

# Fluids Filtration & Separation Equipment



The  
**STRAINRITE**  
Companies  
World Class Filtration

# Strainrite: Reliable, cost efficient, environ



Alan F. Lapoint, President, The Strainrite Companies, and John H. Lapoint III, President, Wrangler Corp.

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The most comprehensive line of application-specific filter bags in the industry



## Liquid Filtration Solutions

Since 1978, The Strainrite Companies, Inc. have been designing and manufacturing filtration products for industry world wide. Our commitment to innovative and environmentally sound solutions is second to none.

## Long-term Partnerships

Our consultative selling approach focuses on custom solutions to filtration problems. We commit the time and resources to tailor our products to our clients' unique requirements. By working with us, our clients realize:

- Operational cost savings
- Improved process efficiency
- Enhanced finished product quality
- Reduced waste costs

## Expanding Product Line

We specialize in the manufacture of ASME code pressure vessels, liquid filter bags, and D.O.T.-approved semi-rigid bulk hazardous waste containers. As we encounter new, or evolving applications, we respond with innovative, application-specific solutions. Extensive research and development, coupled with rigid quality control, provides our clients with consistent, reliable filtration products.

### Liquid Filtration Vessels

We manufacture a variety of standard design vessels to handle flow rates between 5 and 5,000 gpm at pressure ratings ranging from 75 to 3,000 psi. For special system requirements, our engineers will custom design a system to meet your needs. Strainrite vessels are fabricated from the highest quality materials and conform to code standards. Materials of construction include Carbon Steel, 304, 316, Duplex Stainless, Alloy C 276, Alloy 20, and Titanium.

### Assurance Testing

All Strainrite vessels are hydrostatically tested to 150% of rated working pressure. We also offer special quality assurance tests which include X-ray, Magnetic Particle, Liquid Penetrant, Ultra-sonic and Brinell hardness testing.

### Contact Us -

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Our field sales professionals and distributors, in conjunction with our technical support engineers, will work with you to provide a needs assessment outlining which Strainrite product, service, or combination will best suit your requirements. Call our corporate office, and we will provide you with information detailing how a relationship with Strainrite will benefit your firm.



Multibag Pressure Vessel

Pressure Vessels

# SRL Series Low Flow Vessels



Shown with  
Swing Away closure

**SRL** Series vessels come in two standard sizes, tailored to your throughput requirements. The **SRL 1-30** is rated for 30 gpm, and the **SRL 1-65** at 65 gpm. Both sizes are available in three different closure designs, Band Clamp, Swing Bolt, or Swing Away, in 100, 200, and 300 psi ratings.

## Standard Features

- Inlet/outlet orientation: Side-in Bottom-out (standard) or Side-in Side-out (optional)
- Low pressure drop, positive cover seal
- Easily cleaned
- Heavy duty perforated basket
- ASME code stamp available on all designs
- Band clamp and swing bolt closures
- .25" NPT vent tap
- Pipe sizes from .5" to 2" NPT, RFF or Quick Disconnect connections
- Greater surface area than our competitors' equivalent models (see Comparison Chart)

## Surface Area Comparison Chart

Company	Style No.	Surface Area Sq. Ft.	Style No.	Surface Area Sq. Ft.
Strainrite	SRL 1-30	0.95	SRL 1-65	2.1
Competitor	4-6	0.5	4-12	1.0
Competitor	BFN 13	0.5	BFN 14	1.0

## Optional Features

- Epoxy coating, electro-polish and fuse coating
- Higher pressure ratings available up to 3,000 psi
- Jacketing
- Compression devices
- Custom designs
- Sanitary construction
- Mesh-lined basket for straining applications — 50 micron and higher

## Maximum Recommended Flow Rates (Based on a viscosity of 1 cP)

For the following recommended flow rates, vessels need a minimum inlet/outlet size of 1" NPT. The recommended flow for basket and filter combination is for nominally rated filter bags not for our high efficiency filter bag line.

Product	Basket Strainer	Mesh Lined Basket Strainer	Retainer Basket with Filter Bag
SRL 1-30	60 gpm	45 gpm	30 gpm
SRL 1-65	125 gpm	90 gpm	65 gpm



# SRS Series Standard Duty Vessels



Shown with optional compression device

## Recommended Flow Rates and Surface Area

For the following recommended flow rates, vessels need a minimum inlet/outlet size of 2" NPT. The recommended flow for basket and filter combination is for nominally rated filter bags, not for our high efficiency filter bag line.

SRS 1-2	SRS 2-2
100 gpm*	200 gpm

\*Rates are for nominally rated bags only.

SRS Series filter bag/strainer vessels are designed with a recessed basket and *new* horizontally pivoting cover. The new design achieves an advanced bag to vessel seal. These vessels are available in #1 and #2 sizes in a variety of pressure ratings with 150 psi being standard. Standard swing bolt closure allows for quick accessibility when a filter bag or strainer needs replacement. The SRS is an outstanding combination of performance and value.

### Standard Features

- Adjustable height tripod stand
- Inlet/outlet orientation: Side-in Bottom-out (standard) or Side-in Side-out (optional)
- Low pressure drop
- Positive cover seal
- Easily cleaned
- Heavy duty perforated basket
- Swing bolt closures
- .25" NPT vent tap
- Pipe sizes from .75" to 3" NPT, RFF or Quick Disconnect connections

### Optional Features

- Epoxy coating, electro-polish, and fuse coating
- Jacketing
- Compression devices
- Wire mesh support baskets
- Sanitary construction
- Mesh-lined basket for straining applications — 50 micron and higher

# SRH Series Heavy Service Vessels



All SRH Series filter bag/strainer vessels are designed with a recessed basket, a volume displacer permanently welded to the top cover, and a 304 stainless steel wire mesh retainer basket. Our standard wire mesh baskets increase available filtration surface area up to 30% compared to the perforated retainer baskets that come standard with competitors' vessels. This results in longer filter life and decreased labor costs.

## Recommended Flow Rates and Surface Area

For the following recommended flow rates, vessels need a minimum inlet/outlet size of 2" NPT. The recommended flow for basket and filter combination is for nominally rated filter bags not for our high efficiency filter bag line.

Product	Basket Strainer	Mesh Lined Basket Strainer	Retainer Basket with Filter Bag	Surface Area Sq. Ft.
SRH 1	150 gpm	110 gpm	100 gpm	2.25
SRH 2	300 gpm	220 gpm	200 gpm	4.50

## Standard Features

- Adjustable height tripod stand
- Built-in volume displacer in cover
- Inlet/outlet orientation: Side-in Bottom-out (standard) or Side-in Side-out (optional)
- Low pressure drop
- Positive cover seal
- 150 psi design, available to 3,000 psi
- Easily cleaned
- Stainless Steel wire mesh basket
- ASME Code stamp available on all SRH style vessels
- Swing bolt closures
- .25" NPT vent tap
- Pipe sizes from .75" to 4" NPT, RFF or Quick Disconnect connections



# SRX “X-Tra Seal” Series Vessels



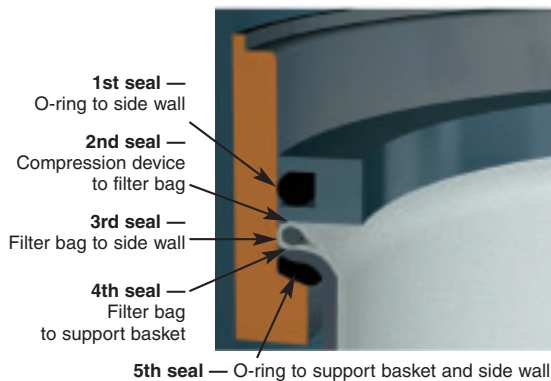
The Strainrite “X-Tra Seal” vessel was developed by our in-house engineering team for the expressed purpose of eliminating vessel-to-bag bypass, a critical element when high efficiency filtration is required. Strainrite’s proprietary “Five Points of Seal” design has proven to be a major advance in filter vessel technology, performing admirably where the competition hasn’t.

Featuring an effective seal on all three crucial planes of the bag, (the top, side, and bottom) as well as two additional O-rings that eliminate the likelihood of bypass along the vessel’s interior wall, the “X-Tra Seal” is truly your best choice for highly efficient bag filtration performance.

The most efficient filter vessel deserves the most efficient filter bag! Using Strainrite’s acclaimed Hi-Pro Micro Series F.D.A. Compliant filter bags ensures the purity of your end product.

“X-Tra Seal” vessels are widely used in applications where reliability, cleanliness, and efficiency are key, such as the Pharmaceutical, and Food and Beverage Industries.

Vessel Under Compression



Compression Plunger



# SRI Series Isolating Manifold Systems and SRD Series Duplex Systems



Duplex design with pump  
and motor assembly

Duplex filter systems offer the greatest flexibility for continuous on-line filtration requirements. This allows for continuous operation by directing the flow from one vessel to another by opening and closing of valves. This allows one side to be serviced, while the other vessel is in use.

### Standard Features

- Butterfly valves — known for their effective seals and low cost
- Valves are easily serviced without having to disrupt other valves or piping
- Soft-seated bubble tight closure
- Designed with four elbows to minimize pressure drop across the system
- Vent and drain ports used to evacuate vessels
- Mechanical stops which assure that valves are completely open or closed
- Available with SRH, SRS, or SRX vessels

Manifold filtration systems consist of three or more filter vessels piped in series or parallel. Strainrite offers countless configurations and flow designs depending on the user's specific needs. The standard design is to configure the vessels in parallel with isolation valves on each vessel (refer to multiplex picture). A four-vessel system can also be configured in a box design, which allows for graduated filtration and continuous flow. Given the modular nature of manifold systems, throughput capability can be easily expanded or contracted as needed, and the footprint is adaptable to available space. Contact your distributor to configure the ideal system for your application.



Multiplex design



# SRC Series Cartridge Vessels



In addition to the most comprehensive line of filter bag vessels in the industry, Strainrite also fabricates cartridge filter vessels for a wide variety of applications. These vessels are available in sizes that employ a single element, on up to 200 elements in a single housing. Pressure ratings from 100 to 3,000 psi.

We offer two standard designs: TP (Threaded Post) and S&P (Spring and V Post) as depicted below. Alternate designs are available. These vessels accommodate string wound, molded, and pleated cartridges, ranging in length from 10 to 40 inches.

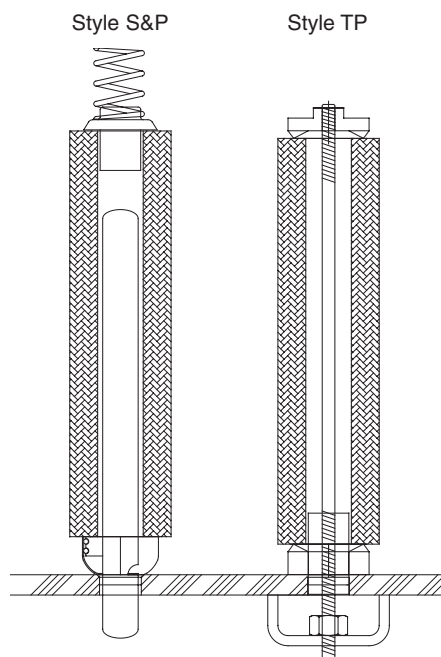
Strainrite Cartridge Vessels are widely used in a variety of industries, including Oil and Gas, Chemical, Paints and Coatings, Pharmaceutical, and Food and Beverage, to name just a few.

### Standard Features

- Swing bolt closure, which requires no special tools to open
- Low pressure drop, positive seal lids
- Easily cleaned
- Choice of Flanged or NPT inlets/outlets
- V Post or Threaded Center Post designs
- Side-in Bottom-out orientation

### Optional Features

- ASME Code Stamp
- Electropolishing
- Epoxy, Teflon®, or Fuse Coating



# SRM Series Multi-Cavity Vessels



SRM Multi-cavity filter vessels offer large surface areas capable of handling up to 5600 gpm in a single housing. Increasing surface area allows for longer processing time prior to filter change-out. Containing anywhere from 2 to 28 bags/baskets in a single vessel, our standard side-inlet side-outlet design offers the greatest inlet/outlet flexibility and doesn't require a platform to be built in order to change-out or clean the filter elements or strainers (*refer to diagram and charts*).

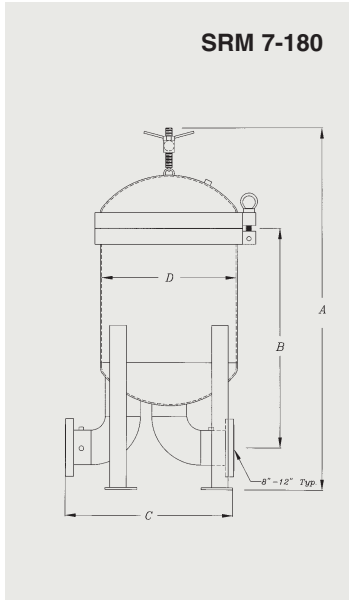
## Standard Features

- Inlet/outlet orientation: Ergonomically superior Side-in Side-out (standard) or Bottom-in Bottom-out (optional)
- Low pressure drop, positive cover seal
- Easily cleaned
- Stainless Steel perforated baskets (standard)
- ASME code stamp available
- Swing bolt closures
- 1" to 2" NPT drain port on bottom
- .50" to 1" NPT pressure gauge/vent tap
- Pipe sizes from 2" to 14" RFF connections
- Davit Lift
- Compression Device

## Optional Features

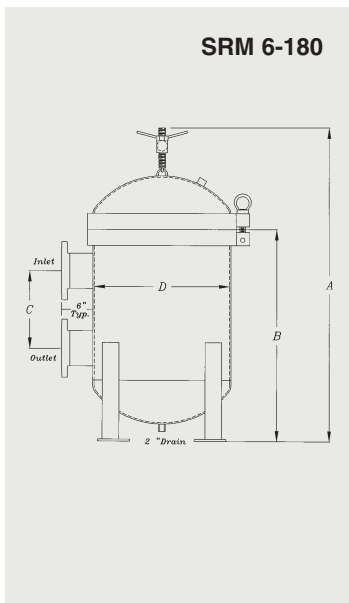
- Epoxy coating, electro-polish, and fuse or Teflon® coating
- Higher pressure ratings available up to 3,000 psi
- Variety of lid-lifting devices — Hydraulic, Jack, or Manual Wheel Davit
- Jacketing
- Sanitary construction
- Wire mesh support baskets
- Mesh-lined basket for straining applications — 50 micron and higher
- Differential pressure gauge taps

### Dimensions Chart for Multi-Bag Vessels, Bottom-in Bottom-out



Unit Type	No. of Baskets or Bags	Std. Conn. RFF	A	B	C	D	Surface Area Sq. Ft.	Max. GPM Strainer	Max. GPM Filter Bags	Shipping Weight lbs.
SRM 2	2	3"	58"	44"	26"	16"	9.0	600	400	275
SRM 3	3	3"	67"	44"	26"	18"	13.5	900	600	625
SRM	4	4"	79"	46"	28"	24"	18.0	1200	800	875
SRM 5	5	6"	82"	48"	32"	26"	22.5	1500	1000	1108
SRM 6	6	6"	82"	48"	32"	26"	27.0	1800	1200	1130
SRM 7	7	8"	85"	59"	36"	30"	31.5	2100	1400	1170
SRM 8	8	8"	89"	59"	36"	30"	35.5	2400	1600	1355
SRM 10	10	10"	90"	64"	46"	36"	44.5	300	2000	1500
SRM 12	12	12"	90"	64"	46"	42"	54.0	3600	2400	1610

### Dimensions Chart for Ergonomically Superior Multi-Bag Vessels, Side-in Side-out



Unit Type	No. of Baskets or Bags	Std. Conn. RFF	A	B	C	D	Surface Area Sq. Ft.	Max. GPM Strainer	Max. GPM Filter Bags	Shipping Weight lbs.
SRM 2	2	3	55"	40"	12 <sup>3/4</sup> "	16"	9.0	600	400	250
SRM 3	3	3	55"	40"	12 <sup>3/4</sup> "	18"	13.5	900	600	565
SRM 4	4	4	55"	42"	12 <sup>3/4</sup> "	24"	18.0	1200	800	785
SRM 5	5	6	60"	42"	12 <sup>3/4</sup> "	26"	22.5	1500	1000	995
SRM 6	6	6	60"	42"	12 <sup>3/4</sup> "	26"	27.0	1800	1200	1020
SRM 7	7	8	66"	47"	15"	30"	31.5	2100	1400	1055
SRM 8	8	8	66"	47"	15"	30"	35.5	2400	1600	1220
SRM 9	9	10	74"	52"	18"	36"	40.0	2700	1800	1310
SRM 10	10	10	74"	52"	18"	36"	44.5	3000	2000	1350
SRM 11	11	12	85"	62"	22"	36"	49.5	3300	2200	1420
SRM 12	12	12	85"	62"	22"	36"	54.0	3600	2400	1450

All the above dimensions are for **REFERENCE ONLY**.

# SRP Series Portable Filter Carts



Typical single stage SRP



Custom designed dual stage SRP  
(pre-filter/final filter)

Strainrite's compact and durable portable filtration carts (SRP) are ideal for those who need filtration at several locations but don't have the footprint space, or the budget for multiple fixed filtration units. The SRP typically is sold without the pump, enabling the user to select the ideal pump for their application. Turn-Key systems complete with factory-installed pumps are readily available.

The SRP's are designed to offer customers the greatest flexibility to handle a variety of applications throughout a manufacturing facility. Available in two or four wheel designs, these units are the perfect choice for station to station, or remote location filtration applications.

## Standard Features

- Portable for movement from one line or application to the next
- Complete prefabricated system
- Four different pump and motor configurations available
- Swing bolt design
- 304 SS wire mesh or perforated support baskets
- Two or more vessels piped in series (standard)
- Vent and pressure gauge taps
- Side-in Bottom-out flow design
- Heavy duty wheels

## Optional Features

- Epoxy, Teflon® or Fuse coatings
- ASME code stamp
- Vessels configured in parallel
- Differential pressure gauges
- Side-in Side-out flow design



# IMMS

## Integrated Media Management Systems



Tired of waiting for service companies to change out your granular beds?

Is the downtime of a break-through costing you money?

The IMMS provides an easy way to utilize a well-known and widely used technology, without all the headache and expense typically associated with it.

The IMMS can be used with any type of granular media (i.e. organo clay, finer grades of carbon, activated aluminas, zeolites, etc.). Media packs are available through your Strainrite distributor.

One IMMS media vessel can hold several different media types to address a variety of contaminants in one pass. It provides an alternative method of meeting your wastewater treatment, or process fluids challenges.

One person can exchange old media for new in a matter of minutes!

**Patent pending**

### Standard Features

- Carbon Steel construction
- Epoxy coating on vessel interior
- Manual hoist
- Metal skid with forklift slots
- Inlet and outlet pressure gauges
- Vent ports on the top of every vessel
- Pre and post filters are Side-in, Side-out design
- Buna O-rings

### Vessel Options

- Coal tar epoxy coating on vessel interior
- Electric Hoist
- Stainless Steel construction

### Media Types Available

<b>BC</b>	Bituminous Coal
<b>CC</b>	Coconut Carbon
<b>OC</b>	Organo Clay
<b>ZE</b>	Zeolite
<b>AC</b>	Attapulgite Clay
<b>AAA</b>	Activated Alumina - A

# Strainrite Open Gravity Systems



Open Gravity filter systems are typically used when filtrate is pumped into an atmospheric tank, or where very small batches are the norm, and quick filter bag change out is a priority. The threaded inlet coupling and light-weight nature of this product allows this filter to be moved from one process feed pipe to another with ease.

Strainrite Open Gravity systems feature the positive locking action of a quick disconnect clamp. Unlike competing designs, including adapter head units, Strainrite systems, with their industrial-grade mesh or perforated support baskets, easily handle higher viscosities and increased differential pressures.

## Strainrite “Pig Catchers”



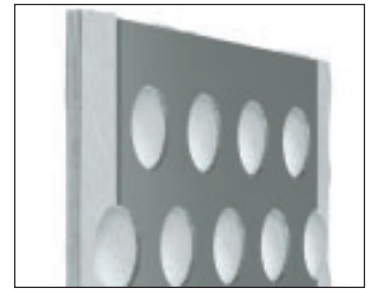
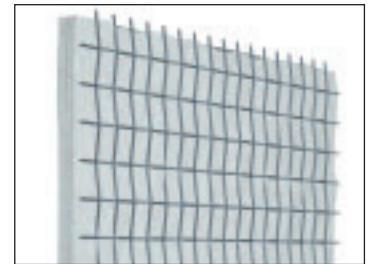
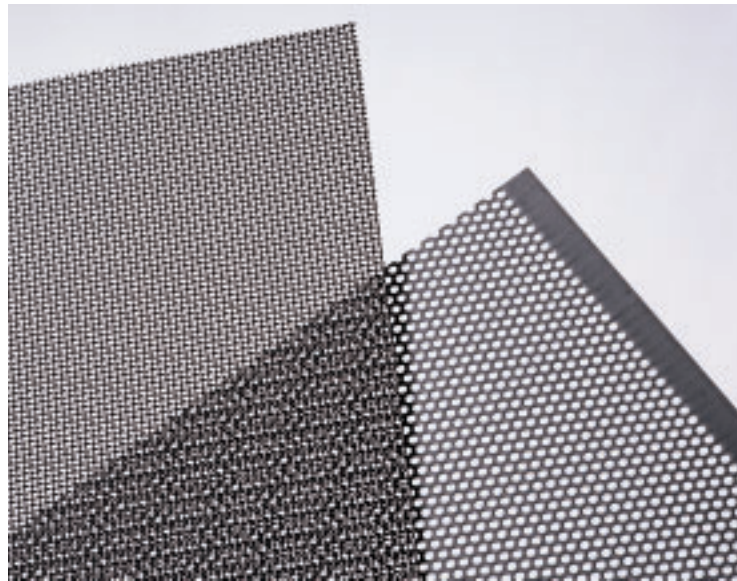
Strainrite “Pig Catchers” are the professional maintenance person’s choice for catching pig wads used to clear process lines, preventing cross-contamination of fluids. The swing bolt closure design and removable containment grate make wad retrieval and vessel cleanup a snap.

### Standard Features

- Adjustable height tripod stand
- Swing bolt cover closures
- Flange sizes from 1" to 12" NPT, RFF, or Quick Disconnect connections
- Side inlet/Bottom outlet
- .25" Vent Relief Tap

# Wire Mesh vs. Perforated

“All support baskets are not created equal...”



### Standard Features

- #1 and #2 size baskets use a wire mesh that is a 10 x 10 wire and 1600 micron
- Perforation for the SRL 1-30 and SRL 1-65 Filter Bag Vessels are 1/8" hole on 3/16" center

### Advantages of Wire Mesh over Perforated

- Greater flow rates — increased production capacity — *improved profits*
- 28% to 38% longer bag life — reduced filter bag operating costs — *improved profits*
- Less downtime — increased productivity — *improved profits*
- Less product loss — which occurs during filter bag change-out — *improved profits*
- Less filter bag waste to dispose of — waste minimization — *improved profits*
- Easier replacement of filter bags since positive pressure tends to push clogged media deep into the perforated holes of the basket — reduced labor time for change-out — *improved profits*

### Total Flow Filtered

Test A ΔP	10 x 10 Wire Mesh 1600 Micron	Perf. Metal 7/64" Holes on 3/32" Centers	Increased Life of Strainrite Filter Bags
15 psi	1370 gal.	1070 gal.	28%
20 psi	2950 gal.	2190 gal.	32%
25 psi	5905 gal.	4380 gal.	35%
27 psi	7380 gal.	5480 gal.	35%

Test B ΔP	10 x 10 Wire Mesh 1600 Micron	Perf. Metal 3/16" Holes on 1/4" Centers	Increased Life of Strainrite Filter Bags
15 psi	1370 gal.	1005 gal.	36%
20 psi	2950 gal.	2165 gal.	36%
25 psi	5905 gal.	4300 gal.	37%
27 psi	7380 gal.	3550 gal.	38%

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