






STOREX

# VSA N<sub>2</sub> (NITROGEN GAS) GENERATORS

**STOREX**  
 CONTROLLED ATMOSPHERE

-  no contamination with oil particles
-  very long service intervals
-  lowest energy consumption / Nm<sup>3</sup>
-  remote control of all functions
-  proven VSA technology



STOREX

## SAFEGUARDING FRESHNESS

Storex VSA N<sub>2</sub> generators produce concentrated nitrogen ( 97% and >99%N<sub>2</sub>) by pumping ambient air over CMS active carbon at a low pressure at approx. 1 bar. In a 2 vessel system the adsorbed oxygen is regenerated by vacuum. This simple and robust working principle is 30 years ago developed by Storex for the fruit industry and has important advantages.

### FEATURES

- low pressure technology
- oil free claw compression pumps
- practical skid
- components easy to access
- IoT technology
- well engineered design

### BENEFITS

- no contamination with oil particles
- lowest energy consumption / Nm<sup>3</sup>
- easy to install and to transport
- long maintenance intervals
- remote control of all functions
- robust and reliable in operation

TYPE	capacity in Nm <sup>3</sup> /h at 97% purity *	capacity in Nm <sup>3</sup> /h at 99% purity *
VSA 10	10,0	7,0
VSA 14	14,0	10,0
VSA 25	25,0	18,0
VSA 30	30,0	21,5
VSA 40	40,0	29,0
VSA 50	48,0	34,0
VSA 60	60,0	43,0
VSA 80	80,0	57,0
VSA 100	100,0	72,0

\* = technical specifications are noncommittal and can be revised



**LOWEST COST  
OF OWNERSHIP !**



**FOOD SAFE**



**SAFE TO  
WORK WITH !**



# STOREX N<sub>2</sub> GENERATOR

+ no contamination with oil-particles  
+ lowest energy consumption / Nm<sup>3</sup>

+ easy to install and to transport  
+ long maintenance intervals

+ easy to install and to transport  
+ long maintenance intervals  
+ remote control of all functions  
+ robust and reliable in operation

## THE NEED FOR NITROGEN GAS !

Nitrogen is used for an accelerated pull down of the oxygen content at the start of CA storage. Respiration will be inhibited faster and that is good for maintaining the firmness of apples.

An increase of oxygen due to leakage can be prevented by injection of a small amount of nitrogen with a high purity (<1%). The availability of nitrogen is therefore an important tool for preserving fruit quality.

## AVAILABLE OPTIONS

- + Dual flow for HIGH / LOW purity control
- + Measurement of the purity of nitrogen gas produced
- + Electronic pressure measurement of the vessels
- + Automatic control of O<sub>2</sub> in connected CA rooms
- + Remote control and surveillance / IoT
- + Transportable skid



## PRINCIPLE OF VSA TECHNOLOGY !

Storex VSA N<sub>2</sub> generators have two vessels filled with CMS activated carbon suitable for the production of nitrogen gas. Using an oil-free low-pressure fan, outside air is blown through one vessel at a pressure of approx. 1 bar where the oxygen is adsorbed and the concentrated nitrogen (99%-97%N<sub>2</sub>) leaves the generator. On another vessel, the adsorbed oxygen is removed with a vacuum pump. The process time is approx. 1 minute after which the processes on the vessels change. In this way, nitrogen is produced continuously. Storex developed this VSA technique for fruit cultivation in 1993 and this concept is now very successful and the standard because of the reliable operation and low costs for the production of nitrogen gas.

## STORE YOUR FRUIT IN THE BEST POSSIBLE WAY WITH STOREX N<sub>2</sub> GENERATORS !

*At Storex, we are committed to providing the best solutions for our customers. With our N<sub>2</sub> generators you can be confident that your fruit will be stored in the best possible way and protected against spoilage. Invest in the quality of your product, with Storex nitrogen gas generators you are assured of the best (D)CA control and the highest quality fruit.*



## WORLD-WIDE PROVEN TECHNOLOGY

Contact us and find out how to get the best fruit quality after storage.



WWW.STOREX.NL



INFO@STOREX.NL

### Storex Nederland

+31 (0) 78 67 365 61  
Beneden Havendijk 89  
3295 XB - 's Gravendeel (NL)

### Storex België

+32 (0) 3 77 942 40  
Zavelstraat 7A  
9190 - Stekene (BE)



**SAFEGUARDING  
FRESHNESS.**