29+ YEARS OF EXCELLENCE

summits
Enabling Innovation. Enhancing Lives.

S LIB Pg L4L
QOA I - PI -
2 A l PI 5

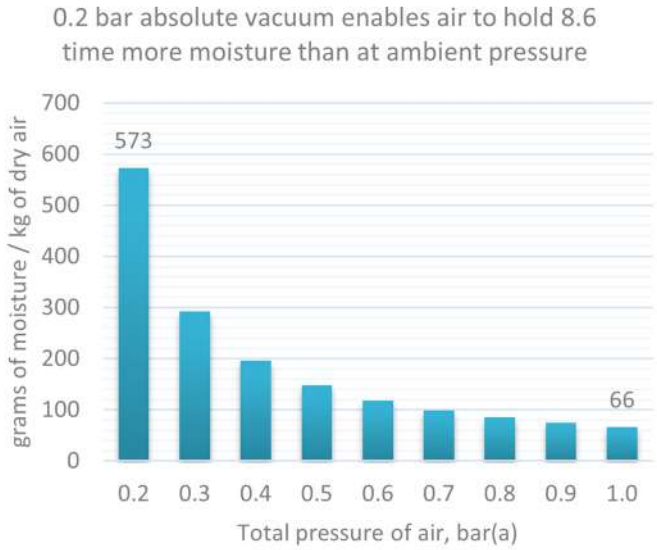
2 mI Q3
I LO 4 2B04OV O

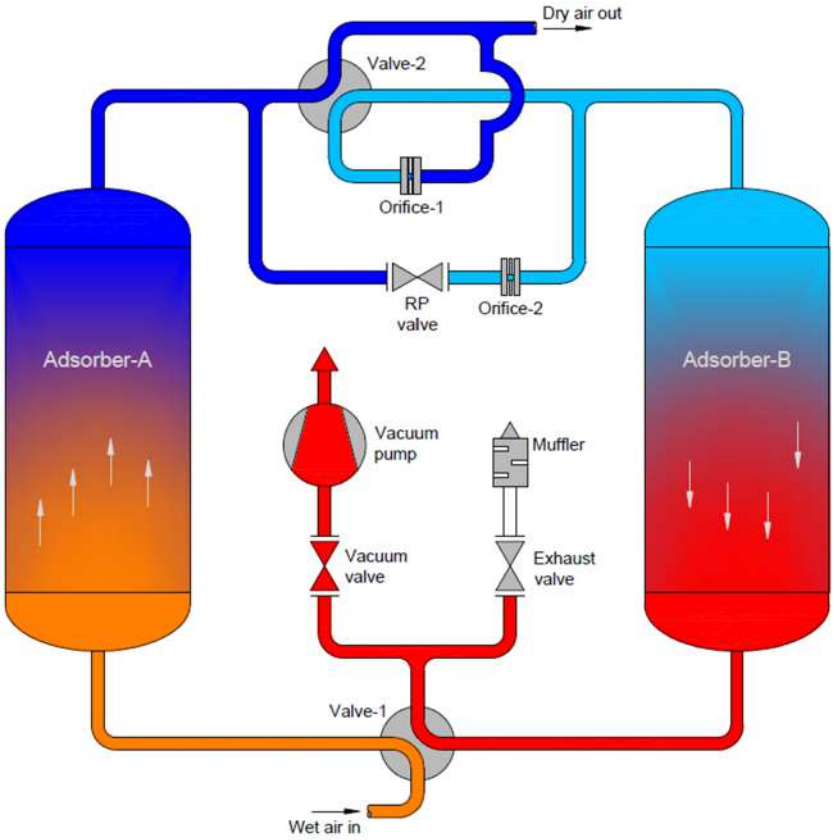
QB DL2V32 D
p I P

IS OI5 Q3g2P I L OB LO QO

Waste is worse than loss. This is true when it comes to regeneration of desiccant in conventional 'Heatless air dryer'. It consumes 14% to 18% of dry compressed air to desorb water vapor. This leads to high operating cost.

Air at 0.2 bar(a), can drive out 8.6 times more moisture than it is at 1 bar(a). Summits Vaczorb VPSA dryer executes regeneration at sub-atmospheric pressure. 2% to 4% of dry air at sub-atmospheric pressure is more than sufficient to desorb the moisture completely out of desiccant pores.





L C2PEI

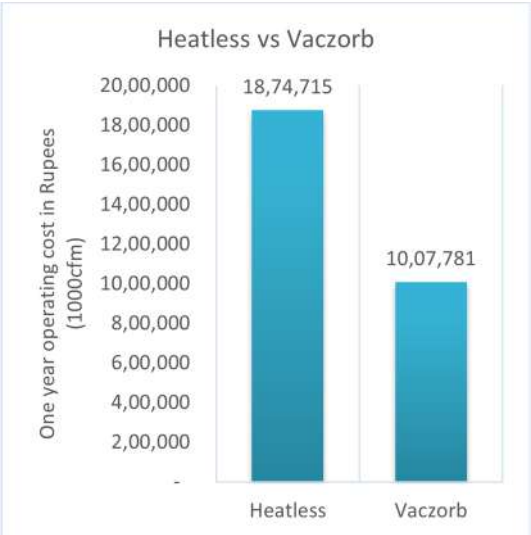
While Adsorber-A dries the compressed air, Adsorber-B undergoes regeneration. Once the compressed air is released from Adsorber-B, the exhaust valve closes.

The vacuum valve then opens, and the vacuum pump reduces the pressure in Adsorber-B to a sub-atmospheric level. Simultaneously, about 2% to 4% of the dry air is expanded through Orifice-1, purging the desorbed moisture from Adsorber-B.

Before switching back to adsorption, the vacuum valve is closed, and the re-pressurization (RP) valve opens to allow sufficient air to gradually repressurize Adsorber-B

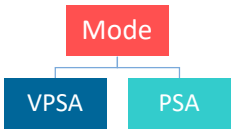
I I B

Beyond the initial investment, the only costs associated with Summits' Vaczorb VPSA dryer are purge air, vacuum pump power, and routine maintenance. By optimizing each of these factors, the Vaczorb VPSA dryer achieves remarkable efficiency—its operating cost is 46.2% lower compared to a conventional heatless air dryer.



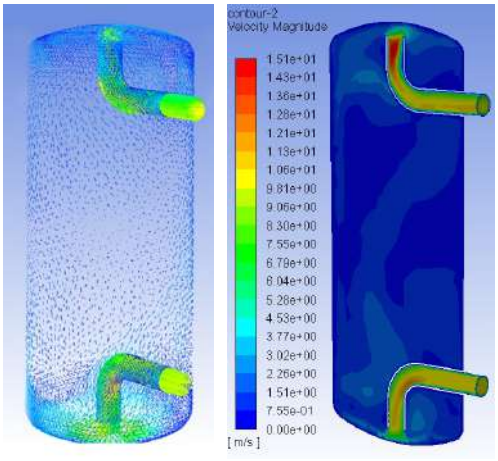
L 423EEPV2P P IO

Summits Vaczorb dryer features a unique switchover facility, enabling operation in either VPSA or PSA (Heatless) mode. With just a click, customers can choose the desired mode, while automatic switchover is available with an optional dew point meter—delivering unmatched flexibility and reliability.



B QE2PEI OR

Every parameter affecting the reliability is carefully analyzed and culminated using simulation techniques. This assures effective removal of moisture at every millimeter travel of compressed air during drying process.



Velocity vector & Velocity contour of flow

E 2P 4 5EEP O 4E2

Pleated Borosilicate depth filter media in all micron filters removes bulk moisture and oil completely and enhance the life of desiccant.

QL OEIOAC24 4 B 2 P

Hygrosorb-35
Superior grade adsorbent offers uniform particle size distribution to ensure consistent performance and efficient air flow through the desiccant bed with less pressure drop.

High crushing strength and very low attrition loss extend life of the desiccant.

IQ 4E I PCIE

Advanced PLC with numerous facilities, Controls, Maintenance alerts and compatible to industries required communication protocols, RS485 Modbus, BMS, IOT, Ethernet and Industry 4.0

2 QQ LQ Lg Q3OB 2P 4

- High ultimate pressure
- Best cold start performance
- High water vapour tolerance
- Efficient oil separation
- Low noise emission

Vaczorb is equipped with Lubricated Vacuum Pump

2 QQ LQ L I gEQ3OB 2P 4

- 100% Dry operation
- Consistent performance
- Low operation and Maintenance cost
- Lower life-cycle emissions

Vaczorbplus is equipped with Non-lubricated Vacuum Pump

Vaczorb – Flowrates and Dimension data							
SN	Product Model	FAD, cfm	In/Out	Width mm	Depth mm	Height mm	Weight kg
1.	Vaczorb 025 CM	250	G1-1/2	880	450	1900	520
2.	Vaczorb 030 CM	300	G1-1/2	1300	600	1720	640
3.	Vaczorb 035 CM	350	G2	1300	600	1850	700
4.	Vaczorb 040 CM	400	G2	1400	650	1700	740
5.	Vaczorb 050 CM	500	G2	1500	900	1850	1100
6.	Vaczorb 060 CM	600	80 NB	1500	900	2000	1250
7.	Vaczorb 075 CM	750	80 NB	1650	1000	1850	1410
8.	Vaczorb 100 CM	1000	80 NB	2000	1200	2000	2050
9.	Vaczorb 125 CM	1250	80 NB	2300	1200	2200	2250
10.	Vaczorb 160 CM	1600	100 NB	2500	1300	2200	2550
11.	Vaczorb 200 CM	2000	100 NB	2500	1300	2400	2900
12.	Vaczorb 250 CM	2500	150 NB	2650	1400	2500	3300
13.	Vaczorb 300 CM	3000	150 NB	2650	1400	2650	3700

Common technical data:

Pressure	: 7 to 12 bar g
Inlet Temp.	: 45°C
Ambient temp.	: 40°C
Air humidity	: 100%
Installation	: Indoor
Power supply	: 415VAC 50Hz

Note:

FAD (Free Air Delivery) is based ISO 7183-2007.
In/Out Flange (NB) conforms to ASME B16.5 CL.150 LBS SORF.
For ordering add suffix of Pressure and Dewpoint; Refer Ordering code.
Summits can deliver ultra-high-pressure dryer up to 400 bar g working pressure. Please contact the factory for any high-pressure requirements.

Variants & Features		
Scope	Vaczorb	Vaczorbplus
Pre-filter	√	√
Oil filter	√	√
Adsorber (2 nos.)	√	√
Vaccum pump	Lubricated	Non lubricated
Dust filter	√	√
Moisture indicator	√	√
PLC	√	√
Dew point demand switching (DDS)	√	√
Add-on components		
Dew point meter	√	√
Oil check apparatus	√	√
Autovent system (AVS)	√	√
Differential pressure gauge	√	√

Ordering code: Vaczorb 010 CM

Description of Ordering code	Vaczorb	010	C	M

Series name
Vaczorb
Vaczorbplus

Flow rate
010 x 10 = 100 cfm

Pressure variants
C: 7.0 to 12.0 bar(g)
D: 12.1 to 16.0 bar(g)
E: 16.1 to 40 bar(g)
F: 40.1 to 70 bar(g)

Dewpoint variants
M: -20°C pdp
L: -40°C pdp
Other upon request

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