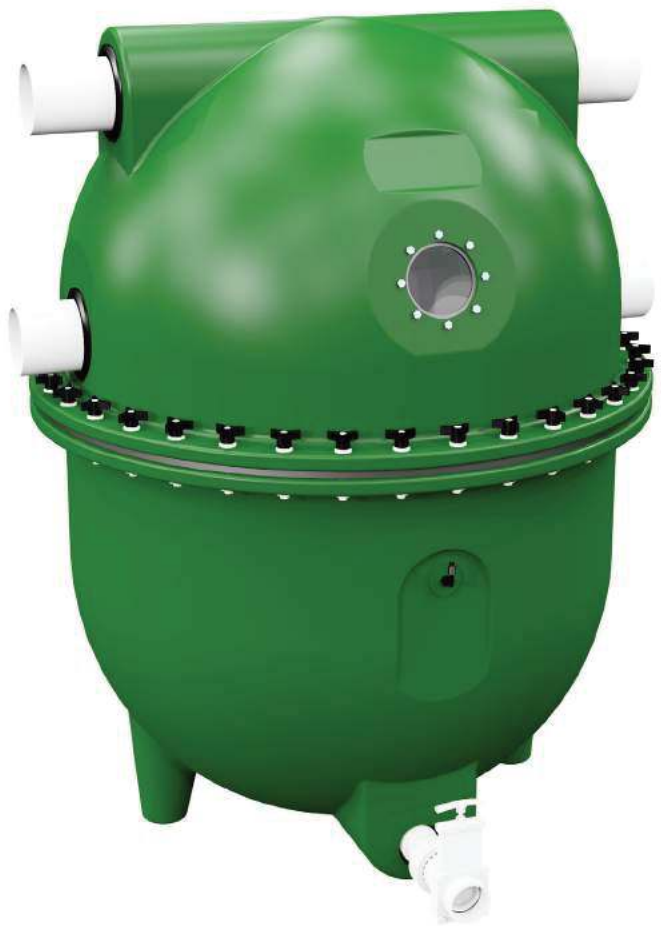
POLYGEYSER® FILTERS

Pure Aquatics

• Superior Solids Removal • Excellent Biofiltration • Automatic Backwashes • Low Water Loss • Air Operated •



PolyGeyser® Bead Filters are the newest addition to Aquaculture Systems Technologies' line of Bead Filter Technologies. The patented PolyGeyser®stands apart from AST's other bead filter technologies primarily through its automatic pneumatic backwash mechanism.

The PolyGeyser® utilizes the same filtration mechanism as all of our bead filters, namely upward water flow through a packed bed of plastic beads. Simultaneously, air is pumped into the charge chamber at a constant controlled rate to achieve the desired backwash frequency. Once the charge chamber has reached capacity, the pneumatic trigger fires, releasing the entrained air from the charge chamber below the media bed. The sudden release of air from the charge chamber causes the beads to mix, roll and "drop" as the air agitates the beads. As the beads drop, the bed expands downward while water simultaneously rushes through the beads, effectively sweeping the solids away and into the air charge chamber below. Once in the charge chamber, the solids settle out from the backwash water and are later removed from the filter.

The pneumatic backwash strategy breaks the linkage between backwash frequency and water loss. Research has shown these filters are capable of handling biological loads greater than our other filters with a high degree of reliability and minimal water loss.

US Patent No. 9,227,863 • Patent Pending • Canada Patent No. 7989-005 • EPO No. 977,713

AST™ POLYGEYSER® FILTERS

Pure Aquatics

INSTALLATIONS

PG filters in an aquaculture facility

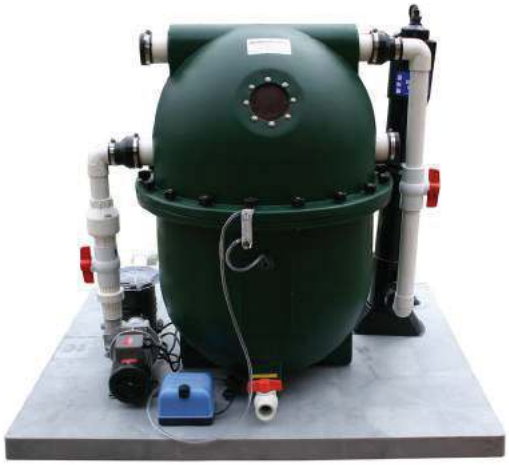
University of Tasmania, Australia

POLYGEYSER SIZING RECOMMENDATIONS:

MODELS	Max Flow Rate (lpm)	Liters Bead Media	Tank Volume (Liters)		Peak Feed Rate (Kgs/day)		Fish Supported (Kgs)*	
			Fingerling	Growout	Fingerling	Growout	Fingerling	Growout
PG-6000	170	85	3400	2300	0.9	1.8	32	182
PG-12000	340	170	6800	4500	2.3	4.5	77	410

Table based on TAN levels below 1.5 and .5 for growout and fingerling production respectively
* Based upon a 1% and 3% daily feed rate for growout and fingerling production respectively

Max PSI = 10



PG-6000 Skid System