Clean Air
PRODUCTS

Shown with optional leg stand and ionization bars

Series 201
Horizontal Laminar Flow Table Top Clean Bench

SOLUTIONS

The Series 201 cabinets offer new accomplishments in the use of modern technologies in materials, manufacturing processes, and design.

Vinclad steel or painted structural materials offer the ultimate in appearance and in resisting abuse. They are highly resistant to abrasion, corrosion, stains, and chemicals as well as scratches and scuffs.

Of high quality and excellent in appearance, the cabinets have a ruggedness achieved through the use of a new wrap-around structural design. Close attention has been made to details.

The cabinet volume has been designed to offer the least envelope for each work area, thus minimizing weight and space.

Easy, quick maintenance is accomplished through the use of a removable grill with front filter removal.

The cabinet configuration has been designed for "clean" edge air-shear of the absolute filter, thus assuring clean laminar airflow through the work area by eliminating turbulence and back currents.

Features

- ❖ 99.99% efficient removal of all particulate contaminates 0.3 micron and larger; factory tested
- ❖ Meets or exceeds Class 100 conditions of Federal Standard 209E
- ❖ Flex duct provides a factory-sealed clean laminar airflow system with simple front removal
- ❖ Standard shell is white vinyl-covered steel; optional painted steel or stainless steel
- ❖ Polycarbonate hood over work area
- ❖ Protective grill for the absolute filter
- ❖ White fluorescent lighting
- ❖ Separate motor and light switch
- ❖ Meets or exceeds NEC electrical codes
- ❖ Selected sizes and options UL listed
- ❖ Fiberglass prefilter easily removable from the top
- ❖ Motor speed infinitely variable with solid state controller

For more information or to download or fax this product from the web, simply go to:
www.cleanairproducts.com/201

CLEAN BENCHES

Additional Features

❖ Instrument control panel provides:
  - Cabinet on-off switch
  - Light switch
  - Electrical duplex outlet
❖ Durable Formica work surface
❖ Motor/blower is dynamically balanced direct drive unit mounted in-scroll in a resilient cradle

Cabinet

Standard shell is white vinyl-covered steel; optional painted steel or stainless steel is available. The vinyl is 8 to 10 mils in thickness. It is resistant to abrasion, corrosion, stains, and attacks by chemicals. Vinclad will not support combustion; it is resistant to scratch or scuff, will not chip, craze or crack. Vinclad is peel proof and has moderate acoustical control.

The table work surface is fabricated of white plastic laminate over particleboard. Providing a durable, cleanable and attractive surface.

Two white fluorescent lamps, with energy efficient ballast, are provided to illuminate work area. An on/off switch is provided for lamp control.

The work area hood assembly is fabricated of clear polycarbonate. The hood provides a controlled work area and assists in directional air flow.

Filter

The final filter is 99.99% effective on 0.3 micron and larger particles. Standard final filters have an aluminum anodized frame, painted white metal faceguard and mini pleated filter media construction. Filters are removable through the table top enclosure area. Optional ULPA filters, 99.999% on .12 micron are available.

Negative Pressure Plenum for Final Filters: HEPA or ULPA

The Series 201 laminar flow bench utilizes the HEPA FLEX duct system to provide air flow from the blower to the HEPA filter. This ducting system in conjunction with the cabinet blower provides a negative pressure area on the cabinet interior. The negative pressure serves as a safety seal that prevents gasket leaks which can occur in positive pressured filter systems.

HEPA/ULPA Filter Replacement

The HEPA or ULPA filter is serviced from the front of the unit.

Prefilters

The 1.0 inch fiberglass prefilter is removable from the top. The cabinet has a large prefilter area to keep the filtering efficiency high and to minimize the pressure drop across the prefilters. The prefilters are shipped in place. The cabinets have a commonly available 16x25x1 and 16x20x1 disposable prefilter style depending on its size. These prefilters are interchangeable in size with prefilters of higher efficiency. The higher efficiency prefilters can be ordered with the unit or upgraded with the first prefilter change.

Airflow

Factory set at 90 FPM; maintained by adjusting blower speed as filter increases over period of use.

Light Level

Fluorescent bulbs provide a minimum of 100 foot-candles on the table top.

Sound Level

This laminar flow bench is designed for quiet operation. The typical sound level is approximately 65dbA. Larger size units and those with multiple blowers may have a slightly higher sound level. The sound levels are measured with ambient of 55dbA. The sound level of your particular laminar flow bench may vary depending on the size of the unit surrounding room size and acoustics.

Electrical

Meets or exceeds requirements of the NEC electrical codes. 120V, single phase, 3-wire electrical system with 8 ft. flex power cord. (Up to 20 amps) Motor is permanently lubricated with thermal protection.

15 amp motor speed infinitely variable with Solid State controller. 15 amp duplex outlet installed in left front of top for auxiliary equipment. Outlet is fused from main cabinet circuit breaker.

Independent motor and light on/off switches.

Direct drive motor and dynamically balanced blower assembly is isolated from cabinet by rubber mounts and by the FLEX DUCT connection.

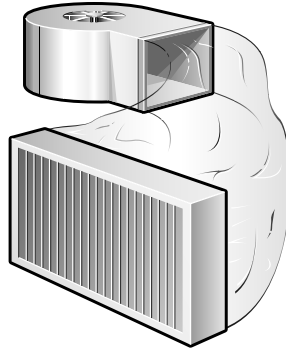Selected sizes and options UL listed.

Options

- Stainless steel table top
- Removable grill in front of HEPA filter
- Safety glass hood
- Extended table top/hood
- Ultraviolet germicidal lamps
- Electrical duplex outlet (additional)
- "Minihelic" 0 to 2 inch differential pressure gauge (HEPA)
- Basic cabinet (Model CAP201) easily converts Series 201 to a floor console
- 4-leg support stand
- Gas cock
- Bar and hooks for bottle hanging
- Gold fluorescent lamps
- Photoresist gold lamp sleeves
- Conductive Formica top
- CAP201 Console Base 30 inches high or 36 inches high
- Ionization bars and power supply
- Painted cabinet — color code, manufacturer and chip required

Solutions Built to Your Specifications.

Clean AIR PRODUCTS

tel: 763.425.9122   800.423.9728
www.cleanairproducts.com

- Series 201 models to be grouped to form continuous work area
- Special motors available

Meets requirements of the NEC electrical codes.

Shipped fully assembled ready for operation and certified to meet or exceed Class 100 conditions of Federal Standard 209E.

Operations manual and test reports provided with unit at shipment.
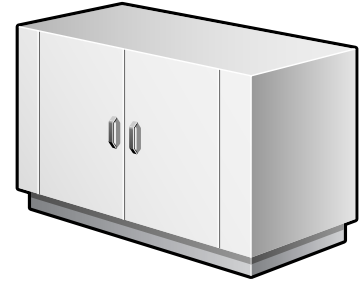
Selected sizes and options UL listed.

FLEX DUCT

The FLEX DUCT filter system provides a negative pressure area between the cabinet and the duct that gathers any contaminated air and recirculates it through the HEPA filter.

Console Base Conversion

A model CAP201 is available to match each Series 201 table. Easily attached, the base is rugged and places the work surface 36 inches above the floor. Leg risers adjust 1/2 inch for leveling. One storage shelf is standard.

Blower, Motor, Electrical, and Filter Sizes

201-*T24	Blower	Motor	Fluorescent Lamp	Electrical*		HEPA Filters**		Prefilters	
224	(1) DD-10-4	1/3HP PSC	(2)	120V/10/60HZ	9.7 amp*	(1)	24X24X3**	(1)	16x20
324	(1) DD-10-4	1/3HP PSC	(2)	120V/10/60HZ	9.7 amp*	(1)	24x36x3**	(1)	16x25
424	(1) DD-10-6	1/2HP PSC	(2)	120V/10/60HZ	9.7 amp*	(1)	24x48x3**	(2)	16x20
524	(1) DD-10-8	1/2HP PSC	(2)	120V/10/60HZ	12.5 amp*	(2)	24x60x3**	(2)	16x20
624	(1) DD-10-8	3/4HP PSC	(2)	120V/10/60HZ	12.5 amp*	(1)	24x72x3**	(2)	16x25
824	(1) DD-10-6	1/2HP PSC	(2)	120V/10/60HZ	19.95 amp*	(2)	24x48x3**	(3)	16x25
201-*T30									
230	(1) DD-10-4	1/3HP PSC	(2)	120V/10/60HZ	9.7 amp*	(1)	24x30x3**	(1)	16x20
330	(1) DD-10-6	1/3HP PSC	(2)	120V/10/60HZ	9.7 amp*	(1)	30x48x3**	(1)	16x20
430	(1) DD-10-6	1/2HP PSC	(2)	120V/10/60HZ	12.5 amp*	(1)	30x48x3**	(1)	16x20
530	(1) DD-10-8	1/2HP PSC	(2)	120V/10/60HZ	12.5 amp*	(1)	30x60x3**	(2)	16x20
630	(2) DD-10-8	3/4HP PSC	(2)	120V/10/60HZ	14.7 amp*	(1)	30x72x3**	(2)	16x25
830	(2) DD-10-6	1/2HP PSC	(2)	120V/10/60HZ	19.95 amp*	(2)	30x48x3**	(3)	16x25
201-*T36									
336	(1) DD-10-8	1/2HP PSC	(2)	120V/10/60HZ	12.5 amp*	(1)	36x36x3**	(1)	16x20
436	(1) DD-10-8	1/2HP PSC	(2)	120V/10/60HZ	14.3 amp*	(1)	36x48x3**	(1)	16x25
536	(1) DD-10-8	3/4HP PSC	(2)	120V/10/60HZ	14.7 amp*	(1)	36x60x3**	(2)	16x20
636	(2) DD-10-8	1/2HP PSC	(2)	120V/10/60HZ	19.8 amp*	(2)	36x36x3**	(2)	16x25
836	(2) DD-10-6	1/2HP PSC	(2)	120V/10/60HZ	19.95 amp*	(2)	36x48x3**	(3)	16x25
201-*T48									
448	(1) DD-10-8	3/4HP PSC	(2)	120V/10/60HZ	14.3 amp*	(1)	48x48x3**	(1)	16x25
548	(1) DD-10-8	1/2HP PSC	(2)	120V/10/60HZ	19.8 amp*	(1)	48x60x3**	(2)	16x20
648	(2) DD-10-8	1/2HP PSC	(2)	120V/10/60HZ	19.8 amp*	(2)	48x36x3**	(2)	16x25
848	(2) DD-10-6	3/4HP PSC	(2)	120V/10/60HZ	19.95 amp*	(2)	48x48x3**	(3)	16x25

*Includes 4 Amp receptacle.

**3 in. dimension can vary depending on filter type used.

Dimensions

White Formica cover over particle board table top: 21-1/2 in. deep.

Overall Depth of Cabinet: (front to back): 34 in.

Table top can be made deeper, increasing overall depth. Units deeper than 34 in. may not fit through 3 ft. door.

Overall Width of Cabinet: Dimension "A"

___ 2 foot = 26-1/2 in.
___ 3 foot = 38-1/2 in.
___ 4 foot = 50-1/2 in.
___ 5 foot = 62-1/2 in.
___ 6 foot = 74-1/2 in.
___ 8 foot = 98-1/2 in.

Work Area Width: Dimension "B"

___ 2 foot = 22 in.
___ 3 foot = 34 in.
___ 4 foot = 46 in.
___ 5 foot = 58 in.
___ 6 foot = 70 in.
___ 8 foot = 94 in.

Work Area Height: Dimension "C"

___ 22 in. (24 Series)
___ 28 in. (30 Series)
___ 34 in. (36 Series)
___ 46 in. (48 Series)

Overall Height of Cabinet: Dimension "D"

201*24
224 = 39-1/2 in.
324 = 39-1/2 in.
424 = 40-1/2 in.
524 = 40-1/2 in.
624 = 43.0 in.
824 = 41-1/2 in.

201*30
230 = 45-1/2 in.
330 = 45-1/2 in.
430 = 46-1/2 in.
530 = 46-1/2 in.
630 = 48-1/2 in.
830 = 48-1/2 in.

201*36
336 = 52-1/2 in.
436 = 56-1/2 in.
536 = 56-1/2 in.
636 = 57-1/2 in.
836 = 57-1/2 in.

201*48
448 = 68-1/2 in.
548 = 68-1/2 in.
648 = 68-1/2 in.
848 = 68-1/2 in.

Estimated Weight

201*24
324 = 270 lb.
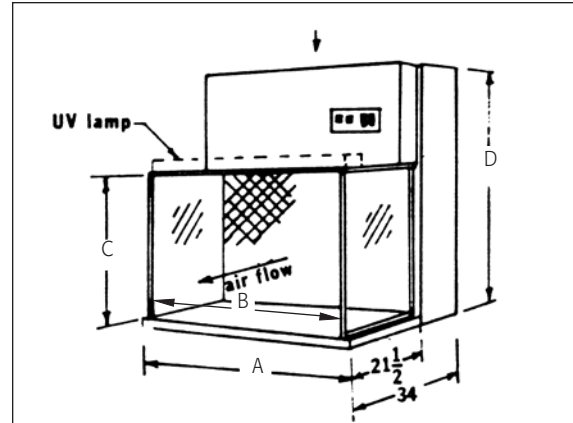424 = 300 lb.
524 = 350 lb.
624 = 400 lb.
824 = 580 lb.

201*30
330 = 300 lb.
430 = 350 lb.
530 = 400 lb.
630 = 450 lb.
830 = 670 lb.

201*36
336 = 350 lb.
436 = 400 lb.
536 = 450 lb.
636 = 500 lb.
836 = 750 lb.

201*48
448 = 470 lb.
548 = 550 lb.
648 = 650 lb.
848 = 800 lb.

Standard Models

MODEL	A		B	C	D
CAP 201-224*	26	1/2	22	22	39 1/2
CAP 201-230*	26	1/2	22	28	45 1/2
CAP 201-324*	38	1/2	34	22	39 1/2
CAP 201-330*	38	1/2	34	28	45 1/2
CAP 201-336*	38	1/2	34	34	52 1/2
CAP 201-424*	50	1/2	46	22	40 1/2
CAP 201-430*	50	1/2	46	28	46 1/2
CAP 201-436*	50	1/2	46	34	56 1/2
CAP 201-448*	50	1/2	46	46	68 1/2
CAP 201-524*	62	1/2	58	22	40 1/2
CAP 201-530*	62	1/2	58	28	46 1/2
CAP 201-536*	62	1/2	58	34	56 1/2
CAP 201-548*	62	1/2	58	46	68 1/2
CAP 201-624*	74	1/2	70	22	43
CAP 201-630*	74	1/2	70	28	48 1/2
CAP 201-636*	74	1/2	70	34	57 1/2
CAP 201-648*	74	1/2	70	46	68 1/2
CAP 201-824*	98	1/2	94	22	41 1/2
CAP 201-830*	98	1/2	94	28	48 1/2
CAP 201-836*	98	1/2	94	34	57 1/2
CAP 201-848*	98	1/2	94	46	68 1/2

* Filter size — width in feet, height in inches

Standard units shipped F.O.B. factory padded van.

Equipment specification, dimension and upgrades are subject to change without notice.

Guarantee

A written 1 year Warranty is furnished with each cabinet.

Specifications subject to change. Please contact factory for details.