



SAHARA-PAK

Unique, Energy-Saving Heat-of-Compression Air Dryer



PATENTED

U.S. PATENT NO.
6,375,722 B1



Table of Contents

The Need for Dryers	3
A Message from the Owners	3
A History of Service	3
The Sahara Team	4
A Commitment to Quality	5
A Commitment to Customer Service	6
Sahara-Pak Air Dryer Reduces Production Costs	7
The Competitive Edge	7
Most Energy Efficient.....	7
A SAHARA Dryer for Every Application	7
Two Design Awards.....	7
Ask Our Customers	7
Sahara-Pak Features.....	8
Cost Comparison	8
Sahara-Pak Model SP	9
Performance	9
Reliability	9
Energy Savings.....	9
Valves That Work	9
Flexibility.....	9
Service.....	9
SP Specifications & Dimensions.....	10
Heat-of-Compression Model HC	11
Exceptional Dewpoints	11
Low Pressure Drop.....	11
A Complete System.....	11
Rugged Construction.....	11
Peace of Mind.....	11
Options for Ultimate Performance.....	11
HC Specifications & Dimensions	12
Sahara-Pak Features.....	13
Simple, Low Cost SP	13
Left Tower Heating, Right Tower Drying.....	13
HC Description of Operation	14
Left Tower Heating	14
Left Tower Stripping	14
Left Tower Cooling.....	14
HC Options for Optimum Performance.....	15
Controls.....	16
Designed for Reliable Operation and Long Life.....	17
Non-lubricated Switching Valve	17
Efficient Separators	17
Reliable Drain Traps.....	17
Experience	18
10 Year Warranty.....	18
Sahara-Pak Partial Users List.....	19
Installations All Over the World.....	19
Commitment to Customer Satisfaction	19



The Need for Dryers

Compressed air is one of industry's most important utilities. Yet without proper air treatment, your compressed air system cannot deliver its full potential.

Moisture, dirt, oil; all pollutants, pollutants that contaminate your process. Frozen air lines, damaged instruments, product rejects; all problems caused by air contamination. Downtime, lost production, lost profits; the cost of air contamination.

The solution; a systems approach by an organization dedicated to solving air system problems one customer at a time.

A Message from the Owners

"We designed and patented our first heat-of-compression dryer design back in the 1970's", says Terry Henderson, President. "Since then, we have been constantly improving and refining our designs so that today's models offer our customers the best of both worlds; unparalleled reliability and exceptional performance."

"Our heat-of-compression dryers are operating in virtually every corner of the world in every industry imaginable", says Chuck Henderson, Vice President. "We have more successful installations than all other competitors combined. We have more repeat customers than they have customers. The reason is simple; our dryers work year in and year out, delivering the specified dewpoint without wasting energy."



Joe Henderson, 1957

A History of Service

SAHARA AIR PRODUCTS, a Division of Henderson Engineering Co., Inc., was founded in 1957 by Joe Henderson to provide engineered solutions for air system problems. The first dryer we ever built was a heatless design way back in the 50's. It's still in service today.

Joe 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. The trademark of engineered solutions exists at SAHARA today, as the next generation of Henderson's continue the tradition of product excellence and customer service.



The Sahara Team

Your SAHARA sales engineer has the expertise to review your plant air system and design the optimum engineered solution. ***This saves you time and money.***

All products are manufactured at the corporate headquarters in Sandwich, Illinois, 60 miles west of Chicago. Living and working in the country has proven to be a tremendous benefit. SAHARA employees are true team members concerned with providing our customers with high quality, responsive service. Because we have very little turnover, our experience is unmatched.



Corporate headquarters in Sandwich, IL



CAD system engineer

The heart of our company has always been engineering; finding novel solutions to our customers' unique applications. We use the most modern tools available. Drawings are done on CAD and can be transmitted via e-mail for immediate customer review and approval. Our reputation has been built by building dryers specially designed for each specific application. We are one of the few dryer manufacturers who can completely design and fabricate a dryer to each and every customer's specifications.

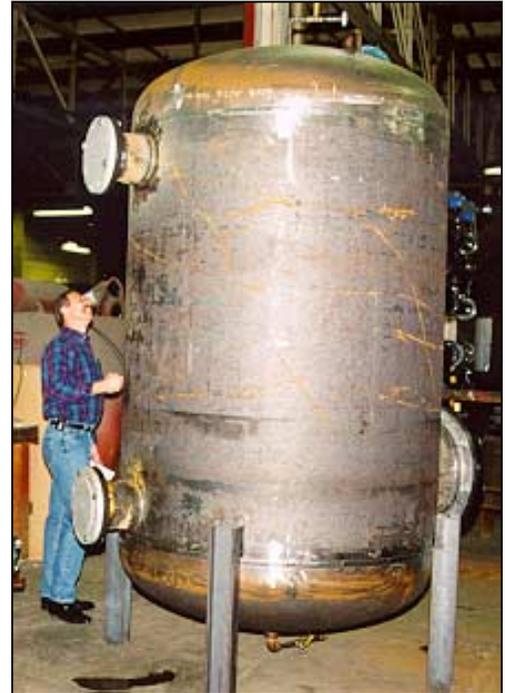
Visit our Web Site at

www.saharahenderson.com



A Commitment to Quality

A total commitment to quality begins with the desire of every individual to deliver nothing less than their best. Our team is totally committed to quality products and customer satisfaction. Incoming materials are inspected and randomly tested. All welding is done in strict accordance with the ASME code. We weld our own pressure vessels, and we regularly perform radiographic examination. We can weld exotic materials; ***what you want is what we deliver.***



Pressure vessels being pressure tested



Final electrical test before shipment

Standards constantly evolve. SAHARA meets all existing quality specifications and is leading the industry towards the future. Today, SAHARA is able to provide our customers with **UL fabricated electrical panels**. We are meeting standards before they become required practice. **Innovative technology and quality engineering; trademarks from SAHARA.**



A Commitment to Customer Service



Customer Service Team

SAHARA products are used throughout the world. Customers in China, Thailand, Singapore, Malaysia, Mexico, Canada, Chile, Venezuela, Argentina, Puerto Rico, Panama, Saudi Arabia, Kuwait, Bahrain, South Africa, New Zealand, Australia, England, Italy, Germany, Greece, and every state in the U.S. successfully operate SAHARA dryers.



Worldwide Customers

All SAHARA products are sold with our **guarantee of performance**. During commissioning, SAHARA sales engineers review the complete system and instruct operators in proper operation. After your dryer has been installed, our customer service team maintains regular contact to guarantee satisfaction.

Every month, our customer service team sends each customer a brief fax giving tips on maintenance and optimum operation. We understand the difficulties you face every day trying to keep your plant up and running. We try to help you do your job better by making sure that your compressed air system does what it's supposed to do; reliably deliver clean, dry air. ***We make it easier for you to do your best.***



HC-3500-200



Sahara-Pak Air Dryer Reduces Production Costs

The Competitive Edge

Give yourself a competitive edge by reducing production costs with the unique Sahara-Pak. The first to develop a heat-of-compression regenerative dryer, SAHARA AIR PRODUCTS, a division of Henderson Engineering Company, 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, saving valuable energy. In addition to efficiently using the heat-of-compression, the Sahara-Pak produces extremely low dewpoints.

An important energy-saving design feature of the Sahara-Pak is the repositioned aftercooler. In order to economically use the heat-of-compression, the hot air goes directly into the regenerating tower, and then to the aftercooler, eliminating the cost of drying air.



Vaaler Award, Energy Award

Two Design Awards

SAHARA 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.

Ask Our Customers

For the best proof of Sahara-Pak efficiency, call us for the name of a Sahara-Pak user near you. They'll tell you about the reduced energy costs, eliminated downtime, and lowered dewpoint.

A SAHARA Dryer for Every Application

Efficient SAHARA air dryers reduce operating costs for a wide variety of industries throughout the world.



(4) HC-7500's



(10) HC-4000's



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.
- Backed by an exclusive 10 year warranty.
- SP design averages less than \$10 per year total electrical cost; there are no heaters or blowers to consume electricity and there is no purge air loss.
- SP design delivers pressure dewpoints in the 0°F to -60°F range, depending on your operating conditions.
- SP design consumes none of your valuable dry air.
- HC design includes stripping and cooling cycle for optimum performance.
- HC design delivers pressure dewpoints in the -40°F to -100°F pressure dewpoint, depending on your operating conditions.
- HC design can be equipped to provide -40°F dewpoints or lower, under every possible scenario, including operation of rental compressors.

Cost Comparison

Sahara-Pak provides greater protection for air lines, tools, and costly instrumentation. No other compressed air dryer can deliver these dewpoints at so low an annual operating cost.

The following chart compares the Sahara-Pak to other types of regenerative air dryers.

DRYER	Initial Cost	Purge Air	Heater	Blower	Annual Operating Cost Per 1000 SCFM*
Heatless	\$11,375.00	15%	No	No	\$19,710.00
Exhaust Purge	17,082.00	2-7%	Yes	No	11,169.00
Blower Purge	25,482.00	No***	Yes	Yes	9,198.00
Sahara-Pak SP	22,302.00	No	No	No	7.09
Sahara-Pak HC	27,175.00	½ %**	No	No	657.00

* 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.

*** Can use up to 5% purge during cooling, if exhaust purge cooling mode is selected.



Sahara-Pak Model SP

Performance

The SP design fully uses all of the normally wasted energy from your compressor to regenerate its desiccant. The final outlet dewpoint is determined by the dewpoint and temperature of the regeneration air and the temperature of the air entering the drying tower. Typically, dewpoints will vary summer to winter; however, the average outlet dewpoint meets the standards for instrument quality air as specified by ISA. Your SAHARA engineer has a computer program that takes into account the variables at your location and will indicate the anticipated dewpoints.

Reliability

The single most important question facing any buyer is "Does this work?" The answer is a resounding "YES". The SP is the world's simplest, most reliable regenerative dryer. There are only 8 valves, all of them high performance 2-way valves designed for years of trouble-free operation.

Energy Savings

The SP is the most energy efficient regenerative dryer available. It doesn't lose any compressed air; it doesn't have any heaters or blowers. The only operating cost is the electricity needed to operate the electrical controls; less than 24 watts, less than a light bulb. The operating cost is the same regardless of dryer size, thus a 10,000 SCFM SP dryer costs less than \$10 per year to operate. You want an edge to compete in the global economy? How about getting instrument quality air for next to nothing.

Valves That Work

Valves 3" and larger are high performance butterfly valves. A patented axially pliant seat flexes against the sealing edge of the disc, when the valve is closed. This design assures a bubble tight shutoff. Made of PTFE with a unique pliant membrane, the be-directional, self and pressure activated seat returns to its original shape with every opening of the valve because the pliant membrane causes constant restorative forces to act on the seat member. The eccentrically mounted disc is offset for an uninterrupted, 360° seal. Valves are actuated by a rotary actuator that also indicates valve position. Valves are equipped with controls to prevent dead-heading centrifugal compressors.

Flexibility

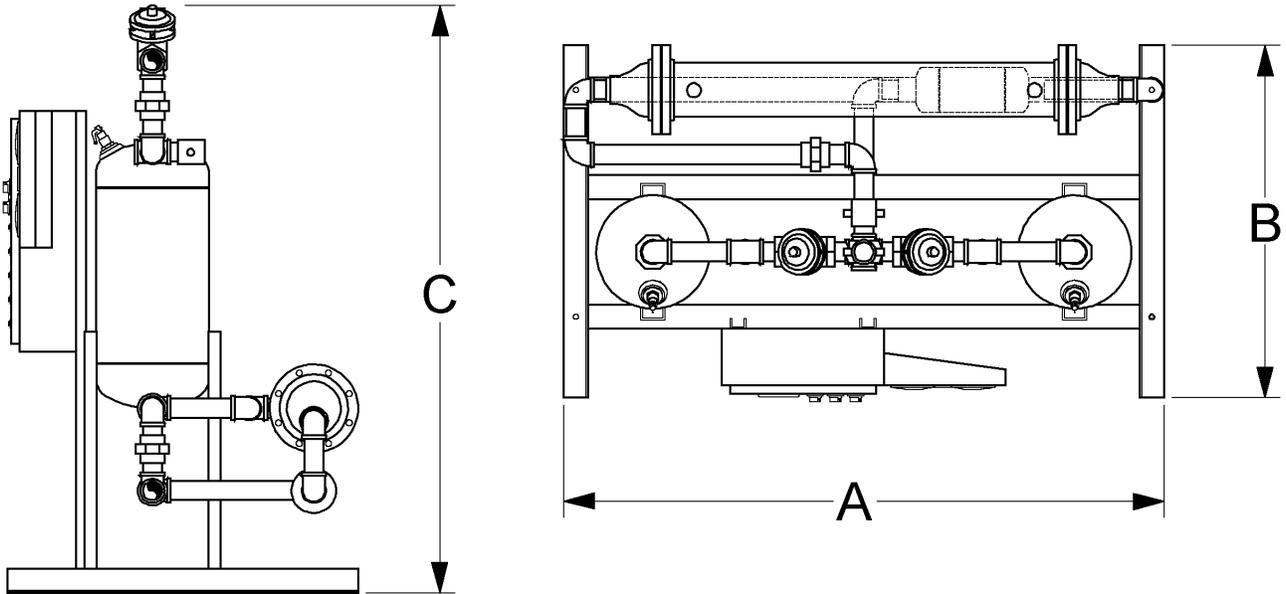
SAHARA heat-of-compression dryers, both the SP and the HC designs, provide you with total flexibility. You may install either unit with a multitude of compressors. A single dryer can be manifolded with a variety of compressors. You can operate centrifugal, oil-free rotary screw, and oil-free reciprocating compressors in any combination with a single SAHARA dryer.

Service

Maintenance and trouble-shooting are very simple and can be easily performed by your maintenance personnel or with the assistance of a local SAHARA service technician. Because there are very few moving parts, there is very little to fail. Annual preventative maintenance can be performed with a minimum of downtime.



SP Specifications & Dimensions



MODEL	SCFM RATING @ 100#	INLET / OUTLET SIZE	LBS. DESICCANT/ TOWER	WATER REQ'D. @ 85F GPM *	LENGTH (INCHES)	WIDTH (INCHES)	HEIGHT (INCHES)	WEIGHT (POUNDS)
SP-125	125	1"	41	8	96	31	67	1475
SP-180	180	1 ½"	60	11	96	33	67	1713
SP-280	280	1 ½"	92 ½	17	96	36	66	1948
SP-400	400	2"	132	16	96	38	68	2345
SP-600	600	3"	200	24	93	46	60	3167
SP-900	900	3"	300	37	100	46	64	3630
SP-1200	1200	4"	385	49	106	60	83	4880
SP-1800	1800	4"	595	73	127	75	88	5220
SP-3200	3200	6"	1055	98	136	76	95	8970
SP-4400	4400	6"	1450	134	154	96	95	10,528
SP-6000	6000	8"	1980	183	175	96	102	12,839
SP-8500	8500	8"	2805	260	190	138	107	16,290
SP-10,000	10,000	10"	3300	306	201	145	109	22,130

SAHARA reserves the right to make changes without notification. Some models not shown. Metric dimensions available upon request.

* Assumes 350°F air inlet temperature; for lower regeneration temperatures less water is necessary.



Heat-of-Compression Model HC

Exceptional Dewpoints

The SP design has the ability to provide extremely low, constant dewpoints. Like most other heated dryers, the SP has a brief increase in outlet temperature and dewpoint at tower shift. While this is acceptable for most applications, there are applications for continuous low dewpoints; the kind of performance provided by the HC design. Because of its stripping and cooling cycle, the HC is capable of providing year round dewpoints below -40°F.

Low Pressure Drop

With any heat-of-compression dryer, the air flow goes through both towers. This means higher pressure drop when compared to conventional heated or heatless dryers where the process air only goes into one tower. At SAHARA, we recognize that pressure drop is a serious concern and a real cost, thus we have designed our dryers to absolutely minimize pressure drop. All valves are full flow design. We use the minimum amount of elbows and pipe and have designed a complete system that compares very favorable to any other type of dryer.

A Complete System

Any SAHARA heat-of-compression dryer is available as a fully packaged, complete system. All drying systems require an aftercooler, separator, traps, and afterfilter. We can provide all of these components integrally mounted on the dryer skid, even including block and bypass valves. This simplifies and minimizes your installed costs. Our complete system saves valuable floor space and can even be installed outside.

Rugged Construction

We probably don't have to build them this good, but you'll be glad we do. We provide you with a unique feature on our dryer that can make a big difference in your maintenance people's time down the road. Where necessary, when valves are mounted between towers, instead of welding both towers to the structural steel base, we weld one and BOLT the other tower. This makes maintenance much easier; if you ever have to pull a valve, you grab a wrench, not a torch. We use rigid tubing that is supported throughout the dryer by a system of tubing holders, making everything rigid and leaktight. All components are braced and well supported, so you don't have to worry.

Peace of Mind

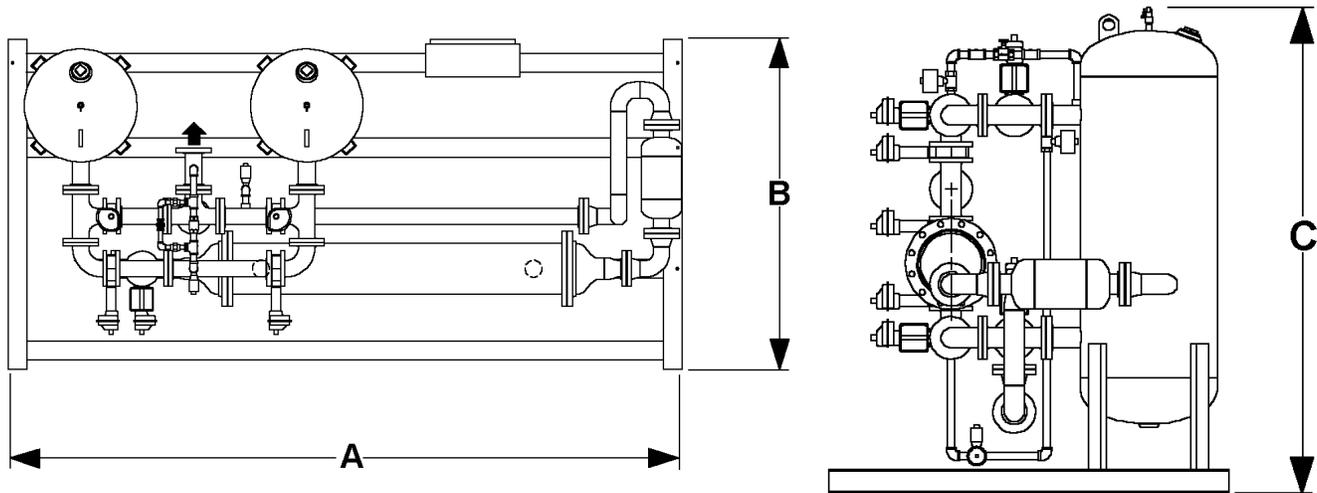
Every dryer undergoes a complete mechanical test. All fittings are leak tested. The dryer is connected electrically and all functions are completely tested, including all alarms. Every valve is cycled. When we ship your dryer, you can rest assured that it has passed our rigorous quality control inspection.

Options for Ultimate Performance

The HC basic design may be enhanced with a variety of unique options. We can install a small booster heater in the stripping line. If the discharge temperature from your compressor is too low for adequate regeneration, we can supercharge regeneration by increasing the temperature of the stripping air. This assures performance under any set of conditions. Additionally, the HC may be equipped with a PLC and heatless mode option. If, for example, your primary compressor fails and you bring in portable rentals, the rentals typically include integral aftercoolers. This makes conventional heat-of-compression dryers unusable. Now, with our heatless mode option, your HC dryer can continue to deliver low dewpoints, even with oil-free portable compressors.



HC Specifications & Dimensions



MODEL	SCFM RATING @ 100#	INLET / OUTLET SIZE	LBS. DESICCANT PER TOWER	WATER REQ'D. @ 85F GPM *	LENGTH (INCHES)	WIDTH (INCHES)	HEIGHT (INCHES)	WEIGHT (POUNDS)
HC-100	100	1"	66	6	82	38	78	2947
HC-210	210	1 ½"	132	13	92	46	78	3509
HC-350	350	2"	220	21	99	50	87	4235
HC-700	700	3"	440	29	103	58	84	5052
HC-770	770	3"	484	31	128	63	84	5735
HC-1540	1540	4"	968	63	142	71	94	8550
HC-2100	2100	4"	1320	86	151	83	107	11,070
HC-2520	2520	6"	1585	103	165	90	110	12,330
HC-3500	3500	6"	2220	107	167	93	113	15,050
HC-4500	4500	6"	2860	138	211	108	118	17,300
HC-5000	5000	6"	3180	153	181	99	121	19,600
HC-5500	5500	6"	3500	168	195	104	123	20,900
HC-6000	6000	6"	3820	183	192	104	123	22,580
HC-6500	6500	6"	4140	199	192	104	129	23240
HC-7000	7000	6"	4455	214	204	112	117	24290
HC-7500	7500	8"	4775	229	204	112	123	25305
HC-8000	8000	8"	5095	244	204	112	129	26130
HC-8500	8500	8"	5400	260	237	120	132	28,940
HC-9000	9000	8"	5720	275	260	132	132	30,520
HC-10,000	10,000	10"	6360	306	289	136	155	34,180

SAHARA reserves the right to make changes without notification. Some models not shown. Metric dimensions available upon request.

* Assumes 350°F air inlet temperature; for lower regeneration temperatures less water is necessary.



Sahara-Pak Features

The two Sahara-Pak designs allow you to choose the dryer which best fits your needs.

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.

The HC design provides a constant dewpoint without temperature or dewpoint bumps. The HC is more complex and includes a cooling and stripping cycle, but delivers the highest performance of any air dryer.

Simple, Low Cost SP

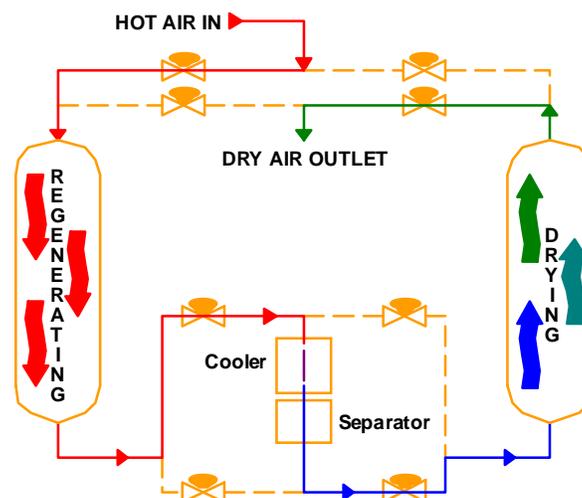
The flow chart illustrates the efficient SP system. Air enters the dryer directly from the compressor. It is directed into the regenerating tower, where the heat-of-compression removes the moisture from the desiccant. The air then flows into the aftercooler, into the coalescing-type moisture separator,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

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 dewpoint bump occurs, as with most other heat reactivated dryers. The small amount of high dewpoint air blends in with the previously dried air to maintain a low overall dewpoint.

The DPDS turns off the timer and switches the towers only when the dewpoint 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 0 to 100% capacity.

Left Tower Heating, Right Tower Drying





HC Description of Operation

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

Left Tower Heating

Hot air directly from the compressors 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 dewpoint.

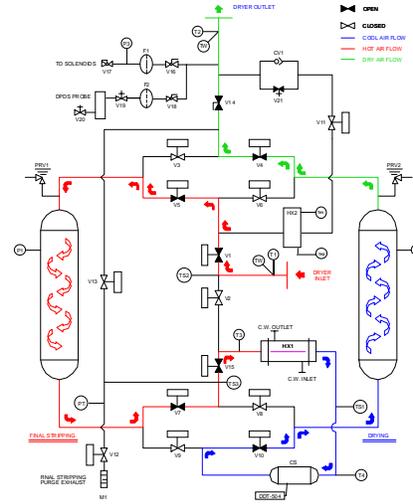
Left Tower Stripping

The heating cycle lasts 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. The stripping phase of regeneration lasts 90 minutes. 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 dewpoints.

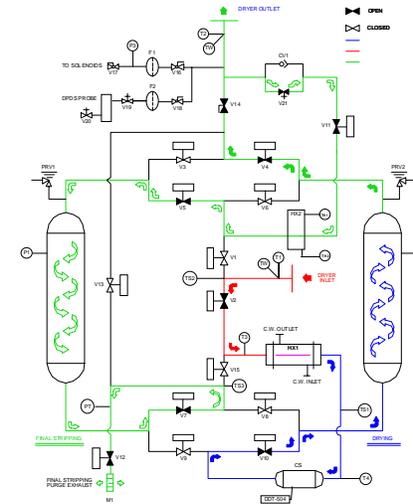
Left Tower Cooling

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 to 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 dewpoints and to eliminate dewpoint fluctuations during tower shift.

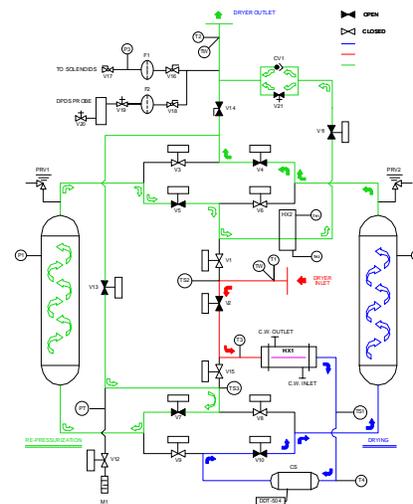
Left Tower Heating



Left Tower Stripping



Left Tower Cooling





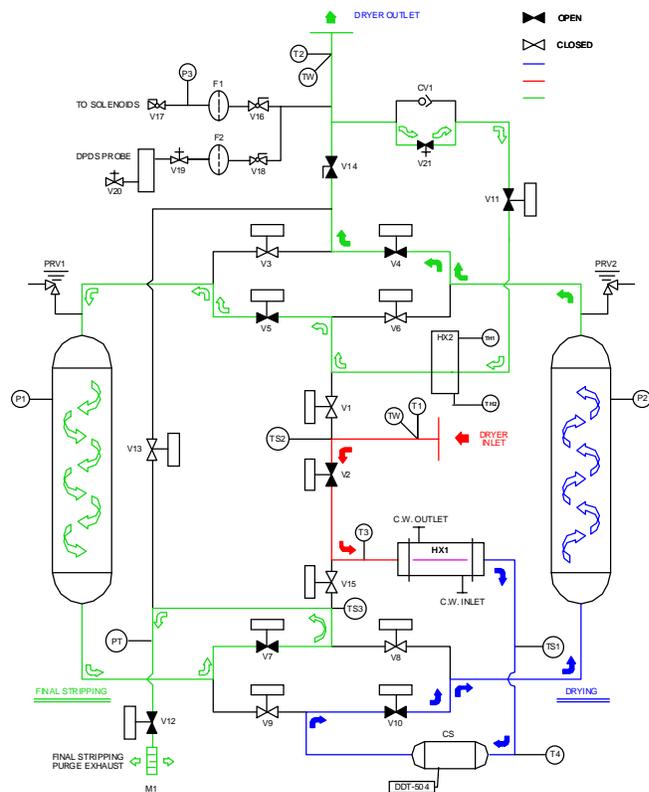
HC Options for Optimum Performance

The outlet dewpoint 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 dewpoints. 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 booster heater which will automatically energize 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 maximum heating time is the same as stripping; 90 minutes. Heating is terminated by a temperature switch to minimize energy consumption*. The heater allows the dryer to deliver low dewpoints 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. We provide a triple redundant thermostat control system to insure heater life and exceptional reliability.

Additionally, the HC design may also be equipped with a heatless mode option**. 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 dewpoint. As with any heatless dryer, the HC will now purge 15% of the inlet air. With these two options, the HC can deliver any required dewpoint, under any set of conditions, all the time.

* *Optional booster heater*

** *Patent Pending*



HC heatless mode of operation

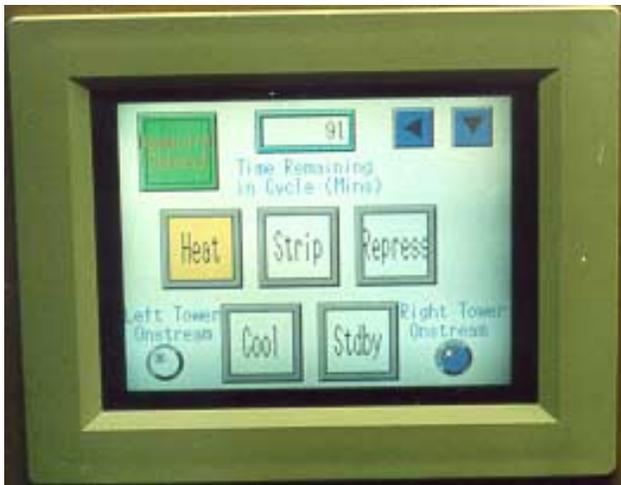


Controls



The control system for the HC dryer with the optional stripping heater and heatless mode of operation is a programmable controller with a touch screen display. The PLC controls all operations of the dryer automatically, integrating with the optional Dew Point Demand System to provide the ultimate in user friendly controls. The DPDS indicates the exact outlet dewpoint of the dryer at all times and allows the dryer to shift towers on dewpoint, rather than time.

By extending the cycle, we reduce the number of tower shifts, which extends the life and efficiency of the desiccant and valves. Additionally, there is a 4-20 mA output you can connect to a chart recorder or your computer system, and maintain a constant record of dryer performance.



The PLC controls all aspects of dryer operation. It is accessible through the touch screen display. You can simply touch the screen to monitor or control operations of the dryer. With the PLC, we are able to allow the HC dryer to emulate a heatless dryer.

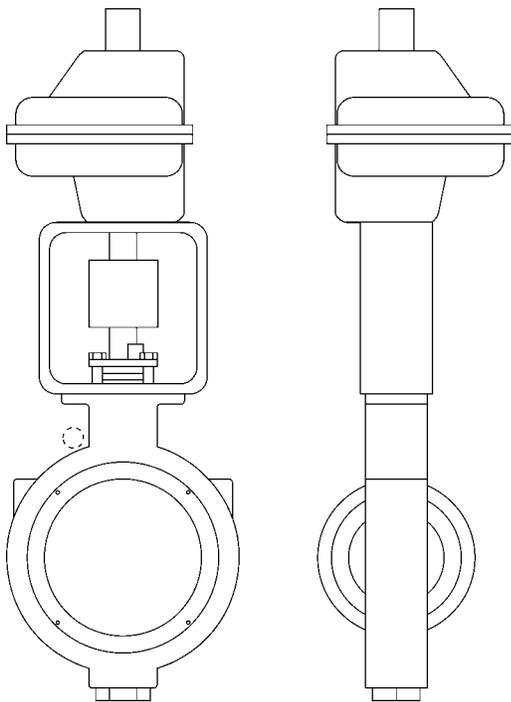
If, for any reason, your primary compressor is down and you bring in portable oil-free compressors, you can easily convert the HC dryer to heatless mode and continue to receive exceptional dewpoints. You don't need to rent a portable dryer or suffer with wet air. The SAHARA HC takes care of you through all possibilities.



Designed for Reliable Operation and Long Life

SAHARA's years of experience are reflected in our choice of components. Since the 50's, we have been selecting the most reliable parts for our dryers and perfecting our designs for efficiency and economy. For example, the SP is designed with only eight moving components, to guarantee trouble-free operation.

Non-lubricated Switching Valve



Efficient Separators

The most important components are those that remove water from the system – the separator and drain trap. Most centrifugal type separators are only 75% efficient, meaning 25% of the condensed water enters the drying tower. The most efficient separator is the coalescing type separator used in the Sahara-Pak.

This 95% efficient design consists of a stainless steel mesh pad housed in an ASME coded pressure vessel. The saturated air from the cooler enters the separator. As water droplets hit the pad, they coalesce, becoming heavier and larger, and gradually drop down the pad where the condensed liquid is drained out.

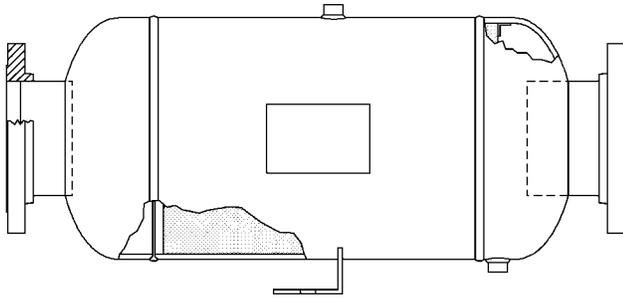
Reliable Drain Traps

Because the drain trap is such a critical component, and the one most likely to fail, SAHARA developed its own fail-safe drain trap. Called the DDT-504, the SAHARA system is the most reliable drain trap available. The DDT-504 consists of two separate traps, a primary and a secondary. When the primary trap fails, the secondary trap activates. A failure alarm light and horn indicate the secondary trap is now in operation.

The primary trap is a simple mechanical float. This trap will operate reliably for a long period of time; however, eventually it will become contaminated and plug up. When this occurs, water will back up into the secondary trap liquid level sensor, a high quality probe that is used to activate the secondary trap's 2-way valve. Any time that water touches the liquid level sensor, the probe opens the secondary 2-way valve, draining all of the water present. Once the water is drained away, the valve automatically closes; however, the primary drain failure alarm light and horn remain activated, telling you that the primary trap requires cleaning.



Experience

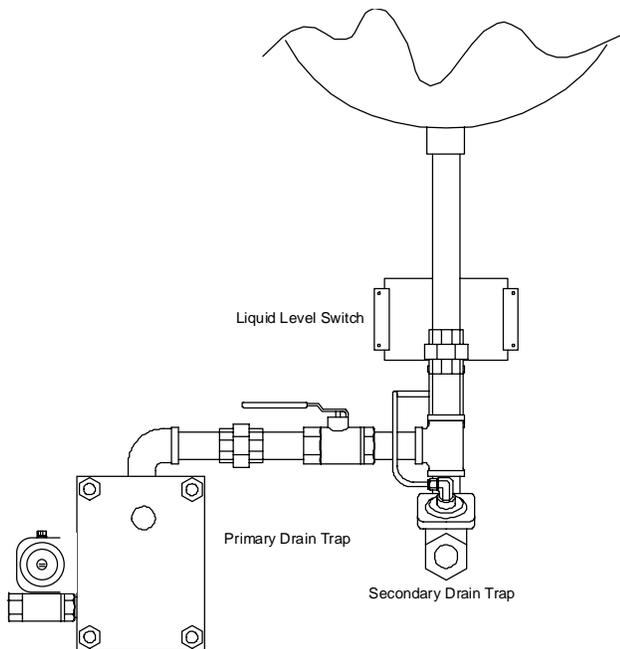


Coalescing Separator

A wise man once said, “there is no substitute for experience”. How true. SAHARA developed and patented heat-of-compression back in the 70’s and keep on working to make it better. Our newest designs include options that guarantee performance under any set of conditions. Our real world experience translates into component selection that performs reliably year in and year out. Our knowledge helps us design systems with a minimum of pressure drop. You can receive factory engineered, complete drying solutions from the world leader in dryer technology, backed by the best guarantee in the industry.

10 Year Warranty

The best possible components and the ultimate dryer technology combine to produce the most reliable, trouble-free dryer on the market. SAHARA backs the claim with a solid 10 year warranty; the only one in the industry.



DDT-504 Dual Drain Trap



Sahara-Pak Partial Users List

- | | |
|------------------------|--------------------------|
| DOW | QUAKER STATE |
| BASF | BOEING |
| HERCULES | TWA |
| DUPONT | LTV STEEL |
| UNITED AIRLINES | ALUSAF |
| MERCK | YIZHENG FIBRE & CHEMICAL |
| PROCTER & GAMBLE | ARCO |
| PACIFIC GAS & ELECTRIC | HONDA |
| ALLIED | SONY |
| MONSANTO | CIBA GEIGY |
| THIOKOL | INTERNATIONAL PAPER |
| WESTINGHOUSE | RHONE POULENC |
| CROWN ZELLERBACH | RORER PHARMACEUTICAL |
| WEYERHAEUSER | AMERICAN AIRLINES |
| CHAMPION INT'L. | BORDEN |
| ANHEUSER BUSCH | BADISCHE |
| AIR PRODUCTS | GENERAL MOTORS |
| PRAXAIR | MG INDUSTRIES |
| WYETH-AYERST | PFIZER |

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

Installations All Over the World

Since the early 1970's, SAHARA has been a leader in saving energy through innovate dryer designs. Our unique Sahara-Pak has performed successfully for hundreds of customers in a variety of factories all around the world. Numerous written testimonials, even customer videos, illustrate the benefits of the Sahara-Pak dryer. The common element in all of our testimonials is the reliability of the system. Of course our customers are interested in saving energy and they love saving money. Perhaps the most important considerations are performance and reliability because it doesn't really matter how much money or energy is saved, if the system doesn't perform reliably year after year.

The words of our customer best describe their feelings about our Sahara-Pak dryers. You too can join the list of satisfied users and begin saving money, saving energy, and improving plant performance.



SAHARA AIR DRYERS

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