

Sahara-Pak

*Heat-of-Compression
Regenerative Compressed Air Dryers*



Henderson Engineering Co.
815.786.9471 800.544.4379

Unique, Energy-Saving

Models HC & SP



World Leader in Regenerative Dryer Technology





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Reduced Production Costs

The Competitive Edge

Give yourself a competitive edge by reducing production costs with the revolutionary Sahara-Pak. The first to develop a heat-of-compression regenerative dryer, Sahara Air Products has been a leader in compressed air and gas technology since the 1950's.

Most Energy Efficient

The unique Sahara-Pak uses the normally wasted heat from the compressor to regenerate its desiccant. In addition to efficiently using the heat-of-compression, the Sahara-Pak produces extremely low dew points.

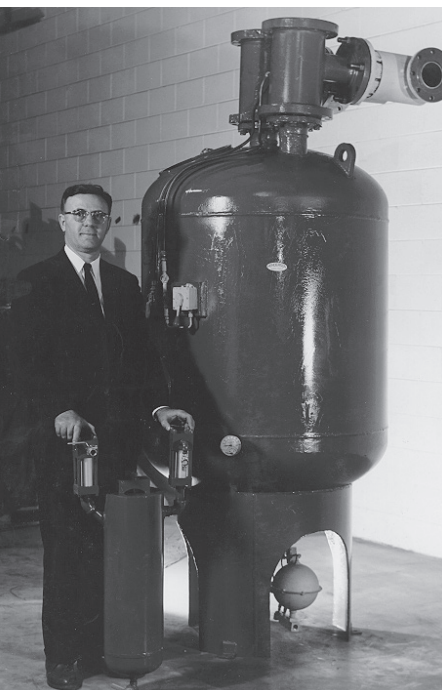
An important energy-saving design feature of the Sahara-Pak is the repositioned aftercooler. In order to use the heat-of-compression, the hot air goes directly into the regenerating tower, then to the aftercooler and drying tower. Net result, instrument quality air for free.



Two Design Awards

Sahara Air Products is the only dryer company to win an independently judged award. In fact, the patented Sahara-Pak design has won two awards for the most practical and widely applicable new developments for improving operations in specific industries.

A Long & Proud Company History



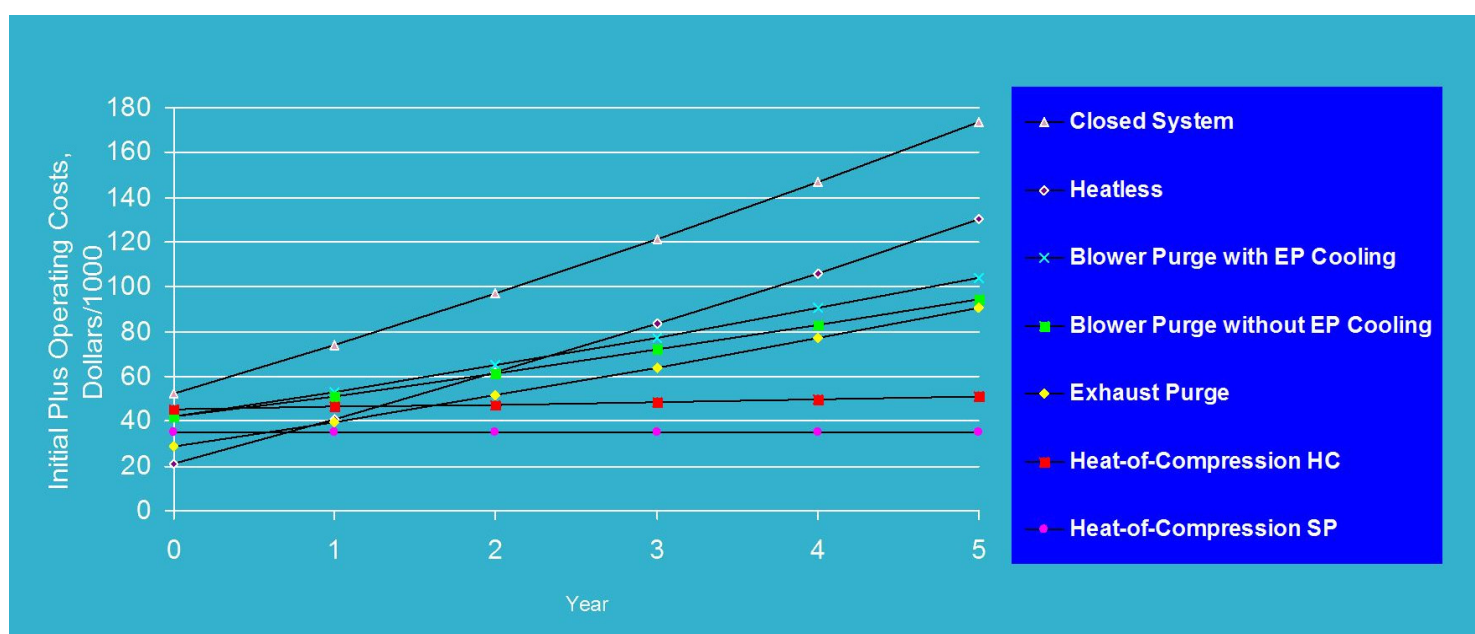
Sahara Air Products, a Division of Henderson Engineering Co., Inc., was founded in 1957 by Joe and Evelyn Henderson to provide engineered solutions for air system problems. Mr. Henderson's philosophy was to thoroughly examine the unique requirements of each customer and to develop the most economical and reliable system solution for that application. This trademark of engineered solutions exists at Sahara today, as the third generation of Hendersons continue the tradition of product excellence and customer service. Sahara's reputation for high quality, innovative products, and customer loyalty has continued to grow through the years.

As a family business, we know that our greatest assets are our employees. Most of our people have been with us for more than 20 years. There is no substitute for experience. Sahara employees are true team members who know what they're doing and they truly care about doing it right the first time. This means you get what you want; a drying system that delivers performance year after year, decade after decade.

Quality and old world craftsmanship never goes out of style

Revolutionary Energy Savings

Total Drying Cost to Deliver 1608 Nm³/H (1000 SCFM) with a -40°C/°F PDP



Regenerative Dryer Cost Comparison

DRYER	INITIAL COST	PURGE AIR	HEATER	BLOWER	ANNUAL OPERATING COST PER 1000 SCFM*
Heatless	\$25,157.00	15%	No	No	\$19,700.00
Exhaust Purge	33,484.00	2-7%	Yes	No	11,258.00
Blower Purge w/EP Cooling	49,292.00	Yes	Yes	Yes	11,267.00
Blower Purge w/o EP Cooling	49,292.00	No	Yes	Yes	9,520.00
Sahara-Pak HC	64,778.00	½%	No	No	1,026.00
Sahara-Pak SP	52,061.00	No	No	No	44.00

* Costs based on 1000 SCFM dryer operating around the clock 365 days.

Purge air at \$.25/1000 SCF; electricity at \$.05/KWH.

Does not include maintenance costs.

Average purge loss.



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Competing In A Global Economy

A Green Dryer, HOC Requires No CFC's Does Not Pollute

The Ability To Remain Competitive

	B	C	D	E	F	G	H	I	J	K	L	M
2	REGENERATIVE DRYER OPERATING COSTS											
3												
4	DRYER OPERATING CONDITIONS											
5		TYPICAL		RANGE								
6	FLOW RATE, SCFM	1,000	-	1 - 50,000								
7	PRESSURE, PSIG	100	110	25 - 150								
8	TEMPERATURE, F	100	90	50 - 120								
9	OPERATING HOURS PER DAY	24	24	1 - 24								
10	OPERATING DAYS PER WEEK	7	7	1 - 7								
11	OPERATING WEEKS PER YEAR	52	52	1 - 52								
12												
13												
14	COST OF UTILITIES											
15												
16	ELECTRICITY, \$ / KWH	\$0.050	\$0.06	\$0.01 - \$0.20	CALCULATION OF COST OF COMPRESSED AIR							
17	COMPRESSED AIR, \$ / 1000 SCF	\$0.250	\$0.40	\$0.20 - \$0.50	ELECTRICITY ONLY = \$0.153				RECOMMENDED AIR COST = \$0.403			
18	COOLING WATER, \$ / 1000 GALLONS	\$1.960	\$7.84	\$0.25 - \$10.00	TYPICAL TOWER WATER COST = \$1.96							
19	ANNUAL INFLATION RATE	5.0%	5.0%	0.0% - 10.0%								
20												
21												
22		HEATLESS	CS	EXHAUST	(WITH EP COOL)	(WO EP COOL)	REFRIGERATED	HC	SP			
23	WATER REMOVED, PPH	23.61	23.61	23.61	23.61	23.61	20.59	23.61	23.61			
24	WATER REMOVED PER 4 HRS	94.45	94.45	94.45	94.45	94.45	82.35	94.45	94.45			
25	DESIGN DDC %		16.33%	16.33%	16.33%	16.33%	-	16.33%	4.00%			
26	# DESICCANT REQ'D	600	578	578	578	578	-	578	295			
27	THEORETICAL "DRYER SIZE" REQ'D	1,000	1,000	1,000	1,000	1,000	-	1,000	1,000			
28	PURGE RATE	15%	25%	7%	25%	25%	-	2.0%	0%			
29	PURGE, SCFM	150	250	70	250	250	-	20	0			
30	HEATER KW	0	22.26	6.23	22.26	22.26	-	0	0			
31	HRS HEATING PER 24 HOURS	0	18	18	18	18	-	0	0			
32	KWH PER 24 HOURS	0	401	112	401	401	-	0	0			
33	HEATER ELECTRIC COST / 24 HRS	\$0.00	\$20.03	\$5.61	\$20.03	\$20.03	-	\$0.00	\$0.00			
34	MOTOR ELECTRIC COST / 24 HRS	\$0.00	\$12.00	\$0.00	\$4.50	\$6.00	\$6.67	\$0.00	\$0.00			
35	COMPRESSED AIR PURGE COST / 24 HRS	\$54.00	\$0.00	\$25.20	\$6.30	\$0.00	-	\$2.70	\$0.00			
36	COOLING WATER COST / 24 HRS	\$0.12	\$28.22				\$22.58					
37	CONTROLS ELECTRIC COST / 24 HRS	\$0.12	\$0.12	\$0.12	\$0.12	\$0.12	\$0.12	\$0.12	\$0.12			
38	TOTAL COST PER 24 HOURS	\$54.12	\$60.38	\$30.93	\$30.95	\$26.15	\$29.37	\$2.82	\$0.12			
39												
40	TOTAL COST PER DAY	\$54.12	\$60.38	\$30.93	\$30.95	\$26.15	\$29.37	\$2.82	\$0.12			
41	TOTAL COST PER WEEK	\$378.84	\$422.64	\$216.50	\$216.67	\$183.07	\$205.56	\$19.74	\$0.84			
42	TOTAL OPERATING COST 1ST YEAR	\$19,700	\$21,977	\$11,258	\$11,267	\$9,520	\$10,689	\$1,026	\$44			
43	CAPITAL COST FOR DRYER	\$21,354	\$52,285	\$28,419	\$41,828	\$41,828	\$17,084	\$45,327	\$35,106			
44												
45	TOTAL COST FOR 5 YEARS	\$130,207	\$173,722	\$90,627	\$104,085	\$94,431	\$76,148	\$50,999	\$35,347			

We manufacture all of these regenerative dryers.

Our goal is to assist you in making the best informed decision to provide you with the

lowest initial cost,
lowest operating cost,
and highest reliability.

Choosing A Dryer Design

Which Dryer Design is Right for You?

There are two Sahara-Pak designs that allow you to choose the dryer which best fits your needs. All Heat-of-Compression dryers may only be used with an oil-free compressor; located reasonably close to the compressor. Pipe between the compressor final stage discharge and the Heat-of-Compression dryer should be insulated to minimize heat loss.

Sahara-Pak SP Model

The result of years of product development, the Model SP is the simplest SAHARA dryer and has the lowest initial cost. The SP design provides instrument quality air.

- SP design delivers pressure dew points in the 0°F to -60°F range, depending on your operating conditions.
- SP design consumes none of your valuable dry air.
- Like other heat reactivated dryers, the SP design has a brief temperature and dew point spike at tower shift. This bump evens out as the air moves through the piping system.
- Outlet dew points vary based on operating conditions; higher in the summer and lower in the winter.
- Typical dew points meet and exceed the requirements for instrument quality air as defined by the Instrument Society of America.



Sahara-Pak HC Model

The Model HC is a true process dryer. Given the proper operating conditions, it can deliver extremely low dew points with virtually no operating cost.

The HC design provides a constant dew point without temperature or dew point bumps. The HC includes a cooling and stripping cycle and delivers the highest performance of any air dryer.

- HC design includes stripping and cooling cycle for optimum performance.
- HC design deliver pressure dew points in the -40°F to -100°F pressure dew point, depending on your operating conditions.
- HC design can be equipped to provide -40°F dew points or lower, under every possible scenario, including operation of rental compressors.





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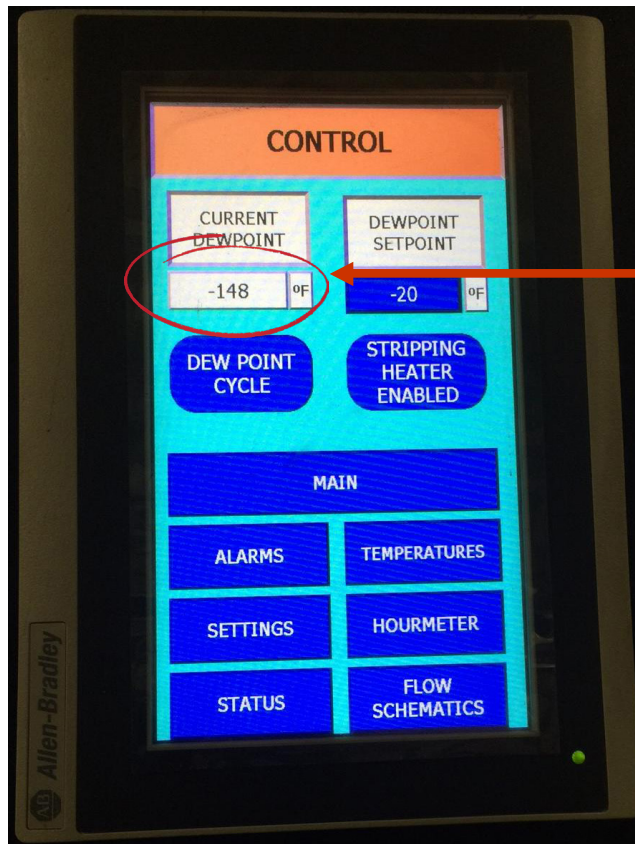


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Sahara-Pak Features

- Cuts operating costs to near zero by using the heat-of-compression for regeneration.
- Regenerated with “free” heat produced by your compressor.
- Eliminates costly installation charges; all components are pre-piped and pre-wired.
- Minimizes potential for wear and mechanical failure.
- Lower initial cost than other regenerative dryer designs.
- Lower operating costs vs. performance for all regenerative dryers.
- Available in capacities from 125 SCFM to 50,000 SCFM.
- SP design averages less than \$45 per year total electrical cost; there are no heaters or blowers to consume electricity and there is no purge air loss.
- HC design averages less than \$1,100 per 1000 SCFM per year total electrical cost; there are no heaters or blowers to consume electricity and there is an adjustable 2% purge air loss.

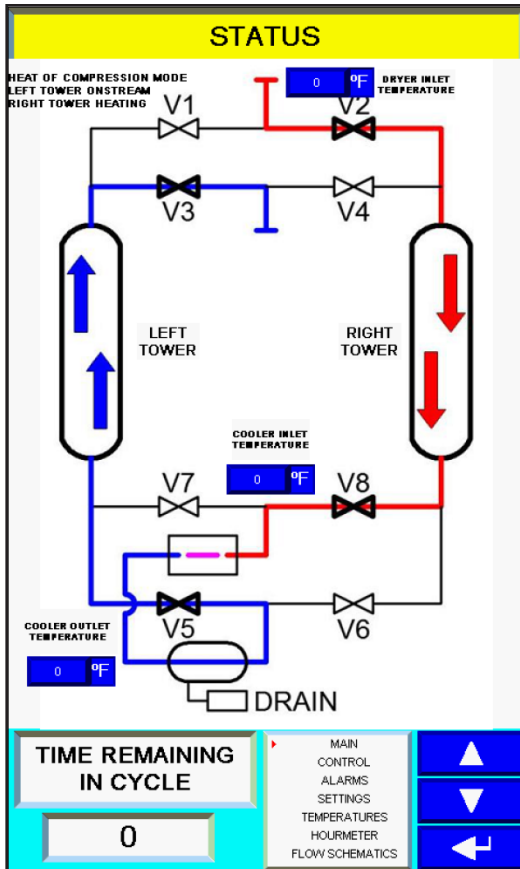
We can build a dryer to meet your strict performance requirements



-148°F PDP
at one of our steel
manufacturer customer's
facilities

***Quality and reliability are built into every SAHARA air dryer
and performance is guaranteed***

Controller Comes Standard



- The standard PLC controls the dryer's operation
- Ethernet communication
- The standard operator interface for local control of the air dryer
- Housed in a NEMA 4 enclosure, the operator interface uses a touch sensitive screen with control functions performed by touching on-screen display buttons to change screens, modify settings, or enter values
- Dryer cycle indication
- P&ID for each cycle on operator interface screen
- Other controllers available, per customer specifications





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SP Description of Operation

Simple, Low Cost SP

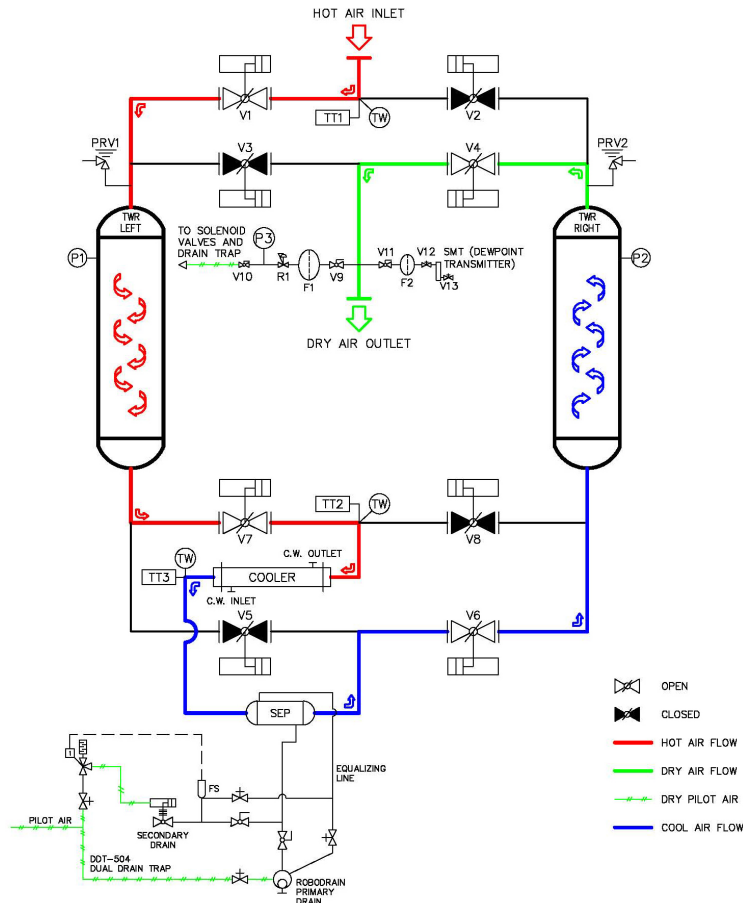
The flow chart illustrates the efficient SP system. Air enters the dryer directly from the final stage of compression. It is directed into the regenerating tower, where the heat-of-compression removes the moisture from the desiccant. The air then flows into the aftercooler, into the coalescing-type moisture separator, and into the drying tower where the air is dried to its final low dew point.

The SP switches towers every half hour. (With the optional Dew Point Demand System (DPDS), the cycle is extended until the drying tower reaches saturation.)

At tower shift, a small temperature and dew point bump occurs, as with most other heat reactivated dryers. The small amount of high dew point air blends in with the previously dried air to maintain a low overall dew point.

The DPDS turns off the timer and switches the towers only when the dew point at the outlet of the dryer rises to a preset level indicating the desiccant in the drying tower is saturated. Switching towers on demand uses the full capacity of the desiccant, reduces the number of tower shifts, and compensates for fluctuations in compressor flow. The DPDS allows the dryer to be operated at 15% to 100% capacity.

Left Tower Heating, Right Tower Drying



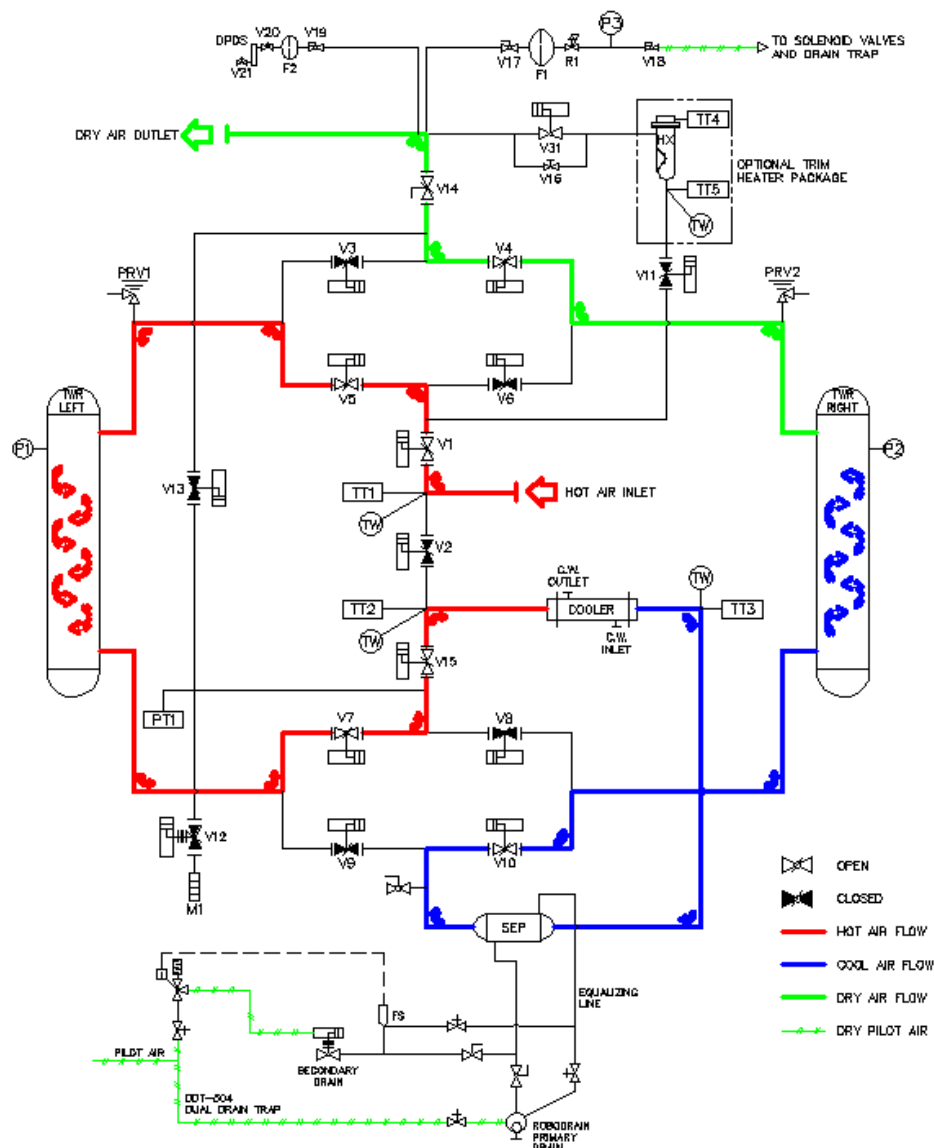
HC Description of Operation

Lower Overall Dew Points

These flow charts illustrate how the HC employs an 8 hour time cycle, cooling and stripping cycle to prevent dew point bumps at tower shift, and provide lower overall dew points.

Left Tower Heating (90 minutes)

Hot air from the final stage of compression enters the inlet of the HC and is directed by the inlet 2-way valves into the regenerating tower. This hot, thirsty air regenerates the bulk of the water from the desiccant. The air is then directed into the aftercooler where it is cooled, the coalescing separator where liquid water is removed through the drain trap system, then into the drying tower where the air is actually dried to its final low dew point.





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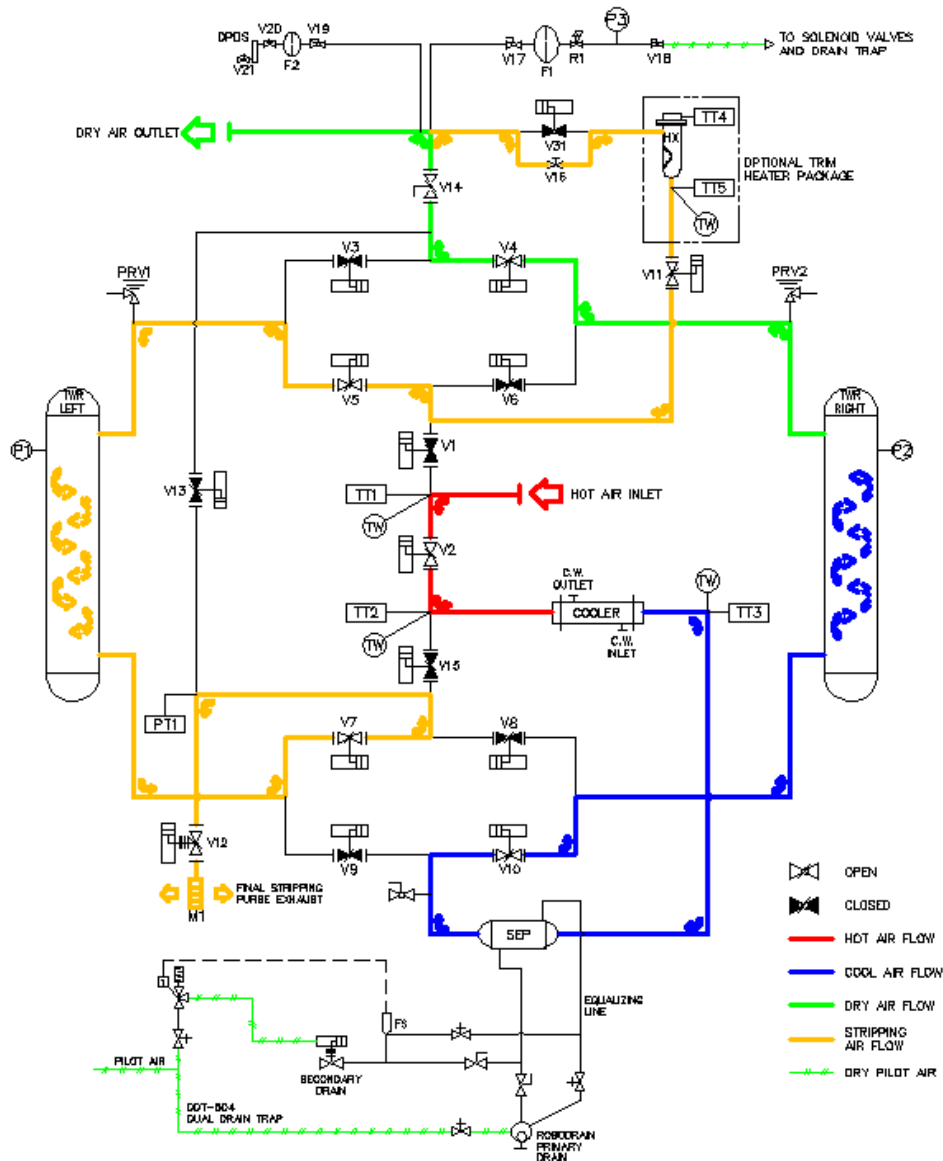


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Stripping allows the HC to deliver 30°F lower dew points than the SP

Left Tower Stripping (90 minutes)

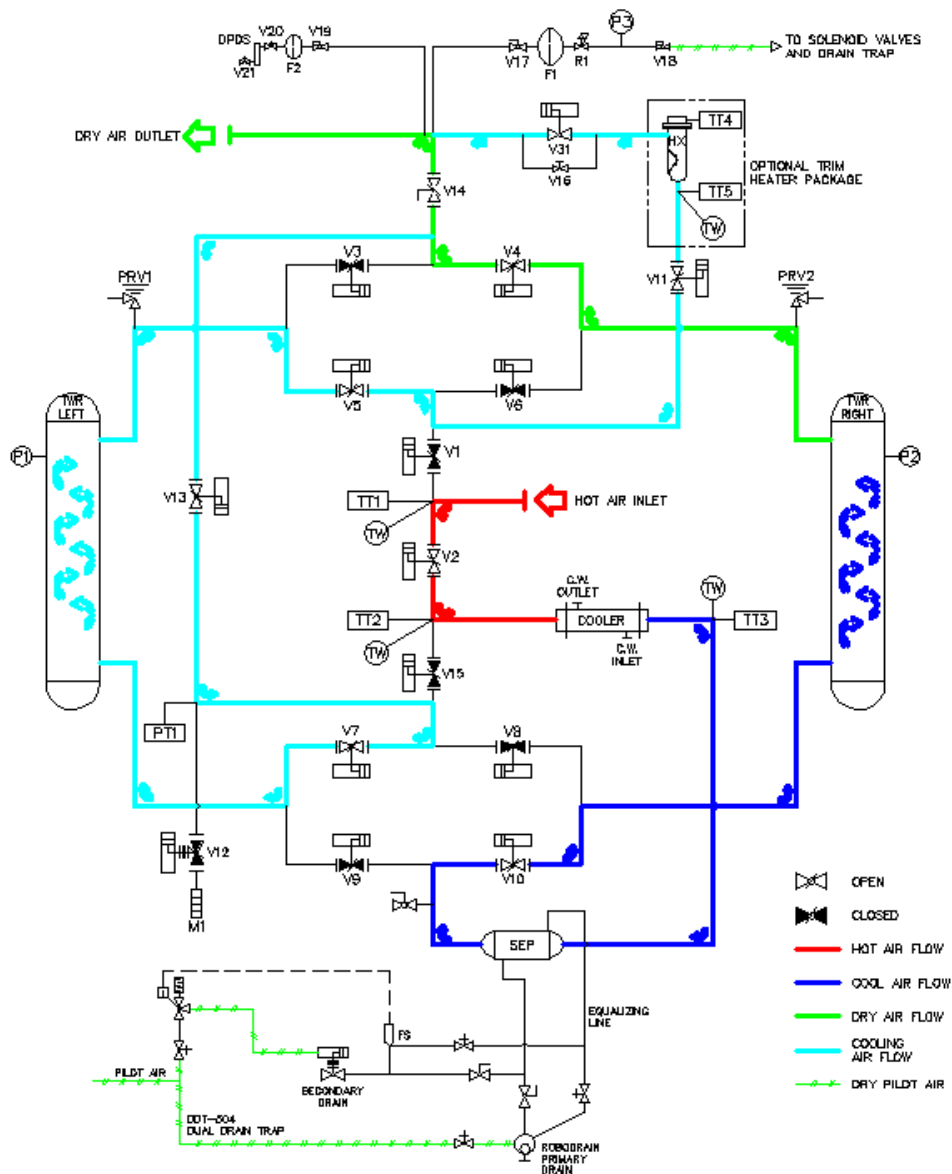
At the end of heating, the inlet valves shift position, directing the hot inlet air directly into the aftercooler, separator, and drying tower. We now begin stripping. At the beginning of stripping, the regenerating tower is depressurized through a muffler. During stripping, a small adjustable flow of dry air is used to remove the last little bit of moisture from the regenerating tower. This allows the HC dryer to provide exceptionally low dew points.



Cooling eliminates temperature & dew point spikes at tower shift; allows the HC to deliver flat line dew points

Left Tower Cooling (60 minutes)

At the end of stripping, the regenerating tower is repressurized. The outlet cooling cycle valves open and cooling begins. During cooling, a portion of the dry outlet air is directed into the regenerating tower to reduce the temperature of the bed prior to tower shift. There is no air lost during cooling. Cooling and stripping combine to provide extremely low dew points and to eliminate dew point fluctuations during tower shift.





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Optimum Performance Features for the HC

The outlet dew point from any heat-of-compression dryer is based in large part on the discharge temperature of the compressor. If the compressor, for whatever reason, does not deliver high enough temperatures, then the dryer can't deliver low dew points. This has always been one of the problems with conventional heat-of-compression dryers; until now. The HC design can be equipped with a small optional trim heater which can be automatically energized, if the regeneration temperatures are not adequate. Because the heater is located in the stripping line, it is not heating the full flow of the compressor; rather, it is comparable to a typical heated dryer. The stripping with heat time is adjustable between 0 and 90 minutes. The heater allows the dryer to deliver low dew points under virtually any set of conditions. The heater is identical to our heated dryer design; we use an incoloy sheathed heater derated to 14 watts/sq. inch. The heater is controlled by a temperature transmitter that provides heater overtemp alarm and shutdown. Also provided is a temperature transmitter in the cold zone for heater shutdown, if there is a loss of flow across the heater.

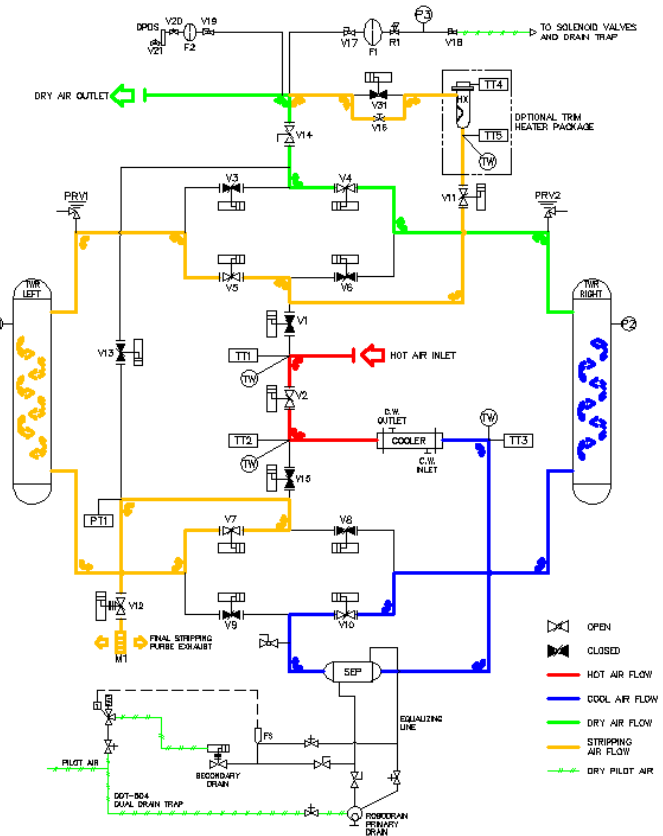


Additionally, the HC design is also equipped as standard with a heatless mode of operation*. If, for example, the primary compressor is down and portable oil-free compressors are brought in, the inlet temperature to the dryer may be as low as 100°F. In this case, the HC dryer can operate in a heatless mode and deliver the specified dew point. As with any heatless dryer, the HC will now purge 15% of the inlet air.

When the trim heater option is purchased, the dryer can also operate as an externally heated dryer; another mode of operation, if the primary compressor is down and portable oil-free compressors are brought in. As with any externally heated dryer, the purge will be 7% of the inlet air.

With these two features, the HC can deliver any required dew point, under any set of conditions, all the time.

*Henderson HOC Patents: 3950154, 5137548, 5376164, 6171377, and 6375722 (heatless mode of operation).



HC heatless mode of operation

Safe & Reliable

Heat-of-Compression dryers are inherently the safest and most reliable regenerative dryers available.

The SP has eight high performance switching valves that are guaranteed to operate for 5 years. There is no air loss, no heaters or blowers; so not only is the SP the most energy efficient dryer design in the world, it's also the most reliable.

The HC design provides process quality continuous dew points. If you require -40° or lower, the HC is the dryer custom designed to deliver it day after day, year after year.

Additionally, the HC includes valves to control the stripping and cooling cycles to deliver optimum performance. Able to deliver the specified dew point under virtually any condition the HC dryer provides worry free performance.

Both Heat-of-Compression dryer designs use the same high performance switching valves; guaranteed to perform for 5 years.



Worldwide Installations

Glass & Plastics Producers

Electric & Power Utilities

Automotive & Airline Industry

Oil Refineries

Chemical Companies

Healthcare

Breweries

Nuclear Energy

Fabricators

Aluminum & Steel Foundries

Recycling

Electronics

Waste Management

Diagnostics

Paint Manufacturers



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Quality Integral Components & Features

SWITCHING VALVES



- Reliable 2-way non-lubricated
- 2" & smaller are 2-way rack and pinion actuated bronze ball valves
- 3" & larger are high performance butterfly valves w/SS internals and reinforced teflon seat

ELECTRICAL



- Housed in a NEMA 4 enclosure
- Built to latest NEC Guidelines

ELECTRIC HEATER (when trim heater purchased)



- Derated to a maximum of 14 watts/sq. in. density for longer life
- Inconel sheathed
- Heating elements not in direct contact with desiccant
- Applies only if there's a trim heater

PRESSURE TRANSMITTER (HC design)



- Controls cooling valve operation
- Adjustable setpoint

DEPRESSURIZATION MUFFLERS (HC Dryers)



- Utilized on the blowdown, keeps noise levels to a minimum
- Complies with OSHA standards by keeping noise tolerance at <85 dBA on a time-weighted average

SEPARATE PILOT AIR FILTER



- With pressure gauge and block valve to protect dryer control system

Quality Integral Components & Features

DIN RAIL MOUNTED TEMPERATURE TRANSMITTER



Standard

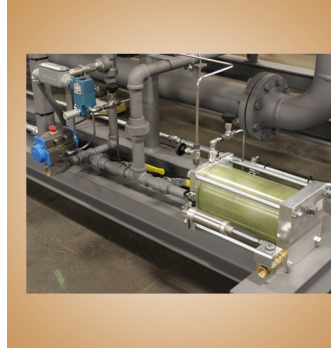
- Used to display dryer inlet temperature, cooler inlet temperature, & cooler outlet temperature on PLC screen
- Provides low inlet temperature alarm
- Provides high cooler outlet temperature alarm

With trim heater option:

- For heater control & cold zone
- Transmitter regulates heater outlet temperature
- Temperature indication and alarms displayed on PLC screen
- A separate transmitter located in the cold zone of the heater provides additional protection, in case of low or lost flow



DDT-504 DRAIN TRAP



- Fail-safe drain trap developed by Sahara
- Most reliable drain trap available
- Consists of two separate traps; a primary and a secondary
- Alarm in PLC, if primary drain fails
- Secondary drain continues to operate until primary drain is repaired

SEPARATOR



- Most efficient coalescing type
- 99.5% efficient design
- Consists of a stainless steel mesh pad housed in an ASME coded pressure vessel

SHELL & TUBE HEAT EXCHANGER



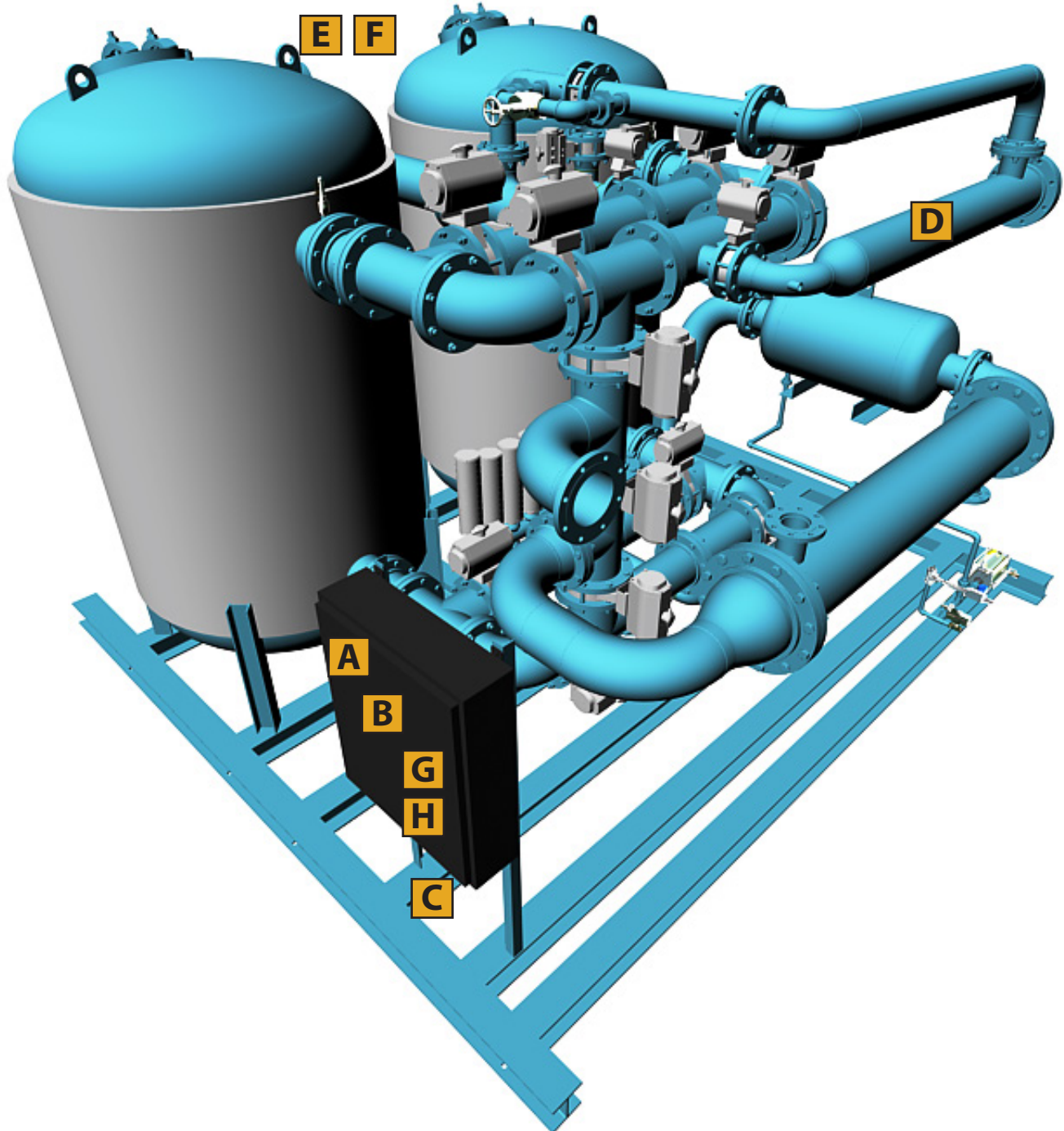
- ASME code stamped
- Copper tubes provided as standard
- Other tube material options:
 - 90/10 cupro nickel
 - 304 & 316 stainless steel
- Other shell materials available:
 - 304 & 316 stainless steel
- Optional air cooled heat exchanger available



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Other options also available.

*We can custom build a dryer to meet your strict performance requirements.
Contact us and our sales engineers will help you select
the right system for your application.*

Standard Options

A SAHARA DEW POINT DEMAND SYSTEM

Energy conservation has always been a strong design consideration of Sahara Air Products. The Dew Point Demand System measures the dew point of the outlet air, overriding the timer, eliminating unnecessary switching of towers resulting in considerable savings through reduction of regeneration cost. Additional savings can be realized with this system by reducing wear on component parts, as well as extending the life of desiccant.

The SAHARA Dew Point Demand System utilizes a state-of-the-art moisture transmitter to accurately measure the actual PRESSURE DEW POINT the dryer is delivering at all times. The instrument reads directly to the PLC and is displayed on the Panel View screen, which constantly keeps you informed of dryer performance. An adjustable set point allows you to set the precise dew point for tower switching. Tower switching can be activated anywhere within the broad range of -148°F to +86°F.

B FAIL-TO-SHIFT ALARM INDICATION

Indication that malfunction has occurred, preventing towers from shifting at the proper time or dew point sequence.

C MOISTURE INDICATOR

Visual indication of outlet air moisture content by means of color change media.

D TRIM HEATER

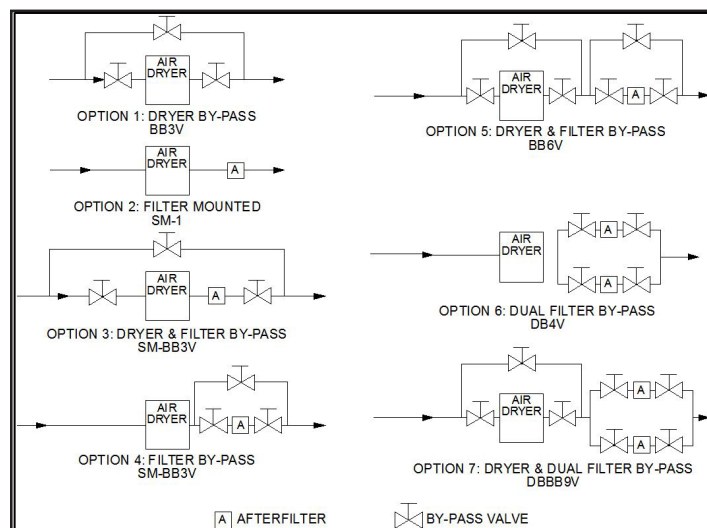
Used to enhance dew point performance.

E PARTICULATE AFTERFILTER

We recommend an afterfilter downstream of the dryer to eliminate the possibility of desiccant dust carryover into the air system. For this duty, we offer a Sahara particulate afterfilter. This unit is constructed of carbon steel to ASME standards and the elements are designed to filter particles to 1 micron or better.

F FILTER MOUNTING & BYPASS OPTIONS

Filters may be mounted on dryer skid for ease of installation.



G NEMA 7 or 12 ELECTRICAL CONSTRUCTION

NEMA 4 Standard

H CONTROLLERS PER CUSTOMER SPECIFICATIONS

The standard PLC is an Allen-Bradley Micrologix with an Allen-Bradley PanelView. Other controllers are available per your required custom specifications.

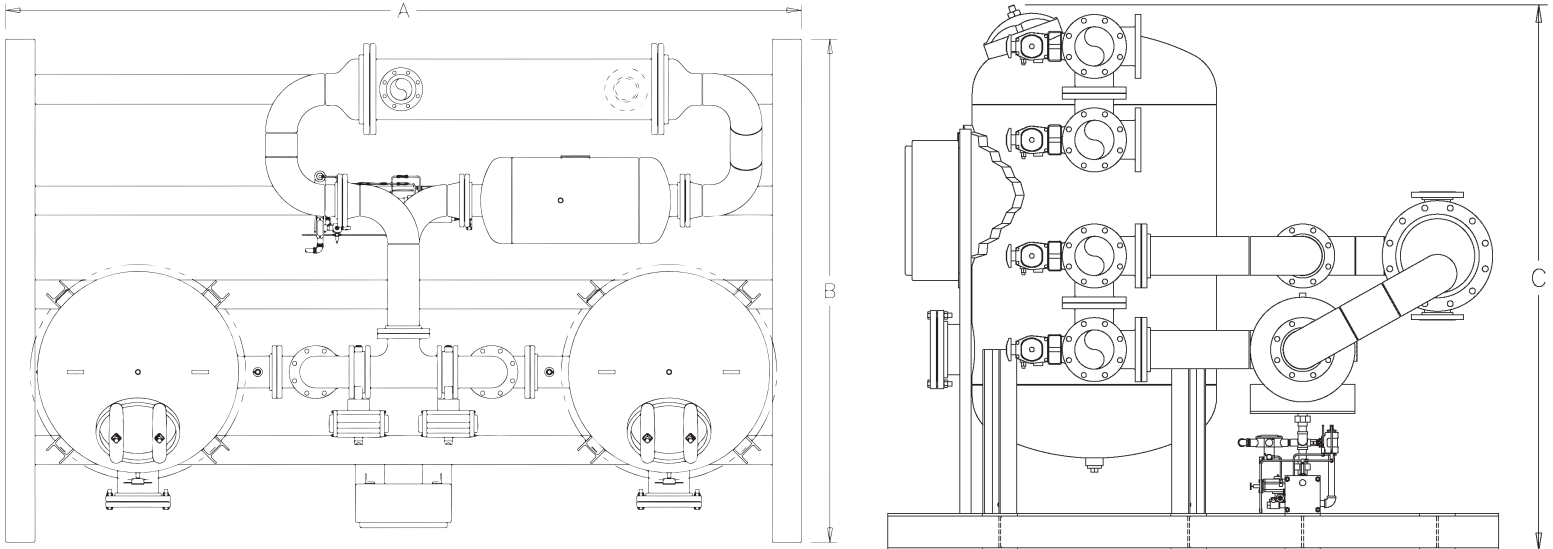


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SP Specifications & Dimensions



MODEL	SCFM RATING @ 100#	INLET / OUTLET SIZE	LBS. DESICCANT PER TOWER	A (INCHES)	B (INCHES)	C (INCHES)	WEIGHT (POUNDS)
SP-125	125	1"	42	84	48	67	1549
SP-180	180	1 1/2"	72	86	48	67	1784
SP-280	280	1 1/2"	92	86	48	68	1983
SP-400	400	2"	120	90	50	68	2408
SP-600	600	3"	182	93	62	60	3245
SP-900	900	3"	367	100	64	64	3825
SP-1200	1200	4"	487	106	72	88	5165
SP-1500	1500	4"	735	111	72	88	5325
SP-1800	1800	4"	735	111	74	88	5430
SP-2200	2200	6"	1230	132	94	93	8775
SP-2700	2700	6"	1230	132	94	93	8975
SP-3200	3200	6"	1230	132	94	93	9625
SP-3700	3700	6"	1662	153	90	96	11295
SP-4400	4400	6"	1754	164	98	99	12050
SP-6000	6000	8"	2008	186	112	99	13685
SP-7500	7500	8"	2561	190	114	100	17925
SP-8500	8500	8"	2805	200	120	100	19213
SP-10,000	10,000	10"	4459	232	129	128	24300

Sahara reserves the right to make changes without notification. Some models not shown. Other sizes and pressures available. Metric dimensions available upon request. Ratings are based on 100 PSIG, 100°F.

Heat-of-Compression Keys To Success

Full Flow Heating

Both the SP and the HC utilize full flow heating; all of the air from the final stage of compression is directed into the regenerating tower. We know that compressor flows vary during the course of a day or week. Heat-of-Compression designs that split flow at the inlet, and only use partial flow regeneration, are unable to perform at less than 100% flow. The SP & HC can deliver dew point as low as 15% load.

Dry Gas Stripping

The HC uses dry outlet air to continue to regenerate the desiccant. After 90 minutes of full flow heating, the HC begins a stripping cycle using only 2% of the dry process air to remove additional moisture from the desiccant in the regenerating tower. The net result is a lower outlet dew point.

Dry Gas Cooling

After 90 minutes of stripping, the HC begins to cool the desiccant in the regenerating tower with dry outlet air. No air is lost during cooling. Some competitive Heat-of-Compression designs cool with wet air; preloading the desiccant in the regenerating tower with water making it very difficult to deliver low dew points.

High Performance Switching Valves

All of the valves used in the SP and HC are high performance, leak tight, and fire safe. This means they work under all conditions. If a switching valve fails, or even leaks, you get wet air downstream. We recognize this fact and designed our Heat-of-Compression dryers to use bubble tight valves that don't leak.

Fail Safe Drain Traps

The only place that liquid water is removed is through the drain traps. Our dual drain trap system is the most reliable drain available. The truth is, if the trap fails, then the dryer fails. Any single trap will ultimately fail. The dual drain trap uses 2 separate traps; a mechanical primary, and a liquid level sensor as a back up. The primary trap will operate reliably for a long time, but like any mechanical device it will eventually fail. When that happens, water backs up into a liquid level sensor that opens a valve draining out the water while simultaneously triggering an alarm. The water is removed; the dryer performs.

Commitment to Customer Satisfaction

"As with any new equipment that my plant purchases, we had our doubts at first, but we have now seen first hand that the energy-free heat-of-compression dryer is a very good investment for us. It can operate continuously for a long period, the quality of outlet air is very good, especially, operating costs are very low. We are pleased to recommend the Henderson/Sahara HC series heat-of-compression dryer to any compressed air user who desires dry compressed air with very low costs." – Yizheng Fibre & Chemical

"The old, undersized mechanical dryer was prone to frequent failure and unable to reach the -40°F dewpoint. The heat-of-compression dryer essentially costs nothing to operate and it saves air too. It doesn't matter how much energy one dryer saves over another, if it's constantly down for maintenance, the minimum annual savings of the heat-of-compression dryer compared with other types of dryers is estimated at \$23,000. Purchase price of the dryer is the same or less than others quoted. The new air compressor system has operated on-line continuously for 18 months without any significant downtime. In the last six months, there has been no downtime." – Rorer Pharmaceutical

"Since desiccant regeneration in the new air dryer is accomplished using the heat-of-compression, energy consumption to dry the plant air has been substantially reduced. With the heat-of-compression air dryer, which requires no purge air, 100% of compressor capacity is reserved for plant uses. All maintenance problems encountered previously have been eliminated with the heat-of-compression type air dryer." – Mobil

"The heat-of-compression air dryer has proven to be reliable and provides adequate energy savings to justify modernizing complete plant air compression facilities. In smaller sizes, such as used at the World Headquarters (two 600 scfm units) energy savings are not as dramatic, but installation of the equipment can be supported on the basis of reduced maintenance costs and improved quality of air." -- Monsanto

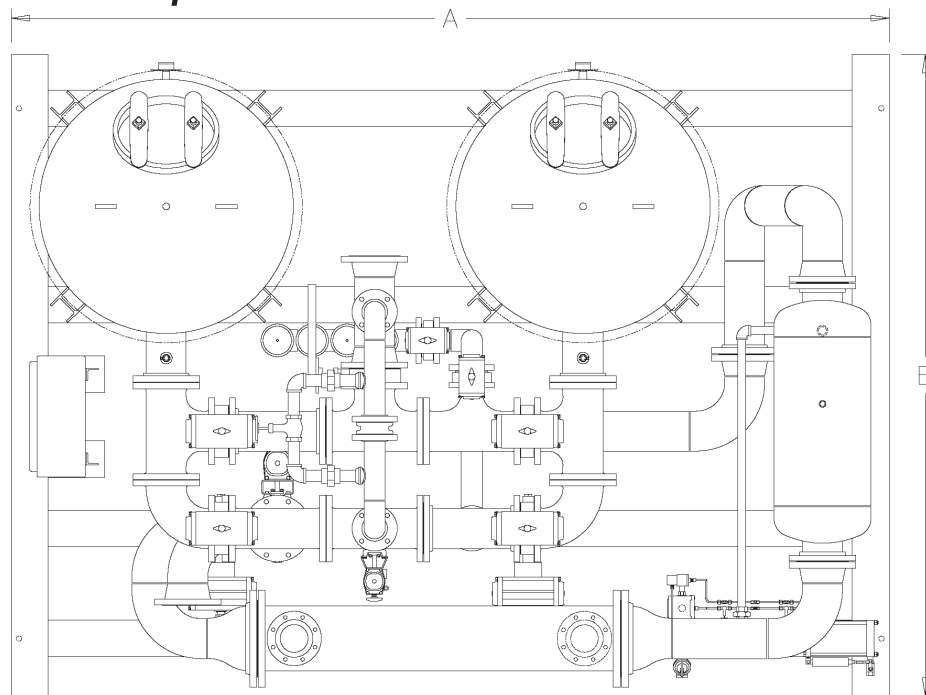


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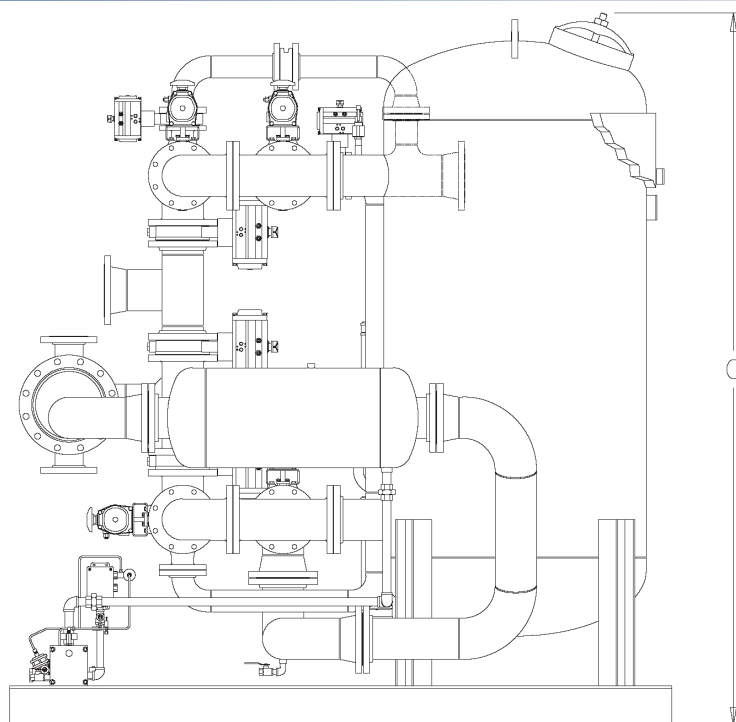
HC Specifications & Dimensions



MODEL	SCFM RATING @ 100#	INLET / OUTLET SIZE	LBS. DESICCANT PER TOWER	A (INCHES)	B (INCHES)	C (INCHES)	WEIGHT (POUNDS)
HC-100	100	1"	66	95	60	85	2947
HC-140	140	1"	88	95	60	85	2991
HC-210	210	1 1/2"	132	95	64	85	3509
HC-280	280	1 1/2"	176	95	64	85	3622
HC-350	350	2"	220	99	70	88	4235
HC-420	420	2"	264	99	70	88	4358
HC-490	490	2"	308	99	70	88	4446
HC-560	560	2"	352	99	70	88	4534
HC-630	630	3"	396	101	65	84	4821
HC-700	700	3"	440	113	65	84	5052
HC-770	770	3"	484	106	75	84	5735
HC-840	840	3"	528	106	75	84	5823
HC-980	980	3"	616	111	75	85	6184
HC-1120	1120	3"	704	111	75	85	6440
HC-1260	1260	3"	792	119	76	85	6841
HC-1400	1400	3"	880	119	79	95	7789
HC-1540	1540	4"	968	120	79	95	8550
HC-1680	1680	4"	1056	120	79	95	8926
HC-1820	1820	4"	1144	120	79	95	9102
HC-1960	1960	4"	1232	120	82	95	9598

Sahara reserves the right to make changes without notification. Some models not shown. Other sizes and pressures available. Metric dimensions available upon request. Ratings are based on 100 PSIG, 100°F.

Heat-of-Compression Regenerative Compressed Air Dryers



MODEL	SCFM RATING @ 100#	INLET / OUTLET SIZE	LBS. DESICCANT PER TOWER	A (INCHES)	B (INCHES)	C (INCHES)	WEIGHT (POUNDS)
HC-2100	2100	4"	1320	126	90	110	11070
HC-2380	2380	4"	1496	126	90	110	11722
HC-2520	2520	6"	1584	144	99	109	12330
HC-2660	2660	6"	1672	144	99	109	12506
HC-2800	2800	6"	1760	144	99	109	13007
HC-2940	2940	6"	1848	144	99	109	13183
HC-3080	3080	6"	1936	144	99	109	13584
HC-3220	3220	6"	2024	144	99	109	13760
HC-3360	3360	6"	2112	144	99	109	13936
HC-3500	3500	6"	2222	145	106	115	15050
HC-4000	4000	6"	2541	147	109	115	16473
HC-4500	4500	6"	2860	150	114	116	17300
HC-5000	5000	6"	3179	150	114	116	17938
HC-5500	5500	6"	3498	171	114	116	20900
HC-6000	6000	6"	3817	176	119	118	22580
HC-6500	6500	6"	4136	178	119	118	23568
HC-7000	7000	6"	4455	182	124	129	24965
HC-7500	7500	8"	4774	182	151	129	26895
HC-8000	8000	8"	5093	194	151	129	28283
HC-8500	8500	8"	5401	189	154	129	29899
HC-9000	9000	8"	5720	212	158	134	32637
HC-9500	9500	8"	6050	212	158	134	33297
HC-10000	10000	10"	6358	243	184	156	39106

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One of the world's largest heat-of-compression installations; operating at nearly zero cost.

Sahara Air Products

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Henderson Engineering Co., Inc., is proud to be certified to the ISO 9001 Quality Management System standards and guidelines