

SD Heatless Desiccant Dryers

100 to 3,400 scfm



- 100 to 3,400 scfm At Up To 140 psig
- Dry Air From -40°F to -100°F Pressure Dew Point

Sullair SD Heatless Desiccant Dryers

100 to 3400 scfm up to 140 psig.
Dry air from -40°F to -100°F pressure
dew point.

Standard features

- Guaranteed dew point
- ASME coded pressure vessels and piping
- Durable, low maintenance valves
- NEMA 4, CSA approved electrical panel
- Tower and purge pressure gauges
- Efficient, abrasion resistant activated alumina desiccant
- Moisture indicator or optional digital dew point readout
- Depressurization mufflers for noise reduction
- Fail safe PLC controls
- No interruption of flow
- No dew point spikes

Designed for sub-freezing temperatures

These regenerative dryers are ideal for installations with outdoor compressed air piping, and for processes that require an extremely low dew point to as low as -100°F.

Sullair SD dryers use activated alumina desiccant to adsorb water vapor from compressed air. By combining the proven benefits of desiccant drying with the most advanced designs, Sullair offers an extremely compact, reliable system to clean and dry compressed air for the most critical applications.

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%
- Mounted filters with bypass arrangements
From SD-100 to SD-600, this option is mounted on the dryer skid. SD-820 and up requires some piping to be provided by the installer
- Dew point to -100°F
- Higher pressures



Easy installation

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.

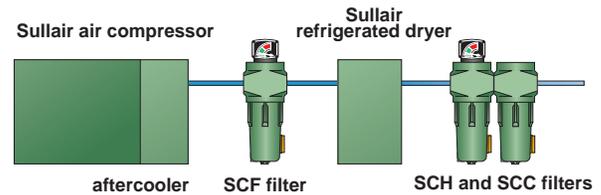
Wide range of operating conditions

The Sullair SD dryers can operate with inlet temperatures from 80°F to 120°F, inlet pressures from 80 to 140 psig and flows from 100 to 3400 scfm. They can be sized to provide either a -40°F or -100°F outlet pressure dew point.

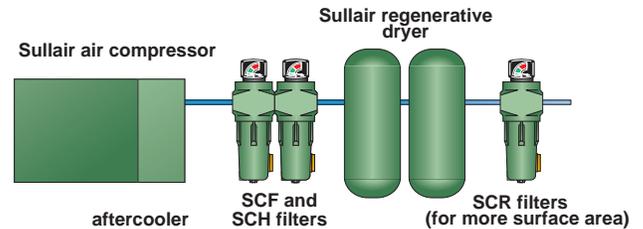
Air Quality Standards ISO 8573.1 Classes

Class	Solid Particle Maximum number of particles per m ³			Pressure Dew Point °F	Oil (incl. vapor) mg/m ³
	0.1-0.5 micron	0.5-1 micron	1.0-5 micron		
1	100	1	0	-94	0.01
2	100,000	1,000	10	-40	0.1
3	-	10,000	500	-4	1.0
4	-	-	1,000	37	5.0
5	-	-	20,000	45	-
6	-	-	-	50	-

Class 2 (dirt), 4 (water), 1 (oil)



Class 2 (dirt), 2 (water), 1 (oil)



Specifications

Model	Max Inlet Flow SCFM ¹	Inlet/Outlet Connection	Required Pre and After Filter ²	Height (in)	Dimensions ⁴			Total Weight ⁴	Standard Voltage
					Width (in)	Depth ³ (in)			
SD-100	100	1" NPT	SCH/SCR-125	68	41	26	850	115/1/60	
SD-160	160	1" NPT	SCH/SCR-235	71	41	26	900	115/1/60	
SD-220	220	1 1/2" NPT	SCH/SCR-235	82	41	22	950	115/1/60	
SD-300	300	1 1/2" NPT	SCH/SCR-340	71	47	28	1185	115/1/60	
SD-400	400	1 1/2" NPT	SCH/SCR-465	83	51	28	1300	115/1/60	
SD-500	500	2" NPT	SCH/SCR-700	85	55	30	1691	115/1/60	
SD-600	600	2" NPT	SCH/SCR-700	85	55	30	1750	115/1/60	
SD-820	820	3" FLG	SCH/SCR-910	106	60	45	2920	115/1/60	
SD-1050	1050	3" FLG	SCH/SCR-1315	106	60	48	3400	115/1/60	
SD-1200	1200	3" FLG	SCH/SCR-1315	118	60	56	4150	115/1/60	
SD-1450	1450	3" FLG	PH/PR-2100	119	64	58	4610	115/1/60	
SD-1710	1710	3" FLG	PH/PR-2100	119	64	58	5104	115/1/60	
SD-2000	2000	4" FLG	PH/PR-2100	128	80	45	5600	115/1/60	
SD-2350	2350	4" FLG	PH/PR-2750	119	80	45	6300	115/1/60	
SD-2750	2750	4" FLG	PH/PR-2750	130	89	52	7500	115/1/60	
SD-3400	3400	6" FLG	PH/PR-4200	132	93	58	9300	115/1/60	

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 may project beyond the dryer skid on 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.

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.

A circular diagram divided into seven segments, each representing a service area:

- DOWNSTREAM PRODUCTS
- AIR AUDITS
- CUSTOMER CARE™ BY SULLAIR®
- AIRILITY™
- SYSTEM MONITORING
- CORE PRODUCTS
- SYSTEM CONTROLS



Sullair Corporation

3700 East Michigan Boulevard, Michigan City, IN 46360
Telephone: 1-800-SULLAIR or 1-219-879-5451
www.sullair.com

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