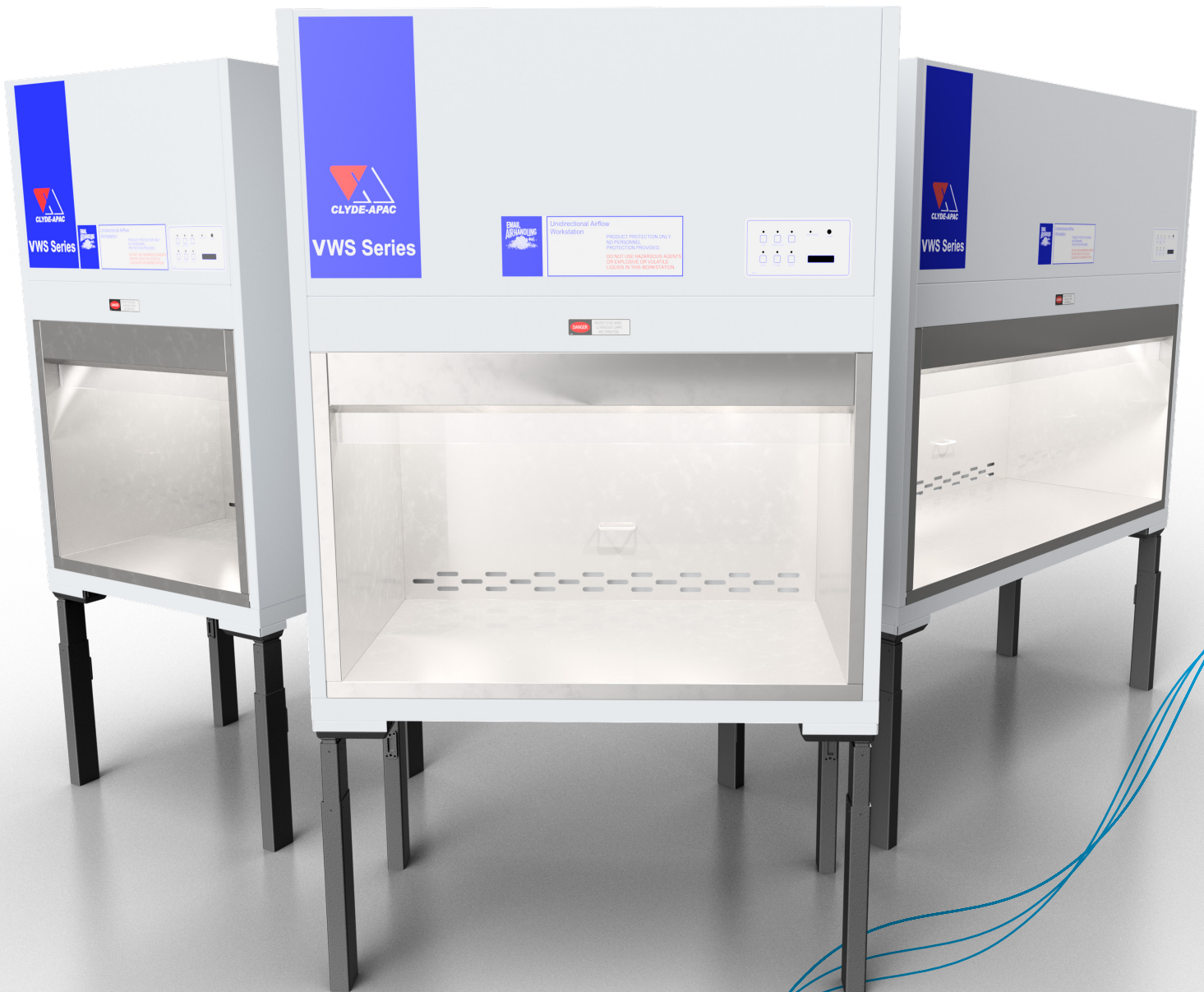


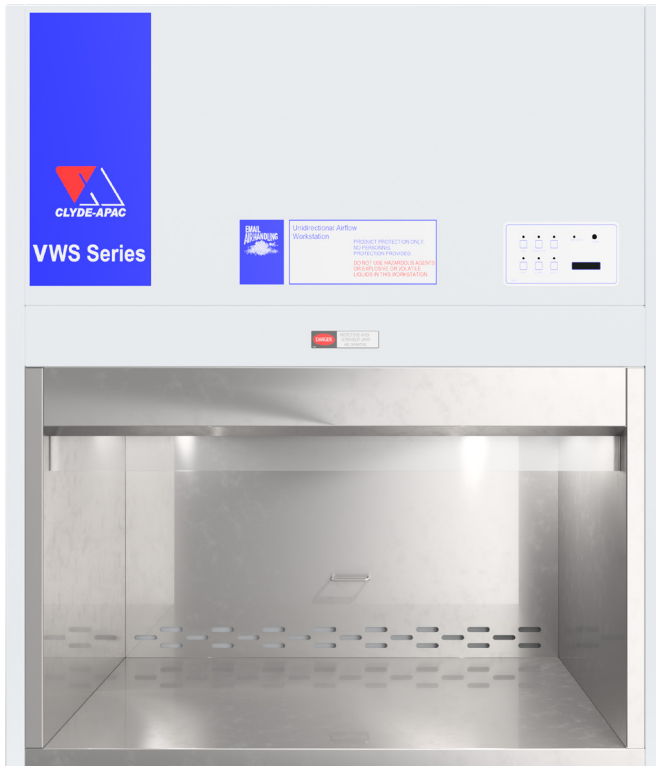


VWS SERIES

VERTICAL LAMINAR FLOW CABINETS



DESCRIPTION



VWS Series cabinets provide vertical laminar airflow, delivering clean, HEPA-filtered air downward onto the work surface to minimise turbulence and protect sensitive materials. Designed for critical applications in medical, pharmaceutical, scientific, and electronics environments, these units feature durable, easy-to-clean construction and support high standards of particulate control in laboratory and production settings.

APPLICATION

SUITABLE FOR:

- Handling of sensitive materials in a controlled environment
- Preparation of sterile medical devices
- Aseptic dispensing
- Assembly of electronics and optics components
- Conducting sterility testing procedures
- Applications requiring vertical laminar airflow for contamination control

VWS (Vertical-flow) Series cabinets are designed for procedures where protection of materials and products from particulate contamination is essential. Typical applications include media preparation, plate pouring, non-pathogenic cell culture work, electronics assembly, optics inspection, and pharmaceutical staging.

These Class 3.5 laminar flow workstations provide a unidirectional vertical airflow of HEPA-filtered air across the work surface, creating an ultra-clean zone that meets ISO Class 5 cleanliness standards. VWS cabinets are well suited for integration into cleanrooms, laboratories, and controlled environments where reliable, contamination-free handling is critical.

Optional floor stands, quiet operation, and compact footprint make them adaptable to a wide range of laboratory and production settings.

FEATURES

HEPA Filter

AS 4260 Grade 2 or equivalent to H14 (EN1822) 99.995% efficient, high performance single phase microglass filter media

Touch Control

Low voltage touch control panel for ease of use

Splash Guard

Splash guard specifically designed to provide the best protection to the HEPA filter from accidental damage whilst maintaining the best possible air distribution for superior laminar flow

Work Zone

304 Grade Stainless Steel polished to a 2B finish is utilised throughout the workzone

Automatic Stand

At the push of a button the optional electrically adjustable stand can be raised and lowered through a range of 600 - 990mm



CONSTRUCTION

CABINET

The housing is crafted from locally sourced steel with a durable, powder-coated finish, ensuring resistance to solvents, alkalis, and acids, making it ideal for laboratory-grade environments. The work area is meticulously constructed from stainless steel with inward folds, eliminating sharp edges for enhanced safety. Additionally, a removable, washable metal screen safeguards the HEPA filter from potential mechanical damage, extending its service life.

FANS

A direct-drive fan in the VWS Series is equipped with a speed controller to ensure consistent airflow throughout the filter's lifespan. The fans and filter plenums are meticulously designed to deliver quiet operation and minimize vibration, enhancing performance and user comfort in sensitive work environments.

PRE FILTER

An easily accessible, washable pre-filter in the VWS Series captures at least 90% of particles 5 microns and larger, effectively extending the lifespan of the HEPA filter. The design ensures smooth maintenance, while a warning light on the control panel alerts users when pre-filter servicing is required, ensuring consistent performance and reliability.



HEPA FILTRATION

VWS cabinets incorporate AES Environmental HEPA filters certified to AS 4260. Each filter is individually tested and certified to be leak-free in accordance with AS 1807:2021 Clause 4.4. For traceability and quality assurance, a manufacturer-endorsed test label — including an extract from the test report — is affixed to every filter.

A prefilter is fitted to protect the HEPA filter from mechanical damage during cleaning of the work zone, while also extending the service life of the filtration system and maintaining consistent performance.

ELECTRICAL

The VWS Series features a low-voltage touch control panel conveniently positioned at the front of the cabinet for easy operation. Glare-free lamps are incorporated to ensure a minimum lighting intensity of 650 lux on the work surface, providing a well-lit and comfortable workspace for precision tasks.

STANDARD FEATURES:

- Stainless steel work zone
- Pre-filter service
- Partial airflow recirculation
- Comprehensive operation manual
- Low-voltage touch controls
- Glare-free fluorescent lighting
- Quiet, low-vibration operation

OPTIONAL EXTRAS:

- IV hanging rail
- Hourmeter
- Manometer
- Service taps for air, gas and vacuum
- Extra quiet operation
- Floor stand (fixed height)
- Floor stand (electric height adjustable)
- Double-sided operation
- Recirculating available
- IVF available
- Germicidal UV lamp
- UV shield/ work zone cover



SPECIFICATIONS

	VWS 90	VWS 120	VWS 150	VWS 180
WIDTH (MM)	1000	1340	1500	1962
DEPTH (MM)	712	712	712	712
OVERALL HEIGHT (MM)	1420	1420	1420	1420
WORKZONE HEIGHT (MM)	690	690	690	690
WORKZONE DEPTH (MM)	642	642	642	642
WORKZONE LENGTH (MM)	880	1180	1338	1800
WEIGHT (KG)	150	200	250	270

ADVANCED PRODUCT PROTECTION

HWS & VWS cabinets provide protection for products or experiments, but do not protect personnel from aerosols of hazardous materials that may be handled in the cabinet. For applications where personnel and environmental protection is required, Clyde-Apac Class I, II or III biological safety cabinets, or cytotoxic drug safety cabinets (as applicable) should be considered. Specifiers and intending users should see AS2243.3, Clause 2.2 which sets out the intended applications and limitations of these cabinets.

PERFORMANCE SPECIFICATION

- Design and compliance standard: Australian Standard: AS2252.6
- Air Cleanliness: ISO class 5 (class 100) AS ISO 14644.1
- Air velocity: Between 0.40-0.45 m/s average at the work zone
- Illuminance: Greater than average of 60 Lux
- Power Supply: 220-240V, 1ph, 50Hz Filters: F5 pre-filter and H14 Main HEPA filter to 99.995%
- UV Wavelength: 254 nm intensity not less than 400mW/m

CERTIFICATION & TESTING

VWS Series Laminar Flow Cabinets are factory tested and certified by a NATA-Accredited laboratory. Additional testing and certification is recommended as follows:

- On site prior to use
- After maintenance or filter replacement
- After re-location
- Anually
- In special circumstances, e.g. if faulty operation is suspected.



AES Environmental maintains an ISO 9001:2015 quality management system to ensure process and product conformance.

Please note: Specifiers and intending users should see AS 2252.6 and ISO 14644, Clause 2.2 which sets out the intended applications and limitations of these cabinets.



AES Environmental is a family owned, engineering and manufacturing business. The company comprises of major brands situated in the Air Filtration, Pollution Control and Life Sciences markets. Those brands and products are market-leading names within their fields ensuring that AES Environmental is capable of fulfilling its goal of providing the market with a single, integrated source for air filtration, clean room and pollution control needs.

Whatever business area you operate in, effective air filtration and pollution control is vital for your products, processes and people. All our products are manufactured in Australia and along with that, we offer installation and service Australia wide, that you can always rely on.

GET TO KNOW

AES Environmental consists of an Australian head office and manufacturing location in Sydney, NSW, manufacturing and service operations in Perth, WA, Adelaide, S.A. and service operations in Melbourne, Vic. Internationally the business operates manufacturing facilities in Bangkok, Thailand and Newcastle Upon-Tyne, UK.

However large or small the need, with expertise in just about every area of industrial and process filtration and separation, we're ready to help to deliver the products and 'hands-on' support to help you build a better future.

© 2025 AES Environmental | Bulletin No. 15.04.25 AES190 REV1

In keeping with our policy of continuing product improvement, we reserve the right to alter specifications without notice.

GET IN TOUCH!

AES HEAD OFFICE SYDNEY



9A Pebury Rd, Minto, 2566



1300 550 116



sales@aesenvironmental.com.au



aesenvironmental.com.au

