

# AES C-VAC CENTRALISED WOOD DUST VACUUM SYSTEM



## APPLICATIONS



Bandfacers



Bandsaws



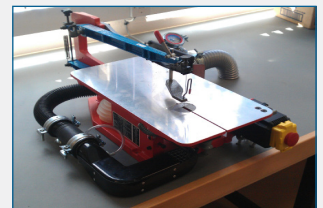
Bench Cleaning



Circular Saws



Floor Cleaning



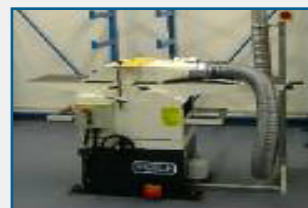
Fretsaws



Mortisers



Pillar Drills



Planer/Thicknessers



Woodworking Lathes

## DESCRIPTION

The AES centralised system is the modern solution for the efficient extraction and cleaning of wood dust in technical workshops within schools and colleges.

Discrete pipework is fixed above or below ceiling level and connects every machine in the department to the central system which is usually located in the technician's workshop. The C-VAC extracts dust from multiple machines simultaneously and incorporates plug in points for portable tools, floor and bench cleaning.

All fine dust particles are captured by a coated polyester filter sock and at the end of each vacuum operation, an automatic shaker mechanism is activated to dispose of these particles into a 240L collection bag. A bag level indicator alarm alerts the operator when bag replacement is required, at which point the filled bag is easily removed using a specially designed trolley system.

Low operating noise levels and improved energy efficiency are achieved with the inclusion of a frequency inverter control panel which allows the fan power level to match the number of points in use at any time. A variety of valves and machine connection options are available to allow the system to interface with all types of woodworking machinery.

Two models are available within the range and all are designed to remove wood dust ensuring compliance with COSHH (Control of Substances Hazardous to Health) regulations 2002.

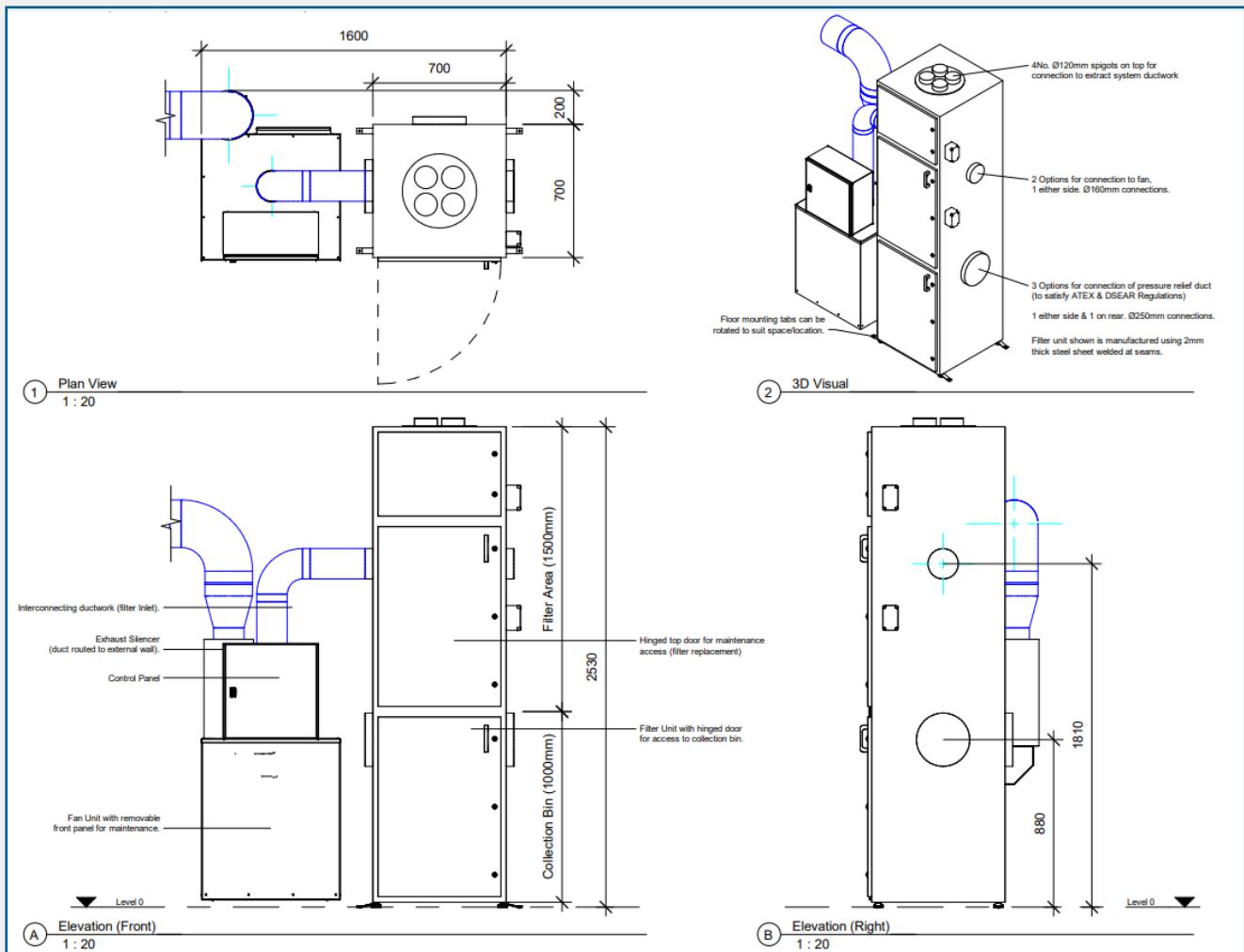
AES OFFER INSTALLATION AND SERVICE SUPPORT FOR ALL EQUIPMENT

# AES C-VAC CENTRALISED WOOD DUST VACUUM SYSTEM

## TECHNICAL SPECIFICATION

BF-52 Fan VSD Starter Panel C250 Filter	
Fan Type	BF-52
Fan Power	15 kW
Speed Control	Variable Speed
Filter Unit	C-250
Airflow Rate	5200 m <sup>3</sup> /hr
Max. Pressure	-13 KPa
Voltage	415V 3-Phase
AES Part Codes	CV-BF52-250-ATEX
	CV-BF52-250-ATEX-DQS

## EXAMPLE DRAWING WITH BF-52 FAN SHOWN



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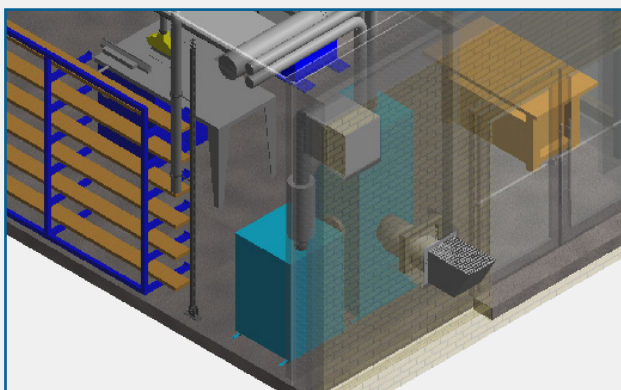
## ATEX CONFIGURATIONS FOR THE C-VAC

### EXTERNAL ATEX EXPLOSION RELIEF VENT



The C-VAC wood dust extraction system is ATEX certified for wood dust extraction and, as standard, is fitted with an explosion relief vent. The system is installed in accordance with the DSEAR regulations and HSG 103 by fitting a vent duct, through an external wall, which is terminated with a deflector plate designed to meet the requirements of BS EN 1491:2002.

This configuration is suitable for sites where the client can ensure that the external area at the vent duct is not normally occupied.



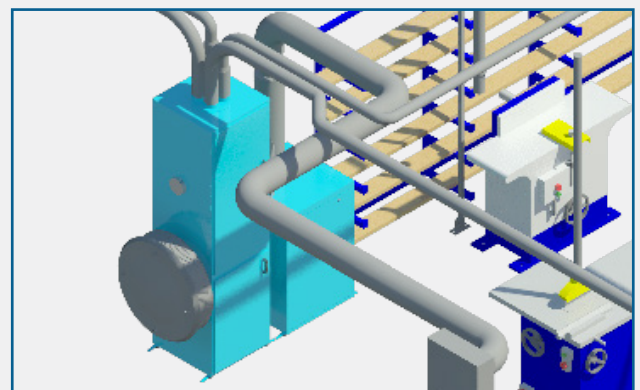
BIM model of standard C-VAC configuration ducted through the external wall and terminated with a deflector plate.

### FLAMELESS VENTING



Where it is not possible to discharge an explosion to a safe place externally the C-VAC system can be fitted with a DQS flameless vent. The DQS vent is a suppression device which, in the event of a dust explosion, extinguishes the flame and dissipates the explosion pressure harmlessly.

This system allows ATEX compliance without the need for additional wall penetrations which are traditionally required for explosion venting.



BIM model of the C-VAC system configured with a DQS Vent.

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## BF-SERIES VARIABLE SPEED FAN UNITS



### DESCRIPTION

The BF-Series is designed for the extraction of light to medium heavy dust particles, and is easily adjusted to comply with various applications.

The fan units are equipped with an automatic start and stop controlled by switches, which are located out of the system and pressure control for optimum efficiency. A high speed mode is available for more demanding applications and for cleaning.

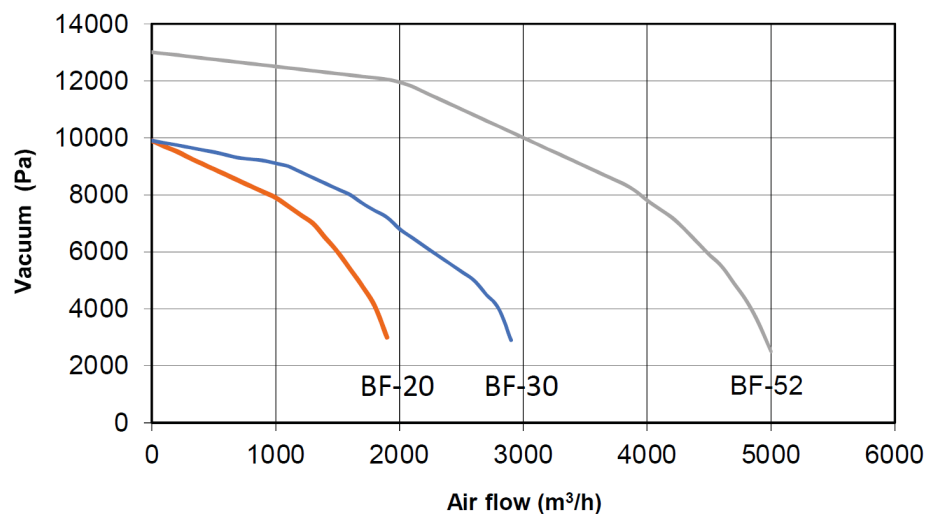
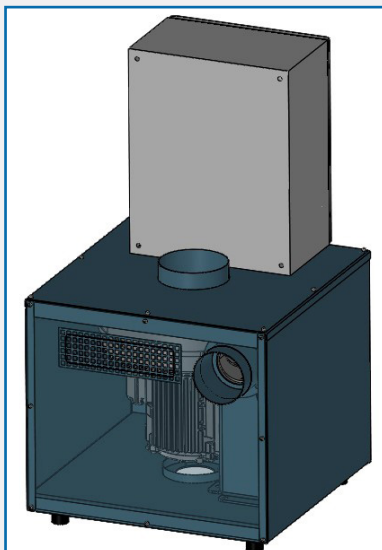
These units are frequently used in wood workshops, orthopedic workshops, printing industry, laboratories, plastic industry and more.

### CONSTRUCTION

- Frequency controlled fan with specially designed high-speed engine and need control. Ensures a lower sound level & energy consumption.
- The fan and motor are designed as one unit and is mounted on a solid non-vibrating chassis.
- Powder coated solid steel chassis with highly effective sound insulation.
- Rear hatch for easy access.
- Electrical panel mounted on top to reduce installation cost and assembly.
- Spark proof alloy fan.
- Can be placed outside in a simple weather shelter.
- Low maintenance costs.

### TECHNICAL SPECIFICATION & PRESSURE DROP GRAPH

Model	Effect	rpm	Power (400 V)	Fuse	Max Vacuum	Airflow	Measurements	Sound
BF-20	4 kW	5500	400 V 9.1 A	13 A	-10 kPa	1950 m <sup>3</sup> /h	1100 x 600 x 620	<65 dB(A)
BF-30	7 kW	5720	400 V 13.5 A	16 A	-10 kPa	2950 m <sup>3</sup> /h	1100 x 600 x 620	<65 dB(A)
BF-52	15 kW	5900	400 V 29.8 A	32 A	-13 kPa	5200 m <sup>3</sup> /h	1400 x 650 x 750	<65 dB(A)



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