






# Application Selection Guide

## INDUSTRIAL FILTRATION SOLUTIONS

Problem Source	Problem	Recommended Filtration	Benefits	Flow Range	LAKOS Solution
<b>Open Source Water</b>	<ul style="list-style-type: none"> <li>• Impeller damage and wear</li> <li>• Lost suction</li> <li>• Messy and time consuming maintenance</li> <li>• Blocked water flow</li> </ul>	Self-Cleaning Pump Intake Screen	<ul style="list-style-type: none"> <li>• Reliable self cleaning internal backwash system, keeps water intake area free of debris</li> <li>• Improved pump performance</li> <li>• Energy savings</li> </ul>	50-2,400 U.S. gpm (11.3-545 m <sup>3</sup> /hr)	<b>Self Cleaning Pump Intake Screen</b> <b>Model: ISF</b> 
<b>Source Water From Well</b>	<ul style="list-style-type: none"> <li>• Abrasive wear to pump's impellers and bearings</li> <li>• Expensive repairs and replacements</li> <li>• High energy usage</li> <li>• Sand in source water</li> </ul>	Pump protection separator installed on suction of submersible pump	<ul style="list-style-type: none"> <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>	100-3,180 U.S. gpm (23-722 m <sup>3</sup> /hr)	<b>Pump Protection Sand Separator</b> for large submersible and turbine pumps <b>Model: PPS</b> 
<b>Process Water</b>	<ul style="list-style-type: none"> <li>• Plugged or worn spray nozzles</li> <li>• Uneven water distribution</li> <li>• Excessive pumping</li> <li>• Costly premature replacement costs</li> <li>• High energy/operating costs</li> <li>• Unscheduled shutdowns for maintenance</li> <li>• Solids causing process waste</li> </ul>	Centrifugal sand separator	<ul style="list-style-type: none"> <li>• Centrifugally removes sand and other sediment <b>up to 98% of 325 mesh</b></li> <li>• No moving parts to wear out; no screens or filter elements to clean or replace</li> <li>• Reduced operating costs</li> <li>• Increased productivity</li> <li>• Includes SmartPurge Connection</li> </ul>	55-1,030 U.S. gpm (12.5-233 m <sup>3</sup> /hr)	<b>High Efficiency Liquid-Solid Separators</b> <b>Models:</b> <ul style="list-style-type: none"> <li>• eJPX and Bi-Sep/Tri-Sep Configurations (high flow in carbon and stainless steel)</li> </ul> 
<b>Process Water</b>	<ul style="list-style-type: none"> <li>• Plugged or worn spray nozzles</li> <li>• Uneven water distribution</li> <li>• Excessive pumping</li> <li>• Costly premature replacement costs</li> <li>• High energy/operating costs</li> <li>• Unscheduled shutdowns for maintenance</li> <li>• Solids causing process waste</li> </ul>	Centrifugal sand separator	<ul style="list-style-type: none"> <li>• Centrifugally removes sand and other sediment <b>up to 98% of 200 mesh</b></li> <li>• No moving parts to wear out; no screens or filter elements to clean or replace</li> <li>• Reduced operating costs</li> <li>• Increased productivity</li> </ul>	4-12,750 U.S. gpm (1-2,895 m <sup>3</sup> /hr)	<b>High Performance Liquid Solids Separation Systems</b> <b>Models:</b> <ul style="list-style-type: none"> <li>• JPX, JPL and Bi-Sep/Tri-Sep Configurations (high flow in carbon and stainless steel)</li> </ul> 
<b>Process Water</b>	<i>Same as above but also:</i> <ul style="list-style-type: none"> <li>• Limited space</li> <li>• Turnkey solution desired</li> </ul>	Complete Filtration Solution	<i>Same as above but also:</i> <ul style="list-style-type: none"> <li>• Convenient total solution in a single system</li> </ul>	4-12,750 U.S. gpm (1-2,895 m <sup>3</sup> /hr)	<b>Packaged Systems</b> <b>Models:</b> <ul style="list-style-type: none"> <li>• JCX</li> <li>• JBX</li> <li>• PRX</li> </ul> 
<b>Process Water Where Fine Filtration Is Needed</b>	<ul style="list-style-type: none"> <li>• Fine particles</li> </ul>	Barrier filtration typically used in tandem with LAKOS Separator, which acts as a pre-filter to finer filtration	<ul style="list-style-type: none"> <li>• Easy to install</li> </ul>	Up to 450 U.S. gpm (102 m <sup>3</sup> /hr)	<b>Cartridge and Bag Filters</b> 