costs, meet waste disposal requirements and greatly reduce chemical loss
- Optional dry contact available for remote monitoring with BMS (Building Management System) connection or audio/visual alarms for bag changes
- For more information see LAKOS literature LS-622



SRV-816 & SRV-833



Solids Recovery Vessel (SRV) helps capture separated solids from LAKOS Separators – and return clean liquid back to the system through pump suction for zero liquid loss.

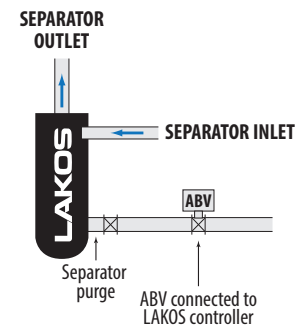
## AUTOMATED BALL VALVE (ABV)

### Features and Benefits

- Eliminates manual purging
- ABV actuator features an electronic circuit that automatically adjusts the motor speed (depending on torque variations) to keep cycle time constant — maintaining consistent purge durations
- ABV actuator housing is made of a V0 self-extinguish class techno-polymer material for fire safety
- Can be combined with an SRV to offer temporary hands-off operation
- For more information see LAKOS literature LS-239



ABV



ABV and LAKOS Controller automatically purge separated solids from Separator's collection chamber at pre-determined time intervals – eliminating manual purging.

Models	Valve Diameter	
	Inches	mm
ABV-07	3/4"	19.05
ABV-15	1-1/2"	38.1
ABV-20	2"	50.8

Purge controller is required and included as part of valve kit.



SCAN HERE TO LEARN MORE



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