

Hydraulic fluid, lubrication oil, and diesel fuel are critical components in many industries, including agriculture, construction, and transportation. Therefore, it is essential to store them properly to prevent contamination and degradation. The use of desiccant breathers is one of the best ways to ensure that storage totes and drums remain clean and dry, preserving the quality of the contents and maintaining the performance of the machinery.

## What are Desiccant Breathers?

Desiccant breathers are devices that are designed to remove moisture and particulate contamination from the air that is entering the storage totes and drums as well as help to draw moisture from the contents inside. They are fitted to the lid or cap of the storage totes and drums using special adapters that ensure and exact fitment for the breather, while helping to mitigate cross contamination during filling and dispensing. Desiccant breathers are typically made of a combination of a filter material and a desiccant material (silica gel) that absorbs the moisture.

## Why are Desiccant Breathers Important for Fluid and Oil Storage?

Simply said, desiccant breathers protect the quality of the fluids and oils inside of storage totes and drums from moisture, which can have a significant impact on the quality and performance of hydraulic fluid, lubrication oil, and diesel fuel. Moisture can cause corrosion and rust, or other contaminants that reduce the life of the machinery and increases maintenance costs. Moisture can also reduce the viscosity of the fluids and oils, affecting their performance and decreased efficiency.

## When Should Desiccant Breathers be Used?

Desiccant breathers should be used whenever fluid and oil storage containers are stored outdoors or in areas that are susceptible to high levels of moisture or particulate contamination. This includes farms, manufacturing plants, paper mills, etc., as well as areas that experience high humidity, frequent rainfall, or even areas near large bodies of water.

Desiccant breathers are also important for containers that are stored for long periods of time. Over time, moisture can penetrate the containers and cause significant problems. Desiccant breathers will help protect the contents, even if the containers are stored for an extended period.

In conclusion, the use of desiccant breathers is an essential step in preserving the quality and performance of hydraulic fluid, lubrication oil, and diesel fuel storage totes and drums. They help to remove moisture from the air that enters and exits the containers, preventing contamination and degradation of the contents. By using desiccant breathers, businesses can reduce their costs associated with maintenance and repairs, while ensuring that their machinery runs smoothly and efficiently.

TTI's PowerBreather<sup>™</sup> line of desiccant breathers, as well as tote and drum adapters are the perfect tools for the job. Reach out to TTI for more information.

