

# ScanJet

Automatic screen filter for high dirt loads and fine filtration. Efficient and powerful cleaning ability, makes it ideal for heavy duty applications with high loads and hard to remove suspended solids.



flowrates

**up to 1,000 m<sup>3</sup>/h  
(4,400 gpm)**

filtration degrees

**25 - 300 micron**

water for cleaning

**typical backwash  
volume < 1%**

minimum operating  
pressure

**1.5 bar (22 psi)**

## Features and benefits:

- Automatic self cleaning screen filter designed for high and sticky TSS loads.
- The ScanJet is designed for continuous flushing, to handle high dirt loads in one stage filtration.
- Unique and innovative back-flushing process, which combines a suction scanner and pressurized spray jets.
- The ScanJet is a clog-free filter; its cleaning mechanism will not allow the screen to get blocked.
- Suitable for low-pressure filtration as low as 1.5 bar.
- Fine micron screen range, 50, 40, 25 micron screens are available for all applications.
- Flexible in flushing programs, including continuous flush, flush by DP, time, or a combination of all.
- While flushing, there are no interruptions on the filtered water flow.
- The ONLY filter in the market that offers multiple cleaning options and suites any type of heavy load applications and conditions.

\*Patent pending

## How the ScanJet Filter Works

### Filtration process:

Raw water is supplied by the consumer's system to the entry point of the filter. The filter filters the water to the micron degree of the screen and the filtered water exist the filter through the outlet port.

### Self-cleaning process:

A filter cake starts to build up due to dirt load on the screen. The Filtration system enters into flushing mode due to one of the following triggers and signals:

1. Time interval.
2. DP – Pressure differential signal.
3. Manual start command.

A pressure differential switch is installed on the filter control system. Once a pressure differential signal (at a preset value) is transmitted to the controller the system enters into flush cycle.

### **This back-flushing process is an innovative process that combines a suction scanner and pressurized spray jets:**

In the inner side of the screen a suction scanner is installed, and in the outer side of the screen spray nozzles are located in front of each suction point of the scanner.

During flushing a powerful jet dislodges the filter cake from the outside in while the suction scanner sucks and expels the debris through the exhaust valve.

In the case of heavy dirt load the filter will automatically detect a higher frequency of DP build up, and the controller will switch to continual flush mode.

### **Control & flushing programs:**

- Various operation modes of suction and jetting enable optimal cleaning efficiency with minimum wasted water.
- Flush by accumulated DP.
- Flush in continual mode, with jets or without, (optional).

## Technical Specifications

Filter Type	10,000 *	4,500	1,500
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### General Data

Maximum flow rate *	1,000 m <sup>3</sup> /hr (4,400 gpm)	160 m <sup>3</sup> /hr (700 gpm)	80 m <sup>3</sup> /hr (350 gpm)
Min. working pressure	1.5 bar (22 psi)		
Max. working pressure	10 bar (145 psi)		
Filter area	10,000 cm <sup>2</sup> (1,550 in <sup>2</sup> )	4,500 cm <sup>2</sup> (690 in <sup>2</sup> )	1,500 cm <sup>2</sup> (232 in <sup>2</sup> )
Inlet/Outlet diameter	200-350 mm (8"-14")	80-150 mm (3"-6")	50-100 mm (2"-4")
Max. working temperature	60°C (170°F)		
Type of screen	Weave Wire		

\* Max. flow recommendation is based on water quality and specific micron rating. Please consult with your authorized representative.

### Flush data

Exhaust valve	3" (80 mm) butterfly valve	2" (50 mm) butterfly valve	2" (50 mm) butterfly valve
Flushing cycle time	35 sec	20 sec	20 sec
Wasted water per cycle	500 liter (132 gallons)	80 liter (21 gallons)	40 liter (10 gallons)
Min. flow for flushing	50 m <sup>3</sup> /hr (220 gpm)	15 m <sup>3</sup> /hr (66 gpm)	7 m <sup>3</sup> /hr (30.8 gallons)
Recommended Spraying Pressure	10 bar (145 psi)		

### Control and electricity

Electric motor	0.375 Kw	0.25 Kw	
Rated operation voltage	400-480 volt 50/60 (other voltages available per request)		
Control voltage	24 DC		

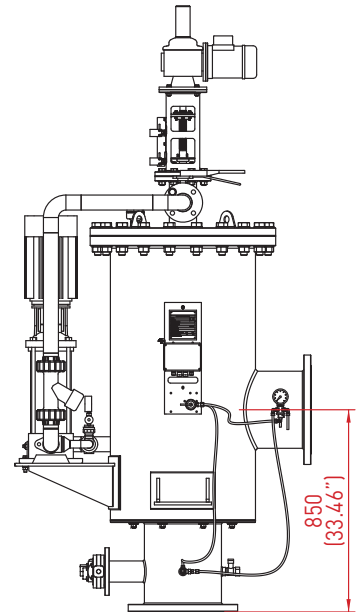
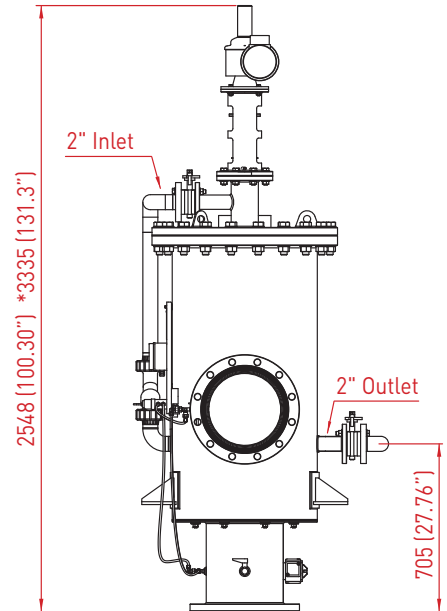
### Pump and electrical Data

Pump	6 Kw	4 Kw	2.5 Kw
Flow nominal	15 m <sup>3</sup> /hr (66 gpm)	10 m <sup>3</sup> /hr (44 gpm)	6 m <sup>3</sup> /hr (26.5 gpm)
Pressure	10 bar (145 psi)		

### Construction materials

Filter housing and lid	Epoxy coated C/ST, St St 316		
Screen	ST/ST 316L		
Cleaning mechanism	ST/ST 316L		
Exhaust valve	Actuated valve (pneumatic or electric)		
Seals	NBR, EPDM		
Control system	PLC with HMI		

### ScanJet 10,000 dimensions: On-Line:



Dim: mm (inch)

\*In-line configuration available as well

### Filtration degrees available

micron	200	130	100	80	50	40	25
mesh	0.2	0.13	0.1	0.08	0.05	0.04	0.02

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