

# **HV-HIGH VACUUM FILTER UNITS**

**Technical Specifications:** 









Vertical Turbo-Blower with motor coupling. Separate individual motor cooling.





## Intended Use

- HV-Series filter units are specifically designed for extraction and dedusting of dust, fume and smoke where high velocity or high pressure loss extraction is needed.
- HV-Series are Fully integrated, ready-to-operate High Vacuum Filter Unit with all components built-in.
- As Standard, 10kPa and 15kPa vacuum models are available.
- For specific projects, higher airflow capacity or higher vacuum (20-25kPa) models are also available upon request.(Filter design is subject to alterations)
- As standard, single or double stage turbo-blowers are used with vertical arrangement.
- VANTERM HV-Series filter units are equipped with filter elements average lifetime of 10 000 hours
- As Standard, all HV-Series filter units have silencers at the air outlet. Average sound levels are 70-78db(A) according to airflow capacity and a vacuum level.
- Standard Units are built for indoor applications.

### **Operation Principle**

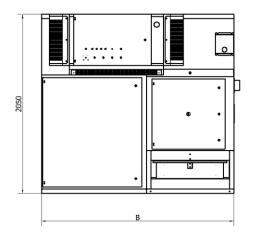
- Dust laden air is extracted from source with high velocity intake.
  First, dust laden enters the pre-separator chamber Afterwards, dust laden air is filtered at the cartridge filters. Clean air is extracted through fan-silencer group and returned clean.
  - (Beware Filter outlet temperature is 30-40°C above ambient temperature.)
- When K-type VANTERM filter cleaning system senses that filters are needed to clean, Jet-pulse filter cleaning is activated in order to clean filters elements. A sudden burst of pressured air is released to clean filter by freeing the pores of the filter media and shaking of dust cake on the elements.

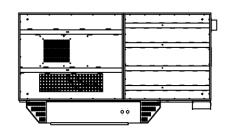
#### Optional Features

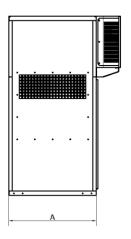
 Any three phase Voltage and frequency (ex.480V ~ 3P PE -60 Hz) configuration is available upon request.

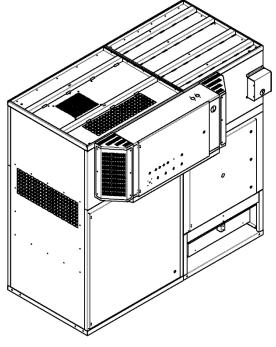
### Standard Features

- **Power Input:** 400V ~ 3P PE 50 Hz.
- <u>Power Regulations:</u> Direct Drive or Optional PID Power management with pressure regulated VFD.
- Pre-Separator: Standard Pre-separator against dust wear.
- <u>Turbomachine:</u> Single or Double Stage Turboblower with High Efficiency
- <u>Filter Type:</u> Cartridge Surface Filtration Dust Class M Polyester. (ePTFE membrane Polyester Non-woven cartridges are available, on request.)
- <u>Filter Life time:</u> Average 10 000 h state-of-the-art filter lifetime above industry standards with cutting edge filter design, media and cleaning system.
- <u>Filter Cleaning:</u> VANTERM K-type fully automatic Differential Pressure (ΔP) controlled with high efficiency solo jet-pulse cleaning.
- <u>Pressured Air Input:</u> min.6 bar (Reduced to 4,5 bar internally with built-in regulator)
- Sound level: Low sound level below 70-78 dB(A) with builtin silencer after fan.
- Operation Mode: Panel Operation and slave mod (with NO relay connection from parent) as standard.
- Output Signals: Digital Motor Fault, Normal Operation and Low Air Flow Signals
- <u>Dust Bin:</u> Easy to Handle locking mechanism 140 to 160-liter capacity.
- Special Feature (1): Separate Motor and Blower Cooling with the secondary fan.
- Special Feature (2): High Vacuum Safety Valve to avoid, extreme Vacuum in pipeline as standard to protect system safety.









TYPE	CAPACITY (m³/h)	MOTOR (kW)	FAN PRESSURE (Pa)	FILTER AREA (m²)	A (mm)	B (mm)	ØD (mm)	DUST BIN (liter)	WEIGHT (kg.)
HV-1010	1 170	11,0	10 000	28,0	1000	1800	160	140	570
HV-1015	900	11,0	15 000	28,0	1000	1800	160	140	668
HV-1510	1 400	18,5	10 000	28,0	1000	2200	160	140	576
HV-1515	1 700	22,0	15 000	28,0	1000	2200	160	140	684
HV-2010	2 150	2x11,0	10 000	42,0	1000	2200	200	140	654
HV-2015	1 800	2x15,0	15 000	42,0	1000	2850	200	140	1040
HV-2510	2 340	2x15,0	10 000	42,0	1000	2850	200	160	1120
HV-3010	2 800	2x18,5	10 000	56,0	1000	2900	250	160	1250
HV-3515	3 400	2x22,0	15 000	56,0	1000	3300	250	160	1340

<sup>\*</sup>Ongoing product development may subject the technical specifications to alteration without notice.

