

### PRODUCT DATA SHEET

#### ■ Introduction

**100% exhausted, freestanding, vertical unidirectional flow clean work station for operations involving toxic or noxious fumes.** The ENVIRCO Unimodule METD Series Work Station removes exhaust fumes<sup>†</sup> from within the cabinet through its rear plenums and exhaust slots in the work deck. It has an open front with inward airflow for personnel protection, while the supply high efficiency particulate air (HEPA) filter provides product protection.

#### Vertical Unidirectional Airflow

The Unimodule M2 negative pressure plenum air supply module provides an ISO Class 5\* (Class 100) environment within the work area that complies with the latest IEST Recommended Practices. All of the cabinet air along with any fumes are exhausted to the exterior.

#### ■ Standard Features

- » An ISO Class 5\* environment utilizing an aerosol challenged HEPA filter.
- » Three standard sizes with 24 in. (610 m) deep work areas.
- » Custom sizes available.
- » The M2 air module has a welded steel cabinet with a corrosion resistant polyurethane enamel finish.
- » Stainless steel side panels and clear acrylic, hinged view screen ensure complete work area isolation.
- » Removable stainless steel work deck for easy cleaning.
- » Stainless steel exhaust tub with liquid drain.
- » All stainless steel rear exhaust plenum, transition duct and 12 inch exhaust collar.
- » Rugged tubular steel support stand. 1.5 in. x 3 in. x .25 in. 38.1 mm x 76.2 mm x 6.35 mm
- » Recessed fluorescent lighting provides 150 foot candles (1615 Lux) at the work surface.
- » Egg crate light diffuser protects the HEPA filter and maintains uniform airflow velocity within the work area.
- » Quiet operation (65 dBA ± 3).

#### ■ Applications

- » Hormone Manufacturing.
- » Photographic Etching.
- » Microelectronic Etching.

#### NOTES:

<sup>†</sup> Proper unit operation requires an exhaust system (provided and installed by others) capacity equal to 125% of the face velocity and air supply volume. Makeup air must compensate for that exhausted with final exhaust balancing achieved by a customer provided and installed damper in the external exhaust duct.

\* As defined by the latest ISO 14644 and IEST Recommended Practices, where particle count does not exceed 3520 particles, 0.5 µm or larger, per cubic meter of air.



*Unimodule METD Unidirectional Flow Clean Bench shown with optional stainless steel sink and gooseneck service.*

#### ■ Options

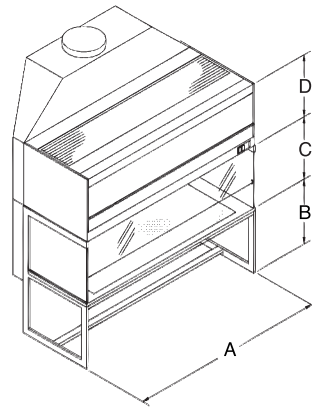
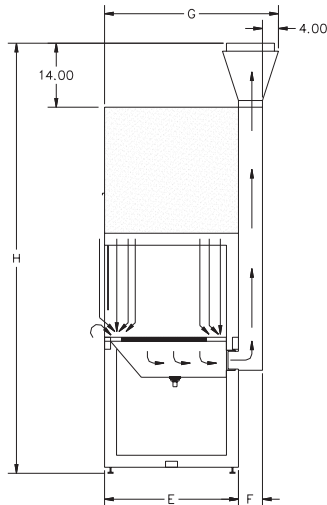
- » Chrome Gooseneck with Mixer, Part No. 10336.
- » Chrome Gooseneck without Mixer, Part No. 10229.
- » Duplex Electrical Outlet, Part No. 10232
- » Lab Service, Part No. 10231.
- » PVC Gooseneck Valve, Part No. 10230.
- » Stainless Steel Sink, Part No. 10233 (12 in. x 12 in. x 7.5 in.).
- » Power Cord, Part No. 33729.
- » 220 V, 50-60 Hz unit available with transformer.

#### ■ Warranty

- » Limited 1-year warranty.

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#### ■ Dimensional Information



Model No.	Dimensions, Inches (mm)				
	A	B	C	D	E
METD 424	52.24 (1279.8)	34.00 (833)	26.00 (637)	31.50 (771.75)	27.50 (673.75)
METD 624	76.24 (1867.8)	34.00 (833)	26.00 (637)	31.50 (771.75)	27.50 (673.75)
METD 824	100.24 (2455.8)	34.00 (833)	26.00 (637)	31.50 (771.75)	27.50 (673.75)

Model No.	Dimensions, Inches (mm)			Ship Wt. lbs. (kg)
	F	G	H	
METD 424	6.00 (147)	37.50 (952.5)	105.5 (2679.7)	425 (192.78)
METD 624	6.00 (147)	37.50 (952.5)	105.5 (2679.7)	615 (278.96)
METD 824	6.00 (147)	37.50 (952.5)	105.5 (2679.7)	780 (353.8)

#### ■ Specification

##### Construction

##### Basic Exhausted Work Station

Welded steel Unimodule M2 air supply module with exterior finished in corrosion resistant polyurethane enamel. Tubular steel supports with welded joints, finished to match the M2 air supply module. Complete with leveling feet with neoprene caps and retainer pins for positioning or holding the M2 air supply module. Foam gasket, field-installed between stand and air module, provides an airtight seal. #304 stainless steel construction for upper and lower exhaust plenums, side enclosure panels, work deck and exhaust tub. Hinged 15-in. (381 mm) acrylic view screen. Stainless steel transition duct with 12 in. (304 mm) diameter exhaust collar.

##### Work Deck

Removable 17.25 in. (438.15 mm) solid center stainless steel work surface. 51% open stainless steel front and rear exhaust grilles. Optional faucets and lab services mount from below and on either side of the solid stainless steel work surface without penetrating the exhaust tub.

Model No.	Part No.	Opening Inches (mm)		Face m <sup>3</sup> /hr @ 105 FPM (.53 m/s)	Supply m <sup>3</sup> /hr @ 90 FPM (.45 m/s)	Total Exhaust Volume CFM (m <sup>3</sup> /hr)	BTU/Hour
		Width	Height				
METD 424	10662	46.94 (1150)	11.00 (269.5)	376* (639)	720* (1224)	1096* (1836)	3460*
METD 624	10663	70.94 (1738)	11.00 (269.5)	569* (967)	1080* (1836)	1649* (2803)	5944*
METD 824	10664	94.94 (2326)	11.00 (269.5)	761* (1294)	1440* (2448)	2201* (3742)	6060*

##### 10 Inch Deep Exhaust Tub

Located below the work deck permits use of liquids. Solid stainless steel tub slopes to a center drain. Watertight to 3/4 in. (19.05 mm) liquid depth.

##### Filters

Aluminum framed High Efficiency Particulate Air (HEPA) type, with a minimum efficiency of 99.99% at 0.3 micron, aerosol challenged (zero probed).

##### Prefilters

Disposable - 30% ASHRAE. Standard top mounted prefilter assembly interchangeable to the front.

##### Airflow

90 FPM (.45 m/s) ±10 FPM (.05 m/s) average velocity measured 6 inches from the diffuser screen. Uniformity ±20% of average or better.

##### Motor/Blower Assembly

Direct drive, continuous duty with sealed-for-life bearings and inherent overload protection. Motor/blower assembly is electronically balanced (dynamically) and mounted on vibration dampening rubber mounts. Motor/blower assembly is designed to provide rated airflow through a 50% increase in initial static pressure.

##### Speed Controller

Solid state speed control (with RFI suppression), for adjusting airflow velocity.

##### Electrical

Standard 115 V, single phase, 60 Hz with 7/8-inch conduit knock-out located on top of the M2 air module. Optional power cord available. Recessed fluorescent lighting fixture provides 150 foot candles at the work surface. Separate blower and light switches. ETL listed.