

**Triangularwave
Technologies, Inc.**
(TWT®)

**Versatile Fluid
Management
Products & Systems
To Effectively Meet
The Needs Of Any
Industry &
Application**

- Control Scale Deposits
- Bacteria
- Corrosion
- Algae
- Colloids

In All Fluid Based
Systems

**Potable Water,
Process and Waste
Water Treatment &
Conditioning**

PROTECTION FOR NEW EQUIPMENT

TWT provides new
equipment with the
ability to enhance
the product features
and benefits

TREATMENT FOR EXISTING EQUIP- MENT

Retrofit existing
equipment to
improve its operating
efficiency and life
cycle

ENHANCE PRODUCT LINE

Enter new markets
and broaden cus-
tomer satisfaction

CUSTOM DESIGN

Let TWT, Inc. custom
design a fluid man-
agement system to
meet any industry
specific application

- Residential
- Commercial
- Industrial

Self Cleaning Sediment Filters

**Spin-down™ sediment filters - Self-cleaning
design, designed for large particle
removal with manual purge valve**



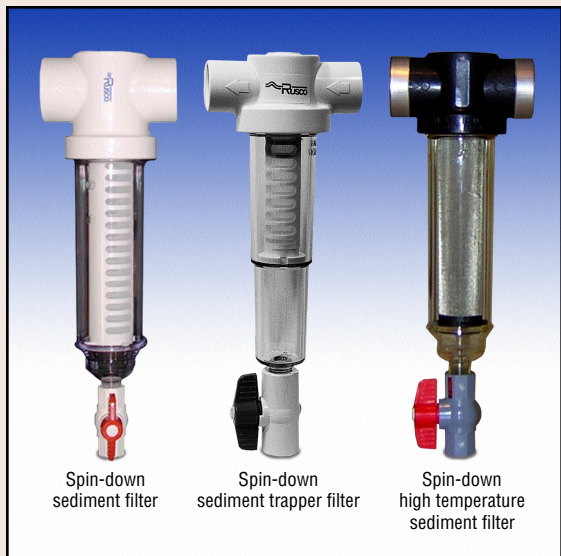
**TWT, Inc. offers a full range of products & systems
designed to address fluid problems wherever fluid flows.**

**From patented deposit control technology to pre
and post filtration, ionization, iron removal, disinfection,
and ultraviolet purification treatment and conditioning,**

**Lots of Companies Provide Products and
Systems...TWT, Inc. Senses Environmental
Needs with Intelligent Solutions**



The Green Market Answer



Spin-down sediment filter Spin-down sediment trapper filter Spin-down high temperature sediment filter

Self-Cleaning Sediment Filters

Filters with a built-in manual valve to purge built-up sediments in the bottom of the filter. Filter will initially clean the water so the replacement cartridges will have a much longer service life.

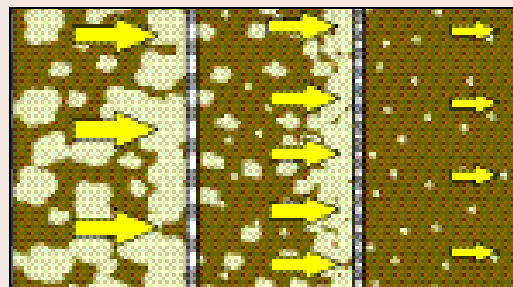


Triangularwave Technologies, Inc.(TWT®)
 Filtration • Deposit Control Technology
 • Ultra Violet (UV) Disinfection & Purification
 Combined for Maximum Effectiveness

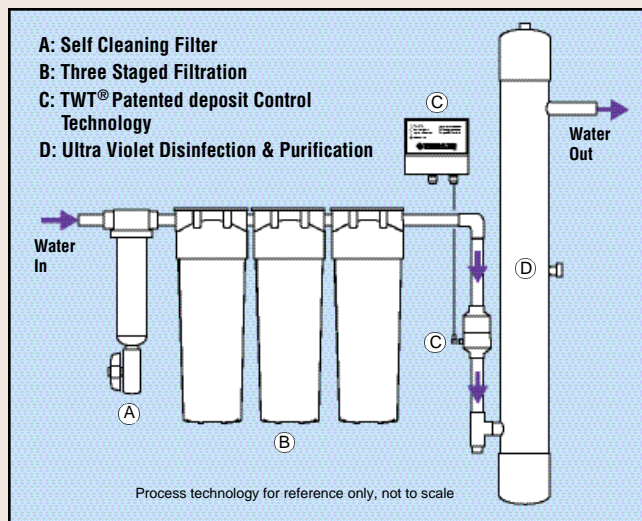
Filtration: The First Step in achieving clean water is a filtration system that effectively removes particulate matter and similar debris.

Staged Filtration* (optional)

The first stage in achieving clean water is a filter with a built-in manual flush valve to purge built-up sediments in the bottom of the filter (as illustrated). This filter will initially clean the water so the second stage filter system, replacement sediment and other media cartridges will have a much longer service and life cycle.



Filters are designed to trap various kinds of debris, dirt and organic particles that will otherwise enter your equipment and/or plumbing system, restrict your water flow and create a breeding ground for bacteria. Water is filtered to remove lingering sediment, chlorine, heavy metals, organic carbon compounds, volatile organic chemicals, pesticides and hundreds of other volatile organic compounds sometimes found in source water.



TWT® Inc. products and systems provide technologically advanced methods for water and fluid management that are both efficient and cost-effective. Components and subsystems chosen from across the

range of treatment methods can be combined in different configurations to provide custom solutions specific to any industry, site or application.



TWT-POEPOUV-604SC4 (4 PGM)
 Larger sizes (GPM) available upon request



After installing your Chemical-Free Water Treatment products, you will taste, feel, smell and see the difference in your water quality.

TWT® Multi-Process Modular Chemical-Free Water Treatment System: Staged Filtration, Hard Water Conditioning, and Ultra Violet Purification & Disinfection Technology



In effect, a clean, corrosion-free delivery system is restored and maintained in an environmentally safe and chemical-free manner. The result is clean pipes and tubing with no biofilm and reduced bacterial contamination. The output water is thus disinfected and the exceptionally high water for process, human consumption and use.

Self Cleaning Sediment Filtration Systems



Spin Down Filter System

Reusable sediment filter for fine sediment or particulates that can be flushed periodically



Sediment Trapper Filter System

Reusable sediment filter for medium sediment or particulates that can be flushed periodically



Hot Water Spin-Down Sediment Trapper Filters

Hot water sediment filters for water up to 200° F can be utilized after the water heater to capture scale

The complete line of Spin-Down™ Sediment and Sediment Trapper™ Model Filters make solid particle removal simple and economical

- Centrifuge Spin-Down type sediment separation
- Clear cover easily removed for cleaning (no tools required)
- Sediment is visible through cover
- Reusable polyester and stainless steel elements are available in various mesh sizes
- Flow capacity for entire system(s)
- All molded non-corrosive materials
- Available in 4 sizes: 3/4" FIPT, 1", 1 1/2" and 2" slip x slip connections in & out (optional bushings are available for 1", 1 1/2" and 2" FPT connections)
- Flow rates up to 100 GPM
- Simple installation & easy to use
- Models available for hot water applications to 200°F (93°C)

Optional Equipment

- Automatic flush valve
- Automatic flush valve installation kit
- Mounting bracket - UB-1 kit for 3/4" housing U-shaped bracket & screws
- Sun shield

TWT® The Smart Treatment Method

These systems are ideally suited for wells, homes, offices, factories, farms, medical/dental & laboratory environments, hospitals, restaurants, schools and anywhere the need for cleaner water to use and drink are required.

Spin-Down™ Sediment Filters

- Clear Cover is easily removed for total cleaning (No tools required)
Flow capacity for entire system
- Sediment is visible through the clear cover indicating when the filter needs cleaning
- Sediment is quickly and easily removed by opening the ball valve at the bottom of the filter cover



Reusable polyester and stainless steel filter elements in many mesh sizes

- No down time

Filter Elements

Polyester and stainless steel screens are available in many mesh sizes to meet your requirements.

Covers

Sediment Filter covers are made of high impact polymer resin for maximum strength and durability. 1/2" MPT nipple on bottom of cover for connection of plastic ball valve for easy cleaning.

Body

SPIN-DOWN™ Sediment Filter bodies are PVC material in 3/4" FPT, 1", 1-1/2" and 2" slip x slip connections in and out. Bushings are available to convert 1", 1-1/2" and 2" slip by slip connections to female pipe thread.

Filter Dimensions

Size	3/4"	1"	1-1/2"	2"
*Length	11-3/8"	11-3/8"	15-3/8"	17-7/8"
Width	5"	5"	5-1/4"	5-1/2"

*With ball valve attached

Screen Sizes • Polyester

Mesh	Microns	Opening
1000	15	.0006"
500	30	.0012"
250	61	.0024"
*140	104	.004"
*100	152	.006"
*60	254	.010"
40	381	.015"
*30	533	.021"
24	711	.028"

*Also available in stainless steel

Spin-Down™ Sediment Trapper™ Filters

- Unique element design traps sediment in lower reservoir of clear cover
- Clear bowl easily removed for total cleaning
- Flow capacity for entire system Sediment is visible through the clear cover indicating when the filter needs cleaning
- No down time
- Ball valve allows for quick sediment removal from bottom of cover
- Centrifuge Spin-Down type sediment separation
- Reusable polyester and stainless steel filter elements available in many mesh sizes from very fine to very coarse
- A self-cleaning sediment filter (spin-down separator) will help to significantly reduce the number of replacement sediment and other media filters used to filter water sources.



Filter Element

The unique design of the sediment trapper™ element allows debris to settle in the bottom of the clear cover, trapping sediment away from the screen. The new 1-1/2" and 2" model elements make it easy to convert a standard spin-down filter to a Sediment Trapper™ by simply replacing the element screens which are available in either polyester or stainless steel to suit your needs and can be ordered in various mesh sizes.

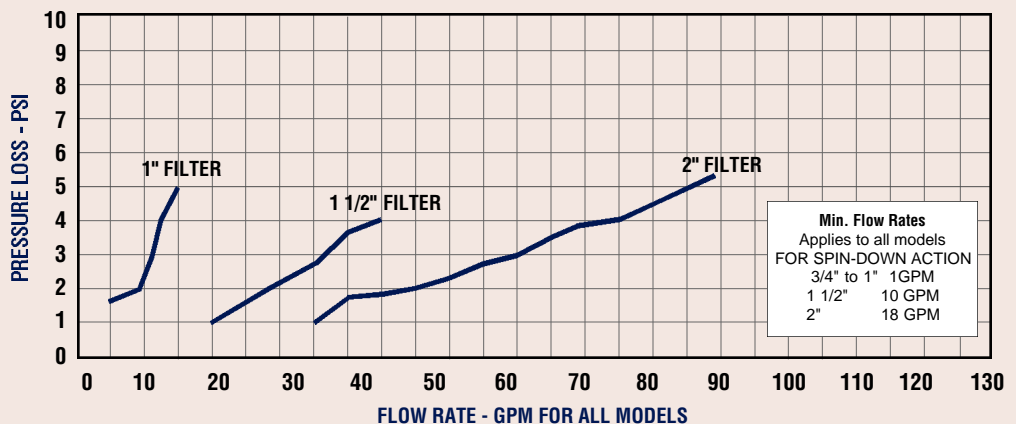
Filter Dimensions

Size	3/4"	1"	1-1/2"	2"
*Length	14-3/8"	14-3/8"	15-3/8"	17-7/8"
Width	5"	5"	5-1/4"	5-1/2"

*With ball valve attached

Spin-Down™ Pressure Graph

Maximum operating pressure 150 PSI at 73°F (23°C) (on selected models)



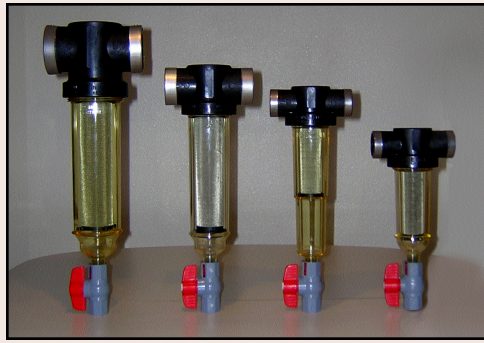
Min. Flow Rates
Applies to all models
FOR SPIN-DOWN ACTION
3/4" to 1" 1GPM
1 1/2" 10 GPM
2" 18 GPM

Hot Water Spin-Down Sediment Trapper™ Filters

Application post hot water heater

Need to Enhance Water Quality, and Improve Operating Efficiency and Life Cycle of Vertical Hot Water Heater/Boiler Systems Control Scale Deposits Bio-film • Corrosion Algae and Colloids In Your Fluid-Fed Equipment

The build up of scale deposits is a common and costly problem in Hot Water Heaters and Boilers in the residential, commercial environments. The higher costs of maintaining and cleaning heaters and boilers can be attributed to the continuous cleaning of scaled surfaces or to the increased energy and operating costs due to the poor conductivity of the fluid pipe. For example, a 2.0 mm scale layer can induce a 47% decrease in overall heat transfer. Moreover, scale deposits narrow the inner diameter of piping, increasing the amount of energy required to pump the water through the system.



Hot water sediment filters for water up to 200° F can be utilized, before and/or after the water heater to capture scale, and other particulate matter.



Vertical Boiler with Hot Water Filter

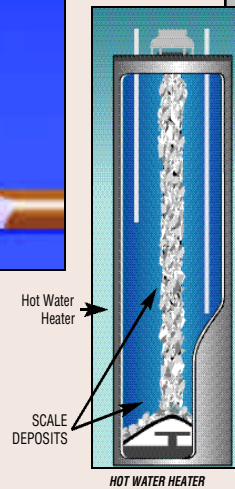


TWT-5C8-472 Deposit Controller for Pipes up to 1 inch. Voltage: 9 vdc Transformer




TWT® Deposit Control technology

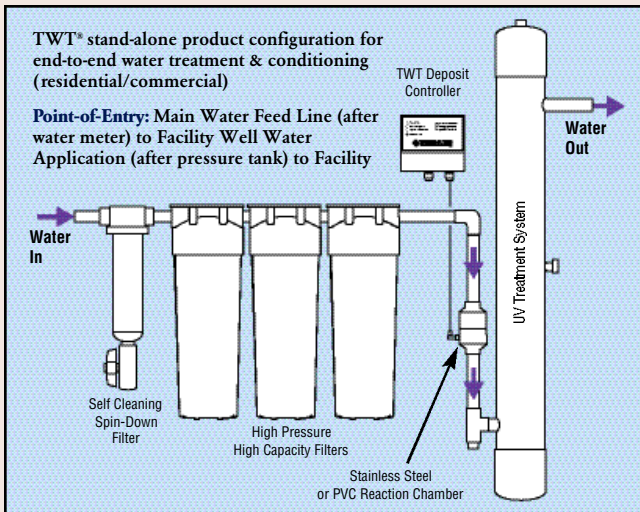
- Removes Existing Scale on Heat Exchangers Over Time, Which Improves Heat Transfer for Greater Efficiency • Eliminates Deposits in Pipes, and Fixtures
- Controls Scale and Bio-fouling in Water Fed Appliances
- Reduces Equipment Replacement & Downtime



Pounds of scale removed from a 40 gallon hot water heater

ISO Certified Facility  **MADE IN U.S.A.**

Filtration • Patented Deposit Control Technology • UV Disinfection & Purification

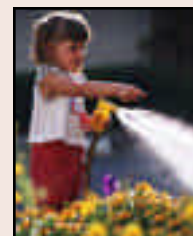


TWT® stand-alone product configuration for end-to-end water treatment & conditioning (residential/commercial)

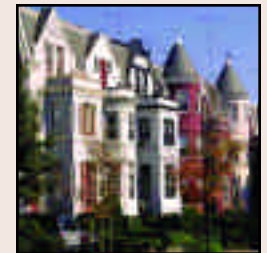
Point-of-Entry: Main Water Feed Line (after water meter) to Facility Well Water Application (after pressure tank) to Facility



In The Home



Lawn & Garden



Offices



Sprinklers & Irrigation Systems



On Farms

Conserve Water, Save Energy...Non-Chemical, Safe, Cost-Effective Treatment System.

Ordering Information for Manual self-Cleaning Sediment Filters

Spin-Down™ model filters are ordered by size # and mesh size.

Example: 3/4"- RSF100LST

Is a 3/4" Filter with a 100 mesh stainless steel element and flush valve.

When ordering a Sediment Trapper™ Model filter use size #, mesh size, ST designation.

Example: 1"- RSF250LST

Is a 1" Filter Sediment Trapper™ with a 250 mesh stainless steel element and flush valve.

Case Quantities:

All Models -10 per Case. All filters are individually boxed to prevent loss or damage.

Manual Self-Cleaning Sediment Filters

	L=5 to 20 GPM (3/4" to 1")	M=10 to 40 GPM (1.50")	H=18-100 GPM (2")
Screen Sizes:	1000 = 15 Micron		200 (mesh) = 74 Microns
Polyester	500 = 30 Micron		140 (mesh) = 104 Microns
	250 = 60 Micron		100 = (mesh)152 Microns
	100 = 150 Micron		60 = (mesh) 254 Microns

Larger microns & mesh sizes elements available upon request

Spin Down™ Cold Water Feed Line Polyester Screen	Sediment Trapper™ Cold Water Feed Line Polyester Screen	Spin Down™ Hot Water Feed Line Stainless Steel Mesh Screen	Sediment Trapper™ Hot Water Feed Line Stainless Steel Screen	Available Upon Request
3/4" RSF1000L	3/4" RSF1000LST	3/4" RSFSS200LHT	3/4" RSFSS200LSTHT	<ul style="list-style-type: none"> • Replacement Intake Filters • Spin-Down™ Filter Elements • Sediment Trapper™ Filter Elements • Optional Equipment Listed Pg. 4 • TWT Deposit Control Technology (hard water treatment & Conditioning)
3/4" RSF500L	3/4" RSF500LST	3/4" RSFSS140LHT	3/4" RSFSS140LSTHT	
3/4" RSF250L	3/4" RSF250LST	3/4" RSFSS100LHT	3/4" RSFSS100LSTHT	
3/4" RSF100L	3/4" RSF100LST	3/4" RSFSS600LHT	3/4" RSFSS600LSTHT	
1" RSF1000L	1" RSF1000LST	N/A	N/A	
1" RSF500L	1" RSF500LST	N/A	N/A	
1" RSF250L	1" RSF250LST	N/A	N/A	
1" RSF100L	1" RSF100LST	N/A	N/A	
1.5" RSF1000M	1.5" RSF1000MST	1.5" RSFSS2000MHT	N/A	
1.5" RSF500M	1.5" RSF500MST	1.5" RSFSS140MHT	N/A	
1.5" RSF250M	1.5" RSF250MST	1.5" RSFSS100MHT	N/A	
1.5" RSF100M	1.5" RSF100MST	1.5" RSFV60MSMHT	N/A	
2" RSF1000H	2" RSF1000HST	2" RSFSS200HHT	N/A	
2" RSF500H	2" RSS500HST	2" RSSSS140HHT	N/A	
2" RSF250H	2" RSF250MST	2" RSFSS100HHT	N/A	
2" RSF100H	2" RSF100HST	2" RSFSS60HHT	N/A	

If required, contact your Distributor or TWT today (info@Triangularwave.com) for additional information on micron size(s) and/or what TWT system will meet your specific application needs, visit Triangularwave Technologies, Inc.

Comprehensive Websites. The Valuable Technical Resource For All Involved In Water and Fluid Management. www.Triangularwave.com • twatwatertreatment.com

TWT products make sense from operational, economic, and safety point of view. Ownership of the TWT System will afford you and our customers significant savings over a short period of time and even greater savings over the life of the equipment.

TWT® has the versatile, efficient, cost-effective methods to solve your water/fluid management problems end to end.

TWT® The Ultimate in Water Treatment & Conditioning

TWT® "The Competitive Edge"

Go Green-Save Green

