

SSB Blower Purge Desiccant Dryers SSE Heat Reactivated Desiccant Dryers

220 to 10,500 scfm

ASK ABOUT OUR
OIL FREE GUARANTEE!

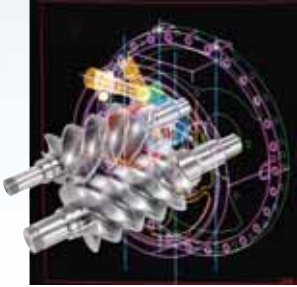


- Dry air as low as -100°F pressure dew point
- Clean, dry compressed air solves the problems of moisture contamination

Sullair Capabilities

Sullair Leadership

Since 1965, Sullair has been recognized around the world as an innovator and a leader in rotary screw compression and vacuum technology. For more than 40 years, Sullair has designed and



manufactured its own rotors and air end assemblies at the corporate headquarters in Michigan City, Indiana.

The award-winning rotary screw design sets the industry standards and delivers

the quality and reliability one expects from a leader.

Sullair Technology

Utilizing the most modern technologies, equipment and advanced manufacturing techniques, Sullair designs, manufactures, assembles, and tests the most innovative compressed air and vacuum products in the industry. Sullair products are known around the world for their universally applicable design, outstanding craftsmanship and superior quality.

Sullair's Statistical Process Control

Sullair's Statistical Process Control (SPC)

system monitors rotor quality standards to assure consistent compressor and vacuum performance.



Sullair's Commitment to Innovation

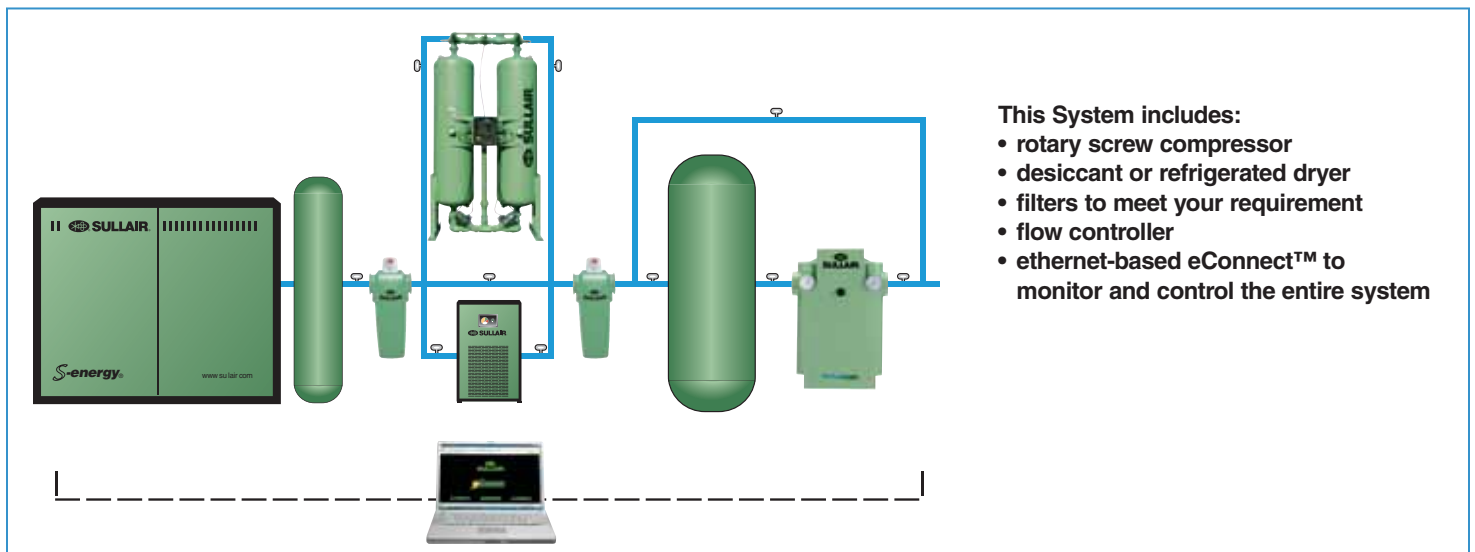
Underlying Sullair's leadership is a dedication to excellence and a commitment to innovation. Sullair is constantly exploring new ideas and seeking new ways to meet industry's need for increasingly energy efficient compressed air and vacuum solutions.

Sullair Stationary Air Power Systems

Sullair offers total compressed air systems to help compressed air users reduce energy costs and improve productivity by analyzing, managing and controlling their compressed air systems.

Sullair's air systems include: plant air audits, energy efficient products, compressed air system controls, equipment to monitor and manage systems, air distribution products, and after-purchase support.

Each component of the system is carefully matched for capacity and pressure to provide maximum performance and energy efficiency. A total Sullair system provides the user with an air quality guarantee.



How It Works

Sullair SSB and SSE Series regenerative desiccant air dryers utilize the adsorption method to remove moisture from compressed air by directing the flow of saturated compressed air over a bed of desiccant. Desiccant is generally activated alumina, a tough spherically shaped and chemically inert material which is contained in “dual” or “twin” tower pressure vessels.

The master controller cycles the flow of compressed air between the towers, one tower is drying while one tower is regenerating. The moisture is adsorbed by the desiccant during the drying process. As the purge air flows through the regenerating bed, it desorbs accumulated moisture on the desiccant and exhausts it to the atmosphere.

Both models of the heat reactivated dryers combine heat with either a small portion of the dried compressed air, or with forced ambient air from the blower to assist in the regeneration process.

Desiccant Dryer Flow

Up-Flow Drying

- Moisture falls due to gravity

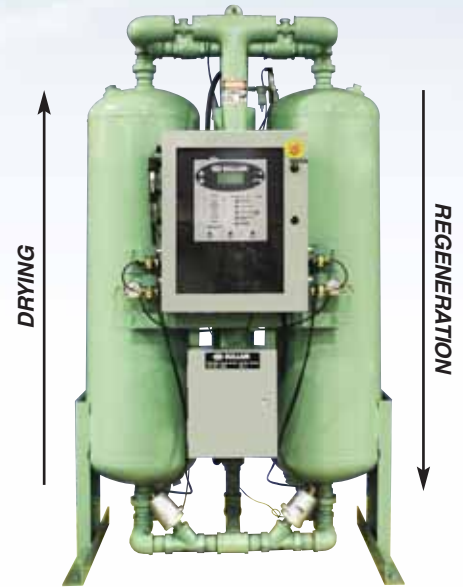
Down-Flow Regeneration

- Bulk moisture exits close to its entrance
- Minimizes effects of liquid slugging

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.



The Importance of Clean, Dry Compressed Air

Water Jeopardizes Everything You Want Your Compressed Air System To Do. It Ruins Product and Fouls Processes.

How Much Water is Too Much?

Any Amount of Water is Too Much.

- Relative humidity is the amount of water vapor in air relative to what it could hold at a given temperature
- Moisture in compressed air remains in a vapor state through the compression cycle, so it is not a problem until it leaves the compressor
- At 75°F and 75% relative humidity, a 75 HP compressor takes in 46 gallons of water vapor in 24 hours.
- Removing this moisture is essential to keeping equipment in top shape!



Liquid remaining after the aftercooler: 14.7 gallons (32.0%)



Liquid remaining after a refrigerated dryer: 1.8 gallons (0.4%)



Liquid remaining after a desiccant dryer: 0.14 gallon (0.3%)

SSB Blower Purge Desiccant Dryers

900 to 10,500 scfm at up to 150 psig Dry air from -40°F to -100°F pressure dew point

Designed for Sub-freezing Temperatures

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

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.

Standard Features on SSB and SSE Dryer Series:

- Cycle stepping
- Heatless backup mode
- ASME code vessels
- Long-life low watt density heater
- Independent switching valves
- Over-temperature safety control
- Full instrumentation
- Stainless steel diffuser screen
- Dual heater thermostats
- 5-Year warranty

Standard Features on SSB Models:

- Dual purge exhaust
- Blower silencer
- Blower flow interlock

Standard Features on SSE Models:

- Failure-to-switch alarm
- System sequence annunciator
- Multiport purge injection
- Moisture indicator

Sullair Control Center

Sullair's full featured control center provides superior dryer control with a wide array of data displayed on the controller. Dryer system temperatures, pressures, dew point (with Power Saver Plus), as well as alarms are all shown on the four-line text display.

Sequence annunciation shows the status of the dryer during normal operation. At a quick glance, the user can determine the status of each tower during the cycle.

Manual cycle stepping allows the operator to step the dryer through a complete eight hour cycle in a matter of minutes to be sure all components are functioning properly. This is a great troubleshooting feature.

Heatless back up allow the dryer to be switched to an unheated mode should there be a problem with the heater or blower. This will allow the dryer to continue to operate without heat until it can be repaired.



Power Saver Plus™ (Optional)

Power Saver Plus adjusts the energy usage to the actual moisture load. Since a desiccant dryer rarely operates at full load, this option can save thousands of dollars in annual energy costs. Power Saver Plus will extend the drying cycle



Energy Efficient Blower

Standard on all heat-activated air dryer 900 scfm and larger, the blower is designed to improve performance and efficiency, yet requires low power consumption and minimal maintenance.



SSE Heat Reactivated Desiccant Dryers

220 to 3,500 scfm at up to 150 psig Dry air from -40°F to -100°F pressure dew point

and start the regeneration cycle only when needed.

- Advanced purge control
- Digital dew point display
- Saves energy
- 4-20 mA output for dew point
- High dew point alarm with Contacts PS PLUS
- **Save up to 75% in energy costs**

High Quality Check Valves

- Teflon Seats
Wafer Check Valves (220-750 scfm)
- Spring assist close
 - Built in stop for longer life
 - Enclosed hinge to eliminate body leakage
 - Easy to maintain

Swing Check Valves (900-10500 scfm)

- More durable than lift type
- Easy to maintain

Purge Exhaust Valves

- Two way poppet valve
- Bronze body
- Stainless steel internals
- Teflon valve seat
- Parts commonality
- Also used as depressurization valve on larger models



Inlet Switching Valves

220 – 750 scfm

- Two way poppet valve
- Bronze body
- Stainless steel internals
- Teflon valve seat
- Parts commonality
- Also used as depressurization valve and re-pressurization valve on larger models

900 – 10500 scfm

- High performance butterfly valve
- Carbon steel body
- Stainless steel internals
- Teflon valve seat
- Double acting pneumatic actuator
- Fail safe operation



IGS SOLUTION
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The Sullair Warranty

All Inclusive "Peace of Mind" Warranty

Sullair backs our commitment to quality with an unparalleled, non-pro-rated 5-year warranty (*parts and labor*) on the major components. No other manufacturer offers a warranty that is as all inclusive.

(Note: a Sullair prefilter must be installed upstream of the dryer as a prerequisite for this warranty.)

Quality is Third Party Certified and Guaranteed.

Dryers are manufactured in an ISO 9001 environment and are ETL (UL), CSA Approved.



Capacity Correction Factors

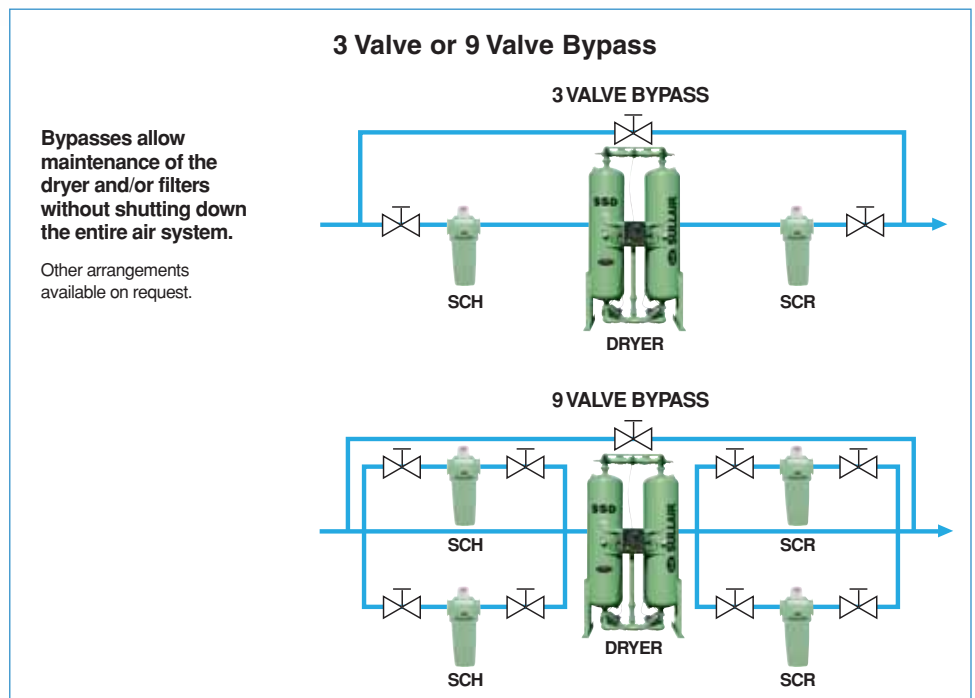
Temp.	Pressure		Inlet Air Pressure (psig)												
	Factor		50	60	70	75	80	90	100	110	120	125	130	140	150
			0.7	0.74	0.79	0.82	0.85	0.92	1	1.1	1.21	1.28	1.35	1.54	1.77
80°F	1.79	1.253	1.3246	1.4141	1.4678	1.5215	1.6468	1.79	1.969	2.1659	2.2912	2.4165	2.7566	3.1683	
85°F	1.56	1.092	1.1544	1.2324	1.2792	1.326	1.4352	1.56	1.716	1.8876	1.9968	2.106	2.4024	2.7612	
90°F	1.36	0.952	1.0064	1.0744	1.1152	1.156	1.2512	1.36	1.496	1.6456	1.7408	1.836	2.0944	2.4072	
95°F	1.17	0.819	0.8658	0.9243	0.9594	0.9945	1.0764	1.17	1.287	1.4157	1.4976	1.5795	1.8018	2.0709	
100°F	1	0.7	0.74	0.79	0.82	0.85	0.92	1	1.1	1.21	1.28	1.35	1.54	1.77	
105°F	0.86	0.602	0.6364	0.6794	0.7052	0.731	0.7912	0.86	0.946	1.0406	1.1008	1.161	1.3244	1.5222	
110°F	0.74	0.518	0.5476	0.5846	0.6068	0.629	0.6808	0.74	0.814	0.8954	0.9472	0.999	1.1396	1.3098	
115°F	0.63	0.441	0.4662	0.4977	0.5166	0.5355	0.5796	0.63	0.693	0.7623	0.8064	0.8505	0.9702	1.1151	
120°F	0.56	0.392	0.4144	0.4424	0.4592	0.476	0.5152	0.56	0.616	0.6776	0.7168	0.756	0.8624	0.9912	

Corrected capacity = rated capacity X correction factor

Options

- Filters mounted (220-750)
- 3 Valve bypass with mounted filters*
- 9 Valve bypass with dual filters*
- Power Saver Plus Demand Control
- All NEMA classifications
- Pressure to 1000 psig
- High humidity alarm
- -80°F to -100°F dew points for SSE (-65°F for SSB)

* For dryer models SSE-900, SSB-900, and larger, the filter and bypass valves are supplied as a separate skid, to be piped to the dryer by installer.



Sullair SSB Dryer Specifications

Model	Flow SCFM	Inlet/Outlet Connection	Dimension			Total Weight (lbs)	Standard Voltage	Heater kW	Blower HP	Recommended Pre and After Filter
			Height (in)	Width (in)	Depth (in)					
SSB-900	900	3" FLG	101	62	48	4490	460/3/60	18	5	SCH/SCR-910
SSB-1050	1050	3" FLG	101	62	48	5700	460/3/60	18	5	SCH/SCR-1315
SSB-1200	1200	3" FLG	112	62	48	6300	460/3/60	25	5	SCH/SCR-1315
SSB-1450	1450	3" FLG	113	74	48	8250	460/3/60	30	7.5	SCH/SCR-2120
SSB-1750	1750	4" FLG	100	84	58	8250	460/3/60	30	7.5	SCH/SCR-2120
SSB-2000	2000	4" FLG	100	84	58	9850	460/3/60	30	7.5	SCH/SCR-2120
SSB-2500	2500	4" FLG	110	84	58	12210	460/3/60	50	10	PH/PR-2750
SSB-3000	3000	6" FLG	111	96	58	15717	460/3/60	60	10	PH/PR-4200
SSB-3500	3500	6" FLG	113	168	84	17000	460/3/60	67	15	PH/PR-4200
SSB-4000	4000	6" FLG	113	168	84	18910	460/3/60	85	15	PH/PR-4200
SSB-5000	5000	6" FLG	CF	CF	CF	CF	460/3/60	100	20	PH/PR-7000
SSB-6000	6000	6" FLG	CF	CF	CF	CF	460/3/60	115	20	PH/PR-7000
SSB-7000	7000	CF	CF	CF	CF	CF	CF	CF	CF	CF
SSB-8700	8700	CF	CF	CF	CF	CF	CF	CF	CF	CF
SSB-10500	10500	CF	CF	CF	CF	CF	CF	CF	CF	CF

Sullair SSE Dryer Specifications

Model	Flow SCFM	Inlet/Outlet Connection	Dimension			Total Weight (lbs)	Standard Voltage	Heater kW	Blower HP	Recommended Pre and After Filter
			Height (in)	Width (in)	Depth (in)					
SSE-220	220	1-1/2" NPT	86	42	22	1180	460/3/60	3	NA	SCH/SCR-235
SSE-300	300	1-1/2" NPT	86	42	22	1370	460/3/60	3	NA	SCH/SCR-465
SSE-400	400	2" NPT	86	47	27	1400	460/3/60	6	NA	SCH/SCR-465
SSE-500	500	2" NPT	86	49	27	2060	460/3/60	6	NA	SCH/SCR-700
SSE-600	600	2" NPT	90	52	28	2350	460/3/60	9	NA	SCH/SCR-700
SSE-750	750	2" NPT	90	62	35	3035	460/3/60	9	NA	SCH/SCR-910
SSE-900	900	3" FLG	101	62	48	4195	460/3/60	13	NA	SCH/SCR-910
SSE-1050	1050	3" FLG	101	62	48	4200	460/3/60	13	NA	SCH/SCR-1315
SSE-1200	1200	3" FLG	112	62	48	5215	460/3/60	13	NA	SCH/SCR-1315
SSE-1450	1450	3" FLG	113	72	52	5715	460/3/60	18	NA	SCH/SCR-2120
SSE-1750	1750	4" FLG	98	72	58	6250	460/3/60	18	NA	SCH/SCR-2120
SSE-2000	2000	4" FLG	112	76	58	6300	460/3/60	25	NA	SCH/SCR-2120
SSE-2500	2500	4" FLG	112	80	60	6750	460/3/60	25	NA	PH/PR-2750
SSE-3000	3000	6" FLG	112	80	60	7055	460/3/60	30	NA	PH/PR-4200
SSE-3500	3500	6" FLG	113	108	66	8800	460/3/60	38	NA	PH/PR-4200

Sullair Supplies Compressed Air Systems

For the lowest total cost of ownership, Sullair provides an air system designed to lower operating cost, improve reliability and maximize return on investment.



Sullair offers air systems to help compressed air users reduce their energy costs and improve their productivity by analyzing, managing and controlling total compressed air systems. Information on the compressed air system tailored to your specific needs can be obtained by contacting your local Sullair Distributor. To acquire local distributor contact information visit us online at www.sullair.com or call 219-879-5451.



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