Liquid Phase Treatment Systems

- GAC Adsorbers for Environmental Remediation
- Industrial Wastewater Treatment Systems
- Potable Water Purification
- Stormwater Treatment
- Multi-Media Filters
- ASME-Code & Non-Code

TIGG
Short-term municipal water purification projects require smart solutions. When you need a GAC adsorption system robust enough to run in parallel at rates from 1,000 gpm to 1,500 gpm, but only need it for a few months, costs can quickly build up while temporary concrete pads are poured or slap-dash supports are put in place to prevent the vessel’s legs from sinking into the ground.

TIGG developed its **CP20K-10 Skid System** to stop sinkage, reduce clients’ costs and allow for easy assembly. Setting up the entire two-vessel adsorption system can take just one day, simplifying contractors’ jobs while reducing labor costs. Ensuring easy pipe rack connectivity, the sturdy carbon steel skids stabilize the vessels on an even plane. Now, you don’t need to construct that concrete pad.

### Modular Activated Carbon Liquid Phase Adsorbers

<table>
<thead>
<tr>
<th>Model #</th>
<th>Max Flow Parallel</th>
<th>Max Pressure</th>
<th>Max Temp</th>
<th>FNPT In/Outlet</th>
<th>Maximum Adsorb Fill</th>
<th>Shipping Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP 8000 Skid</td>
<td>1,000 gpm</td>
<td>125 psig</td>
<td>130</td>
<td>6/6</td>
<td>20,000 lbs</td>
<td>33,000 lbs</td>
</tr>
<tr>
<td>CP 20K-10 Skid</td>
<td>1,500 gpm</td>
<td>125 psig</td>
<td>130</td>
<td>8/8</td>
<td>40,000 lbs</td>
<td>40,000 lbs</td>
</tr>
</tbody>
</table>

**Call a TIGG Representative Today at 800-925-0011**

www.tigg.com/Adsorber_Skid_System

TIGG, LLC  
1 Willow Avenue  
Oakdale, PA 15071

**Purifying Air & Water**
**NOTE: DIMENSIONS & WEIGHTS ARE APPROXIMATE.**

VEssel WT. EMPTY (1):
5,850 LBS

VEssel OPERATING WT. (1):
39,500 LBS

PIPE RACK OPERATING WT:
10,000 LBS

SKID WT:
5,000 LBS

SYSTEM OPERATING WT:
94,000 LBS

**SKID SYSTEM - PLAN VIEW**

**SKID SYSTEM - ELEVATION VIEW**
*NOTE: DIMENSIONS & WEIGHTS ARE APPROXIMATE.*

VEssel WT. EMPTY (1): 13,000 LBS
VEssel OPERATING WT. (1): 79,000 LBS
PIPE RACK OPERATING WT: 12,000 LBS
SKID WT: 5,000 LBS
SYSTEM OPERATING WT: 175,000 LBS

CP-20K-10-1001 FOR VEssel PLAN & ELEVATION.
CP-20K-10-1002 FOR SYSTEM P&ID.
CP-20K-10-1003 FOR SYSTEM PROCESS CONNECTIONS.
CP-20K-10-1004 FOR TRANSIT LOADING.
CANSORB P - HIGH PRESSURE VESSELS
Modular Activated Carbon Liquid Adsorber Series
For Removal of Organic Contaminants From Liquids

The CANSORB P Series Modular Adsorbers are capable of operations where full backwash is required, including applications for backwashing activated carbon. These units are fabricated of pressure vessel quality carbon steel and include a high solids epoxy lining. However, a different lining can be substituted for the high solids epoxy.

The liquid collection system is designed to promote even flow distribution and efficient adsorbent utilization. Manways are 18” x 14” elliptical located on top of tank for easy access.

### Modular Activated Carbon Liquid Phase Adsorbers

<table>
<thead>
<tr>
<th>Model #</th>
<th>Max Flo GPM</th>
<th>Max Press (PSIG)</th>
<th>Max Temp</th>
<th>FNPT Inlet/Outlet</th>
<th>Maximum Adsorb Fill</th>
<th>Shipping Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP-500</td>
<td>78</td>
<td>75</td>
<td>130</td>
<td>2/3</td>
<td>850</td>
<td>1400</td>
</tr>
<tr>
<td>CP-1000</td>
<td>115</td>
<td>75</td>
<td>130</td>
<td>3/3</td>
<td>1500</td>
<td>2200</td>
</tr>
<tr>
<td>CP-2000</td>
<td>145</td>
<td>75</td>
<td>130</td>
<td>3/3</td>
<td>2200</td>
<td>3600</td>
</tr>
<tr>
<td>CP-3000</td>
<td>235</td>
<td>75</td>
<td>130</td>
<td>4/4</td>
<td>3300</td>
<td>5000</td>
</tr>
<tr>
<td>CP-5000</td>
<td>400</td>
<td>75</td>
<td>130</td>
<td>6/6</td>
<td>6200</td>
<td>8200</td>
</tr>
<tr>
<td>CP-8000</td>
<td>500</td>
<td>125</td>
<td>130</td>
<td>6/6</td>
<td>10000</td>
<td>13400</td>
</tr>
<tr>
<td>CP-20K-10</td>
<td>750</td>
<td>125</td>
<td>150</td>
<td>8/8</td>
<td>20000</td>
<td>31800</td>
</tr>
<tr>
<td>CP-20K-12</td>
<td>1100</td>
<td>125</td>
<td>150</td>
<td>8/8</td>
<td>20000</td>
<td>33000</td>
</tr>
<tr>
<td>CP-40K-12</td>
<td>1100</td>
<td>125</td>
<td>150</td>
<td>8/8</td>
<td>40000</td>
<td>64000</td>
</tr>
<tr>
<td>CP-60K-14</td>
<td>1500</td>
<td>125</td>
<td>150</td>
<td>10/10</td>
<td>60000</td>
<td>100000</td>
</tr>
</tbody>
</table>

Call a TIGG Representative Today at 800-925-0011

www.tigg.com/CANSORB-P

TIGG, LLC
1 Willow Avenue
Oakdale, PA 15071

Purifying Air & Water
The CANSORB P Series High Pressure Carbon Steel Modular Carbon Adsorption system is fabricated of PVQ (pressure vessel quality) carbon steel and provided with a high solids epoxy lining. Where process conditions dictate, the carbon adsorption vessels can be fabricated from other materials, such as stainless steel.

In addition, a different lining can be substituted for the high solids epoxy. The liquid collection system promotes even flow distribution. Manways are 18” x 14” elliptical located on top of tank for easy access and vessels are supplied with 4” x 6” hand holes on bottom side. The vessels are provided with legs and fork channels.

<table>
<thead>
<tr>
<th>Model #</th>
<th>Max Flo GPM</th>
<th>Max Press (PSIG)</th>
<th>Inlet/Outlet</th>
<th>Diameter/Height (In)</th>
<th>Ship Weight Filter Pack A</th>
<th>Ship Weight Filter Pack B</th>
<th>Ship Weight Filter Pack C</th>
<th>Ship Weight Filter Pack D</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP-500</td>
<td>78</td>
<td>75</td>
<td>2/2</td>
<td>38/80</td>
<td>3000</td>
<td>1400</td>
<td>2750</td>
<td>2550</td>
</tr>
<tr>
<td>CP-1000</td>
<td>115</td>
<td>75</td>
<td>3/3</td>
<td>46/94</td>
<td>4400</td>
<td>2200</td>
<td>4400</td>
<td>4425</td>
</tr>
<tr>
<td>CP-2000</td>
<td>145</td>
<td>75</td>
<td>3/3</td>
<td>52/103</td>
<td>5750</td>
<td>3600</td>
<td>5800</td>
<td>5975</td>
</tr>
<tr>
<td>CP-3000</td>
<td>235</td>
<td>75</td>
<td>4/4**</td>
<td>66/100</td>
<td>8800</td>
<td>5000</td>
<td>8800</td>
<td>8850</td>
</tr>
<tr>
<td>CP-5000</td>
<td>400</td>
<td>75</td>
<td>6/6**</td>
<td>86/119</td>
<td>17475</td>
<td>8200</td>
<td>17550</td>
<td>17625</td>
</tr>
<tr>
<td>CP-8000</td>
<td>500</td>
<td>125</td>
<td>130</td>
<td>96/165</td>
<td>29450</td>
<td>29375</td>
<td>28950</td>
<td>28650</td>
</tr>
</tbody>
</table>

FILTER PACK:
A) Contains gravel and sand. B) Contains gravel, garnet, and sand.
C) Contains gravel sand, and anthracite. D) Contains gravel, garnet, sand, and anthracite.
NOTE: Inlets/outlets are couplings. Inlet/outlet designated with an ** are flanged fittings.
VEssel Standards

Vessel Materials: S16-70 Carbon Steel
Lining: Epoxy
Exterior Paint: Epoxy Base w/ Urethane Top Coat
Head Thickness: 3/16", ASME Code F & D
Shell Thickness: 3/16"
Internals: PVC Pipe

Vessel Access: 18" x 14" Elliptical Manway
Max. Media Fill: 60 ft³
Total Volume of Vessel: 69.5 ft³
Empty Wt.: 1200 lbs
Max. Operating Pressure: 75 PSIG
Max. Operating Temp.: 130°F

CP-1000

TIGG Corporation

Plan & Elevation

CP-1000-1001
VEssel STANDARDS

Vessel Materials: SA-516-70 Carbon Steel
Vessel Access: 18" x 14" Elliptical Manway
Lining: Epoxy
Max. Media Fill: 1.32 ft³
Exterior Paint: Epoxy Base W/Urethane Top Coat
Total Volume of Vessel: 151 ft³
Head Thickness: 1/4" ASME Code F & O
Empty Wt: 2000 lbs
Shell Thickness: 1/4"
Max. Operating Pressure: 75 psig
Internals: PVC H/E
Max. Operating Temp: 130°F
TIGG’s CANSORB L Series High Pressure Steel Vessel Adsorbers are fabricated of carbon steel for operation under high pressure. They feature an NSF certified high solids epoxy lining for excellent corrosion protection.

The CANSORB L is a versatile liquid phase unit designed to contain activated carbon and other filtration media such as sand, garnet and zeolite. These vessels are ideal for either longer term installations or the rigors of handling in short term projects as rental units.

The liquid collection system inside the vessel is designed to promote even flow distribution and thus, efficient adsorbent utilization. Vessels are supplied with maximum adsorbent fill volume and may be backwashed. Manways are quick release style and are 14”x18” for easy access (except CL-500’s supplied with 12” x16” manway). The vessels are provided with fork channels which also function as supports.

NOTES:

• Desired contact time may require lower flow rates
• Standard adsorbent fill is based on a bed density of 27 lb/ft3
• Adsorbent fill can differ based on media density and alternate adsorbents

<table>
<thead>
<tr>
<th>Model #</th>
<th>Max Flow (GPM)</th>
<th>Max Press (PSIG)</th>
<th>Max Temp (°F)</th>
<th>FNPT Inlet/Outlet</th>
<th>Standard Adsorb Fill</th>
<th>Shipping Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL-500</td>
<td>40</td>
<td>75</td>
<td>130</td>
<td>2/2</td>
<td>500</td>
<td>1,075</td>
</tr>
<tr>
<td>CL-1000</td>
<td>55</td>
<td>75</td>
<td>130</td>
<td>2/2</td>
<td>1,000</td>
<td>1,860</td>
</tr>
<tr>
<td>CL-2000</td>
<td>100</td>
<td>75</td>
<td>130</td>
<td>3/3</td>
<td>2,000</td>
<td>3,150</td>
</tr>
<tr>
<td>CL-3000</td>
<td>155</td>
<td>75</td>
<td>130</td>
<td>3/3</td>
<td>3,000</td>
<td>4,700</td>
</tr>
<tr>
<td>CL-5000</td>
<td>225</td>
<td>75</td>
<td>130</td>
<td>4/4</td>
<td>5,000</td>
<td>7,850</td>
</tr>
</tbody>
</table>

Call a TIGG Representative Today at 800-925-0011
ECONO L & LS Adsorber Drums
Modular Activated Carbon Liquid Adsorber Series
For Removal of Organic Contaminants From Liquids

The Econo - L activated carbon adsorber 55 gallon drum can withstand the rigors of environmental remediation applications since they are constructed of polyethylene with a closed head. This adsorber features a specially constructed collection system, which is designed to promote even flow distribution and thus efficient utilization of the activated carbon and have a low pressure drop.

The Econo LS may be used where a steel drum is preferred. This carbon adsorption system features a specially constructed collection system, which is designed to promote even flow distribution and thus efficient utilization of the activated carbon.

NOTES:
• “OH” designation on Model number indicates open head (refillable) adsorber. Desired contact time may allow higher or lower flow rates.
• Dry virgin activated or reactivated carbon provided as standard adsorbent.
• Maximum adsorbent fill is based on a bed density of 27 lb/ft³.
• Maximum adsorbent fill can differ based on variable bed density and alternate adsorbents.

<table>
<thead>
<tr>
<th>Model #</th>
<th>Nominal Flow-GPM</th>
<th>Max Press (PSIG)</th>
<th>Max Temp</th>
<th>FNPT In/Out</th>
<th>Standard Adsorb Fill</th>
<th>Ship Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Econo L</td>
<td>15</td>
<td>6</td>
<td>130</td>
<td>3/4</td>
<td>150</td>
<td>175</td>
</tr>
<tr>
<td>Econo LS</td>
<td>15</td>
<td>6</td>
<td>130</td>
<td>1</td>
<td>200</td>
<td>218</td>
</tr>
</tbody>
</table>

Call a TIGG Representative Today at 800-925-0011

http://www.tigg.com/Liquid-drums.html
800-925-0011
TIGG, LLC
1 Willow Avenue
Oakdale, PA 15071
Purifying Air & Water
TIGG’s bag filters remove suspended solids and gelatinous particles from liquid streams. Multiple liquid phase bag filter housings can be piped in parallel to treat flows greater than 180 gpm or provide duplicity for continuous filtering system operation while bag filters are being changed.

Bag filter units are piped with inlet and outlet valves, pressure gauges and sample ports. The solids are collected on the inside of the bag, which is easily removed when the pressure drop across the filter is in the 15-20 psi range.

TIGG’s liquid phase bag filters, made of polyester, Nomex and PTFE, are obtainable in sizes 0.5 through 200 microns. TIGG offers its line of bag filters either by rental or direct sale.

### Model Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Max Flow</th>
<th>Max Press</th>
<th>Max Temp</th>
<th>FNPT² In/Out</th>
<th>Dmtr/Ht</th>
<th>Fltr Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>BF-180</td>
<td>180 gpm</td>
<td>150 psig</td>
<td>250°F</td>
<td>2 in</td>
<td>7.7/42 in³</td>
<td>5.0 ft²</td>
</tr>
</tbody>
</table>

**NOTES**

1) Limit of 200°F when using polypropylene bags
2) Flange connections can be provided
3) Total height depends on placement of the band holding the legs

**Call a TIGG Representative Today at 800-925-0011**

www.tigg.com/bag-filter.html
MATERIALS OF CONSTRUCTION:

BAG FILTERS - 304L STAINLESS STEEL
PIPE - SCH 80 PVC
BALL VALVES - PVC TRUE-UNION BALL
SKID - SA-36 WELDED STEEL (PAINTED)
PRESSURE CAP - 0-60 PSI
HARDWARE - ASTM A307 Gr. B (PLATED)
MATERIALS OF CONSTRUCTION:

BAG FILTERS - 304L STAINLESS STEEL
PIPE - SCH. 80 PVC
BALL VALVES - PVC TRUE-UNION BALL
SKID - SA-36 WELDED STEEL (PAINTED)
PRESSURE GAUGE - 0-60 PSIG
HARDWARE - ASTM A307 Gr. B (PLATED)
MATERIALS OF CONSTRUCTION:

BAG FILTERS = 304L STAINLESS STEEL
PIPE = SCH. 80 PVC
BALL VALVES = PVC TRUE-UNION BALL
SKID = SA-36 WELDED STEEL (PAINTED)
PRESSURE CAKE = 0-60 PSIG
HARDWARE = ASTM A307 Gr. B (PLATED)