



# S.I COST-EFFECTIVE FILTRATION SOLUTION



EXCELLENT COST-EFFECTIVE FILTRATION  
MECHANISM, DESIGNED TO PROVIDE MAXIMUM  
PERFORMANCE AT THE LOWEST COST

# COMPANY INTRODUCTION

## **ADVANCED FILTRATION TECHNOLOGIES**

**S.I. IRRIGATION SYSTEMS** is an Israeli company, experienced in design and manufacture of cost-effective filtration technology for drip irrigation systems and micro sprinklers. With over 15 years of experience in irrigation management and irrigation project applications, **S.I.** brings the most advanced and efficient filtration solutions for the agriculture market.

## **SUPERIOR SERVICE BY A GROUP OF PROFESSIONALS**

The company is managed by dedicated, highly trained employees who focus on quality, innovation and customer service. We strive to provide our clients the best products alongside superior service - this is the key to our success.

## **TRULY SAFE IRRIGATION WATER**

Our goal and aim is to provide our clients the most safe water. Our highly advanced irrigation solutions are crafted and designed to provide peak performance when it comes to reliability.

## **OUR KEY PRODUCTS**

Our key products are Disc filters, Screen filters and Sand separators. All filters are made using advanced plastic injection machines which can manufacture a broad range of plastic products to meet all specifications and requirements.

## **WE BELIEVE IN QUALITY**

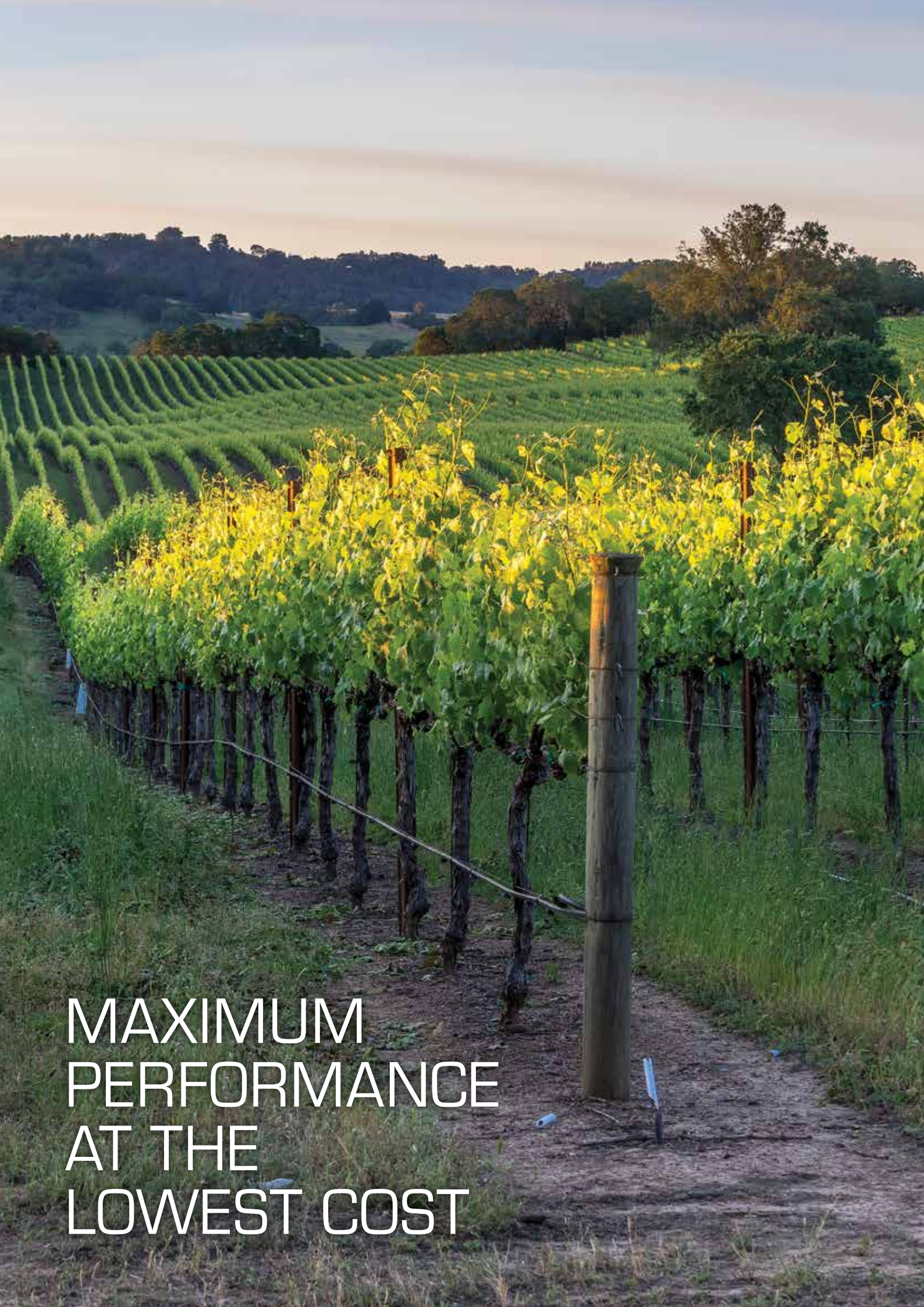
The production plan is a Quality-audited ISO-9001. We are committed to promoting improvement to ensure the future quality of products and state of the art innovation to ensure our clients they are getting the best water filtration solutions.

## **COST-EFFECTIVE IRRIGATION SOLUTIONS**

Our advanced technology, alongside the smart design, offer our clients not only the best irrigation equipment today, but also an excellent cost-effective irrigation mechanism, designed to provide maximum performance at the lowest cost.

Our filters are designed to efficiently coordinate with the irrigation applications providing cost-effective high performance and reliability featuring many advantages: Saving flushing water, a minor footprint, easy maintenance, eliminates leaks and rusting, lowering the installation costs and a portable & easy to move system.





MAXIMUM  
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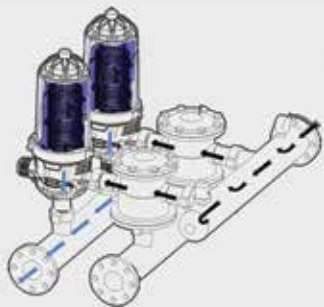
# AUTOMATIC SELF CLEANING DISC FILTERS

## LOWER MAINTENANCE AND PROLONGED LONGEVITY

The automatic self cleaning disc filters features a large filtration area with excellent depth filtration. It does not require high pressure and uses a small quantity of flushing water.

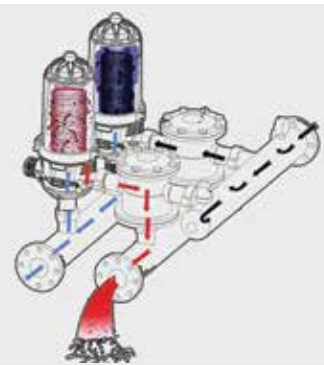
## FEATURES & BENEFITS

- ▶ Due to the low pressure required for backflushing (>2.0Bar), the customer can save energy costs by reducing the size of the irrigation pump.
- ▶ The system is portable, pre-assembled, light-weight and requires a small footprint, saving time and money in terms of transportation and installation.
- ▶ The system is made from composed plastic materials, designed for chemical resistance and featuring a minimum of moving parts, ensuring lower maintenance and longevity.



### FILTRATION MODE

The disc is held tightly together, allowing the irrigation water to pass through the micron water passages between the disc and debris traps.



### BACK-FLUSHING MODE

The Backflush process initiated by time or by a differential pressure switch which measures the pressure before and after the filter. The pressure differential results from debris accumulated on the disc. The filter's controller sends a command to a 3-way valve to change the flow direction through the filter element. The opposite flow decompresses the stacked discs and jets of water will spin the discs and flush all the trapped debris down the drain. This process is done for each filter in the system.

## AUTOMATIC SYSTEM - FILTRATION GRADE

Micron	50μ	80μ	100μ	130μ	180μ	420μ
Mesh	300	200	150	120	80	40
Disc Color	Grey	Blue	Orange	Red	Green	Purple







# AUTOMATIC ANGLE

## TECHNICAL SPECIFICATION

	2 units 2"	3 units 2"	2 units 3"	3 units 3"	4 units 3"	5 units 3"	6 units 3"
Maximum operating pressure	10 bar (145 psi)						
Minimum Back-Flush pressure	2 bar (29 psi)						
Filtration area	1960cm <sup>2</sup> (304 in <sup>2</sup> )	2940cm <sup>2</sup> (456 in <sup>2</sup> )	2980cm <sup>2</sup> (456 in <sup>2</sup> )	4470cm <sup>2</sup> (684 in <sup>2</sup> )	5960cm <sup>2</sup> (911 in <sup>2</sup> )	7450cm <sup>2</sup> (1139 in <sup>2</sup> )	8940cm <sup>2</sup> (1367 in <sup>2</sup> )
Minimum Back-Flush flow rate	7m <sup>3</sup> /h (31 GPM)			10m <sup>3</sup> /h (44 GPM)			
Inlet/Outlet Manifold	3" Flange	4" Flange	4" Flange	4" Flange	6" Flange	6" Flange	8" Flange
pH range	3-12						
Maximum working temperature	60 °C (140°F)						

### MAXIMUM FLOW RATE @ 130MICRON

Water Quality	2 units 2"	3 units 2"	2 units 3"	3 units 3"	4 units 3"	5 units 3"	6 units 3"
Good	40m <sup>3</sup> /h	60m <sup>3</sup> /h	60m <sup>3</sup> /h	90m <sup>3</sup> /h	120m <sup>3</sup> /h	150m <sup>3</sup> /h	180m <sup>3</sup> /h
Average	34m <sup>3</sup> /h	50m <sup>3</sup> /h	50m <sup>3</sup> /h	75m <sup>3</sup> /h	100m <sup>3</sup> /h	125m <sup>3</sup> /h	150m <sup>3</sup> /h
Poor	27m <sup>3</sup> /h	40m <sup>3</sup> /h	40m <sup>3</sup> /h	60m <sup>3</sup> /h	80m <sup>3</sup> /h	100m <sup>3</sup> /h	120m <sup>3</sup> /h



# AUTOMATIC 3" TWIN

## TECHNICAL SPECIFICATION

	3 units 3"	4 units 3"	5 units 3"
Maximum operating pressure	10 bar (145 psi)		
Minimum Back-Flush pressure	2 bar (29 psi)		
Filtration area	5880cm <sup>2</sup> (911 in <sup>2</sup> )	7840cm <sup>2</sup> (1215 in <sup>2</sup> )	9800cm <sup>2</sup> (1519 in <sup>2</sup> )
Minimum Back-Flush flow rate	15m <sup>3</sup> /h (66 GPM)		
Inlet/Outlet Manifold	6" Flange	8" Flange	8" Flange
pH range	3-12		
Maximum working temperature	60 °C (140°F)		

### MAXIMUM FLOW RATE @ 130MICRON

Water Quality	3 units 3"	4 units 3"	5 units 3"
Good	120m <sup>3</sup> /h	160m <sup>3</sup> /h	200m <sup>3</sup> /h
Average	100m <sup>3</sup> /h	135m <sup>3</sup> /h	170m <sup>3</sup> /h
Poor	80m <sup>3</sup> /h	105m <sup>3</sup> /h	135m <sup>3</sup> /h



# AUTOMATIC 4" TWIN

## TECHNICAL SPECIFICATION

	4 units 4"	5 units 4"	6 units 4"	7 units 4"	8 units 4"	9 units 4"	10 units 4"
Maximum operating pressure	10 bar (145 psi)						
Minimum Back-Flush pressure	2 bar (29 psi)						
Filtration area	11920cm <sup>2</sup> (1823 in <sup>2</sup> )	14900cm <sup>2</sup> (2278 in <sup>2</sup> )	17880cm <sup>2</sup> (2734 in <sup>2</sup> )	20860cm <sup>2</sup> (3190 in <sup>2</sup> )	23840cm <sup>2</sup> (3646 in <sup>2</sup> )	26820cm <sup>2</sup> (4101 in <sup>2</sup> )	29800cm <sup>2</sup> (4557 in <sup>2</sup> )
Minimum Back-Flush flow rate	20m <sup>3</sup> /h (88 GPM)						
Inlet/Outlet Manifold	6" Flange	8" Flange	8" Flange	8" Flange	8" Flange	10" Flange	10" Flange
pH range	3-12						
Maximum working temperature	60 °C (140°F)						

### MAXIMUM FLOW RATE @ 130MICRON

Water Quality	4 units 4"	5 units 4"	6 units 4"	7 units 4"	8 units 4"	9 units 4"	10 units 4"
Good	240m <sup>3</sup> /h	300m <sup>3</sup> /h	360m <sup>3</sup> /h	420m <sup>3</sup> /h	480m <sup>3</sup> /h	540m <sup>3</sup> /h	600m <sup>3</sup> /h
Average	200m <sup>3</sup> /h	250m <sup>3</sup> /h	300m <sup>3</sup> /h	350m <sup>3</sup> /h	400m <sup>3</sup> /h	450m <sup>3</sup> /h	500m <sup>3</sup> /h
Poor	160m <sup>3</sup> /h	200m <sup>3</sup> /h	240m <sup>3</sup> /h	280m <sup>3</sup> /h	320m <sup>3</sup> /h	360m <sup>3</sup> /h	400m <sup>3</sup> /h





# T & H MODELS

## TECHNICAL SPECIFICATION

Our manual filtration T&H models are the perfect solution for simple application or for big project where a secondary filter is required at every irrigation block.

This sustainable and quality solution is available from 2" to 4" and can be assembled with both Screen and Disc elements.

Micron	50μ	80μ	100μ	130μ	180μ	420μ
Mesh	300	200	150	120	80	40
Color						




	2" T Filter	2½" T Filter	3" T Filter (Small)	3" T Filter (Large)	3" H Filter	4" H Filter (Small)	4" H Filter (Large)
Maximum operating pressure	10 bar (145 psi)						
Disc Filtration area	1225 cm <sup>2</sup> (190 in <sup>2</sup> )	1225 cm <sup>2</sup> (190 in <sup>2</sup> )	1225 cm <sup>2</sup> (190 in <sup>2</sup> )	1756 cm <sup>2</sup> (272 in <sup>2</sup> )	2450cm <sup>2</sup> (380 in <sup>2</sup> )	2450cm <sup>2</sup> (380 in <sup>2</sup> )	3512cm <sup>2</sup> (544 in <sup>2</sup> )
Screen Filtration area	1180cm <sup>2</sup> (183 in <sup>2</sup> )	1180cm <sup>2</sup> (183 in <sup>2</sup> )	1180cm <sup>2</sup> (183 in <sup>2</sup> )	1580cm <sup>2</sup> (245 in <sup>2</sup> )	2360cm <sup>2</sup> (366 in <sup>2</sup> )	2360cm <sup>2</sup> (366 in <sup>2</sup> )	3160cm <sup>2</sup> (490 in <sup>2</sup> )
Maximum Flow rate	30 m <sup>3</sup> /h (132 GPM)	40 m <sup>3</sup> /h (176 GPM)	40 m <sup>3</sup> /h (176 GPM)	50 m <sup>3</sup> /h (220 GPM)	50 m <sup>3</sup> /h (220 GPM)	70 m <sup>3</sup> /h (308 GPM)	100 m <sup>3</sup> /h (440 GPM)
Inlet/Outlet Connections	BSP, NPT, Flange, Victaulic						
pH range	3-12						
Maximum working temperature	60 °C (140°F)						



# Y MODELS

## TECHNICAL SPECIFICATION

The Y filter is an attractive and economic solution for Landscape application as well as Municipal application. Its varies from small size of ¾" to large size of 3". By utilizing the Y shape, it will fit most of installation infield. The Y filter is the perfect solution for fertilizer usage where soluble fertilizer is being mixed with water and stored in a fertilizer tank.

Micron	130μ	180μ	420μ
Mesh	120	80	40
Color			

	¾" Y Filter	1" Y Filter	1¼" Y Filter	1½" Y Filter (Small)	1½" Y Filter (Large)	2" Y Filter	2½" & 3" Y Filter
Maximum operating pressure	8 bar (116 psi)						
Disc Filtration area	192cm <sup>2</sup> (30 in <sup>2</sup> )	192cm <sup>2</sup> (30 in <sup>2</sup> )	334cm <sup>2</sup> (52 in <sup>2</sup> )	334cm <sup>2</sup> (52 in <sup>2</sup> )	490cm <sup>2</sup> (76 in <sup>2</sup> )	490cm <sup>2</sup> (76 in <sup>2</sup> )	880cm <sup>2</sup> (136 in <sup>2</sup> )
Screen Filtration area	160cm <sup>2</sup> (25 in <sup>2</sup> )	160cm <sup>2</sup> (25 in <sup>2</sup> )	311cm <sup>2</sup> (48 in <sup>2</sup> )	311cm <sup>2</sup> (48 in <sup>2</sup> )	408cm <sup>2</sup> (63 in <sup>2</sup> )	408cm <sup>2</sup> (63 in <sup>2</sup> )	800cm <sup>2</sup> (124 in <sup>2</sup> )
Maximum Flow rate	5 m <sup>3</sup> /h (22 GPM)	6 m <sup>3</sup> /h (26 GPM)	15 m <sup>3</sup> /h (66 GPM)	20 m <sup>3</sup> /h (88 GPM)	25 m <sup>3</sup> /h (110 GPM)	25 m <sup>3</sup> /h (110 GPM)	35 m <sup>3</sup> /h (154 GPM)
Inlet/Outlet Connections	BSP, NPT						
pH range	3-12						
Maximum working temperature	60 °C (140°F)						





# SAND SEPARATORS

## TECHNICAL SPECIFICATION

S.I. Sand Separator (Hydro cyclone) is a unique product which is made from Polyamide reinforced by Fiberglass. The high accuracy of the centrifugal production increases the efficiency of trapping the sand particles in the accumulation tank and results in high filtration efficiency.

	2" Sand Separator	3" Sand Separator	4" Sand Separator
Maximum operating pressure	8 bar (116 psi)		
Flow rate	10 - 30 m <sup>3</sup> /h (44 - 132 GPM)	25 - 55 m <sup>3</sup> /h (110 - 242 GPM)	50 - 100 m <sup>3</sup> /h (220 - 440 GPM)
Accumulation Tank	16 Liter (4.2 US Gallon)	16 Liter (4.2 US Gallon)	27 Liter (7.1 US Gallon)
Inlet/Outlet Connections	BSP, NPT, Flange		
pH range	3-12		
Maximum working temperature	60 °C (140°F)		



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