FSI Filter Bags for Consistent Performance

Our exclusive advanced design makes the difference.

FSI PolyLoc bags employ patented design features for added convenience and positive sealing. The Polyloc top, together with the Polyloc Snap-Fit Ring, creates a hermetic seal within the vessel housing to prevent liquid bypass. The PolyLocMelt welded seam design eliminates unfiltered liquid bypass occurring due to needle holes. The Snap-Fit Ring can be installed in any new FSI FSP/R/N series housing, as well as previously installed FSI FSP/R/N units. Polyloc bags are fully combustible. FSI offers a full line of single- and multi-layer bags. Coated and filter-free finishes are available. Call us for your special applications. Our sales engineers analyze your filtration needs fully before making any product suggestions. And our nationwide distribution network facilitates quick response to your order.

Filter Fabric Properties

Physical - Chemical - Temperature

**MONOFILAMENT MESH** is a woven fabric with evenly-spaced holes. Each thread is a single filament. Excellent strength. No fiber migration.

**POLYMICRO MATERIAL** is a specially designed melt blown polypropylene fiber with excellent oil absorbing characteristics.


Filter bags provide depth filtration and higher solids loading capacity than comparable mesh fabric bags.

BUILT-IN HANDLES provide depth filtration and higher solids loading capacity than comparable mesh fabric bags.

**POLYESTER** is a woven fabric. Each thread consists of many smaller diameter threads twisted together. Makes a low cost, disposable bag.

**FELT** is a woven fabric. Each thread consists of many smaller diameter threads twisted together. Makes a low cost, disposable bag.

Filter bags provide depth filtration and higher solids loading capacity than comparable mesh fabric bags.

**FABRIC** is a specially designed melt blown polypropylene fiber with excellent oil absorbing characteristics.

**Teflon** is a registered trademark of Dupont.

**PolyWeld**, **Polyloc** and the FSI logo are registered trademarks of Filter Specialists, Inc. in the United States and other countries.

www.fsifilters.com

Filter Specialists, Inc. is a vertically integrated manufacturer. We control our production from fiber to finished products, ensuring better quality control. FSI’s ‘complete business manufacturing concept’ of quality means that we will never sacrifice quality for price. This is a promise we make to our customers. We stand behind everything we offer. Each bag is individually inspected and tested before making any product suggestions. Our products are to the highest quality standards. We are an ISO 9001 Certified Company.

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THIS GUIDE CONTAINS GENERAL INFORMATION. ACTUAL USE OR SOAK TESTS SHOULD BE PERFORMED WHEREVER POSSIBLE.

The FSI PENG bag is one of the most versatile and popular bags on the market. Made from a non-inserted polypropylene felt with a glazed surface finish, the standard bag incorporates the PolyLoc ﬁt ring and is available with the PolyLocMelt welded seam design. The FSI PENG filterbag is made from non-inserted polyester, and can be ordered with the polyester Polyloc ring.
Filter Specialists, Inc. in the United States and other countries.

**Filter Fabric Properties**

<table>
<thead>
<tr>
<th>Physical - Chemical - Temperature</th>
<th>Material</th>
<th>Micron Rating:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Treatment</td>
<td>Glazed and Singed finishes</td>
<td>PEM = 75, 100, 125, 150, 200, 250, 300, 400, 600, 800, 1200</td>
</tr>
<tr>
<td></td>
<td>Polyester</td>
<td>PEM = 75, 100, 125, 150, 200, 250, 300, 400, 600, 800, 1200</td>
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<tr>
<td></td>
<td>Nomex</td>
<td>PEM = 75, 100, 125, 150, 200, 250, 300, 400, 600, 800, 1200</td>
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<tr>
<td></td>
<td>Polypropylene</td>
<td>PEM = 75, 100, 125, 150, 200, 250, 300, 400, 600, 800, 1200</td>
</tr>
</tbody>
</table>

**Filter Bag Construction**

- **Type of Filter:**
  - Felt
  - Mesh

- **Micron Rating:**
  - PEM = 75, 100, 125, 150, 200, 250, 300, 400, 600, 800, 1200

**Filter Bag Options**

- **Material:**
  - Polyester
  - Polypropylene

- **Ring:**
  - Polyloc Snap-fit Ring
  - Commercial Steel Ring
  - Commercial Plastic Ring
  - Ronningen-Petter Snap-fit Ring
  - Ronningen-Petter Plastic Ring

**Filter Bag Sizes**

- **Felt Bag Sizes:**
  - 8" Flange Ring
  - 7/8" x 34"

- **Mesh Bag Sizes:**
  - 1: 7" x 16" 4: 4" x 14" 7: 5 1/2" x 16"
  - 2: 7" x 32" 3: 4" x 8

**Suffix:**

- **A:** Auto Construction
- **C:** Cotton Handle
- **W:** DI Washed
- **R:** Reverse Collar
- **LOOPS:** Loops
- **N:** Nylon Handle
- **P:** Polypropylene Polyloc
- **SSS:** Stainless Steel Snap Fit
- **CO:** Commercial Steel Ring
- **COP:** Commercial Plastic Ring
- **RP:** Ronningen-Petter Snap Fit
- **RPP:** Ronningen-Petter Plastic Ring
- **EX:** Extended Life (PO/PE Only)

**How to Order (Felt Bags):**

- **Type of Filter:** Felt
- **Micron Rating:** PEM

**How to Order (Mesh Bags):**

- **Type of Filter:** Mesh
- **Micron Rating:** PEM

**Filter Specialists, Inc.**

- **FSI SUL Americana Industrias**
  - FAX 011.86.21.5995.3491
- **Filter Specialists, International GMBH**
  - FAX 011.55.11.4341.6464
- **FSI de Mexico**
  - FAX 011.52.5.670.2224

**Contact Information:**

- **100 Anchor Road P. O. Box 735 Michigan City, Indiana 46360 219.879.3307 800.348.3205**

**Distributed by:**

- **FSI**
  - FSI is a vertically integrated manufacturer. We control our processes from fiber to finished products, ensuring better quality control. FSI’s “complete-knower manufacturing control” philosophy means that we will never compromise on the quality of our finished products. For more information, technical consultation or details about our custom-designing capability, contact your FSI representative or our headquarters in Michigan City, Indiana.  

**Liquid Filter Bags**

- **FSI Filter Bags for Consistent Performance**
  - The FSI PONG filter bag is one of the most versatile and popular bags on the market. Made from a non-inserted polypropylene felt with a glazed surface finish, the standard bag incorporates the Polyloc® Snap-fit ring and is available with the Polylok® welded seam design. The PENG filter bag is made from non-inserted polyester, and can be ordered with the polyester Polyloc® ring.
FSI Custom Capability

FSI offers custom-sized and custom-shaped bags in a variety of materials including our polymeric material which is designed specifically to remove tramp oil from liquids. Our experience in designing and manufacturing non-standard bags enables us to develop a high quality, durable product that is custom built to meet your specific needs. You can count on our accuracy, dependability and efficiency in filling your custom order. Contact your FSI representative for details.

<table>
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<tr>
<th>Bag</th>
<th>Diameter</th>
<th>Length</th>
<th>Microns</th>
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</thead>
<tbody>
<tr>
<td>S1</td>
<td>7 inches</td>
<td>8.25 inches</td>
<td>1200</td>
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<tr>
<td>S2</td>
<td>4 inches</td>
<td>14 inches</td>
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<tr>
<td>S3</td>
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High Performance Filtration Products

The PolyWeld liquid filter bag over conventional sewn seam bags.

The PolyWeld® liquid filter bag over conventional sewn seam bags.

The PolyWeld bag's welded seams completely eliminate the possibility of unfiltered liquid bypass occurring due to needle holes. The benefits are a tighter seam, higher bag efficiencies and improved finished product yields. Additionally, the fused edges of the PolyWeld bag provide a fiber-free finish and virtually eliminate fiber migration. FSI offers the PolyWeld liquid filter bag in two filter media—standard polypropylene felt and polyester felt.

FSI has again demonstrated why it continues as a leader in the liquid filtration industry with its PolyWeld liquid filter bag, the superior performer for your critical liquid filtering applications.

These photos clearly demonstrate the dramatic advantages of the PolyWeld liquid filter bag over conventional sewn seam bags. These polymeric liquid filter bags provide a seamless finish to the bag, virtually eliminating fiber migration and allowing for improved finished product yields. The PolyWeld bag is ideal for continuous flow applications.

The FSI PolyWeld liquid filter bag is the leader in high efficiency, low cost filtration. The seamless cartridge insert combined with the welded seam felt cover and Polyveld helps to completely eliminate unfiltered bypass, provides longer life and yields four times the dirt load of conventional polypropylene bags. This filter bag is ideal for continuous flow applications such as e-coat and phosphate baths, batch applications (oils, edible oils and syrups) or any final or polishing filter requirements.

The Extended Life Filter Bags (POEX/PEEX) will provide outstanding performance on any type of contaminant (i.e. gels, particles with a wide range of sizes and particles with various and irregular shapes). The coarse pre-filtering layer is designed to provide long service life, capturing a large amount of contaminants, without excess surface loading. The POEX and PEEX have been proven to hold at least twice the amount of contaminants as a standard felt bag, thereby reducing waste volumes and bag changes. The Extended Life Filter Bag is ideal for automotive coatings, chemicals, resins, edible oils and other fluid applications.

FSI Custom Capability

FSI offers custom-sized and custom-shaped bags in a variety of materials including our polymeric material which is designed specifically to remove tramp oil from liquids. Our experience in designing and manufacturing non-standard bags enables us to develop a high quality, durable product that is custom built to meet your specific needs. You can count on our accuracy, dependability and efficiency in filling your custom order. Contact your FSI representative for details.

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Extended Life Filter Bag

Extended Life Filter Bag

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The PONG Heavy Duty Extended Life Filter Bag (MAX PONG) is the leader in high efficiency, low cost filtration. The seamless cartridge insert combined with the welded seam felt cover and Polyveld helps to completely eliminate unfiltered bypass, provides longer life and yields four times the dirt load of conventional polypropylene bags. This filter bag is ideal for continuous flow applications such as e-coat and phosphate baths, batch applications (oils, edible oils and syrups) or any final or polishing filter requirements.

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High Performance Filtration Products

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FSI has again demonstrated why it continues as a leader in the liquid filtration industry with its PolyWeld liquid filter bag, the superior performer for your critical liquid filtering applications.

These photos clearly demonstrate the dramatic advantages of the PolyWeld liquid filter bag over conventional sewn seam bags. These polymeric liquid filter bags provide a seamless finish to the bag, virtually eliminating fiber migration and allowing for improved finished product yields. The PolyWeld bag is ideal for continuous flow applications.

The answer to high performance filtration products can be seen in FSI’s BOS, BOS MAX, MAX PONG, POEX and PEEX Filter Bags. The Polymeric seamless filter bag (BOS) is composed of continuous length micromesh, which vary in diameter throughout the depth of the filter medium. These micromeshes are thermally bonded to create a seamless filter bag that has exceptionally low tensile strength, providing superior resistance to channeling, unloading, bypass and other forms of traditional leakage that result from pulsating water. This unique property develops a higher efficiency, graded pore-size distribution for absolute filtration. This seamless feature is also found on the FSI Heavy Duty Extended Life Filter Bag (BOS MAX). This bag uses innovative construction and an extended design to provide extended life and increased efficiency. This filter bag is ideal for high-purity applications, edible oils and syrups, paints, chemicals, coolants, pharmaceuticals and many water applications.

FSI Custom Capability

FSI offers custom-sized and custom-shaped bags in a variety of materials including our polymeric material which is designed specifically to remove tramp oil from liquids. Our experience in designing and manufacturing non-standard bags enables us to develop a high quality, durable product that is custom built to meet your specific needs. You can count on our accuracy, dependability and efficiency in filling your custom order. Contact your FSI representative for details.

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Standard Filter Bags

The answer to high performance filtration products can be seen in FSI's BOS, BOS MAX, MAX PONG, POEX and PEEX filter bags. The PolyWeld seamless filter bag (BOS) is composed of continuous length microfibers, which vary in diameter throughout the depth of the filter media. These microfibers are thermally bonded to create a seamless filter bag that has exceptionally low tensile strength, providing superior resistance to channeling, unloading, bypass and other forms of traditional leakage that result from pulsating water. This unique property develops a higher efficiency, graded pore-size distribution for absolute filtration.

This seamless feature is also found on the FSI Heavy Duty Extended Life Filter Bag (BOS MAX). This bag uses innovative construction and an advanced design to provide extended life and increased efficiency. This filter bag is ideal for high-purity applications, edible oils and syrups, paints, chemicals, coolants, pharmaceuticals and many water applications.
FSI Custom Capability

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Standard Filter Bags

The patented Polyloc ring is ideal for continuous flow applications. It is hermetic sealing, as these diagrams demonstrate. The one-piece molded top is heat welded to the media to further eliminate needle holes.

HEPOLYWELD BAG'S welded seams completely eliminate the possibility of unfiltered liquid bypass occurring due to needle holes. This seamless feature is also found on the FSI Heavy Duty Extended Life Filter Bag (MAX PONG) and all other FSI bags.

The answer to high performance filtration products can be seen in FSI's BOS, BOS MAX, MAX PONG, POEX and PEEX Filter Bags. The Polymeric seam less filter bag (BOS) is composed of continuous length micromesh, which vary in diameter throughout the length of the fiber medium. These micromesh filters are thermally bonded to create a seamless filter bag that has exceptionally low tensile strength, providing superior resistance to channeling, impaction and other forms of traditional leakage that result from pulsating water. This unique property develops a higher efficiency, graded pore-size distribution for absolute filtration. This seamless feature is also found on the FSI Heavy Duty Extended Life Filter Bag (BOS MAX). This bag uses innovative construction and an advanced design to provide extended life and increased efficiency. This filter bag is ideal for high-purity applications, edible oils and syrups, paints, chemicals, coolants, pharmaceuticals and many water applications.

Contaminant Leaks and Fiber Migration

As loading in the sewn bag rises, increased pressure accelerates the leakage of contaminants through the bag’s sewn seams. The extended life filter bag is ideal for automotive coatings, chemicals, resins, edible oils and other fluid applications.
The FSI PONG filter bag is one of the most versatile and popular bags on the market. Made from a non-inserted polypropylene felt with a glazed surface finish, the standard bag incorporates the Polyloc® welded seam design and is available with the Polyloc® Snap-Fit Ring, creating a hermetic seal within the vessel housing to prevent liquid bypass. The Polyloc® welded seam design eliminates unfiltered liquid bypass occurring due to needle holes. The Snap-Fit Ring can be installed in any new FSI/FSI/MU series housing, as well as previously installed FSI/FSI/MU housings. Polyloc bags are fully combustible; FSI offers a full line of single- and multi-layer bags. Covalent and filter-free finishes are available. Call us for your special applications. Our sales engineers analyze your filtration needs fully before making any product suggestions. And our nationwide distribution network facilitates quick response to your order.

Providing Consistent Performance

The FSI PONG filter bag is one of the most versatile and popular bags on the market. Made from a non-inserted polypropylene felt with a glazed surface finish, the standard bag incorporates the Polyloc® welded seam design and is available with the Polyloc® Snap-Fit Ring, creating a hermetic seal within the vessel housing to prevent liquid bypass. The Polyloc® welded seam design eliminates unfiltered liquid bypass occurring due to needle holes. The Snap-Fit Ring can be installed in any new FSI/FSI/MU series housing, as well as previously installed FSI/FSI/MU housings. Polyloc bags are fully combustible; FSI offers a full line of single- and multi-layer bags. Covalent and filter-free finishes are available. Call us for your special applications. Our sales engineers analyze your filtration needs fully before making any product suggestions. And our nationwide distribution network facilitates quick response to your order.

**= Available in sizes 1 and 2, Polyester and Polypropylene only.
* = Available in sizes 3 and 4, NMO only.

** How to Order (Felt Bags)**

- **Material**:
  - PO = Felt, Polypropylene
  - HT = Felt, Nomex
  - TFE = Felt, Teflon
- **Micron Rating**:
  - PEM = Mesh, Polyester Multifilament
  - PMO = Mesh, Polypropylene
  - NMO = Mesh, Nylon Monofilament
- **Cover**:
  - PEM = Polyester Multifilament
  - PMO = 100, 150, 200, 250, 300, 600, 800
- **Size**:
  - 1: 7" x 16"
  - 4: 4" x 14"
  - 7: 5 1/2" x 16"
  - 9: 5 1/2" x 33"
  - 12X18D: 12" x 18" Drawstring
  - 18X24D: 18" x 24" Drawstring
  - 18X28D: 18" x 28" Drawstring
- **Temperature**:
  - 120°F
  - 150°F
  - 250°F
  - 300°F
  - 400°F
  - 800°F
  - 1200°F

**How to Order (Mesh Bags)**

- **Material**:
  - PE = Polyester Polyloc
  - PM = Polypropylene Polyloc
  - PO = Polypropylene
  - PP = Polypropylene
  - PC = Polyethylene
  - PE = Polyester
  - PM = Polypropylene
  - PO = Polypropylene
  - PP = Polypropylene
  - PC = Polyethylene
  - PE = Polyester
  - PM = Polypropylene
  - PO = Polypropylene
  - PP = Polypropylene
  - PC = Polyethylene
- **Micron Rating**:
  - PEM = 75, 100, 125, 150, 200, 250, 300, 400, 600, 800, 1200
  - PMO = 100, 150, 200, 250, 300, 600, 800
  - NMO = 1, 5, 10, 25, 35, 45, 55, 65, 75, 100, 150, 175, 200, 250, 300, 400, 600, 800
- **Size**:
  - 1: 7" x 16"
  - 4: 4" x 14"
  - 7: 5 1/2" x 16"
  - 9: 5 1/2" x 33"
  - 12X18D: 12" x 18" Drawstring
  - 18X24D: 18" x 24" Drawstring
  - 18X28D: 18" x 28" Drawstring
- **Temperature**:
  - 120°F
  - 150°F
  - 250°F
  - 300°F
  - 400°F
  - 800°F
  - 1200°F

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**Filter Specialists, Inc.** is a leader in filtration products. FSI offers custom cartridge design and manufacturing. For more information on other products and services, visit www.fsifilters.com.