Specifications for In-Line Filters

The In-Line models F-65, F-125, F-300 and F-600 are highly efficient point-of-use desiccant type filters for compressed air and gases rated from 20 to 200 scfm at 100 psig.

All filters have two Beach patented Cylform® elements that remove:

- Oil and oil vapor
- Moisture
- Particulate down to 0.3 microns

**IN-LINE FILTER FEATURES**

- "C" model — Clear acrylic tube provides visual inspection for pressures up to 150 psi. Do not use in the presence of:
  1. Solvents, phosphates, esters, organic solvents, etc.
  2. Synthetic compressor lubricants
  Safety guards are recommended.
- "AL" model — Seamless aluminum tube for pressures up to 250 psi. Model AL filter may be used if solvent vapor is present or synthetic lubricants are used.
- "AW" model — Seamless aluminum tube with sight glass for visual inspection at pressures up to 250 psi. Model AW filter may be used in the presence of synthetic lubricants and solvent vapors.
  - Aluminum tube and end caps are coated with a durable industrial finish to prevent corrosion.
  - Models AL or AW should be used when filter is installed outside and/or exposed to direct sunlight.

**REPLACEMENT ELEMENTS**

The Cylform® replaceable element used in Beach In-Line filters is a desiccant-filled seamless tube of polyester fabric with filtration end caps of non-woven polyester, plus an extra particulate filtration pad sewn in the top. The patented design of the Cylform® element eliminates channeling with minimum pressure drop (see graph).

Patented Beach Cylform® elements are available in a variety of desiccants:

- **Standard Clay®** for general use to remove hydrocarbons, moisture and particulates.
  - "Always a good choice". Changes color.
- **Silica Gel** removes moisture and results in low dew point. Cannot be used in presence of oil or oil vapor. Changes color from blue to pink when in contact with moisture. Can be regenerated in oven at 200-220°F for 1½ to 2 hours.
- **Activated Carbon** – odor removal, oils and oil vapors. Does not remove moisture.
- **Special Desiccants** – molecular sieve and other desiccants on request.

Beach replacement elements are packaged 2 per sealed 4 mil polyethylene bag to ensure freedom from contamination.

**WHEN TO SERVICE**

The Standard Clay Cylform® element when saturated with oil and moisture changes from white to grayish brown or dark gray.

The Cylform® silica gel elements change from blue to pink in the presence of moisture. Elements which have been protected from oil can be regenerated: heat in conventional oven from 200°F to 220°F for 1½ to 2 hours or until the element returns to a deep blue color.

Pressure drop usually doubles when it is time to service.

Cylform® is a registered trademark of Beach Filter Products, Inc.
Installation and Maintenance

**INSTALLATION AND MAINTENANCE**
- Turn off air supply and depressurize before servicing.
- Use only Teflon tape, NOT PIPE DOPE, on threaded connections.
- Install filter in vertical position only, with air flow from bottom to top. Large spacer at bottom, Beach label at top.
- Open petcock every 24 hours or as needed to vent condensate.
- Optional Nicholson Automatic Mini Drain can be installed on petcock.
- Consult diagram for arrangement of piping and drain collectors.

**SAFETY AND MAINTENANCE**
- When servicing units wear safety glasses with side shields. Wear gloves and hard hat as required.
- Replace element every three months, or sooner if conditions warrant. DO NOT wash or clean elements.
- REPLACE GASKETS annually to maintain a tight seal.
- When lower element (bottom) becomes saturated, remove and dispose. Move top element down and put fresh element in the top.
- Clean acrylic tube, gaskets, top and bottom spacers in soap or detergent and water. DO NOT USE solvents or phosphates.
- Wipe dry with paper towels. DO NOT use woven shop cloths.
- Acrylic tubes should be replaced with aluminum tubes if crazing or surface cracking is apparent. Safety guards are recommended.

**ACCESSORIES**
- **SAFETY GUARDS** are recommended for Model “C” filters. These perforated metal guards assure maximum safety in the event of system malfunction and permit element inspection. Specify filter model number when ordering.
- **AUTOMATIC MINI DRAIN VALVES** with muffler for reliable removal of filter condensate with minimum loss of air are recommended.
- **AUTOMATIC DRAIN VALVES** are also available for upstream installation.

**PARTS LIST**

<table>
<thead>
<tr>
<th>F-65</th>
<th>F-125</th>
<th>F-300</th>
<th>F-600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaskets</td>
<td>05CA</td>
<td>02CA</td>
<td>03CA</td>
</tr>
<tr>
<td>Top Spacer</td>
<td>TS5CA</td>
<td>TS2CA</td>
<td>TS3CA</td>
</tr>
<tr>
<td>Bottom Spacer</td>
<td>BS5CA</td>
<td>BS2CA</td>
<td>BS3CA</td>
</tr>
<tr>
<td>Top Casting</td>
<td>TC5CA</td>
<td>TC2CA</td>
<td>TC3CA</td>
</tr>
<tr>
<td>Bottom Casting</td>
<td>BC5CA</td>
<td>BC2CA</td>
<td>BC3CA</td>
</tr>
<tr>
<td>Rods</td>
<td>R5CA</td>
<td>R6CA</td>
<td>R3CA</td>
</tr>
<tr>
<td>Stand Pipe</td>
<td>N/A</td>
<td>SP2CA</td>
<td>SP3CA</td>
</tr>
<tr>
<td>Wing Nuts</td>
<td>WN5CA</td>
<td>WN236CA</td>
<td>WN236CA</td>
</tr>
<tr>
<td>Stainless Nuts</td>
<td>SN5CA</td>
<td>SN236CA</td>
<td>SN236CA</td>
</tr>
<tr>
<td>Plastic Tube</td>
<td>PT5C</td>
<td>PT2C</td>
<td>PT3C</td>
</tr>
<tr>
<td>Aluminum Tube</td>
<td>AT5A</td>
<td>AT2A</td>
<td>AT3A</td>
</tr>
<tr>
<td>Alum Tube-Sight Glass</td>
<td>AT5AW</td>
<td>AT2AW</td>
<td>AT3AW</td>
</tr>
<tr>
<td>Petcocks</td>
<td>PCK2</td>
<td>PCK2</td>
<td>PCK2</td>
</tr>
<tr>
<td>Metal Guards</td>
<td>G5C</td>
<td>G2C</td>
<td>G3C</td>
</tr>
<tr>
<td>Elements</td>
<td>EL6S</td>
<td>EL12S</td>
<td>EL300</td>
</tr>
</tbody>
</table>

Model F-1200AW with a flow capacity of 1200 scfm is available on a special order basis.