

Replacement Filter Elements



Pressure Filters



Return-Line Filters



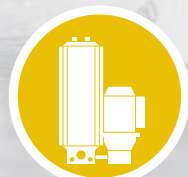
In-Line Filters



Spin-On Filters



Offline and Bypass Filters



Filtration Systems





The STAUFF Filtration Technology product range contains an extensive product range in the areas of filtration and purification of oils and other media, which fully meets – or even exceeds – the requirements of modern service and maintenance of machines and equipment.

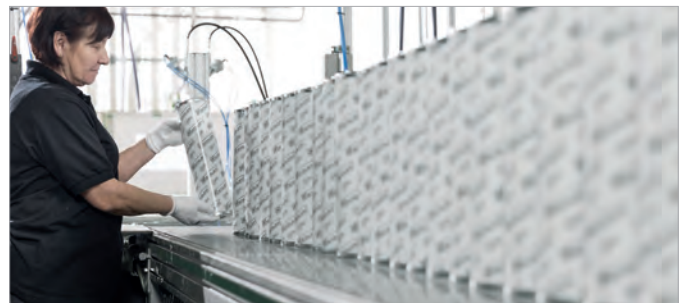
As an experienced manufacturer, STAUFF provides quick and direct access to a complete range of replacement filter elements for industrial liquids such as hydraulic and lubrication oils, heavy fuels, water, chemicals, coolants and other media – equal in form, fit and function to the original products while maintaining or surpassing their performance.

Flexible manufacturing lines and extensive stock-keeping in the country of destination guarantee fast reaction times and shortest delivery times.

STAUFF guarantees prompt service, even for customised solutions according to customer's specifications or based on our in-house development.

STAUFF filter housings and systems can be installed in the pressure, suction or return line. They are already planned in suitable positions in the hydraulic circuit during the design phase of a machine, or added at a later stage in the course of retrofitting or upgrading.

Offline and bypass filters, which are either used as portable units or installed permanently, complete the product portfolio.



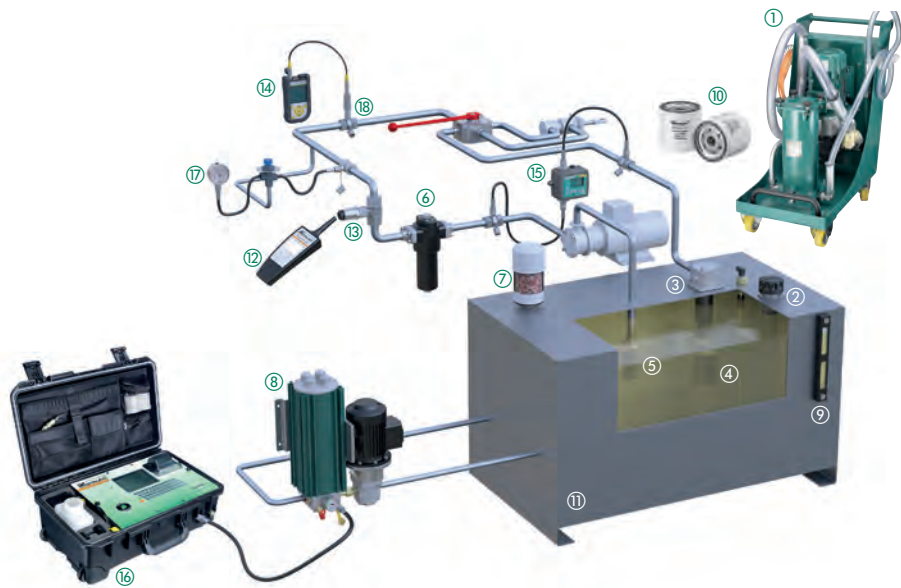
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**Selection of Components within the Hydraulic Circuit**

- |                                  |                  |
|----------------------------------|------------------|
| ① STAUFF Mobile Filter System    | <b>SMFS-U</b>    |
| ② STAUFF Plastic Filler Breather | <b>SPB</b>       |
| ③ STAUFF Return-Line Filter      | <b>RF</b>        |
| ④ STAUFF Diffusor                | <b>SRV</b>       |
| ⑤ STAUFF Suction Strainer        | <b>SUS</b>       |
| ⑥ STAUFF Pressure Filter         | <b>SF</b>        |
| ⑦ STAUFF Desiccant Air Breather  | <b>SDB</b>       |
| ⑧ STAUFF Offline Filter          | <b>OLS</b>       |
| ⑨ STAUFF Level Gauge             | <b>SNA</b>       |
| ⑩ STAUFF Spin-On Filter          | <b>SSF</b>       |
| ⑪ Oil tank                       |                  |
| ⑫ STAUFF Reader                  | <b>PT-RF</b>     |
| ⑬ STAUFF Pressure Transmitter    | <b>PT-RF</b>     |
| ⑭ STAUFF Hydraulic Tester        | <b>PPC</b>       |
| ⑮ STAUFF Particle Monitor        | <b>LPM-II</b>    |
| ⑯ STAUFF Laser Particle Counter  | <b>LasPac-II</b> |
| ⑰ STAUFF Pressure Gauge          | <b>SPG</b>       |
| ⑱ STAUFF Test Coupling           | <b>SMK / SKK</b> |



**Pressure Filters** ⑥ are placed behind the pump and clean the hydraulic oil before it flows through down-stream components like valves, cylinders and so on. The main reason for pressure filtration is the protection of downstream, sensitive components.

Eroded particles from the pump are immediately filtered out of the hydraulic oil. Besides working as a protection filter, Pressure Filters also help to maintain the required purity class.

Because it is placed right behind the pump, a Pressure Filter has to withstand the maximum system pressure. The filter element in the Pressure Filter also has to withstand the loads and is more intricately constructed, for example as a Return-Line Filters element.

**Return-Line Filters** ③ are installed in the Return-Line, on top of or within the oil tank. They filter the hydraulic oil before it flows back into the reservoir. This ensures that contamination arising in the components does not get into the tank. Return-Line Filters maintain the targeted purity class like Pressure Filters. However, because of their arrangement, they do not fulfil the additional function of a protection filter. In contrast to a Pressure Filter, it only has to withstand low pressure levels.

**Diffusers** ④ are used in combination with Return-Line Filters and ensure that the returning oil flow is settled before it reaches the oil tank thereby preventing foaming and re-suspension of deposited dirt.

The job of **Suction Strainers** ⑤ is mainly to provide functional protection of the downstream pumps in the circulation. Suction Strainers always have to be provided if the risk of pump damage from coarse impurities is particularly high. This risk exists if impurities are collected in the tank and if they can't be filtered out afterwards. Suction Strainers are coarse filter elements with a micron rating that is usually bigger than 100 µm.

**Filler Breathers** ② are mounted on the oil tank and prevent the entry of dirt from the surroundings during tank breathing. They should be chosen with a filter unit that is similar to the working filter (Pressure Filter, Return-Line Filter).

The replacement cycles of filter inserts is highly dependent on the surrounding conditions of the hydraulic system.

Another variant of the breather is the **Desiccant Air Breather** ⑦. The additional function of this filter is dehumidification of the inflowing air with a special silicate gel.

**Offline / Bypass Filters** ⑧ / ① are not part of the main hydraulic system. They are supplementary to achieve the best possible filtration results. Because of the high efficiency of the Offline / Bypass Filters, purity levels are reached that cannot be achieved with conventional main filter systems.

**Offline Filters** work with an integrated motor / pump unit that draws in the fluid from the system, filters it and then feeds it back into the tank. Because the offline filter is independent from the hydraulic main circuit, i.e. it can still be operated if the hydraulic system is switched off, it is used in practice for continuous cleaning of the tank.

**Bypass Filters** on the other hand use the existing system pressure to draw a small volumetric flow out of the hydraulic system for filtration. They are only active while the unit is in operation.

Another mobile variant of the bypass filter is the **Mobile Filter System** ①.

STAUFF provides a complete range of **Spin-On Filters** ⑩ which can be used either as Suction Filters or as Return-Line filters for low pressure applications.



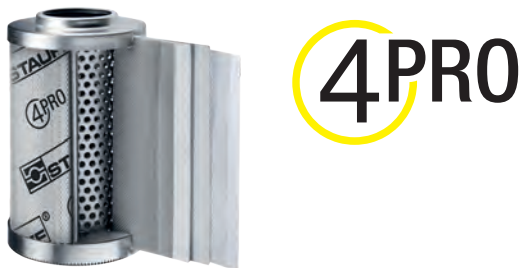


## Replacement Filter Elements for Applications involving Hydraulic and Lubrication Oils

### The STAUFF 4PRO Glass Fibre Elements

The PLUS for customers:

- Longer operating times through higher dirt holding capacity
- Improved energy efficiency through lower differential pressure
- Excellent  $\beta$  values and outstanding  $\beta$  stability



The 4Pro stands for 4 pros that characterise STAUFF glass fibre materials:

- **proACTIVE**
- **proGRESSIVE**
- **proFESSIONAL**
- **proTECTION**

Or simply: **Fo(u)r Protection**

In terms of the  $\beta$  value, STAUFF elements have always exhibited excellent performance. For those who take filtration seriously, there's no other valid approach – the measured values must hold up under any inspection. The elements cannot afford any vulnerabilities. The new generation of elements also have excellent dirt holding capacities. Values that users have been looking for. Values that make it possible for the user to extend operating times thereby providing significant reductions to purchasing costs for elements as well maintenance costs.

### Protecting Filter Elements Against Direct Flow Impact

The sensitive filter bellows on filter elements are frequently prone to damage during transportation, storage and filter replacement work. In addition, large particles in the flow of fluid may harm the filter material.

STAUFF offers a solution: SE and RE series filter elements with protective sheath (only available for glass fibre elements). This is a thin, perforated plastic sheet that completely encases the pleats of the filter from the outside as well as making the element more stable. A further positive effect is that the volume of flow is distributed more evenly by the protective sheath, thus ensuring an efficient flow rate.

In its standard version, the foil is printed with the STAUFF 4PRO logo, eliminating any mix-up with other brands. Larger quantities can also be produced with a customised imprint on the sheath.

### $\beta$ value

Key evaluation criteria for filter elements using glass fibre technology are the retention rate (micron rating) the  $\beta$  value, the  $\beta$  stability, the dirt holding capacity and the initial pressure differential. These values are determined using the multipass test established by ISO 16889.

The designation for STAUFF elements typically includes a rating based on filter fineness.

Filter designation $\beta$ value > 200 according to ISO 4406	$\beta_{(c)} > 200$ ISO 11171	$\beta_{(c)} > 1000$ ISO 11171
03	4,0 $\mu\text{m}_{(c)}$	4,5 $\mu\text{m}_{(c)}$
05	5,0 $\mu\text{m}_{(c)}$	6,0 $\mu\text{m}_{(c)}$
10	8,8 $\mu\text{m}_{(c)}$	11,0 $\mu\text{m}_{(c)}$
20	21,0 $\mu\text{m}_{(c)}$	23,0 $\mu\text{m}_{(c)}$

### Filter Material – Quality And Properties

The choice of the right filter material is dependent on different criteria. Among others, this includes the type of application, the filter function, degree of contamination or alternatively the required dirt-hold capacity as well as requirements of chemical or physical resistance. Inorganic Glass Fibre, Polyester, Cellulose, Stainless Fibre Material and Stainless Steel Wire Mesh are used for hydraulic applications.

The following list gives you an overview of how these five filter materials differ with regard to specific properties:

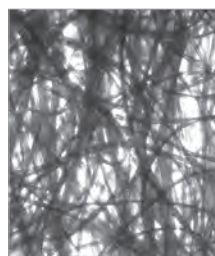


#### Inorganic Glass Fibre

- Inorganic Glass Fibre based on synthetic fibres with acrylic resin binding
- Large dirt-hold capacity
- Excellent separation efficiency of the finest particles due to the three-dimensional labyrinth structure with deep-bed filtration
- Outstanding price/performance ratio

#### Micron rating

- 3 ... 25  $\mu\text{m}$  (alternative micron ratings on request)

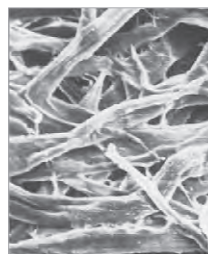


#### Polyester Fibre

- 100% Polyester Fibres with thermal bonding
- High pressure differential resistance
- Good chemical resistance
- High separation efficiency of the finest particle
- Tear-proof structure

#### Micron rating

- 3 ... 25  $\mu\text{m}$  (alternative micron ratings on request)

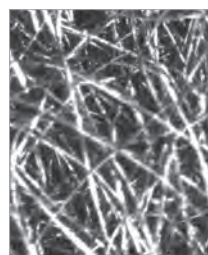


#### Cellulose Fibre

- Filter material made of Cellulose Fibres with special impregnation
- Variants with lowest price with good dirt-hold capacity
- Not suitable for water based fluids

#### Micron rating

- 10 ... 50  $\mu\text{m}$  (alternative micron ratings on request)

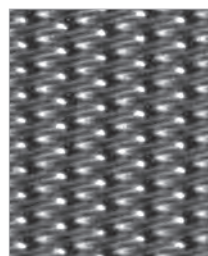


#### Stainless Fibre

- Sintered Stainless Fibres with three-dimensional labyrinth structure for depth filtration
- Low flow resistance with high dirt-hold capacity
- Excellent chemical and thermal resistance

#### Micron rating

- 3 ... 25  $\mu\text{m}$  (alternative micron ratings on request)



#### Stainless Mesh

- Wire Mesh fabric made of material 1.4301 or 1.4305 for surface (other material on request)
- Type of weave: square weave or Dutch weave
- Low flow resistance due to large-pored screening surface
- Excellent chemical and thermal resistance

#### Micron rating

- 10 ... 1000  $\mu\text{m}$  (alternative micron ratings on request)





## Replacement Filter Elements for Applications involving Hydraulic and Lubrication Oils

### Product Description

STAUFF manufactures one of the most comprehensive ranges of replacement filter elements for hydraulic and lubrication applications which are compatible with most of the common competitor products.

The STAUFF Replacement Element Program includes replacement elements for over 10.000 part numbers covering almost every major international brands of filter elements. The majority of these are available from stock.

Continuous improvement of the materials used as well as strict quality controls which take into consideration international standards guarantee the consistently high performance data of the filter elements.

STAUFF impresses in particular with its:

- Innovative research, design and development
- Modern production lines with complete monitoring of production
- Certified work processes in accordance with:
  - ISO 9001:2008 Quality management
  - ISO 14001:2004 Environmental protection
  - OHSAS 18001:2007 Occupational health and safety
- Comprehensive stocks and quick delivery
- Customised products in accordance with customer drawings or on the basis of STAUFF designs
- Comprehensive worldwide network of wholly-owned subsidiaries and sales partners

The development and manufacture of STAUFF Filter Elements are subject to strict testing in accordance with:

- ISO 2941 Collapse and burst resistance
- ISO 2942 Verification of fabrication integrity (bubble point test)
- ISO 2943 Compatibility with hydraulic media
- ISO 3723 End load test
- ISO 3724 Flow fatigue characteristics
- ISO 3968 Flow characteristics
- ISO 16889 Filtration performance test (multi-pass method)



#### Replacement Filter Element for Return-Line Filters

- Filter media: Inorganic Glass Fibre, Polyester Fibre, Cellulose Fibre, Stainless Fibre, Stainless Mesh
- Micron rating: see on page 4
- max.  $\Delta p^*$  collaps: 10 ... 25 bar / 145 ... 362 PSI
- Sealing Material: NBR (Buna-N®), FKM/FPM (Viton®), EPDM
- Bypass: 1 ... 7 bar / 0 ... 101 PSI
- End cap: Plastic / Steel / Stainless Steel (alternative End caps on request)

Note: \* Collapse / burst resistance as per ISO 2941.



#### Replacement Filter Element for Pressure Filters

- Filter media: Inorganic Glass Fibre, Polyester Fibre, Cellulose Fibre, Stainless Fibre, Stainless Mesh
- Micron rating: see on page 4
- max.  $\Delta p^*$  collaps: 10 ... 210 bar / 145 ... 3045 PSI
- Sealing Material: NBR (Buna-N®), FKM/FPM (Viton®), EPDM
- End cap: Steel / Stainless Steel / Aluminium (alternative End caps on request)

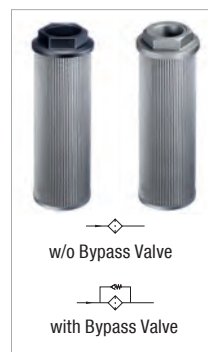
Note: \* Collapse / burst resistance as per ISO 2941.



#### Replacement Filter Element for Spin-On-Filters (see on Page 13)

- max.  $\Delta p^*$  collaps: 5 ... 10 bar / 72 ... 145 PSI
- Sealing Material: NBR (Buna-N®)
- Connection Thread: BSP / UNF / NPT

Note: \* Collapse / burst resistance as per ISO 2941.



#### Replacement Filter Element for Suction Strainers

- Filter media: Stainless Mesh
- Micron rating: 60, 125, 250  $\mu\text{m}$
- Flow Rate: 12 - 400 l/min / 3.1 - 104 US GPM
- Bypass: 0,2 bar / 2.9 PSI
- End cap: Aluminium / Plastic
- Connection Thread: BSP / NPT



## Interchanging STAUFF Filter Elements

As well as original Filter Elements for our own filter housings, STAUFF also provides access to a comprehensive range of Replacement Filter Elements. They match the quality and can be installed in the products of for example:

- Argo-Hytos
- Donaldson
- Eppensteiner Bosch Rexroth
- Fairey Arlon
- Hydac
- Mahle
- Internormen
- Pall
- Parker
- Other types are available on request

STAUFF offers many options for filter conversion, design and calculation and supports interested parties and customers with the design of efficient solutions:

- Online filter search with more than 65000 data sets under [www.filterinterchange.com](http://www.filterinterchange.com)
- Offline filter database with deposited measurements, filter surfaces and drawings
- Filter selection software for easy filter design and calculation

Thanks to their excellent dirt-hold capacity, all of the filter products supplied by STAUFF have an impressive long service life and high  $\beta$  value stability:

- Inorganic glass fibre, filter paper, stainless fibre (micron ratings between 3  $\mu\text{m}$  and 25  $\mu\text{m}$  respectively) as well as stainless mesh (micron ratings between 10  $\mu\text{m}$  and 1000  $\mu\text{m}$ )
- Maximum differential pressure depending on filter media and application for the options 16 bar / 232 PSI, 30 bar / 435 PSI or 210 bar / 3000 PSI.

Your local STAUFF Distributor will assist you interchanging to STAUFF elements.

Find the suitable STAUFF replacement filter element at

[www.filterinterchange.com](http://www.filterinterchange.com)



It's this easy:



search



enquire



save

Your advantages:

- Over 65000 datasets from various manufacturers
- Conversion for all common filter brands and types
- Watch list function for storing search results
- Request price and delivery time with enquiry history

## Order Codes

**RE - 045 - G - 20 - B / X - 123456**

① ② ③ ④ ⑤ ⑥ ⑦

### ① Type

Series	Filter Element
Argo-Hytos High Pressure Filter Element	SD
Argo-Hytos Medium Pressure Filter Element	MD
Argo-Hytos Return-Line Filter Element	RD
Argo-Hytos Suction-Line Filter Element	AD
Eppensteiner Bosch Rexroth High Pressure Filter Element	SS
Eppensteiner Bosch Rexroth Return-Line Filter Element	RS
Eppensteiner Bosch Rexroth Low Pressure Filter Element	LS
Fairey Arlon High Pressure Filter Element	SA
Fairey Arlon Return-Line Filter Element	RA
Hydac High Pressure Filter Element	SE
Hydac Return-Line Filter Element	RE
Mahle High Pressure Filter Element	SL
Mahle Low Pressure Filter Element	ML
Mahle Return-Line Filter Element	RL
Internormen High Pressure Filter Element	SN
Internormen Return-Line Filter Element	RN
Pall High Pressure Filter Element	SP
Pall Return-Line Filter Element	RP
Medium Pressure Filter Element according to standard	NL
Return-Line Filter Element according to standard	NR
Spin-On Filter Element	SFC
Special Element STAUFF	SXX

Note: Other series on request

### ② Nominal Size

Depending on the nominal flow or element length

### ③ Filter Material and Pressure Setting

Stainless Fibre, high collapse pressure	A, M
Stainless Wire mesh, low collapse pressure	B, S
Polyester Fibre, high collapse pressure	C, Q
Filter Paper, low collapse pressure	D, K, L, N
Inorganic Glass Fibre, low collapse pressure	E, G
Inorganic Glass Fibre, high collapse pressure	F, H
Stainless Wire Mesh, high collapse pressure	R, T, W

### ④ Micron Rating

Stainless Wire Mesh	
10 $\mu\text{m}$	10
20 $\mu\text{m}$	20
25 $\mu\text{m}$	25
40 $\mu\text{m}$	40
50 $\mu\text{m}$	50
60 $\mu\text{m}$	60
80 $\mu\text{m}$	80
100 $\mu\text{m}$	100
125 $\mu\text{m}$	125
150 $\mu\text{m}$	150
200 $\mu\text{m}$	200
500 $\mu\text{m}$	500
1000 $\mu\text{m}$	1000

Stainless Fibre	
3 $\mu\text{m}$	03
5 $\mu\text{m}$	05
10 $\mu\text{m}$	10
20 $\mu\text{m}$	20
25 $\mu\text{m}$	25

Filter paper	
10 $\mu\text{m}$	10
20 $\mu\text{m}$	20
50 $\mu\text{m}$	50

### ④ Micron Rating

Inorganic Glass Fibre	
3 $\mu\text{m}$	03
5 $\mu\text{m}$	05
10 $\mu\text{m}$	10
15 $\mu\text{m}$	15
20 $\mu\text{m}$	20
25 $\mu\text{m}$	25

Polyester Fibre	
3 $\mu\text{m}$	03
5 $\mu\text{m}$	05
10 $\mu\text{m}$	10
20 $\mu\text{m}$	20
25 $\mu\text{m}$	25

Note: Other micron ratings on request

### ⑤ Sealing Material

NBR (Buna-N®)	B
FKM/FPM (Viton®)	V
EPDM	E

Note: Other sealing materials on request.

### ⑥ Design Code

Only for information	X
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### ⑦ STAUFF Special Number

If element varies from the standard type	X
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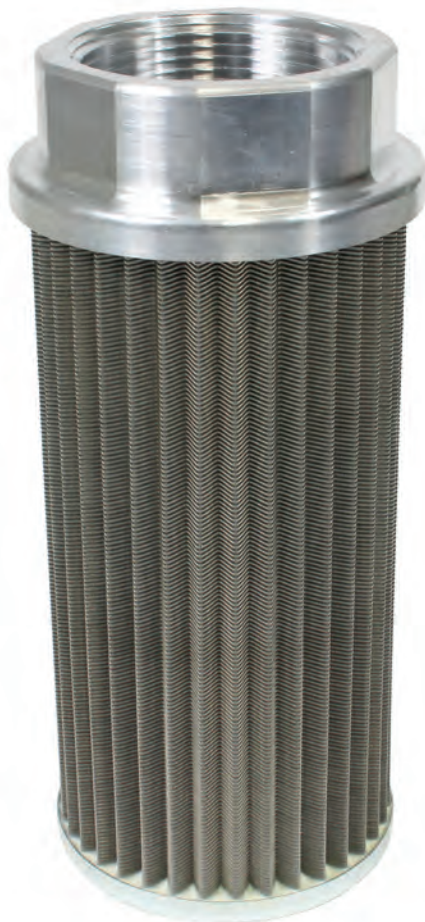
Special Filter Element Solutions



Special Ammonia Filter Element



High Pressure Block with Threaded Filter Element



Special Suction Strainer



Filter Element with Bypass and Special Sealing



High Pressure Threaded Elements

Custom-designed Filter element solutions in addition to the Original-STAUFF-Filtration Technology range according to customers specifications or based on STAUFF developments.

If you have similar requirements please contact STAUFF.







## Replacement Filter Elements for Single, Double and Automatic Filters

### Description

We supply replacement filter elements for single, double and automatic filters which are qualified for various type of fluids such as lubricating oils, heavy fuels, water, chemicals and cooling lubricants.

Thanks to state-of-the-art manufacturing technologies and numerous approvals and certifications for several international organisations and institutes, we can ensure the highest technical standard and best quality. Our clients include leading international companies.

For more than ten years, we provide shipping companies as well as ship chandlers and traders with hydraulic filters and replacement filter elements for filter housings of other manufacturers.



**Screw-In and Plug-In Elements**

Type SFK



**Paper, Fibreglass and Polyester Elements**

Type SBS-124



**Star-Pleated Elements, Basket and Ring Sieves**

Type SBS and SBK



**Plastic Elements**

Type SFK-320 and SFK-445



**Heavy Fuel Elements**

Type SFK-439



**Multimantle Elements**

Type SBM







## Pressure Filters

### Description

STAUFF Pressure Filters were designed for in-line mounting in hydraulic and lubrication systems. They are placed behind the pump and clean the hydraulic oil before it flows through down-stream components like valves, cylinders and so on. The main reason for pressure filtration is the protection of downstream, sensitive components. Eroded particles from the pump are immediately filtered out of the hydraulic oil. Besides working as a protection filter, Pressure Filters also help to maintain the required purity class.

Because it is placed right behind the pump, a Pressure Filter has to withstand the maximum system pressure. The filter element in the Pressure Filter also has to withstand the loads and is more intricately constructed, for example as a Return-Line filters element.

STAUFF Pressure Filters are available in many different sizes, connections and configurations.

### Media Compatibility

- Mineral oils, other fluids on request

### Options and Accessories

#### Valve

- Also available with bypass, reverse flow, non-return or multi-function valve

#### Clogging Indicator

- On request with visual, electrical or visual-electrical differential pressure indicator



#### Type SF

- High Pressure Filter designed for in-line assembly
- Threaded mounting holes on top and fluid ports on side of head
- Also available as toplayer, with bowl in two-part style
- Operating pressure: max. 420 bar / 6000 PSI
- Nominal flow rate: max. 1135 l/min / 300 US GPM
- Materials: Filter head: Spheroidal Graphite Cast Iron, Filter bowl: Cold Drawn Steel
- Connections: option of BSP, NPT, SAE thread or SAE flange (ISO 6162-1/2)



#### Type SFA

- Medium Pressure Filter designed for in-line assembly
- Threaded mounting holes on top and fluid ports on side of head
- Low weight and compact design
- Operating pressure: max. 160 bar / 2320 PSI
- Nominal flow rate: max. 240 l/min / 70 US GPM
- Materials: Filter head: Cast Aluminium, Filter bowl: Aluminium
- Connections: option of BSP, NPT, SAE-thread or SAE flange (ISO 6162-1)



#### Type SF-TM

- High Pressure Filter designed for manifold mounting
- Mounting holes and fluid ports on top of head
- Also available as toplayer, with bowl in two-part style
- Operating pressure: max. 315 bar / 4560 PSI
- Nominal flow rate: max. 1135 l/min / 300 US GPM
- Materials: Filter head: Spheroidal Graphite Cast Iron or rather Free Cutting Steel, Filter bowl: Cold Drawn Steel



#### Type SMPF

- Medium Pressure Filter designed for in-line assembly
- Operating pressure: max. 110 bar / 1600 PSI
- Nominal flow rate: max. 90 l/min / 25 US GPM
- Materials: Filter head and bowl: Aluminium
- Connections: BSP, SAE-thread



#### Type SFZ

- High Pressure Filter designed for sandwich plate mounting
- Available as right or left version
- Operating pressure: max. 315 bar / 4560 PSI
- Nominal flow rate: max. 30 l/min / 8 US GPM
- Materials: Filter head: Free Cutting Steel, Filter bowl: Cold Drawn Steel





## Return-Line Filters

### Description

STAUFF Return-Line Filters were designed as filters for tank-top mounting, tank-inside mounting or inline mounting. They filter the hydraulic oil before it flows back into the reservoir. This ensures that contamination arising in the components does not get into the tank. Return-Line filters maintain the targeted purity class like Pressure Filters. However, because of their arrangement, they do not fulfil the additional function of a protection filter. In contrast to a Pressure Filter, it only has to withstand low pressure levels.

The practical design of STAUFF Return-Line Filters enables quick assembly as well as easy exchange of the filter elements.

### Media Compatibility

- Mineral oils, others on request

### Options and Accessories

#### Valves

- Bypass valve integrated in the filter element (except STAUFF Return-Line Filter RTF)

#### Clogging Indicators

- On request with visual clogging indicator or electrical clogging switch
- Others on request



#### Type RF

- Filter bowl with option of thread connection (e.g. STAUFF Diffuser SRV) or leakage oil connection
- Operating pressure: max. 16 bar / 232 PSI
- Nominal flow rate: max. 500 l/min / 130 US GPM
- Materials: Filter head: Aluminium, Filter bowl: PA
- Connections: BSP, NPT, SAE thread or SAE flange (ISO 6162-1)



#### Type RFA

- Filter bowl with option of thread connection (e.g. STAUFF Diffuser SRV) or leakage oil connection
- Operating pressure: max. 25 bar / 365 PSI
- Nominal flow rate: max. 110 l/min / 30 US GPM
- Materials: Filter housing: Aluminium
- Connection: SAE thread



#### Type RFB

- Low weight and compact design
- Filter bowl with option of thread connection
- Filter head with option of integrated air filter
- Operating pressure: max. 10 bar / 145 PSI
- Nominal flow rate: max. 185 l/min / 52 US GPM
- Materials: Filter head: Aluminium, Filter bowl: PA
- Connections: BSP, NPT, SAE thread



#### Type RFS and RFS-D

- Robust design, suitable for high flow rates
- Filter bowl with option of BSP or SAE flange
- Operating pressure: max. 25 bar / 365 PSI
- Nominal flow rate: max. 1135 l/min / 300 US GPM
- Materials: Filter head and bowl: Steel
- Connections: BSP or SAE flange (ISO 6162-1)



#### Type RTF

- Filter bowl is designed to return the oil beneath the surface thus preventing entrainment of air
- Filter head with option of integrated air filter
- Operating pressure: max. 10 bar / 49 PSI
- Nominal flow rate: max. 380 l/min / 100 US GPM
- Materials: Filter head: Aluminium, Filter bowl: PA or Steel
- Connection: BSP or NPT, others on request



#### Type RTF-N

- Return-Line insert filter
- Custom reservoir design with an in-tank filtering system
- Magnetic pre-filtration
- Operating pressure: max. 10 bar / 145 PSI
- Nominal flow rate: max. 500 l/min / 132 US GPM
- Materials: Flange plate: Aluminium, Magnet rod / Bypass / Diffuser: Steel





## In-Line Filters

### Description

STAUFF In-Line Simplex Filters SRFL-S and Duplex Filters SRFL-D are designed for in-line hydraulic applications. With its compact construction and the easy maintain assembly the SRFL-S and SRFL-D Filters are suitable for flow rates up to 7000 l/min / 1850 US GPM.

The two housings of the Duplex Filter SRFL-D are connected with a special gate valve that is operated with a level or hand wheel. Therefore the filter may be serviced without shutting down the hydraulic system.

The STAUFF In-Line Filter SRFL-SW is designed for installation in water circulations. This filter can be used for cleaning of e.g. industrial water of descaling systems. The filter elements are designed as basket strainers, which keep the dirt during the element change.

### Media Compatibility

- Mineral oils, lubrication oils and water, others on request

### Options and Accessories

#### Valves (except REL Filter Elements)

- Bypass valve (integrated in the filter element)

#### Clogging Indicators

- On request with visual and electrical differential pressure indicator
- The SRFL-SW is also available with an visual-electrical differential pressure indicator



#### Type SRFL-S

- Version: Simplex
- Operating pressure: max. 14 bar / 200 PSI
- Nominal flow rate: max. 7000 l/min / 1850 US GPM
- Materials: Filter housing: Carbon Steel, Stainless Steel (on request)
- Connections: ANSI, DIN or SAE flange (ISO 6162-1/2)



#### Type SRFL-SW

- Version: Simplex, suitable for water Duplex on request
- Operating pressure: max. 16 bar / 232 PSI
- Nominal flow rate: max. 13330 l/min / 3521 US GPM
- Materials: Filter housing: Carbon Steel, Stainless Steel (on request)
- Connections: ANSI or DIN flange

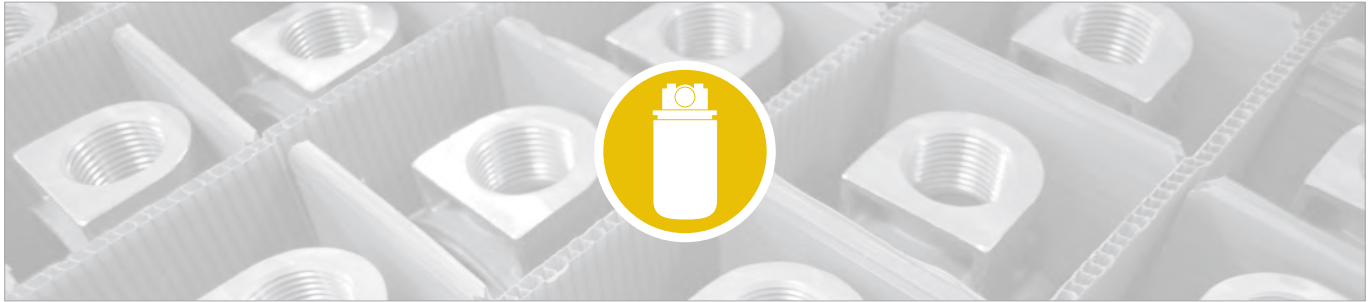


#### Type SRFL-D

- Version: Duplex
- With switch control for maintenance of the system without stoppage
- Operating pressure: max. 14 bar / 200 PSI
- Nominal flow rate: max. 7000 l/min / 1850 US GPM
- Materials: Filter housing: Carbon Steel, Stainless Steel (on request)
- Connections: ANSI, DIN or SAE flange (ISO 6162-1/2)







## Spin-On Filter Heads

### Description

STAUFF provides a complete range of Spin-On Filters which can be used either as Suction-Line filters or as Return-Line filters for low pressure applications. The various ranges meet international standards.

#### Material

- Filter head: Aluminium

#### Media Compatibility

- Mineral oils, others on request

#### Connections

- BSP
- NPT
- SAE flange
- SAE thread
- Other ports connections on request

#### Operating Pressure

- Max. 14 bar / 200 PSI

#### Temperature Range

- -30 °C ... +100 °C / -22 °F ... +212 °F

#### Nominal Flow Rate

- Max. 460 l/min / 120 US GPM

### Options and Accessories

#### Clogging Indicators

- Visual clogging indicator with coloured segments
- Electrical clogging switch
- Other types are available on request

#### Private Labelling

- On request, the filter elements can be printed with a private label



Spin-On Filter Heads  
designed for in-line assembly



Spin-On Filter Heads  
designed for tank top assembly



Spin-On Double Filter Heads  
designed for in-line assembly





## Spin-On Filter Elements

### Description

STAUFF offers a wide range of Spin-On filter heads and Spin-On filter elements.

#### Sealing Material

- NBR (Buna-N®)

#### Media Compatibility

- Mineral oils, other fluids on request

#### Temperature Range

- -30 °C ... +100 °C / -22 °F ... +212 °F

#### Filter Materials

- Wire Mesh, Brass Mesh, Filter Paper, Inorganic Glass Fibre, Stainless Wire Mesh and Water Absorbing Filter Material

#### Options and Accessories

##### Valves

- Filter elements type SFCT have an internal bypass and anti-drain back diaphragm



#### Types SFC-35/36, SFCT-35/36

- Use with Spin-On filter heads SSF-12, SSFT-12 and SSFT-12B
- Connection thread: G3/4
- Operating pressure: SFC: max. 12 bar / 174 PSI  
SFCT: max 7 bar / 100 PSI
- Differential Pressure: SFC: max. 4 bar / 58 PSI  
SFCT: max. 3 bar / 43,5 PSI
- Burst Pressure: SFC: min. 25 bar / 363 PSI  
SFCT: min 21 bar / 305 PSI



#### Types SFC-57/58, SFCT-57/58

- Use with Spin-On filter heads SSF-20L/100/120/120L/130/160 SSF-24B/24N/24S/25B/25FM/25 and SSFT-20B/20
- Connection thread: G1-1/4
- Operating pressure: SFC: max. 12 bar / 174 PSI  
SFCT: max 7 bar / 100 PSI
- Differential Pressure: SFC: max. 4 bar / 58 PSI  
SFCT: max. 3 bar / 43,5 PSI
- Burst Pressure: SFC: min. 25 bar / 363 PSI  
SFCT: min 21 bar / 305 PSI



#### Type SF-63

- Use with Spin-On filter head SLF
- Connection thread: 3/4–16 UNF
- Operating pressure: max. 14 bar / 200 PSI
- Differential Pressure: max. 5,5 bar / 80 PSI
- Burst Pressure: min. 20 bar / 290 PSI



#### Type SF-65

- Use with Spin-On filter head SAF
- Connection thread: 1–12 UNF
- Operating pressure: max. 14 bar / 200 PSI
- Differential Pressure: max. 5,5 bar / 80 PSI
- Burst Pressure: min. 20 bar / 290 PSI



#### Type SF-67

- Use with Spin-On filter heads SSF-20L/100/120/120L/130/150/160/180 SSF-24B/24N/24S/25B/25FM/25
- Connection thread: 1/2–16 UNF
- Operating pressure: max. 14 bar / 200 PSI
- Differential Pressure: max. 5,5 bar / 80 PSI
- Burst Pressure: min. 20 bar / 290 PSI



#### Private Labelling

- On request, the filter elements can be printed with a private label





## Offline and Bypass Filters

### Description

STAUFF Offline and Bypass Filter Systems are designed to keep hydraulic and lubrication systems free of particles and water contamination. STAUFF OLS and BPS Units utilize the STAUFF Systems concept for the removal of contamination from hydraulic and lubrication systems. Desiccant Air Breathers, which clean and dry the air entering the reservoir, are also part of this contamination removal system.

STAUFF Systems will provide optimal system cleanliness for today's sophisticated hydraulic and lubrication systems.

- Increased flow capacity and dirt-hold capacity
- Prevention of channel forming by radial filtration direction
- Extremely clean oil due to the high filtration efficiency  $\beta_{0,5} \geq 200$ ,  $\beta_2 \geq 2330$
- Compact and easy-maintenance design
- Longer usage life for oil and components

### Material

- Housing: Anodized Aluminium, available with one, two or four filter housings in two different length

### Housing Pressure

- Max. 20 bar / 290 PSI

### System Volume

- Max. 10800 l / 2853 US GAL

### Connections

- G3/8, G1/2 and G3/4, Fitting with 18L connection

### Differential Pressure

- Max. 6,2 bar / 90 PSI

### Temperature

- Max. +80 °C / +176 °F media temperature

### Media Compatibility

- Mineral and lubrication oils, others on request

### Options and Accessories

#### Clogging Indicators

- Visual Clogging Indicators



#### Type OLS

- Offline Filter System with intergrated motor/pump unit
- Availab Special designed for industrial applications



#### Type BPS

- Bypass filter units are especially designed for mobile
- Applications in hydraulic and/or transmission systems
- No special motor-pump unit is required



#### Type OLSW

- Water absorbing filter elements with large water holding capacity



#### Type SMWV

- Designated oil purification unit, it dehydrates and cleans most types of oils such as lubricating, hydraulic, transformer and switch oils
- Efficient water, gas and particle removal
- System volume: max. 3.000 l / 795 gal
- Recirculating flow rate: 90 l/h / 23.8 gal/hr
- Backpressure: max. 1 bar / 14.5 PSI
- Extension of fluid life
- Reduces fluid disposal
- Minimizes corrosion
- Reduced failures and downtime
- Reduce operating costs



#### Type OLSH

- Pre-heating unit and extremely efficient filter elements
- Increased flow capacity







## Filtration Systems

### Description

STAUFF Mobile Filtration Systems type SMFS are designed to cover a wide application range in the area of offline-filtration.

Being compact, powerful and robust the units assist the preventive maintenance, either when transferring fresh oils or purifying existing hydraulic and lubrication oil systems.

By selecting high-quality components, the SMFS is suitable for purifying small and medium size systems in a very short time or for a permanent offline-filtration on large hydraulic systems.

- High nominal flow rates of 15 l/min / 4 US GPM respectively 110 l/min / 30 US GPM by using high-quality gear pumps and energy-efficient, high-performance three phase motors suitable for continuous duty cycle
- Flexible use (mobile or stationary offline-filtration, filter elements available in different micro ratings)
- All Units are equipped with a 200 µm pre filter
- Drip pan for residual oil
- Easy and safe handling
- Rugged construction
- Filter elements with 4Pro media provide high dirt holding capacity and filtration performance
- Made in Germany



#### Type SMFS-P-015

- Portable hand-held unit
- Compact and light-weight design
- Very flexibility
- High-quality gear pump
- Nominal flow rate: max. 15 l/min / 4 US GPM
- Motor versions: 230 V 50 Hz or 400 V 50 Hz
- Micron rating available from 3 ... 125 µm
- Also available with a blank filter element for the reason of used oil to be removed from the hydraulic reservoir
- Weight: approx. 33 kg / 73 lbs



#### Type SMFS-U-060

- Mobile Filtration system
- High nominal flow rates
- Long-term operating times
- High-quality gear pump
- Nominal flow rate: max. 60 l/min / 15 US GPM
- Motor unit 400 V 50 Hz
- Micron rating available from 3 ... 125 µm
- Weight: approx. 165 kg / 364 lbs



#### Type SMFS-U-030

- Mobile Filtration system
- Robust steel frame push cart
- Maximum flexibility
- High-quality gear pump
- Nominal flow rate: max. 30 l/min / 8 US GPM
- Motor versions: 230 V 50 Hz or 400 V 50 Hz
- Micron rating available from 3 ... 125 µm
- Water absorbing element SF-6721-W
- Also available with a blank filter element for the reason of used oil to be removed from the hydraulic reservoir
- Weight: approx. 58,5 kg / 129 lbs



#### Type SMFS-U-110

- Mobile Filtration system
- High nominal flow rates
- Long-term operating times
- High-quality gear pump
- Nominal flow rate: max. 110 l/min / 30 US GPM
- Motor unit 400 V 50 Hz
- Micron rating available from 3 ... 125 µm
- Weight: approx. 177,2 kg / 391 lbs



#### Type SMFS-U-DL-015-G

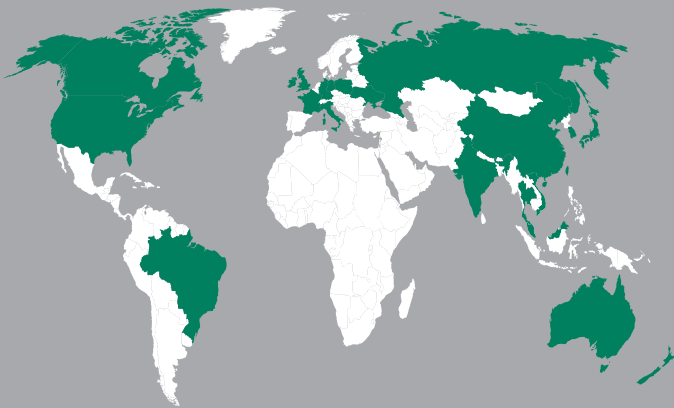
- Extremely robust transport cart
- Heavy-duty rollers, steerable and with locking device on the rear end
- Convenient filling nozzle
- High-quality gear pump
- for 200 l / 52 US GAL oil drums
- Nominal flow rate: max. 15 l/min / 4 US GPM
- Motor versions: 230 V 50 Hz
- Spin-On filter Element of the series SFC-57/58 including visual clogging indicator
- Micron rating available from 3 ... 125 µm
- Water absorbing element SF-6721-W
- Weight: approx. 85 kg / 187 lbs (without oil drum)



#### Type SMFS-U-CM-110

- Mobile Filtration system
- High nominal flow rates
- Long-term operating times
- High-quality gear pump
- Integrated 8-channel particle counter
- Nominal flow rate: max. 110 l/min / 30 US GPM
- Motor unit 400 V 50 Hz
- Micron rating available from 3 ... 125 µm
- Weight: approx. 220 kg / 485 lbs





## GERMANY

Walter Stauffenberg GmbH & Co. KG  
Im Ehrenfeld 4  
58791 Werdohl  
Tel.: +49 2392 91 60  
Fax: +49 2392 91 61 03  
E-Mail: sales@stauff.com

STAUFF products and services are globally available through wholly-owned subsidiaries and a tight network of authorised distributors and representatives in all major industrial regions of the world.

You can find detailed contact information at  
[www.stauff.com](http://www.stauff.com)

## AUSTRALIA

STAUFF Corporation Pty Ltd  
Tel.: +61 2 4271 9000  
sales@stauff.com.au

## BRAZIL

STAUFF Brasil Ltda.  
Tel.: +55 11 47 72 72 00  
stauff@stauffbrasil.com

## CHINA

STAUFF China  
Tel.: +86 21 68 18 70 00  
info@stauff.com.cn

## FRANCE

STAUFF S.A.S.  
Tel.: +33 2 54 50 55 50  
direction@stauffsa.com

## INDIA

STAUFF India Pvt. Ltd.  
Tel.: +91 20 67 31 4900  
sales@stauffindia.com

## IRELAND

STAUFF Ireland  
Tel.: +44 28 92 60 69 00  
sales@stauffireland.com

## ITALY

STAUFF Italia S.r.l.  
Tel.: +39 031 65 84 94  
sales@stauff.it

## CANADA

STAUFF Canada Ltd.  
Tel.: +1 416 282 46 08  
sales@stauffcanada.com

## KOREA

STAUFF Korea Ltd.  
Tel.: +82 51 266 66 66  
info@stauff.co.kr

## MALAYSIA

STAUFF South East Asia Sdn Bhd  
Tel.: +60 3 5637 7888  
sales@stauff.com.my

## NEW ZEALAND

STAUFF Corporation (NZ) Ltd.  
Tel.: +64 9 912 1530  
sales@stauff.co.nz

## POLAND

STAUFF Polska Sp. z o.o.  
Tel.: +48 58 660 11 60  
sales@stauff.pl

## RUSSIAN FEDERATION

STAUFF LLC  
Tel.: +7 495 276 16 50  
sales@stauff.ru

## THAILAND

STAUFF (Thailand) Co., Ltd.  
Tel.: +66 2 721 73 23  
sales@stauff.co.th

## UNITED STATES

STAUFF Corporation  
Tel.: +1 201 444 78 00  
sales@stauffusa.com

## UNITED KINGDOM

STAUFF UK Ltd.  
Tel.: +44 114 251 85 18  
sales@stauff.co.uk

## VIETNAM

STAUFF Vietnam Ltd.  
Tel.: +84 8 3948 1041  
sales@stauff.com.vn