

SDB Blower Purge Desiccant Dryers

1,000 to 12,000 scfm



- Dry Air to as Low as -65° Pressure Dew Point
- Clean, Dry Compressed Air Solves the Problems of Moisture Contamination

Sullair SDB Blower Purge Desiccant Dryers

**1,000 to 12,000 scfm at up to 140 psig*.
Dry air from -40°F to -65°F pressure dew point.**

Standard features

- Temperature dependent heating and cooling cycles for optimum energy savings and reliability
- Fail safe, fully automatic interlocked PLC controls
- Nema 4, CSA approved high and low voltage electrical panels
- Digital text display with numerous alarms and indicators
- High quality solenoid valves and control tubing
- Efficient, abrasion-resistant activated alumina desiccant
- Moisture indicator or optional digital dew point readout
- Depressurization mufflers for noise reduction
- No interruption of flow
- Cooling cycle to eliminate dew point spikes
- Towers are built in accordance with ASME Section VIII Division 1
- Low watt density incoloy sheath heater elements
- Low noise, reliable centrifugal blower and intake filter
- Heavy duty inlet and exhaust valves have stainless steel internals and Teflon valve seats

Clean dry compressed air

Sullair SDB Blower Purge desiccant air dryers use a bed of high quality activated alumina desiccant to adsorb water from compressed air providing continuous dew points as low as -40°F (standard) or -65°F (optional). While one tower is drying the air the other is being regenerated using heated ambient air through an external blower reducing purge requirements to only 2-3% (average over time).



*For higher pressures, contact Sullair or your Sullair Distributor.

Easy to install

Sullair dryers are prepackaged requiring only air inlet/outlet and single point power connections. Sullair recommends the use of a Sullair SCH/PH coalescing pre-filter to ensure long desiccant life and SCR/PR particulate after-filter to catch any desiccant dust.

Wide range of operating conditions

The Sullair SDB dryers can operate with inlet temperatures from 50°F to 120°F, inlet pressures from 60 to 140 psig. The SDB dryers can handle flows from 1000 to 12,000 scfm and provide a steady outlet dew point of -40°F to -65°F.

Options

- Dew point Dependent Switching (DDS). If the hygrometer senses that there is moisture-adsorption capacity available in the on-line desiccant bed before the tower reaches the end of its cycle, a signal is sent to the controller to delay the changeover and utilize the spare desiccant capacity. Dryers with DDS can achieve energy savings from 30% to as much as 80%
- Filters mounted option with 3-valve bypass
- Filters and bypass valves mounted on a separate skid (Piping between dryer and filter skid to be provided by installer)
- -65°F dew point
- High pressure

Specifications

| Model | Max Inlet Flow (scfm) ¹ | Connection Size | Required Pre- and After-Filter ² | Dimensions ⁴ | | | Total Weight (lbs) ⁴ | Standard Voltage | Heater kW | Blower HP |
|------------------|------------------------------------|-----------------|---|-------------------------|------|------|---------------------------------|------------------|-----------|-----------|
| SDB-1000 | 1000 | 3" FLG | SCH/SCR-1315 | 113 | 64 | 66 | 4275 | 460/3/60 | 20 | 5 |
| SDB-1200 | 1200 | 3" FLG | SCH/SCR-1315 | 113 | 64 | 66 | 5250 | 460/3/60 | 26 | 5 |
| SDB-1600 | 1600 | 3" FLG | PH/PR-1600 | 125 | 64 | 66 | 6650 | 460/3/60 | 30 | 5 |
| SDB-1900 | 1900 | 4" FLG | PH/PR-2100 | 119 | 84 | 68 | 8200 | 460/3/60 | 36 | 5 |
| SDB-2200 | 2200 | 4" FLG | PH/PR-2100 | 119 | 84 | 68 | 8950 | 460/3/60 | 43 | 5 |
| SDB-2700 | 2700 | 4" FLG | PH/PR-2750 | 130 | 84 | 68 | 10450 | 460/3/60 | 51 | 7.5 |
| SDB-3700 | 3700 | 6" FLG | PH/PR-4200 | 135 | 98 | 83 | 13250 | 460/3/60 | 75 | 10 |
| SDB-4300 | 4300 | 6" FLG | PH/PR-7000 | 153 | 98 | 83 | 15300 | 460/3/60 | 86 | 10 |
| SDB-5000 | 5000 | 6" FLG | PH/PR-7000 | 160 | 120 | 96 | 17300 | 460/3/60 | 96 | 15 |
| SDB-5600 | 5600 | 6" FLG | PH/PR-7000 | 157 | 120 | 96 | 19550 | 460/3/60 | 120 | 15 |
| SDB-7000 | 7000 | 8" FLG | PH/PR-7000 | 160 | 168 | 96 | 25800 | 460/3/60 | 135 | 20 |
| SDB-8700 | 8700 | 8" FLG | PH/PR-10000 | 166 | 188 | 96 | 31050 | 460/3/60 | 160 | 40 |
| SDB-10500 | 10500 | C.F. | PH/PR-10000 | C.F. | C.F. | C.F. | C.F. | 460/3/60 | C.F. | C.F. |
| SDB-12000 | 12000 | C.F. | PH/PR-16500 | C.F. | C.F. | C.F. | C.F. | 460/3/60 | C.F. | C.F. |

NOTES ¹ Maximum rated inlet flow at CAGI conditions of 100 deg F and 100 psig.

² Filters are sold separately unless 3V option is purchased.

³ Depth does not include mounted mufflers which project beyond the dryer skid in some models.

⁴ Weights and dimensions are approximate and do not include 3V option. Contact Sullair for drawings.

Sullair is committed to a program of continuous improvement. Features and specifications may change without notice. Consult your Sullair representative or authorized Sullair distributor.

Sullair Air Quality Guarantee

Two Levels of Air Quality

Sullair recognizes that the requirements for air quality vary according to each compressed air application. For this reason, Sullair provides compressed air Systems that achieve two distinct levels of air quality and a guarantee for each.



The Sullair System.

The Sullair System matches a Sullair compressor, a Sullair dryer and Sullair filters. Sullair assures that its System will meet specific performance levels throughout its operational life. We offer a one-year test/review period, backed by a purchase refund guarantee, to verify the performance of the Sullair System.

Select the System.

Select the air quality level to meet your plant air or process requirements. You can be assured that the quality of air from the Sullair System you specify will remain consistent for the life of the equipment. Sullair guarantees it... and that's as good as gold.

The Sullair Oil-Free Air Quality Guarantee.

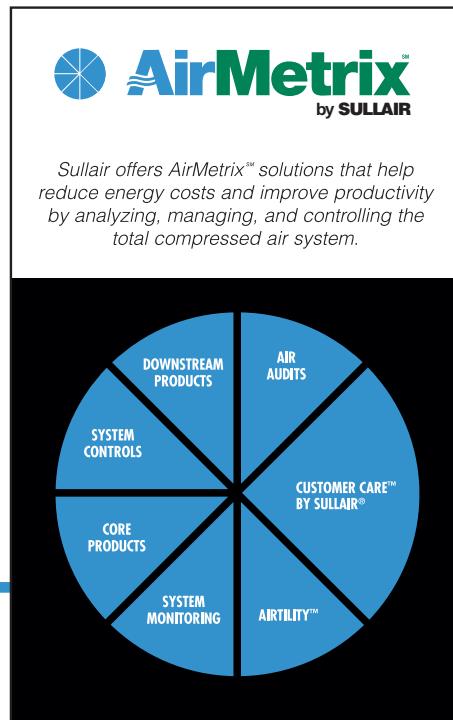
The System consists of a Sullair compressor, Sullair dryer, and Sullair SCF and SCH or PF/PH filters. The compressed air from this system contains particulates no larger than .01 micron, including coalesced liquid water and lubricants.

Maximum remaining oil aerosol content is 0.01 parts per million by weight (ppm/w) @ 70°F, including oil vapor. The air from this Sullair System meets the most stringent ISO standard (ISO 8573.1, Class 1) for air quality.

The Sullair Critical Air Quality Guarantee.

The compressed air from this Sullair System exceeds the ISO standard (ISO 8573.1, Class 1) for air quality with the use of the SCC or PC filter. The System includes a Sullair compressor, Sullair dryer, and Sullair SCF, SCH, and SCC; or PF, PH, and PC filters. The odor-free compressed air from this system contains particulates no larger than 0.01 micron, including water and oil aerosol content of 0.01 parts per million by weight (ppm/w) @ 70°F. The remaining oil vapor content is less than 0.003 ppm/w.

These Systems are not intended to remove carbon monoxide, methyl isocyanate or other noxious, corrosive or toxic gases, vapors or fumes. The system does not provide breathing air.



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



Sullair Corporation

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