Harvestore® Breather Bag

Technical Data Sheet

CST

A HARVESTORE BLUEPRINT PART

- Withstands 2x greater pressure than the competition
- Withstands 2x greater pull force
- 3x stronger than the competition after exposure to caustic conditions

Breather Bag Specifications		
Diameter	Type	Required Nominal Volume (cu. ft.)
14’	Internal	200
17’	Internal	300
20’	Internal	500
25’	Internal	550
31’	Internal	800
800 cu. ft.	External	800
1,000 cu. ft.	External	1,000

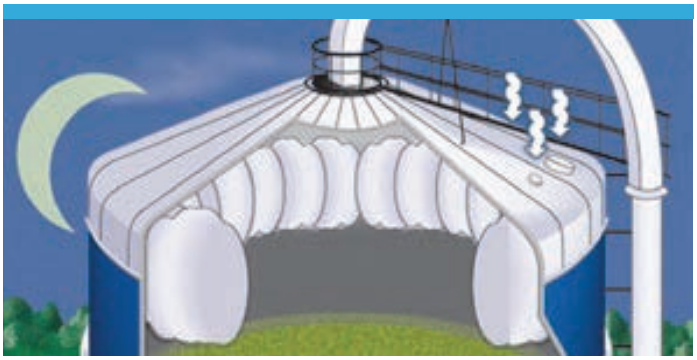
HARVESTORE® BREATHER BAGS are a special feature designed into a Harvestore system to help reduce the amount of air that can get into the structure. While all feed storage systems allow air to come into contact with feed, proper operation of a Harvestore system can minimize the amount of air contacting feed during storage.

This special system helps minimize dry matter loss and contributes to the preservation of feed quality. Harvestore Breather Bags are constructed from a fiber-reinforced polyvinyl chloride (PVC) for greater strength and durability. Test results show there is no loss of tensile strength after exposure to the caustic conditions inside the structure.

There is no equivalent accessory capable of performing this function in a bag or bunker.

HARVESTORE BREATHER BAGS:
An aid to proper fermentation

Breather bags are typically located inside the Harvestore structure and are used to help maintain a desirable concentration of fermentation gases within the structure. Breather bags can also be located outside if space is available. Air flowing in and out of a properly operating and properly maintained breather bag does not come in contact with the stored feed and does not dilute fermentation gases.



Why does air flow in and out of a breather bag?

It primarily happens because of changing pressures in the Harvestore storage structure created by daily environmental temperature changes. This causes the gases inside the structure to expand and contract.

To help understand this, compare a Harvestore structure to a silo without breather bags. In the silo, heat expands the gases, the interior pressure builds, and the gases exit via any available avenue, even through the concrete sides. When the gases inside cool and shrink, air is pulled into the silo through any available avenue. This inward and outward movement of air dilutes important fermentation gases and creates an environment that may lower feed quality more rapidly than an environment containing these gases.

In a Harvestore storage structure, the interior gases heat and expand in much the same way as they do in a silo. Instead of forcing their way out of the structure through the stored feed and through the sides, the expanding gases first exert pressure on the breather bags. The air inside the bags is forced out (like exhaling). If the inside pressure continues to increase after the bags are empty, the fermentation gases then exit the structure through the self-closing, two-way pressure relief valve.

When the gases cool in a Harvestore structure, pressure decreases. The inward vacuum-like force pulls on the breather bags and (like inhaling) they inflate. The air in a properly maintained breather bag does not contact the feed. This greatly lessens the dilution of valuable fermentation gases and contributes to a beneficial fermentation environment. There is no equivalent accessory capable of performing this function in a conventional top-unloading silo, bunker or trench.

*Contact your local authorized dealer for warranty details.

CST Industries, Inc. | 345 Harvestore Dr. | DeKalb, IL 60115 USA | Ph: 815-756-1551 | www.cstindustries.com
Call 815-756-1551 or visit us online at cstindustries.com to find an authorized dealer near you.