



GIEBEL

FilTec GmbH

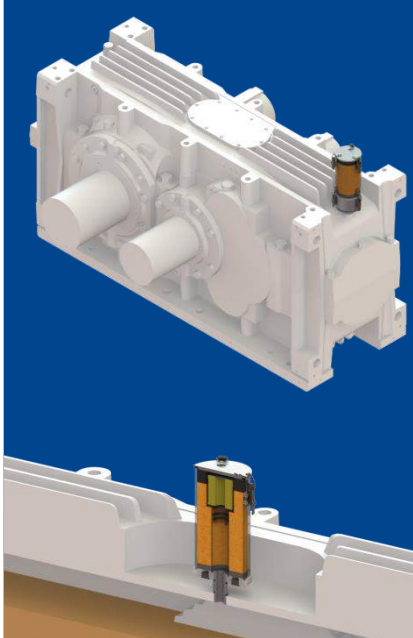
**DESIGNED AND
PRODUCED
IN GERMANY**



Your contact for original GIEBEL Adsorber®



VENTILATION DRYER FOR GEARS



Due to temperature fluctuations between operation and standstill, the air volume in a transmission changes constantly. Sucked, humid ambient air significantly reduces the service life of a gear oil.

Furthermore, moisture in the housing leads to corrosion with particle abrasion and thus damage to the gearbox.

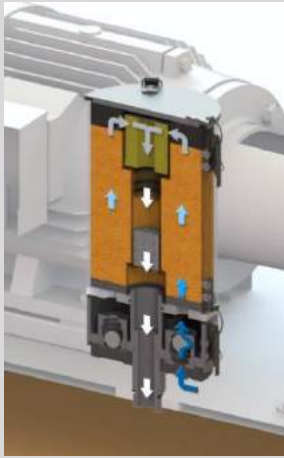
Good transmission ventilation filters prevent the ingress of humidity during the "breathing" of the transmission. GIEBEL Adsorber® are special gear ventilation filters for anhydrous ventilation.

For example, these respiratory dryers are used successfully near the coast, on offshore installations, in tropical regions and underground.





USE OF A BREATHER DRYER



Targets: Drying of sucked, incoming air, avoiding condensation damage

Function: Drying by a desiccant, cleaning of the air by a filter element, protection of the desiccant by frost-proof valves, use of self-regeneration to extend the maintenance intervals

Solution: Dry and filtered air in the hydraulic tank, dew point of up to $-30\text{ }^{\circ}\text{C}$ and residual moisture at approx. 2-20% rh, no damage due to condensation

USE OF AN OIL MIST SEPARATOR



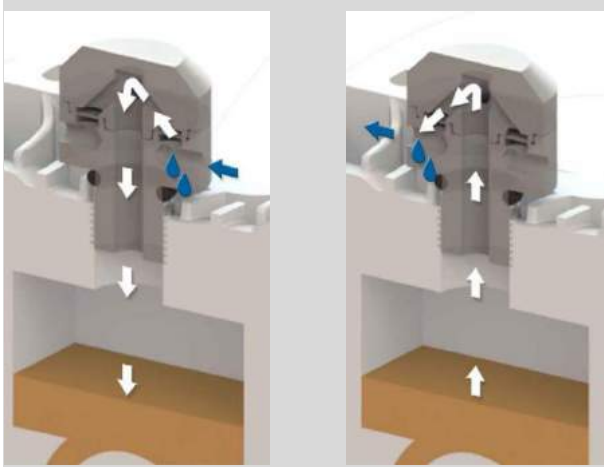
Targets: Protecting the environment from contamination with oil mist, Secondary protection against atmospheric moisture from the ambient air

Function: Binding of larger oil particles, which drops back into the tank due to condensation, adsorption of small particles of oil through activated carbon, drying of the incoming air

Solution: No leakage of oil particles from the hydraulic tank, cleaning of surfaces not necessary, protection of hydraulic oil from humidity.



USE OF A WATER DRP SEPARATOR



Targets: Protection of the gearbox against water entry; Ensuring the free breathing of the transmission

Function: Separation of water droplets and mist, breathing of the gearbox in both directions, no adsorption of humidity

Solution: No inflow of water drops into the transmission, free breathing and no entry of dirt particles

REFERENCES








ADSORBER GEARS



Adsorber	VENT PA-D	VENT PA-R	VARIO PA-D	VARIO PA-R	VARIO MA-D	VARIO MA-R	VARIO ME-D	VARIO ME-R	VARIO VG PA-D	VARIO VG PA-R	HSECURE
Usage	Breather Dryer								Oil Mist Separator		Water Drop Separator
Valves	✗	✗	✓	✓	✓	✓	✓	✓	✗	✗	
Rechargeable	✗	✓	✗	✓	✗	✓	✗	✓	✗	✓	
According ATEX 2014	✗	✗	✗	✗	✓	✓	✓	✓	✗	✗	
Offshore suitable	✗	✗	✗	✗	✗	✗	✓	✓	✗	✗	
Gear volume (Oil and Air volume)											
5 – 10 l	vV 140-PA 05.0010.42	vV 150-PA 05.0010.28	vV 140-PA 05.0010.44	vV 150-PA 05.0010.17							hs 30-PC 02.0000.07
10 – 100 l	vV 200-PA 05.0020.29	vV 210-PA 05.0020.56	vV 200-PA 05.0020.64	vV 210-PA 05.0020.30							hs 50-PC 02.0000.06
100 – 400 l	vV 220-PA 05.0020.32	vV 230-PA 05.0020.78	vV 220-PA 05.0020.25	vV 230-PA 05.0020.33	vV 220-MA 05.0030.97	vV 230-MA 05.0030.90			DV VG 320-PA 07.0001.56	DV VG 330-PA 07.0001.57	
400 – 1200 l	vV 300-PA 05.0030.50	vV 310-PA 05.0030.53	DV 300-PA 07.0001.19	DV 310-PA 07.0000.24	DV 300-MA 07.0001.58	DV 310-MA 07.0000.53	DV 300-ME 07.0001.27	DV 310-ME 07.0001.09	DV VG 500-PA 08.0002.02	DV VG 530-PA 08.0002.05	
1200 – 2400 l	vV 320-PA 05.0030.93	vV 330-PA 05.0030.19	DV 320-PA 07.0001.02	DV 330-PA 07.0001.20	DV 320-MA 07.0001.53	DV 330-MA 07.0001.26	DV 320-ME 07.0001.46	DV 330-ME 07.0001.41	DV VG 550-PA 08.0002.08	DV VG 560-PA 08.0002.15	
2400 – ... l	vV 500-PA 05.0060.16	vV 510-PA 05.0060.10	DV 500-PA 08.0000.50	DV 510-PA 08.0000.51		DV 510-MA 08.0003.09		DV 510-ME 08.0003.01			



ACCESSORIES

Accessories											
Oil separator 	OSD-130 03.2135.07	OSD-130 03.2135.07	OSD-130 03.2135.07	OSD-130 03.2135.07	OSD-180 03.2132.00	OSD-180 03.2132.00	OSD-180 03.2135.05	OSD-180 03.2135.05	OSD-130 03.2135.07	OSD-130 03.2135.07	
	OSD-180 03.2132.00	OSD-180 03.2132.00	OSD-180 03.2132.00	OSD-180 03.2132.00					OSD-180 03.2132.00	OSD-180 03.2132.00	
Wall mount 	WH-oSL-HK 03.0000.89	WH-oSL-HK 03.0000.89	WH-oSL-5 03.0000.90	WH-oSL-5 03.0000.90	WH-oSL-5 03.0000.90	WH-oSL-5 03.0000.90	WH-oSL-5 03.0000.90	WH-oSL-5 03.0000.90	WH-oSL-5 03.0000.90	WH-oSL-5 03.0000.90	
	WH-oSL-5 03.0000.90	WH-oSL-5 03.0000.90	WH-SL-3 03.0000.56	WH-SL-3 03.0000.56	WH-SL-3 03.0000.56	WH-SL-3 03.0000.56	WH-SL-3 03.0000.56	WH-SL-3 03.0000.56	WH-SL-3 03.0000.56	WH-SL-3 03.0000.56	
Assembly tube 	AT-I250 03.0000.71	AT-I250 03.0000.71	AT-I250 03.0000.71	AT-I250 03.0000.71	AT-I250 03.0000.71	AT-I250 03.0000.71	AT-I250 03.0000.75	AT-I250 03.0000.75	AT-I250 03.0000.71	AT-I250 03.0000.71	
	AT-LK250 03.0000.82	AT-LK250 03.0000.82	AT-LK250 03.0000.82	AT-LK250 03.0000.82	AT-LK250 03.0000.82	AT-LK250 03.0000.82			AT-LK250 03.0000.82	AT-LK250 03.0000.82	
Elbow adapter 	WA-W_G12 03.0001.01	WA-W_G12 03.0001.01	WA-W_G12 03.0001.01	WA-W_G12 03.0001.01	WA-V_G1 03.0001.02	WA-V_G1 03.0001.02	WA-V_G1 03.0001.02	WA-V_G1 03.0001.02	WA-V_G1 03.0001.02	WA-V_G1 03.0001.02	
	WA-W_G1 03.0001.00	WA-W_G1 03.0001.00	WA-W_G1 03.0001.00	WA-W_G1 03.0001.00							
Protection adapter 	PRT-AD 08.2104.01	PRT-AD 08.2104.01	PRT-AD 08.2104.01	PRT-AD 08.2104.01	PRT-AD 08.2104.01	PRT-AD 08.2104.01	PRT-AD 08.2104.03	PRT-AD 08.2104.03	PRT-AD 08.2104.01	PRT-AD 08.2104.01	
Bypass adapter 	BPA-AD 08.0000.71	BPA-AD 08.0000.71	BPA-AD 08.0000.71	BPA-AD 08.0000.71	BPA-AD 08.0000.71	BPA-AD 08.0000.71	BPA-AD 08.0000.70	BPA-AD 08.0000.70	BPA-AD 08.0000.71	BPA-AD 08.0000.71	

APPLICATIONS

GIEBEL Adsorber® are used for example:

- Turbines & generators in hydroelectric power plants
- Paper machines
- Vertical drilling rigs (Onshore)
- Gears and pumps for offshore drilling rigs
- Gears in sugar processing
- Extruder gearbox for injection molding machines
- Circulation basin in sewage treatment plants
- Ship gearbox / propeller
- Cable cars and ski lifts
- and many more !

