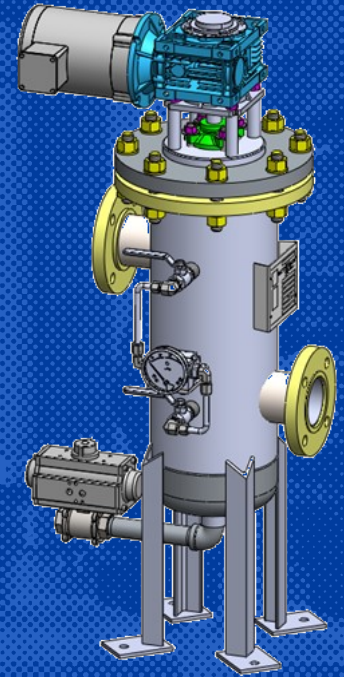


98 SERIES

Automated Self Cleaning Strainer

CONTENTS

- A. Data Sheet / Specifications
- B. Operation
- C. Installation & Start Up
- D. Maintenance
- E. Spare Parts List
- F. Warranty

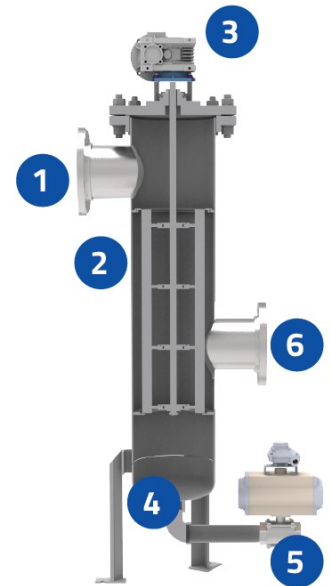


QUOTE	RF-
MODEL	S498D-4F-200-S6-BW TYPE: Backwashing with mechanical cleaning
DESIGN DATA	CODE: ASME UM MAWP: 150 psi @ 200F / -20F MOC: SS304 NOZZLES: 4" 150# RFSO SERVICE: Well water (pulp contaminated), 330gpm
BASKET SCREEN	200 micron heavy duty wedge wire basket, SS316
INTERNAL ASSEMBLY	Heavy gauge bristle brushes, SS316
SHAFT SEAL	Single cartridge mechanical seal SS316
CONTROL	Fil-Trek control panel with Siemens PLC & HMI. 120VAC.
MOTOR	1/2 HP, NEMA 56C, TENV (wired from panel)
PURGE VALVE	Ball Valve, 2in NPT, SS316 with pneumatic actuator
dP MONITORING	Dual pressure transmitters, 0-160psi, adjustable dP set-point on HMI
LEAD TIME	
ADDITIONAL DETAILS	Duplex backwashing Includes automated butterfly valves. See next page for details

B) OPERATION

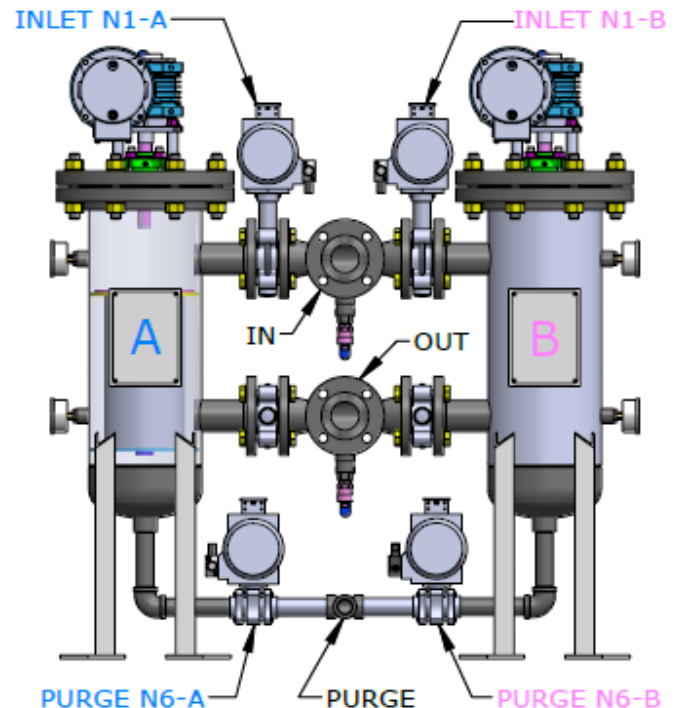
Single Unit Operation

1. Unfiltered fluid enters the strainer through the inlet and flows into the centre of wedge wire strainer screen.
2. Particulate and debris will collect against the screen as clean fluid passes through.
3. As more unwanted particulate builds up against the screen, the differential pressure will increase and the cleaning cycle will initiate automatically at desired set point.
4. The internal scraper will rotate against the screen removing all unwanted buildup which collects at the bottom sump.
5. Near the end of the scraping cycle, the purge valve is automatically opened to flush out the sump.
6. During the scraping operation clean fluid will continue to pass through the vessel.



Duplex Unit Operation

1. Unit A is online.
2. Unit B is on standby.
3. Both N1 Inlet valves have actuators.
4. Both N2 Outlet valves are manual only, and are kept open at all times.
5. Both N6 Purge valves have actuators.
6. When Unit A (online) reaches dP setpoint, the inlet valves swap positions to transfer flow from A to B and the cleaning cycle on Unit A begins:
7. Motor-A spins the scraper brushes.
8. N6-A Purge valve opens to flush the debris.
9. N2 Outlet is always open, thus some clean flow from Unit B is diverted to Unit A to backwash the basket screen.
10. The process repeats when Unit B trips the dP setpoint



C) INSTALLATION & START UP

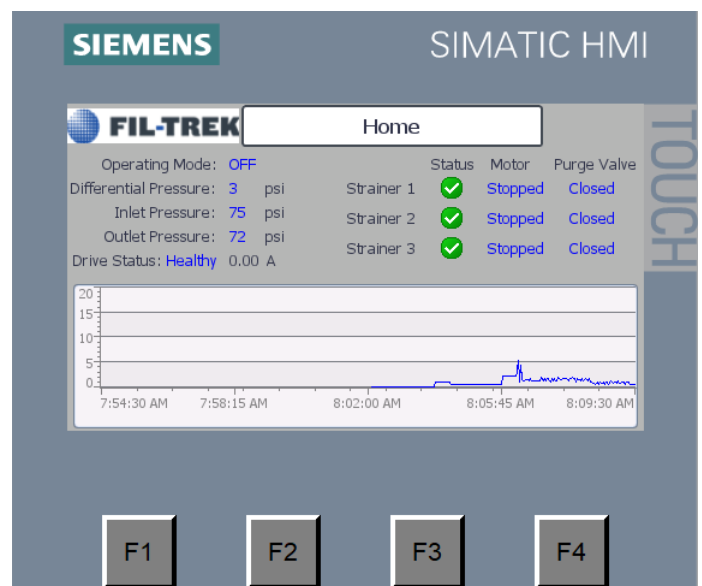
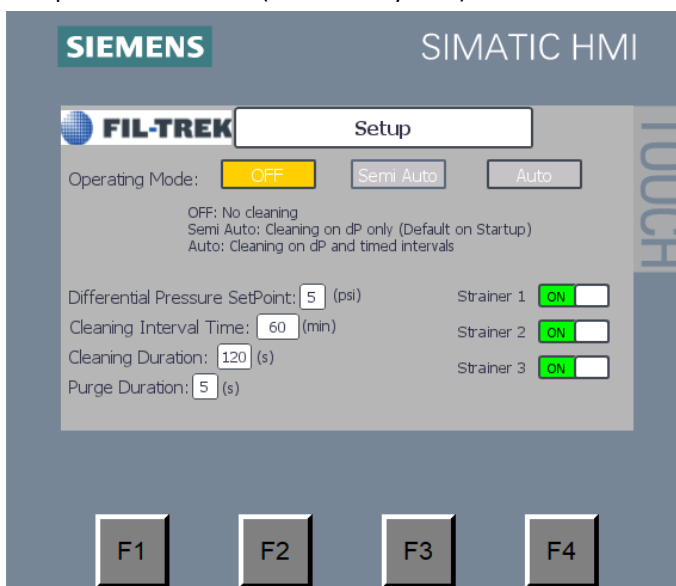
Installation

1. The vessel is top heavy and should be considered a tipping hazard. Ensure that it is securely fastened to a skid until it is ready to be installed at its permanent location.
2. Inspect the vessel for damage during shipping. Thoroughly check all cables and connections for any signs of visible damage. If any damage is found do not proceed with the installation and contact Fil-Trek.
3. Check all bolting and connections before the vessel is pressurized and placed in service.
4. Proceed with installing the vessel into your system per your standard procedure.
5. Do not connect power to the control panel or air supply to any valve actuators at this time.

Start-Up of Control System

1. The vessel must be vented of any trapped air before it can be put into automatic mode. **The mechanical shaft seal should never be run dry.**
2. The vessel can be vented using the (N4) vent valve. Follow your standard procedure for venting to atmosphere.
3. If your unit has a pneumatic actuator, connect the air supply line to the air pilot solenoid.
4. With the panel **Main Switch** in the **OFF** position, connect the power (non GFCI).
5. Turn the Main Switch to the ON position. The HMI screen will turn on.
6. Follow the on-screen instructions to start the control systems.

Sample Control Screen (multi-unit system)



D) MAINTENANCE

Recommended maintenance intervals are as follows:

Start-up Inspection: Within 24-48 hours of start-up & operation

1. Inspect the mechanical seal.
2. Inspect the purge valve and actuator.
3. Inspect the overall integrity of the unit & external components.

Full Inspection: Every 12 months of continued operation*

1. Inspect the mechanical seal.
2. Inspect the purge valve and actuator.
3. Inspect the overall integrity of the unit & external components.
4. Remove the closure assembly and inspect the internals of the vessel.
 - A) Check for wear on the brushes or blades.
 - B) Check for wear on the bushings.
 - C) Check for wear on the basket.

These are suggested minimum inspection intervals. Depending on the operating conditions, it may be necessary to reduce these intervals.

E) SPARE PARTS

PART NUMBER	DESCRIPTION	QTY REQ. PER UNIT	LEADTIME
	Mechanical Shaft Seal	1	Stock Fil-Trek
	Basket Screen	1	4 weeks
	Internal Scraper Assembly	1	Stock Fil-Trek
	Purge Valve	1	Stock Fil-Trek
	Purge Valve Actuator	1	Stock Fil-Trek
	Pressure Transmitter	2	Stock Fil-Trek
	All other parts (bolting, internal, mechanical, etc)	Varies	Stock Fil-Trek

F) WARRANTY

Fil-Trek warrants that the items sold hereunder shall be free from defects in material or workmanship for a period of 12 months AFTER START-UP or 18 months AFTER THE DATE OF SHIPMENT from Fil-Trek Corporation or one of its divisions, whichever comes first. This warranty comprises the sole and entire warranty pertaining to items provided hereunder. Fil-Trek makes no other warranties or representation with respect to the products furnished hereunder and disclaims all other warranties, express or implied, including warranties of merchantability and fitness for a particular purpose. All other warranties, including but not limited to, merchantability and fitness for purpose, whether express, implied or arising by operation of law, trade usage or of course dealing are hereby disclaimed. Notwithstanding the foregoing, there are no warranties whatsoever on items built or acquired wholly or partially, to buyers designs or specifications.

Warranty is Void If

- A. Equipment is subjected to misuse, improper installation, improper storage or protection prior to installation or use, negligence by buyer or user, accident, corrosion, chemical attack, or misapplication.
- B. Equipment has been modified or repaired by anyone other than Fil-Trek authorized personnel.
- C. The serial number on the system is missing, defaced, or modified in any manner.

Warranty Does Not Cover

- A. Damage to the system due to parts of other manufacturers added to or connected to the product.
- B. Any costs incurred in shipping the product to Fil-Trek or a service centre location
- C. Damage or improper operation of the product caused by customer abuse, negligence, or failure to follow operating instructions provided with the product.
- D. The compatibility or performance of any third-party product used with or connected to the system.
- E. Any cosmetic damage to system caused by accident or customer abuse.

Limitation of Remedy

Fil-Trek Corporation's liability arising from or in any way connected with the items sold or this contract shall be limited exclusively to repair or replacement of the items sold or refund of the purchase price by buyer, at Fil-Trek Corporation's sole option. In no event shall Fil-Trek Corporation be liable for any incidental, consequential or special damages of any kind or nature whatsoever, including but not limited to lost profits arising from or in any way connected with this agreement or items sold hereunder, whether alleged to arise from breach of contract, express or implied warranty or in tort, including without limitation, negligence, failure to warn or strict liability.

This warranty is void if any of the spare parts are not supplied by Fil-Trek Corporation or one of its divisions.