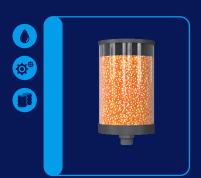
# **ADSORBERS**

Breather dryers /
Dehumidifiers
to prevent humidity
entering your system

Water separators to prevent liquid water entering your system



## VV-D

Disposable breather dryers without valves, developed to protect hydraulics, gears, barrels and IBC with constant air exchange and short maintenance intervals in indoor, outdoor and offshore use against moisture damage.

The plastic housings are filled with GIEBEL Xdry® and a 3µm filter to ensure effective drying and cleaning of supply air. A layer of activated carbon adsorbs escaping oil mist when the air is pressed out. Once the adsorbers are saturated, they are replaced.



## VV-DV

Disposable breather dryers with valves, developed to protect hydraulics and gears under dusty environments or when minimal pressure build-up is required even with high air flows in indoor, outdoor and offshore use against moisture damage.

The plastic housings are filled with GIEBEL Xdry® and a 3µm filter to ensure effective drying and cleaning of supply air. A layer of activated carbon adsorbs escaping oil mist when the air is pressed out. Once the adsorbers are saturated, the cartridges are replaced. The valve parts are reused.



## VV-R

Rechargeable breather dryers without valves, developed to **protect hydraulics, gears, barrels and IBC with constant air exchange and short downtimes** in indoor and outdoor use against moisture damage.

The plastic housings are filled with GIEBEL Xdry® and a 3µm filter to ensure effective drying and cleaning of supply air. A layer of activated carbon adsorbs escaping oil mist when the air is pressed out. Once the adsorbers are saturated, all components of the inner workings can be replaced at low cost.



## VV-RV

Rechargeable breather dryers with valves, developed to **protect hydraulics and gears under dusty environments or when minimal pressure build-up is required even with high air flows** in indoor, outdoor and offshore use against moisture damage.

The plastic housings are filled with GIEBEL Xdry® and a 3µm filter to ensure effective drying and cleaning of supply air. A layer of activated carbon adsorbs escaping oil mist when the air is pressed out. Once the adsorbers are saturated, all components of of the inner workings can be replaced at low cost

## Oil mist separators / Aerosol filters to

# **Gas separators**





Fits barrels & IBC



Fits **gears** 

Fits storage tanks



Fits transformers

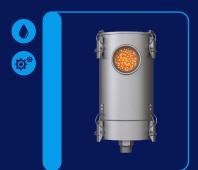


## MA-R

Rechargeable breather dryers without valves, developed to protect barrels and IBC filled with isocyanates, polyols, DOT4, SKYDROL, hygroscopic solvents or oils in indoor and outdoor use against moisture damage. MA-R **comply with the ATEX** product directive 2014/34/EU and are available with FKM and EPDM seals.



Rechargeable breather dryers with valves, developed to protect hydraulics and gears in harsh environments or with aggressive operating fluids in indoor and outdoor use against moisture damage. MA-RV **comply with the ATEX** product directive 2014/34/EU and are available with FKM and EPDM seals.



## ME-RV

Rechargeable breather dryers with valves, developed to protect hydraulics, gears in the chemical industry or exposed to salt air in indoor, outdoor and offshore use against moisture damage. ME-RV **comply with the ATEX** product directive 2014/34/EU and are available with FKM and EPDM seals.



Rechargeable breather dryers without valves, developed to protect large storage tanks of more than 60cbm in indoor, outdoor and offshore use against moisture damage. MS-R comply with the ATEX product directive 2014/34/EU, meet the criteria of corrosivity category CX and are available with FKM and EPDM seals.



## VG-D

Disposable oil mist separators without valves, developed to **protect hydraulics, gears, barrels** and **IBC - especially turbo gearboxes, test benches and recirculating oil lubrication systems** - in indoor and outdoor against the escape of oil mist and pollutants.

The plastic housings are filled with activated carbon. Combined with a slosh protection and oil demister, the activated carbon cleans the air coming out of the unit, protecting the environment from oil aerosol contamination and harmful gases. Once the adsorbers are saturated, they are replaced.



## VG-R

Rechargeable oil mist separators without valves, developed to **protect hydraulics, gears, barrels and IBC - especially turbo gearboxes, test benches and recirculating oil lubrication systems** - in indoor and outdoor against the escape of oil mist.

The plastic housings are filled with activated carbon. Combined with a slosh protection and oil demister, the activated carbon cleans the air coming out of the unit, protecting the environment from oil aerosol contamination and harmful gases. Once the adsorbers are saturated, they are replaced.



## TB-RV

Rechargeable dehumidifiers, developed to **protect transformers** in indoor and outdoor use from moisture damage.

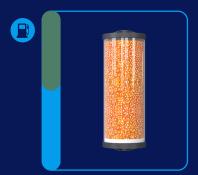
The plastic housings are filled with GIEBEL Xdry® and a 2µm filter to ensure effective drying and cleaning of supply air. A layer of activated carbon adsorbs escaping oil mist when the air is pressed out. Once the adsorbers are saturated, all components of of the inner workings can be replaced at low cost.



## TM-RV

Rechargeable dehumidifiers, developed to protect transformers in zone II 2 G / D IIC T4 according to the ATEX product directive 2014/34/EU in indoor, outdoor and offshore use from moisture damage. TM-RV meet the criteria of corrosivity category CX.

The stainless steel housings are filled with GIEBEL Xdry® and a 2µm filter to ensure effective drying and cleaning of supply air. A layer of activated carbon adsorbs escaping oil mis when the air is pressed out. Once the adsorbers are saturated, all components of of the inner workings can be replaced at low cost.



## **VI -**[

Disposable inline filters, developed to **dry and filter pipeline air streams of storage tanks** from moisture and specific gases.

Inside the plastic housings, a bed of GIEBEL Xdry® ensures effective drying of process air. In addition, an integrated filter separates abrasion and ambient dirt. When the adsorbers are saturated, all components of the inner workings can be replaced at low cost. If required, the inline filters can be filled with pure molecular sieves (3A, 4A, 5A, 13X) to filter specific gases. The versions with a DN50 thread can transfer large volume flows.



## VI -R

Rechargeable inline filters, developed to **dry and filter pipeline air streams of storage tanks** from moisture and specific gases.

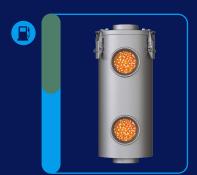
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## VM-R

Rechargeable inline filters, developed to **dry and filter pipeline air streams of storage tanks in extremely harsh environments or in explosion protection zones according to ATEX 2014** from moisture and specific gases.

Inside the plastic housings, a bed of GIEBEL Xdry® ensures effective drying of process air. In addition, an integrated filter separates abrasion and ambient dirt. When the adsorbers are saturated, all components of the inner workings can be replaced at low cost. If required, the inline filters can be filled with pure molecular sieves (3A, 4A, 5A, 13X) to filter specific gases. The versions with a DN50 thread can transfer large volume flows.



## VF-R

Rechargeable inline filters, developed to **dry and filter pipeline air streams of storage tanks in extremely harsh environments or in explosion protection zones according to ATEX 2014** from moisture and specific gases.

Inside the plastic housings, a bed of GIEBEL Xdry® ensures effective drying of process air. In addition, an integrated filter separates abrasion and ambient dirt. When the adsorbers are saturated, all components of the inner workings can be replaced at low cost. If required, the inline filters can be filled with pure molecular sieves (3A, 4A, 5A, 13X) to filter specific gases. The versions with a DN50 thread can transfer large volume flows.



## HS-D

Waterseparators to **protect gears from water droplet ingress** while allowing them to breathe.

HS-D membrane filters are an excellent alternative to adsorbers when liquid water is a challenge but moisture is not a problem. With the help of an ePTFE filter in the core of the robus polyamide housings, the gear oils are protected from contamination by water, even if the transmissions are used outdoors or cleaned with water