SDE Heat Reactivated Desiccant Dryers

400 to 3,500 scfm

- Dry Air as Low as -100º Pressure Dew Point
- Clean, Dry Compressed Air Solves the Problems of Moisture Contamination

AirMetrix℠ by SULLAIR®

SULLAIR®

Sullair SDE Heat Reactivated Desiccant Dryers

400 to 3,500 scfm at up to 140 psig Dry air to -40°F pressure dew point and optional -100ºF

Standard features

- Guaranteed dew point
- 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
- Heavy duty inlet and exhaust valves have stainless steel internals and Teflon valve seats for reliability and long service life

Clean dry compressed air

Sullair SDE Externally Heat Reactivated 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 to -100°F. While one tower is drying the air the other is being regenerated using heated dry air reducing purge requirements to only 7% of the rated flow of the dryer.

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Energy Efficiency
Why a SDE Dryer?

Reduces purge by 50% down to 7%.

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 SDE dryers can operate with inlet temperatures from 50°F to 120°F, inlet pressures from 60 to 140 psig. The SDE dryers can handle flows from 400 to 3500 scfm and provide a steady outlet dew point of -40°F to -100°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
  - – Models SDE-400 to SDE-650: filters and bypass valves are mounted on the dryer skid.
  - – Models SDE-820 to SDE-3500: filters and bypass valves are mounted on separate skid. (Piping between dryer and filter skid to be provided by installer.)
- -100°F dew point
- High pressure

Specifications

Model	Max Inlet Flow (scfm)[1]	Connection Size	Required Pre- and After-Filter[2]	Dimensions[4] Height (in)	Width (in)	Depth (in)[3]	Total Weight (lbs)[4]	Standard Voltage	Heater kW
SDE-400	400	2" NPT	SCH/SCR-465	88	62	34	2240	230/3/60	6
SDE-500	500	2" NPT	SCH/SCR-700	88	62	34	2500	230/3/60	6
SDE-650	650	2" NPT	SCH/SCR-700	100	62	34	2862	230/3/60	8
SDE-820	820	3" FLG	SCH/SCR-910	100	62	48	3728	460/3/60	12
SDE-1000	1000	3" FLG	SCH/SCR-1315	112	62	48	4137	460/3/60	17
SDE-1225	1225	3" FLG	SCH/SCR-1315	124	62	48	4558	460/3/60	21
SDE-1500	1500	3" FLG	PH/PR-1600	113	71	51	5150	460/3/60	25
SDE-1800	1800	4" FLG	PH/PR-2100	127	71	51	6520	460/3/60	28
SDE-2100	2100	4" FLG	PH/PR-2100	128	71	51	7550	460/3/60	30
SDE-2500	2500	4" FLG	PH/PR-2750	119	71	51	10000	460/3/60	36
SDE-2900	2900	6" FLG	PH/PR-4200	126	85	62	11300	460/3/60	43
SDE-3500	3500	6" FLG	PH/PR-4200	139	81	62	12000	460/3/60	50

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.

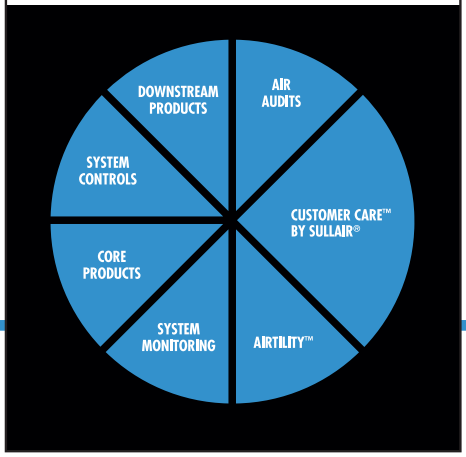
The Sullair Oil-Free Air Quality Guarantee.
The System consists of a Sullair compressor, Sullair dryer, and Sullair SCF and SCH or PF/PH filters. The compressed air from this system contains particulates no larger than .01 micron, including coalesced liquid water and lubricants. Maximum remaining oil 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.

AirMetrix℠ by SULLAIR

Sullair offers AirMetrix℠ solutions that help reduce energy costs and improve productivity by analyzing, managing, and controlling the total compressed air system.



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

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