Absolent | Part of Absolent Air Care Group

EN

AD051, AD101, AD151

Modular Industrial Dust and Fume Filters

- Optimised for high performance, low energy use and extended filter lifespan
- Modular construction enables short lead times for bespoke solutions
- CleanChange™ system enables safe, quick and clean maintenance
- Low running costs through Vertical Airflow Technology and inverter-driven fan options
- Galfan pre-coated steel as standard for enhanced durability and long-term corrosion protection

Flexible filter unit for dust and fume applications

Modular dust filtration unit designed to be tailored to specific performance requirements and site conditions.

The AD-range delivers high performance in a compact footprint. The Vertical Airflow Technology improves particle separation, directs dust towards the hopper and reduces build-up on the filters, extending filter lifespan and lowering maintenance needs.

CleanChange™ positions the filter change mechanism in the clean air section, away from contaminated air. Maintenance becomes cleaner, easier and tool-free, with no need to enter the unit during service.

Function

Modular dust filter that can be configured to meet specific performance requirements and customer needs.

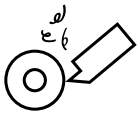
Verical Airflow Technology, which combines a downflow air pattern with vertical filter elements, forces the separated dust down into the dust disposal solution and ensures that following pulse jet cleaning, the dust is directed downwards. The incoming air stream ‘washes’ dust from the vertical filter elements enabling a two-stage cleaning system for optimized efficiency. Vertical filter elements allow this washing due to their orientation - traditional horizontal filter elements can compact dust on the top. Using vertical filter elements also means that the dust that is cleaned from each element is directed straight into the dust disposal solution, not onto filters below as with a horizontal arrangement.

The cartridges can be monitored by a differential pressure sensor that measures the cleanliness of the filter elements and only cleans on demand to ensure optimal filtration efficiency and reduced energy consumption.

Applications

Welding

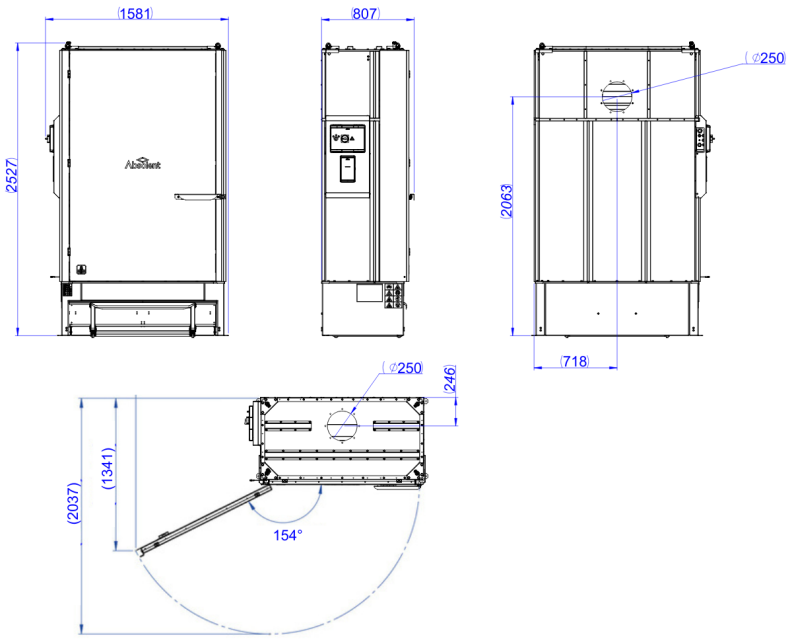
Laser cutting / Plasma cutting



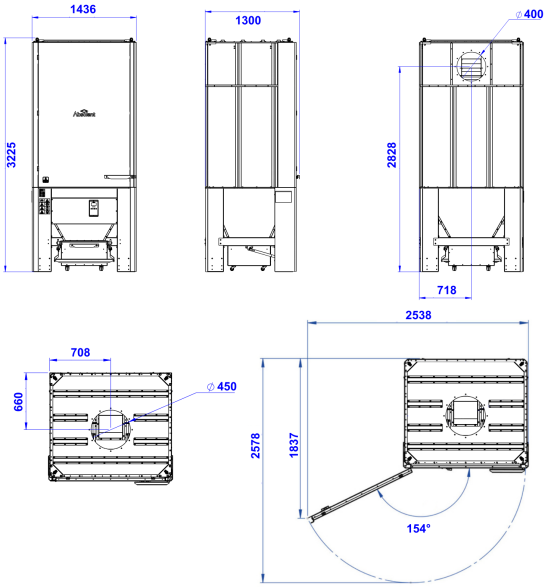
Dry machining

Dimensions

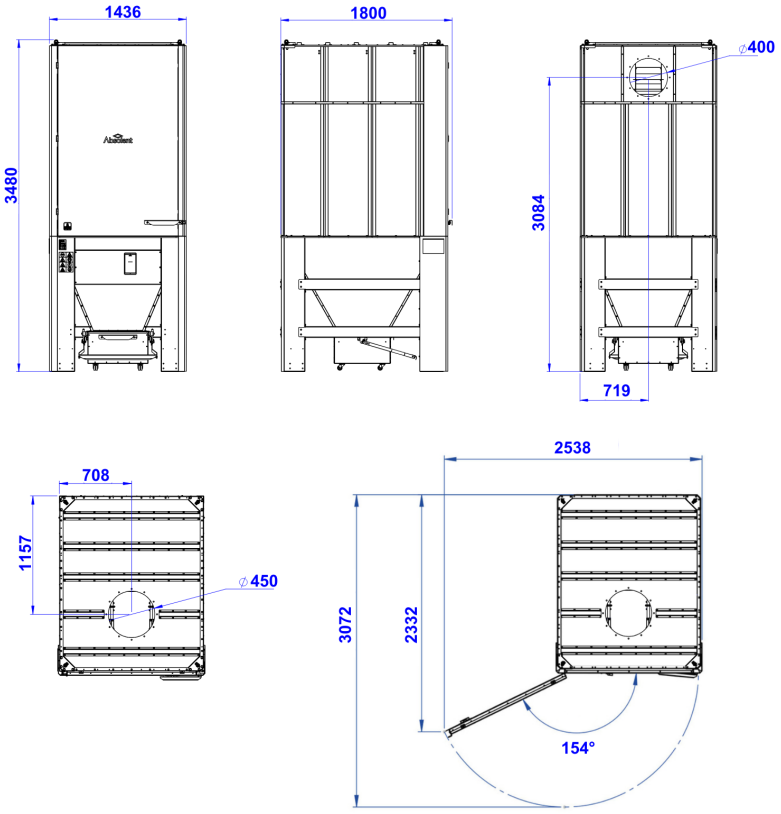
AD051



AD101



AD151



Technical specifications

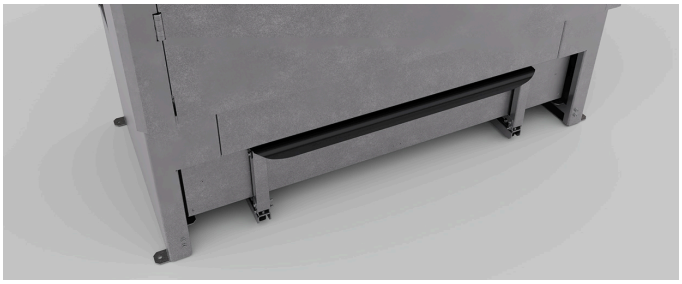
Technical specifications AD051, AD101, AD151

	AD051	AD101	AD151
General			
Application	Hot & Abrasive Metal Fumes & Dust	Hot & Abrasive Metal Fumes & Dust	Hot & Abrasive Metal Fumes & Dust
Airflow range	1 200-3 600 m^3/h	2 400-7 200 m^3/h	3 600-10 800 m^3/h
Pressure drop of the unit	2 000 Pa	2 000 Pa	2 000 Pa
External Finish	Galfan pre-coated steel, high corrosion resistance	Galfan pre-coated steel, high corrosion resistance	Galfan pre-coated steel, high corrosion resistance
Material Thickness	2,5-3,0 mm	2,5-3,0 mm	2,5-3,0 mm
Location	Indoor and outdoor use.	Indoor and outdoor use.	Indoor and outdoor use.
Delivery	Pre-assembled	Delivered in sections	Delivered in sections
Connections			
Inlet type	DIN 24154/T2	DIN 24154/T2	DIN 24154/T2
Inlet diameter	250 mm	400 mm	400 mm
Inlet placement	Rear	Rear	Rear
Outlet type	Via integral fan or open DIN 24154/T2 connection	Via integral fan or open DIN 24154/T2 connection	Via integral fan or open DIN 24154/T2 connection
Outlet diameter	250 mm	450 mm	450 mm
Outlet placement	Top	Top	Top
Compressed air supply	12 mm connection - 6 Bar Clean & Dry Supply	12 mm connection - 6 Bar Clean & Dry Supply	12 mm connection - 6 Bar Clean & Dry Supply
Dust collection			
Drawer	140l (37.0 gal (US))	280l (74.0 gal (US))	N/A
Bin	N/A	115l (30.4 gal (US))	115l (30.4 gal (US))
Filter			
Diameter Primary filter elements	324 mm	324 mm	324 mm
Number of Primary filter elements	2 pcs	4 pcs	6 pcs
Filter efficiency	All filter elements are in accordance with EN 60335-2-69:AA Dust Class M Rating.		
	Dust Class M relates to an efficiency of > 99.9% under conditions given in EN 60335-2-69:AA.		
Filter media	Polyester & Polyester Nano Fibre	Polyester & Polyester Nano Fibre	Polyester & Polyester Nano Fibre
Total Filter area	40 m^2	80 m^2	120 m^2
Filter cartridge length	1 200 mm	1 200 mm	1 200 mm
Secondary filter	Separate	Separate	Separate
Pre-treatment (Pre-coating Powder)	Yes, as option	Yes, as option	Yes, as option
Physical properties			
Width	1 581 mm (62.24 in)	1 436 mm (56.54 in)	1 436 mm (56.54 in)
Height	2 527 mm (99.5 in)	3 225 mm (127 in)	3 480 mm (137 in)
Depth	807 mm (31.77 in)	1 300 mm (51.65 in)	1 800 mm (70.87 in)
Weight with empty filter cassettes	570 kg (1257 lb)	810 kg (1785 lb)	1040 kg (2293 lb)

Description of the concept

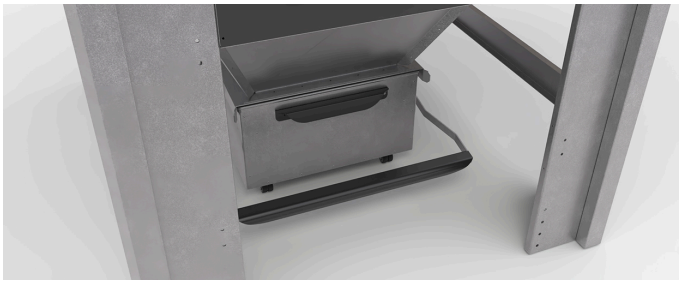
AD filters are designed with a modular architecture and state-of-the-art technology to provide the most advanced industrial filter on the market today. Our Vertical Airflow Technology enables us to provide the highest performance in all aspects, and full flexibility to ensure our customers' unique requirements are met.

Dust disposal options



Dust collection drawer

Available for: AD051, AD101

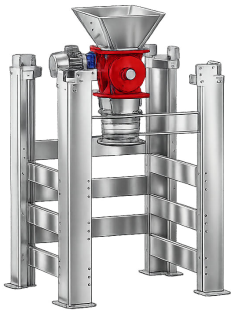


Dust collection bin

Available for: AD101, AD151

Extension legs with drum connection

Available for: AD101, AD151



Extension legs with rotary valve and drum connection

Available for: AD101, AD151

Filter Elements

Industrial processes generate particles of various sizes and concentrations. Absolent's filter cartridges are available in several different materials and finishes, specially developed to cope with the variation in particulate characteristics.

AD Filter Elements

Technical information AD Filter Elements	
Filter cartridge length	1200 mm
Diameter	324 mm
Filter media	Polyester / Polyester Nano Fibre
Removal	Outside of unit, no confined space working
Mechanism	In clean section, no exposure to contaminant
Total Filter area	20 m^2