## Custom & Standard Filter Elements



ISO 9001:2008 CERTIFIED

# What Makes It a Swift Filter?





## Need custom filter elements? We'll make it happen!

We built our business by accepting non-standard projects that the "other guys" didn't want. Today, we are structured to efficiently manufacture both replacement standard filter and strainer elements **and** customized filter elements.



#### We'll do Special Machining

Specially-machined end caps and other non-standard requirements are routine for us. We have numerous special machines as well as in-house CNC equipment

to accommodate modified designs.

We'll do Short-Run Projects

How small an order is too small? Give us a call. We often can help you with orders that other manufacturers don't want to touch. (Of course, we have the capacity for longer production runs as well.)

#### Engineering needed? We'll be happy to help

Special requests and custom projects require engineering effort. We're here to invest the brain power to make custom or customized designs happen!





With over 30 years of making custom and element interchanges for other filter manufacturers, we are very good at figuring out what other companies do. However, we also invent our own products. SwiftGreen<sup>™</sup> Reusable Bypass Valve Return Line elements are a recent example: this patent pending design minimizes potential hazardous waste while substantially saving money.

> Save the reusable ByPass Valve

#### Dispose of used filter element

### ISO Certified and ready to get started



Innovation

is our strength

Our Quality Management System has ISO 9001:2008 with Design certification, testament to our dedication to both manufacture and design.

## We have a full range of media choices

Swift manufactures filter elements with cellulose, micro-fiberglass, stainless steel wire cloth and sintered stainless steel felt, which is ideal for demanding high temperature, high pressure applications. Got a special media in mind? Give us a call.

If a major filter maker made it, we probably can make it for you, too.









#### SWIFTMESH<sup>™</sup> — Epoxy-Bonded Stainless Filters

Swift Filters manufactures stainless steel filter elements using epoxy-bonding construction techniques. Epoxybonded elements provide sufficient strength for many high pressure applications and is ideal for most fluid applications.

SWIFTMESH elements are cleanable. They are easily restored to service by back flushing, ultrasonic or other nonabrasive cleaning techniques. This is particularly valuable and cost-effective in applications involving hazardous fluids. Because our elements are cleanable, disposal costs are significantly reduced.

#### SWIFTMESH Stainless Filter Element Specifications:

- Filter elements are manufactured from 304 or 316 stainless steel wire cloth
- Mesh Patterns Square Weave, Twilled Dutch Weave, Plain Dutch Weave
- Designed and tested to withstand collapse pressure ratings of 300-6,000 PSID
- Temperature ratings from -300 to +800 degrees F
- Various micron ratings available from 2µm to 1000µm (nominal)
- Various mesh sizes available
- SWIFTMESH Stainless Steel filter elements are cleanable for long service life

#### SWIFTMESH<sup>™</sup> — Crimped Construction Stainless Filter Elements

We offer crimped construction, a process particularly applicable for Industrial Process Cartridges. These cartridges are typically pleated or cylindrical (wrapped), with a lightweight core and a support ring. Industrial process cartridges overcome the temperature and compatibility limitations of cellulose or synthetic fiber cartridges by being manufactured of stainless steel using crimping and welding, with no brazing or epoxy bonding used.

Made entirely of 304 or 316 stainless steel, our process cartridges are cleanable, reusable and can withstand differential pressures up to 60 PSI (300 PSID elements are also available). These elements are also good up to 500 degrees F instead of the usual 250 degrees F and are unaffected by most corrosive fluids. Particle retention can be as fine as 5µm. Element media can be pleated to increase surface area. Cartridges rated at 100µm or finer have an underlying support layer of coarser stainless steel mesh to prevent pleat collapse.



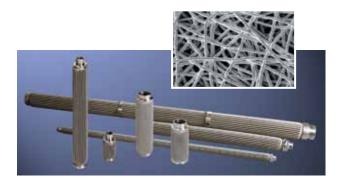
#### SWIFTMESH<sup>™</sup> — Welded Construction Stainless Steel Filter Elements

These woven wire mesh cleanable elements feature rugged stainless steel components and welded construction for a wide variety of applications, including hostile environment applications involving extreme temperatures, high pressures and corrosive fluids. These elements eliminate the harmful effects of media migration, and provide precise filtration control of particles larger than the micron rating. The elements are easily cleaned to restore their useful life by backflushing or other techniques.

Swift woven wire mesh elements feature all stainless steel components including the end caps, center tube, and woven wire mesh. The precision woven 300 series stainless steel wire mesh pleat packs provide positive particle size cutoff, and totally eliminate media migration as a source of downstream contamination. With proper cleaning techniques, these elements may be returned to service. When utilized in filtration applications involving hazardous fluids, the cleanability of these elements can dramatically reduce disposal costs.

The rugged components and welded construction of the woven wire mesh elements make them ideal for many high pressure applications. Swift offers elements designed for collapse pressure ratings from 300 psi to 4500 psi. Applications involving extreme temperature ranges that would destroy conventional epoxy constructed elements are ideal candidates for utilizing woven wire mesh elements. These elements can be used in temperatures ranging from -300 to +800(°F). Swift anneals all welded woven wire mesh to minimize the possibility of element failure caused by the combined effects of intergranular corrosion and high pressure.

Swift elements are available in many efficiency ratings from 2 to 200 microns. The precisely controlled pore size of the woven wire mesh assures absolute particle efficiency in every micron size.



#### SWIFTFELT<sup>™</sup> — Metal Felt Filter Elements for High Pressure, High Temperature

SWIFTFELT<sup>™</sup> metal felt filter media is made with thin filaments of nonwoven stainless steel. This porous metal felt is ideal for high pressure, highly corrosive, highly viscous or radioactive applications. Elements made from metal felt feature extremely high porosity (up to 85%), high flow rates (up to 20 times higher than other media types), and very long life.

Random fiber filtration (metal felt) can provide absolute particle retention, longer on-stream time and high dirt-holding capacity for under 60 micron filter elements. Although more expensive, it often offers clear advantages over wire cloth, sintered metal or non-metallic fibers. Its high temperature, high pressure and corrosion resistance combined with almost unending cleanability, make felt filters highly economical for hostile environments.

- Extremely high porosity (up to 85%)
- Low pressure drop
- Ease of cleaning
- High strength
- Heat & corrosion resistance
- Can be used for surface or depth filtration
- Stainless steel and other alloys available





#### Micro-Fiberglass Filter Elements



SWIFTGLASS<sup>™</sup> filter media is manufactured from inert micro-fiberglass material

bonded with a stable resin, randomly set into a multi-layer composite.

SWIFTGLASS micro-fiberglass filter elements are an appropriate selection for a majority of applications for liquids and gases. They offer extra protection for your filtration system because of their increased dirt holding capacity and particle capture efficiency. The fibers in our SWIFTGLASS filters are typically small and uniform in size. This keeps contamination out of your system for longer system life and less downtime. Our filter media conforms to latest ISO 16889 standards and every non-custom element that we manufacture is functionally and dimensionally interchangeable with OEM filters.

#### SWIFTGLASS Micro-Fiberglass Filter Element Specifications:

Designed to provide Bx(c)=1000 filtration efficiencies (ISO 16889) at 2.5, 5, 7, 12 and 22 microns with a minimum Bx=200 (ISO 4572) at 1, 3, 6, 12 and 25 micron ratings

Designed to withstand from 150 PSID to 3250 PSID collapse pressure ratings.

For maximum element durability and long lifecycles, elements can be co-pleated with support layers, including:

- Polymer mesh
- Annealed epoxy-coated steel wire
- Stainless steel wire cloth



#### **Cellulose Filter Elements**

SWIFTCELL<sup>™</sup> filter media is made from resinimpregnated cellulose filter media. The filter media is pleated and then assembled into an economical disposable filter media. Cellulose filter elements are low cost, disposable, and nominally rated.

Cellulose filter elements are available from Swift Filters as either aftermarket products or as products for original equipment manufacturers. We can custom engineer products to meet your application's requirements.

#### SWIFTCELL<sup>™</sup> Cellulose Filter Element Specifications:

Rated at Bx = 2

Elements available in standard grades of 5,10, 20 and 40 microns

Designed to withstand 150 & 300 PSID collapse pressure ratings

Note: 300 PSID cellulose elements may require co-pleated mesh support screen for additional rigidity.





#### Spin-On Filter/ Replacement Spin-On Filters

Swift 500 Series high performance replacement Spin-On filter products are dimensionally and functionally interchangeable with Pall<sup>®</sup> HC 7500 and Parker<sup>®</sup> 50 AT/50 AT-2 Series filters

- Temperature Range: -65°F to +250°F
- Maximum Operating Pressure: 200 psi
- Maximum pressure without bypass: 80 psi
- Beta Rated SWIFTGLASS<sup>™</sup> media: 1, 3, 6, 10, & 25 Micron
- Application: Petroleum based fluids only. Call SWIFT for synthetic fluids
- Buna "N" Gasket standard. Fluorocarbon Gasket optional, call SWIFT



#### Portable Off-Line Filtration

The Swift Portable Filtration System delivers efficient filtration or flushing to where it's needed. It provides a convenient method to pre-filter new fluids or maintain the cleanliness of fluids within a system.

- Fits directly on top of 55 gallon drum or available with wheels
- 1 GPM flow capacity for petroleum-based fluids at 10,000 SSU
- Two stage filtration
- Differential pressure indicators
- Maximum oil temperature: 150°F
- 35 lbs





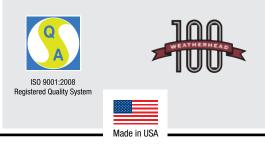


#### **High Performance Racing Elements**

Swift racing filter elements are designed and engineered to meet the exact requirements of the performance racing industry. Our racing filter elements trap dirt and particulates that rob engine performance and horsepower. Swift racing filters help prevent clogged fuel injectors and unnecessary wear and tear on expensive internal engine and drive train components. Our products have a high dirt-holding capacity and low pressure drop that can help prevent premature failures.

Racing filter elements are designed and manufactured to be compatible with most high performance racing fluids including synthetic oils, transmission fluid, gas, alcohol, nitro methane, water and water glycols. We have high performance disposable racing filters including nominal rated cellulose and absolute rated synthetics.

Every Swift product is manufactured in the USA at our facility in Oakwood Village, Ohio. For over 30 years we have been certified as an approved source for the U.S. Department of Defense and for private aerospace manufacturers. For six consecutive years we have been recognized with the Weatherhead 100 Award as one of the 100 fastest-growing companies in Northeast Ohio.





We also have cleanable stainless steel wire cloth high performance filter media, absolute



rated in 304/316 materials. Our media options offer numerous micron ratings from 0.2µm to 863µm (nominal) in epoxy bonded, crimped and welded construction.

To keep your valuable high performance and racing components protected from contamination and a loss in performance capability, choose a Swift Filters high performance racing filter.

Our elements are on fuel systems in IRL® • NASCAR® • NHRA® • NTPA® American LeMans® • Sprint Car • Offshore Powerboat Competition



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