

# SYSTEM AVAILABILITY

# Desiccant Breather Saves Valuable Resources at Class 1 Railroad

# Technical Application Bulletin

PROJECT BACKGROUND

## DISCOVER

DESIGN

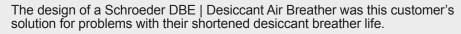
- A Class 1 Railroad repair facility noticed their current desiccant breathers lasted only two (2) weeks on the hydraulic reservoir.
- It was discovered that the current breather was ineffectively inhaling and exhaling through the desiccant.
- It was also revealed that the setup required a valve to release tank pressure, and a vacuum breaker check to hold the 4 psi head pressure in the tank.

#### DIAGNOSE

- It was diagnosed that the amount of turn-over for the desiccant breather was not common, and that a better solution could and should be substituted instead.
- Schroeder expressed our capabilities in providing a lowercost, higher-efficiency, in-tank breather solution, the DBE | Desiccant Air Breather.

#### **INDUSTRIES**





- The DBE only uses the desiccant while inhaling.
- The DBE consists of the required check valves on the base of the breather (4.35 psi check valve) to maintain the tank head pressure.
- Both features also allowed the removal of the vacuum breather and fittings.













#### DELIVER

- A sample unit was sent to the customer's facility in South USA.
  This location was notorious for limiting the life of the breathers.
- The initial testing proved that Schroeder's product lasted approx. 10x longer than the previous desiccant breather.
  - Because of these results, the DBE reduced overall usage of replacement desiccant breathers for this customer.

Hydraulic Reservoir	Without DBE	With DBE
Cost Savings / yr.	-\$40,000.00	+\$40,000.00
# of Changeouts	26 times/yr.	3 times/yr.
# of Replacements	Every 2 wks.	Every 18 wks.



## CUSTOMER BENEFITS

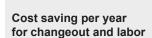
- Decreased breather changeout charges and labor costs
- Reduced consumption of valves, fittings, and replacement desiccant cartridges
- Cost reduction of \$40,000
   per year

### FURTHER APPLICATION AREAS

- Hydraulic Tanks/Reservoirs
- Gear Boxes
- Wind Turbines
- New and Retrofit Applications

## ROI







#### Underlying values:

Reduced desiccant breather changeouts: 26 times/year (w/o DBE) - 3 times/year (w/ DBE). 26 - 3 = 23 less changeouts. Cost savings per year for changeout and labor: \$40,000

# PRODUCT SPECS

#### DBE | Desiccant Air Breather

Contamination Retention: 26g Micron Rating: 2 µm Operating Temp. Range: -20°F to 210°F Storage Temp.: from -40°F Element Material: Pleated Air Filter Connection Piece Material: Robust Zinc Die-Casting

For internal use only. In case of questions please Contact the ACCESSORIES group.

