Compressed Air
Clean, Dry Air System
Moisture, Oil and Particulate Contamination Removal

Sullair SMC Solves the Problem
Sullair SMC Features

Top End Repressurization — ensuring uninterrupted compressed air at all times

ISO7000 inlet and outlet symbols cast into the top cover ensure correct piping installation

Integral high efficiency filter

Corrosion protection by alocrom and epoxy painting

One Desiccant/Filter Cartridge per column contains desiccant and particulate filter

Patented high tensile extruded aluminum column with twin dryer chambers

Positive removal of prefilter condensate by piping away for remote collection

Easy access to electronic control box for main connection

Electronic display providing high visibility LED indication with an audible internal alarm

Alarm reset facility to cancel the audible alarm for 24 hours while replacement components are sourced

Corrosion protection by alocrom and epoxy painting
Sullair SMC Air Dryers

Your compressed air system will contain water, dirt, wear particles and even degraded lubricating oil which mix together to form an unwanted condensate. This often acidic condensate degrades tools and machinery, blocks valves and orifices, and causes high maintenance costs and expensive air leaks. It can corrode piping systems and bring your production to an expensive standstill!

While the use of high efficiency compressed air filters fitted with condensate drains will remove oil, water and dirt particles, in many cases it is not enough. Modern production systems and processes demand an even higher level of air quality. “Point of use” desiccant dryers can provide the correct air quality, without the need for drying the complete compressed air installation, which can be costly and unnecessary.

- The foremost feature of the Sullair SMC desiccant air dryers are integrated filters and desiccant in a single cartridge that can be easily changed. These features and the in-line air connections allow for easy maintenance.
- Sullair SMC desiccant air dryers offer uncompromised performance from a dedicated “point of use” compressed air drying system.
- Easy to install, Sullair SMC dryers will transform an ordinary process into a highly efficient and reliable operation.
- Sullair SMC dryers clean and dry compressed air down to -40°F (-40°C) pressure dewpoint, meeting the requirements of ISO 8573.1 Class 1.2.1. as standard. For critical applications, a pressure dewpoint of -100°F (-70°C) ISO 8573.1 Class 1.1.1. is achievable.
Benefits

- **Point of Use Application**
  Bringing clean dry air just where you need it

- **Approved for International Standards**
  Designed in accordance with ASME VII Div. 1, approved to CSA/UL/CRN and fully CE marked (PED, EMC, LVD) as standard

- **Simple to Install**
  Flexible installation using the multiple in-line inlet and outlet connection ports

- **Compact and Lightweight**
  Can be floor, bench or wall/canopy mounted

- **Very Quiet Operation**
  Noise level less than 75DBA

- **Install Almost Anywhere**
  IP66/NEMA 4 protection is standard

- **Audible Alarm**
  Indicating service interval for optimal performance

- **Easy to Maintain**
  Full operational service can be achieved in less than 15 minutes due to the quick release top cap arrangement, which does not require the inlet/outlet ports to be disconnected as with traditional systems

The Sullair SMC dry air system is the reliable, cost effective and flexible way to provide clean, dry air exactly where you need it.

Options

- For quieter operation, the regeneration exhaust air can be piped away.

- Remote indication provides a warning of the dryer’s need for servicing. (Audible alarm included.)

- A wall mount kit is available for vertically securing the dryer to a wall or canopy.

- A 45° tilt wall mounting kit is also available for vertically securing the dryer to the wall, canopy or inside a product where access to the top of the dryer is restricted.

- In conditions of limited access, the electronic control box (base) can be detached and relocated remotely from the dryer.

- -100°F (-70°C) ISO 8573.1 Class 1.1.1. is available for extreme dry air requirements.
Specifications

Compressed air enters the integral pre-filter and passes into the left chamber (column A) where the air is dried before passing to the application.

A small amount of dry purge air is used to regenerate the right chamber (column B), which is wet, using a pressure swing absorption method of regeneration, venting the saturated air to the atmosphere under pressure. The same regeneration air is also used to “back flush” the integral filter to prolong its working life.

Prior to changeover, the right chamber (column B) enters repressurization where the exhaust valve is closed to allow pressure to increase. The process ensures a smooth uninterrupted changeover, preventing the loss of any system pressure, before the process repeats itself.

How It Works

Compressed air enters the integral pre-filter and passes into the left chamber (column A) where the air is dried before passing to the application.

A small amount of dry purge air is used to regenerate the right chamber (column B), which is wet, using a pressure swing absorption method of regeneration, venting the saturated air to the atmosphere under pressure. The same regeneration air is also used to “back flush” the integral filter to prolong its working life.

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity @100 psig</th>
<th>Air In/Out</th>
<th>Dimensions (in.)</th>
<th>Weight (lbs.)</th>
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<tbody>
<tr>
<td>SMC-3</td>
<td>3</td>
<td>3/8&quot; NPT</td>
<td>16.6</td>
<td>24.3</td>
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<tr>
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<td>19.7</td>
<td>28.7</td>
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<td>35.3</td>
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<tr>
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<tr>
<td>SMC-20</td>
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<td>3/8&quot; NPT</td>
<td>43.2</td>
<td>61.7</td>
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<table>
<thead>
<tr>
<th>Minimum Inlet Pressure</th>
<th>Maximum Inlet Temperature °F (°C)</th>
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<tbody>
<tr>
<td>psi g  bar g</td>
<td>95 (35)</td>
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<tr>
<td>58  .63  .61  .55  .46</td>
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<tr>
<td>73  .75  .73  .66  .55</td>
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<td>87  .88  .85  .77  .64</td>
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<tr>
<td>102 1.00  .97  .88  .73</td>
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<td>116  .97  .94  .85  .71</td>
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<tr>
<td>131 1.08  1.05  .95  .79</td>
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<tr>
<td>145 1.18  1.14  1.04  .86</td>
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<tr>
<td>160 1.29  1.25  1.14  .94</td>
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<tr>
<td>174 1.40  1.36  1.23  1.02</td>
<td></td>
</tr>
</tbody>
</table>

Pressure Correction Factor

Model Capacity Air In/Out Dimensions (in.) Weight

- SMC-3 3 3/8" NPT 16.6 24.3
- SMC-5 5 3/8" NPT 19.7 28.7
- SMC-8 8 3/8" NPT 24.3 35.3
- SMC-10 10 3/8" NPT 27.2 39.7
- SMC-13 13 3/8" NPT 33.3 44.1
- SMC-15 15 3/8" NPT 35.7 50.7
- SMC-20 20 3/8" NPT 43.2 61.7

Maximum operating pressure: 174 psig
Minimum operating pressure: 58 psig
Maximum operating temperature: 122°F
Minimum operating temperature: 35°F

How It Works

Compressed air enters the integral pre-filter and passes into the left chamber (column A) where the air is dried before passing to the application.

A small amount of dry purge air is used to regenerate the right chamber (column B), which is wet, using a pressure swing absorption method of regeneration, venting the saturated air to the atmosphere under pressure. The same regeneration air is also used to “back flush” the integral filter to prolong its working life.

Prior to changeover, the right chamber (column B) enters repressurization where the exhaust valve is closed to allow pressure to increase. The process ensures a smooth uninterrupted changeover, preventing the loss of any system pressure, before the process repeats itself.
Air Audits

Sullair air audits review your entire compressed air system to identify ways to maximize efficiency; reduce waste; and reduce utility, maintenance, and equipment costs. And, Sullair is the only compressor manufacturer to offer three levels of air system audits that address the Department of Energy's standard levels — walk-through, assessment, and audit.

Customer Care by Sullair®

Our Customer Care program gives you a complete package of all the system maintenance resources you need, and our training programs teach you how to properly operate, maintain, and service Sullair equipment. Our global customer support network gives you high-speed access to genuine Sullair service parts and responsive, knowledgeable service.

AirTility™

Sullair's AirTility™ is the industry's most comprehensive air outsourcing solution. Think of AirTility™ for your compressed air system just as you think of the electrical and water systems at your facility — as a utility. AirTility™ is for those who want a reliable, safe compressed air system with no capital expenditures and no maintenance worries.

System Monitoring

Sullair's eConnect™ remotely monitors and diagnoses the health of your compressed air equipment. Using only a computer and a web browser, the status of your entire system can be viewed from anywhere in the world. System monitoring also helps in preventive maintenance and trend analysis.

Core Products

No one gives you more ways to efficiently produce clean air power than Sullair. Compressors are the heart of our business, and our reputation for reliability is reflected in our entire industrial compressor range, from 5 to 600 hp. Sullair also offers a wide range of dryers and filters for contaminant removal, as well as a range of rotary screw vacuum systems.

System Controls

Compressed air system controls match compressed air supply with system demand, and let you take a total systems approach to the most efficient production, distribution, and use of compressed air. Proper control is essential to efficient system operation and high performance.

Downstream Products

Sullair — and our distributor partners — are complete systems solutions providers for the demand side of your compressed air system. From the filter, regulator, and lubricator to the piping system and storage tanks, we provide a complete range of equipment and expertise to help keep your system at peak productivity.

For more information on Sullair products and services, please contact your local Sullair distributor.