

VILEDON CHEMCONTROL DEEP-BED PRESSURIZATION UNITS

viledon®

ENERGY-EFFICIENT SYSTEM SOLUTIONS FOR ENHANCED CORROSION CONTROL

Many industrial processes generate contaminant gases that can cause corrosion. Even minor damage to electronic components can have serious consequences, e.g. fault signals, unplanned downtime, high repair costs.

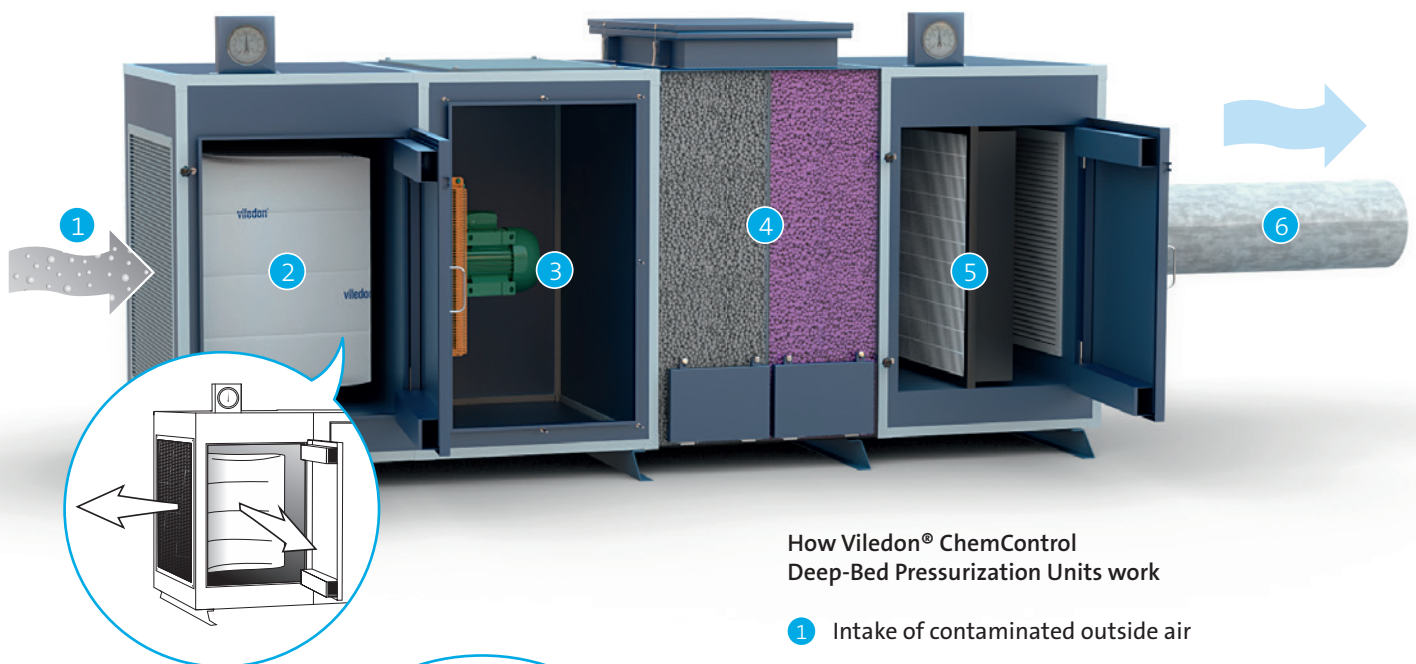
The Viledon® ChemControl Deep-Bed Pressurization Units (DBPU) are multi-stage filtration systems that reliably provide complete protection against corrosion. The Viledon® DBPUs are used for medium to high concentrations of gas-

eous contaminants. The system is placed outside the protected area and supplies purified air into it. Hence, the Viledon® DBPUs provide a positive pressure inside the protected area. They are particularly designed for paper mills, refineries, smelters, steel and chemical plants.

In the Viledon® DBPU, Viledon® Compact pocket filters are used in the pre-filtration stage. Viledon® MaxiPleat cassette filters ensure secure fine filtration. The progressive media design,

moisture resistance up to 100% relative humidity (no risk of filter collapse) and high dust holding capacities result in improved energy consumption over generic industry filters due to homogeneous air flow coupled with a low average pressure drop.

Figure: Example illustration of a complete Viledon® ChemControl Deep-Bed Pressurization Unit (DBPU)



Pre-filter withdrawal available in front or side format

Optional intake air supply via duct

How Viledon® ChemControl Deep-Bed Pressurization Units work

- 1 Intake of contaminated outside air
- 2 Pre-filtration
Viledon® Compact pocket filter (M6, acc. to EN 779:2012)
- 3 Fan with energy-saving EC motor, meeting the ErP 2015 directive for increased minimum efficiency ratings
- 4 Deep-bed filtration
Viledon® ChemControl Pellets
- 5 Fine filtration
Viledon® MaxiPleat cassette filter (F8, acc. to EN 779:2012)
- 6 Purified air
free of fine particles and contaminant gases

VILEDON CHEMCONTROL DEEP-BED PRESSURIZATION UNITS (DBPU) FEATURES

- Boxed anodized aluminum pentapost frame and high strength 30 mm double skin plastisol panels as standard offer reduced leakage rates of L3 in accordance with EN1886, compared to single skin products.
- High quality assembly ensures a smooth interior surface, thereby minimizing frictional losses and providing a positive air seal where panels are fitted to the frames.
- Units equipped with two deep bed stages; optionally available with third or fourth stage for higher gas concentrations.

- Panel construction offers increased acoustic properties over single skin versions with a case reduction index as follows:

FREQUENCY Hz	63	125	250	500	1k	2k	4k	8k
CASING REDUCTION INDEX	-11	-14	-14	-24	-25	-25	-25	-23

- Integrated pressure gauges allow clear monitoring onsite.
- Internal and external weatherproof designs available.

TECHNICAL DATA

UNIT TYPE	CONSTRUCTION	CONNECTION		AIR VOLUME [m³/h]	NUMBER OF PRE-FILTERS (M6)	NUMBER OF FINE FILTERS (F8)	OVERALL UNIT HEIGHT** (EXCLUDES REFILL PORTS) [mm]	OVERALL UNIT WIDTH** (EXCLUDING CONTROL PANEL) [mm]	OVERALL UNIT LENGTH (EXCLUDING DUCT CONNECTIONS) [mm]	OVERALL WEIGHT (EXCLUDING FILTERS AND PELLETS**) [kg]	POWER CONSUMPTION (BASED ON 900 PA TOTAL SYSTEM PRESSURE AT AIR VOLUME STATED) [kW]	CONTROL PANEL
		AIR INTAKE	AIR OUTLET									
DBPU 1000 Indoor	Plastisol inner/outer double skin panels, with aluminum extrusion frame*	Duct	Duct	1,000	1	1	1,076	700	3,700	400	1.35	IP54
DBPU 3000 Indoor		Duct	Duct	3,000	4	4	1,576	1,280	3,700	700	2.30	IP54
DBPU 6000 Indoor		Duct	Duct	6,000	9	9	2,176	1,900	3,700	900	4.70	IP54
DBPU 1000 Outdoor		Louvre	Duct	1,000	1	1	1,076	700	3,700	420	1.35	IP66
DBPU 3000 Outdoor		Louvre	Duct	3,000	4	4	1,576	1,280	3,700	740	2.30	IP66
DBPU 6000 Outdoor		Louvre	Duct	6,000	9	9	2,176	1,900	3,700	960	4.70	IP66

* Stainless steel construction available. All units are supplied as standard in one section. Section breaks can be added as an option.

** Customized unit dimensions are available on request.


*** All units are optionally available with Viledon® CCM 1205 modules.

Standard particle filtration equipment:


Pre-filtration: T 60 1/1 (W×H×D: 592×592×650 mm); filter class M6, acc. to EN 779:2012

(Pre-filter removal on Viledon® DBPU outdoor unit via louvers, which also act as access doors.)


Fine filtration: MX 95 1/1 (W×H×D: 592×592×140 mm); filter class F8, acc. to EN 779:2012




High efficiency EC fan technology meets the ErP directive for 2015




Double wall casings for improved noise reduction in operation



Units optimized for high energy efficiency performance



Units meet the requirements of the applicable EC directives



Viledon® fine filters are certified by Eurovent

The figures given are mean values subject to tolerances due to normal production fluctuations. Our explicit written confirmation is always required for the correctness and applicability of the information involved in any particular case. Subject to technical alterations.

Freudenberg Filtration Technologies SE & Co. KG

69465 Weinheim, Germany
 Phone +49 (0) 6201 80-6264 | Fax +49 (0) 6201 88-6299
 viledon-gasphase@freudenberg-filter.com
 www.freudenberg-filter.com

