2025 Mercantile Dr. Leland, NC 28451 Tel (800) 849-3429 Fax (910) 763-1220 www.flowsciences.com

# GLOVEBOX WORKSTATION EGP723024ABD0 TECHNICAL SPECIFICATIONS

#### GLOVEBOX WORKSTATION - EGP723024ABD0



#### **GENERAL DESCRIPTION**

## **DESIGNATED USAGE**

For use with HPAPI, oncology, and ADCs. HEPA inlet filter for ISO 5 or better interior cleanliness. Surrogate Powder Testing Below 30 ng/m3.

## PRIMARY ENGINEERING CONTROL (PEC) TYPE

Glove box.

## **CONTAINMENT LEVEL**

Heavily dependent on potency and quantity of the toxic material being worked with, this unit can contain to nanogram levels and from OEB 4-5.

MODEL SPECIFICATIONS	CONFIGURATIO	N					
	The EGP series basic setup includes a main door, with integrated gloves,						
	for loading and unloading of equipment; inlet HEPA filter; dual HEPA						
	exhaust filters with Bag In/Bag Out primary filter; a pass through (left side)						
					•	right side for optional	
			s continuous liner,			•	
			ort; interior lighting	•	•		
			and go/no-go stack		car corre	NOT BOX WITH	
	integrated an	uiiii c	ina go/no go stack	iigiit.			
	EXTERIOR DIME	NSIOI	<u>NS</u>		Interior Dimensions		
	Length:	90.	50" with pass thru	Length: 70.00"			
	Depth:	34.0	05"	Depth	:	30.00"	
	Height:	55.9	91"	Height	t:	24.75"	
		1					
	PASS THROUGH	INTE	RNAL DIMENSIONS		<u>Doo</u>	R OPENING DIMENSIONS	
	Length:	11.8	88"		7.00"		
	Depth:	10.0	00"		N/A		
	Height:	12.0	00"		9.50"		
MATERIALS OF CONSTRUCTION	Wall panels: White 0.75" Polypropylene						
	Work surface	e:	Black 1" Phenolic	olic Resin Base dished to 0.5", Routed to			
	Fit Sidewalls for C		Fit Sidewalls for C	Containment			
	Viewing Panels: 0.25" Acrylic						
	Plenums/Baffle: White 0.25" Polypropylene						
TECHNICAL SPECIFICATIONS							
	LAMINAR AIR F	LOW I	ILTRATION				
			er modules are mou			•	
	<ul> <li>Fan &amp; filter modules provide HEPA (99.995% at mpps) vertically</li> </ul>						
	laminar filtered air						
	<ul> <li>Air velocity: 120 ft/minute average +/-5 when measured at inlet filter</li> </ul>						
	<ul> <li>Inlet HEPA Filter placed at right side of unit</li> </ul>						
	o meetier winter placed at right side of diffe						
	EAN CONSTRUC	TION					
	FAN CONSTRUC		d balansad sakes:	od star	l fan ins	nollar whool for law	
		•	a balanced galvaniz and high energy effi			peller wheel for low	
			d fabricated from fi				
			Diameter = 9.8"	0.5.5			
				3 feet a	at maxir	mum airflow. Entire	
			ds two orders of ma	_		•	
				orders	of mag	nitude isolation from	
	fan v				1		
	o Fan s	peed	control unit includ	ea to pr	operly	set flow rate.	

	ELECTRICAL REQUIREMENTS
	<ul> <li>Fan: 120VAC, 50/60Hz, 1PH, 2.25AMPS, 270 WATTS at maximum flow, 5A FUSED.</li> <li>LED Light: 100-240 VAC, 50/60 Hz, 2.0 Amps</li> <li>Alarm integrated into electrical control box housing</li> <li>Hospital grade power cord supplied</li> </ul>
	LIGHTING  LED Fixtures mounted in the top of the front panel all across the work surface  Natural cool white light. (Amber option available)  LED Lifetime 50,000 hours, 2600 lumens, max  3.04A-0.97A @ 12V-30V DC, universal power supply  Luminous Efficiency: 90 Lumens/Watt typical at 24 V dc at 25°C
	CONTROLS  Light switch on/off button Fan switch on/off Integrated Alarm with Lighted Status Indicator and Audible alarm Hospital grade power cord
	INTERIOR POWER & ACCESSIBILITY  O Duplex Outlet in rear wall of unit O Pass thru on right side, blank plate on other side  VELOCITY ALARM
	<ul> <li>0.2 Amps with dry contact feature provided</li> <li>Integrated into electrical control box housing and equipped with red light which warns of low velocity; green light which indicates normal containment velocity with proper certification</li> </ul>
	<ul> <li>DIFFERENTIAL PRESSURE GAUGE</li> <li>Minihelic differential pressure switch/gauges.</li> <li>Pressure gauges (0-1" wg; 0-250 pa) installed to monitor the loading of the inlet and primary exhaust HEPA filters.</li> </ul>
	<ul> <li>EXHAUST SPECIFICATIONS</li> <li>Containment provided with all doors closed</li> <li>For room recirculation, (238) total CFM required to maintain average 120 LFPM +/-5 at inlet filter</li> <li>With thimble, (274) total CFM required to maintain average 120 +/-5 at inlet filter</li> </ul>
	<ul> <li>EXHAUST RECOMMENDATIONS</li> <li>Use thimble connection (FS2081MS) for House Exhaust connections.</li> <li>No additional equipment required for independent recirculating configuration</li> </ul>
DESIGN FEATURES	The Glovebox Workstation is designed with multiple features for maximum containment, ease of use, and ensuring a stable work environment for sensitive activities:

	EXHAUST PORT
	6" thimble connections to house system
	Capable of being recirculated back into the lab
	FS1650 ALARM
	<ul> <li>FS1650 Integrated Face Velocity Alarm Alerts the operator when</li> </ul>
	airflow is compromised.
	LED LIGHTING
	<ul> <li>Standard with white light</li> </ul>
	<ul> <li>Optional add-on Amber LED Lighting</li> </ul>
	FRONT LIFT DOORS
	<ul> <li>Pneumatic assisted hinged front door that lifts for easy loading</li> </ul>
	and unloading of equipment
	o 42.00W" x 18.50"H Access Opening
	Digital Buss
	DISHED BASE
	<ul> <li>Dished phenolic base captures accidental liquid and powder spills</li> </ul>
	<u>PLENUMS</u>
	<ul> <li>Rear and Top Plenums are used to direct airflow and maintain</li> </ul>
	containment at the face opening.
	<ul> <li>Plenums also prevent particles from possibly falling back onto the</li> </ul>
	work surface during loss of power
	BAG IN/ BAG OUT
	<ul> <li>HEPA change out system that allows for safe removal and</li> </ul>
	replacement of the main 4" HEPA filter.
	Pass thru Chamber
	<ul> <li>One (1) transfer port included on left side</li> </ul>
	<ul> <li>Transfer Port Opening external 7"W x 9.5"H</li> </ul>
	<ul> <li>Inward swinging transfer door to access main chamber, outward</li> </ul>
	swinging door to access outside
PART #: G 10B1532975A	GLOVE PORTS
	O Quantity: 4
	<ul> <li>Size: 10" diameter oval glove ports for the manipulation of</li> </ul>
	process material
	<ul> <li>Glove ports are mounted on the front removable panel</li> </ul>
	<ul> <li>The system includes:</li> </ul>
	<ul> <li>Retaining O-rings</li> </ul>
	<ul> <li>butyl gloves (9.75 hand size, ambidextrous)</li> </ul>
	CUSTOMIZED MASTER PORT
	<ul> <li>The blank plate can be customized to install various items such as</li> </ul>
	continuous liner, RTP ports, etc.

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## PART #: 2092 & APS0825



## **8" CONTINUOUS LINER SYSTEM**

o Integrated Continuous Liner System for safe waste disposal. Seal at any increment for disposal of waste in any amount.

PART #: 2093



## RTP ALPHA PORT

 Accommodates a 105mm RTP Alpha port for connecting various betas or other containers

THIMBLE CONNECTION, 6" TO 7" TRANSITION
<ul> <li>Thimble for connection to house exhaust.</li> </ul>
VENT KIT, (8') 6" HOSE AND (2) HOSE CLAMP
<ul> <li>Hose and Clamp for connection to house exhaust.</li> </ul>
PRINTER SHELF – NO ALARM MOUNT
<ul> <li>Label printer shelf for above blank plate for label printing.</li> </ul>
PRIMARY 24x14 4" BAG-IN/BAG-OUT HEPA FILTER
SECONDARY 24x14 4" HEPA FILTER
INLET 24x14 4" HEPA FILTER
CARBON FILTER 24x14 - ORGANIC
<ul> <li>Powder coated carbon steel frame containing 8 ABS plastic canisters with coconut shell activated charcoal media.</li> </ul>
CARBON FILTER 24x14 - ACID
<ul> <li>Powder coated carbon steel frame containing 8 ABS plastic canisters with impregnated coconut shell activated charcoal media.</li> </ul>
CARBON FILTER 24x14 -AMINE
<ul> <li>Powder coated carbon steel frame containing 8 ABS plastic canisters with impregnated coconut shell activated charcoal media.</li> </ul>

PART #: AFC241408D_(A/B)	CARBON FILTER 24x14 - ALDEHYDE
	<ul> <li>Powder coated carbon steel frame containing 8 ABS plastic canisters with impregnated coconut shell activated charcoal media.</li> </ul>
PART #: ATC7230S	TABLE, 72 x 30, POWDER COATED STEEL TABLE
	<ul> <li>Powder coated carbon steel cart, on frame and feet, leveling pads (±1.25" of travel).</li> </ul>
PART #: ATS7230S	TABLE, 72 x 30, STAINLESS STEEL TABLE
	<ul> <li>304 Stainless steel table, on frame and feet, leveling pads (±1.25" of travel).</li> </ul>
PART #: AEC7230S	ADA Table, 72 x 30, Electric Powder Coated Table
	<ul> <li>Electric Ergonomic Lift Table, Powder coated carbon steel, on frame and feet, locking casters.</li> </ul>
PART #: AES7230S	ADA Table, 72 x 30, Stainless Steel Ergonomic Lift Table
	<ul> <li>Electric Ergonomic Lift Table, 304 Stainless Steel, on frame and feet, locking casters.</li> </ul>
PART #: ACC7230S	CART, 72 x 30, POWDER COATED STEEL CART
	<ul> <li>Powder coated carbon steel cart, on frame and feet, locking casters.</li> </ul>
PART #: ACS7230S	CART, 72 x 30, STAINLESS STEEL CART
	<ul> <li>304 Stainless steel cart, on frame and feet, locking casters.</li> </ul>

INSTALLATION AND VALIDATION	Flow Sciences is delighted to offer you Installation services to ensure the complete start-up of your Biological Safety Cabinet.
INSTALLATION, START-UP AND TRAINING	INSTALLATION (at an additional charge) Flow Sciences will send One (1) Technician onsite to install equipment within your facility. Flow Sciences may require additional assistance on site. If additional assistance is required, Flow Sciences will request your assistance or provide additional technicians from Flow Sciences (at an additional charge) if no client staff is available.
	START-UP AND TRAINING (at an additional charge) One (1) Flow Sciences technician will demonstrate the usage of the equipment and train your personnel on the usage of the equipment after the installation is complete. Flow Sciences will provide an operating manual which will include the as built drawings and all the materials certificates.  ***Please note that proposal amount for Installation, Start-up and Training is for 1 days of work for one technician. Should the labour exceed this time frame, and hourly labour rate will apply.
	SURROGATE POWDER TESTS (at an additional charge) Surrogate powder testing available during factory acceptance testing.
	IQOQ – INSTALLATION OPERATION QUALIFICATION (at an additional charge)



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#### **DESIGNATED USAGE**

For use with HPAPI, oncology, and ADCs. HEPA inlet filter for ISO 5 or better interior cleanliness. Surrogate Powder Testing Below 30 ng/m3.

PRIMARY ENGINEERING CONTROL (PEC) TYPE

Glove box.

## **CONTAINMENT LEVEL**

Heavily dependent on potency and quantity of the toxic material being worked with, this unit can contain to nanogram levels and from OEB 4-5.

#### **MODEL SPECIFICATIONS**

#### CONFIGURATION

The EGP series basic setup includes a main door, with integrated gloves, for loading and unloading of equipment; inlet HEPA filter; dual HEPA exhaust filters with Bag In/Bag Out primary filter; a pass through (left side) for loading unloading small items; blanked plate on right side for optional accessories such as continuous liner, disposal port, customized master port, RTP Alpha port; interior lighting; electrical control box with integrated alarm and go/no-go stack light.

#### **EXTERIOR DIMENSIONS**

#### INTERIOR DIMENSIONS

Length:	90.50" with pass thru	Length:	46.00"
Depth:	34.05"	Depth:	30.00"
Height:	55.91"	Height:	24.75"

PASS THROUGH INTERNAL DIMENSIONS		<b>DOOR OPENING DIMENSIONS</b>
Length:	11.88"	7.00"
Depth:	10.00"	N/A
Height:	12.00"	9.50"

#### **MATERIALS OF CONSTRUCTION**

Wall panels:	White 0.75" Polypropylene
Work surface:	Black 1" Phenolic Resin Base dished to 0.5", Routed to
	Fit Sidewalls for Containment
Viewing Panels:	0.25" Tempered Safety Glass
Plenums/Baffle:	White 0.25" Polypropylene

#### **TECHNICAL SPECIFICATIONS**

#### **LAMINAR AIR FLOW FILTRATION**

- o Fan & filter modules are mounted on the top panel of the unit
- Fan & filter modules provide HEPA (99.995% at mpps) vertically laminar filtered air
- Air velocity: 120 ft/minute average +/-5 when measured at inlet filter
- Inlet HEPA Filter placed at right side of unit

## **FAN CONSTRUCTION**

- High speed balanced galvanized steel fan impeller wheel for low vibration and high energy efficiency.
- o Fan shroud fabricated from fiberglass.
- o Impeller Diameter = 9.8"
- Overall output of 50-55 dB @ 3 feet at maximum airflow. Entire unit affords two orders of magnitude isolation from adjacent equipment vibration and four orders of magnitude isolation from fan vibration.
- Fan speed control unit included to properly set flow rate.

	ELECTRICAL REQUIREMENTS
	<ul> <li>Fan: 120VAC, 50/60Hz, 1PH, 2.25AMPS, 270 WATTS at maximum flow, 5A FUSED.</li> <li>LED Light: 100-240 VAC, 50/60 Hz, 2.0 Amps</li> <li>Alarm integrated into electrical control box housing</li> <li>Hospital grade power cord supplied</li> </ul>
	LIGHTING  LED Fixtures mounted in the top of the front panel all across the work surface  Natural cool white light. (Amber option available)  LED Lifetime 50,000 hours, 2600 lumens, max  3.04A-0.97A @ 12V-30V DC, universal power supply  Luminous Efficiency: 90 Lumens/Watt typical at 24 V dc at 25°C
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	INTERIOR POWER & ACCESSIBILITY  O Duplex Outlet in rear wall of unit O Pass thru on right side, blank plate on other side  VELOCITY ALARM
	<ul> <li>0.2 Amps with dry contact feature provided</li> <li>Integrated into electrical control box housing and equipped with red light which warns of low velocity; green light which indicates normal containment velocity with proper certification</li> </ul>
	<ul> <li>DIFFERENTIAL PRESSURE GAUGE</li> <li>Minihelic differential pressure switch/gauges.</li> <li>Pressure gauges (0-1" wg; 0-250 pa) installed to monitor the loading of the inlet and primary exhaust HEPA filters.</li> </ul>
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	Capable of being recirculated back into the lab
	FS1650 ALARM
	<ul> <li>FS1650 Integrated Face Velocity Alarm Alerts the operator when</li> </ul>
	airflow is compromised.
	LED LIGHTING
	<ul> <li>Standard with white light</li> </ul>
	<ul> <li>Optional add-on Amber LED Lighting</li> </ul>
	FRONT LIFT DOORS
	<ul> <li>Pneumatic assisted hinged front door that lifts for easy loading</li> </ul>
	and unloading of equipment
	o 42.00W" x 18.50"H Access Opening
	Digital Buss
	DISHED BASE
	<ul> <li>Dished phenolic base captures accidental liquid and powder spills</li> </ul>
	<u>PLENUMS</u>
	<ul> <li>Rear and Top Plenums are used to direct airflow and maintain</li> </ul>
	containment at the face opening.
	<ul> <li>Plenums also prevent particles from possibly falling back onto the</li> </ul>
	work surface during loss of power
	BAG IN/ BAG OUT
	<ul> <li>HEPA change out system that allows for safe removal and</li> </ul>
	replacement of the main 4" HEPA filter.
	Pass thru Chamber
	<ul> <li>One (1) transfer port included on left side</li> </ul>
	<ul> <li>Transfer Port Opening external 7"W x 9.5"H</li> </ul>
	<ul> <li>Inward swinging transfer door to access main chamber, outward</li> </ul>
	swinging door to access outside
PART #: G 10B1532975A	GLOVE PORTS
	O Quantity: 4
	<ul> <li>Size: 10" diameter oval glove ports for the manipulation of</li> </ul>
	process material
	<ul> <li>Glove ports are mounted on the front removable panel</li> </ul>
	<ul> <li>The system includes:</li> </ul>
	<ul> <li>Retaining O-rings</li> </ul>
	<ul> <li>butyl gloves (9.75 hand size, ambidextrous)</li> </ul>
	CUSTOMIZED MASTER PORT
	<ul> <li>The blank plate can be customized to install various items such as</li> </ul>
	continuous liner, RTP ports, etc.

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## PART #: 2092 & APS0825



## **8" CONTINUOUS LINER SYSTEM**

o Integrated Continuous Liner System for safe waste disposal. Seal at any increment for disposal of waste in any amount.

PART #: 2093



## RTP ALPHA PORT

 Accommodates a 105mm RTP Alpha port for connecting various betas or other containers

THIMBLE CONNECTION, 6" TO 7" TRANSITION
<ul> <li>Thimble for connection to house exhaust.</li> </ul>
VENT KIT, (8') 6" HOSE AND (2) HOSE CLAMP
<ul> <li>Hose and Clamp for connection to house exhaust.</li> </ul>
PRINTER SHELF – NO ALARM MOUNT
<ul> <li>Label printer shelf for above blank plate for label printing.</li> </ul>
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PART #: ATS7230S	TABLE, 72 x 30, STAINLESS STEEL TABLE
	<ul> <li>304 Stainless steel table, on frame and feet, leveling pads (±1.25" of travel).</li> </ul>
PART #: AEC7230S	ADA TABLE, 72 x 30, ELECTRIC POWDER COATED TABLE
	<ul> <li>Electric Ergonomic Lift Table, Powder coated carbon steel, on frame and feet, locking casters.</li> </ul>
PART #: AES7230S	ADA TABLE, 72 x 30, STAINLESS STEEL ERGONOMIC LIFT TABLE
	<ul> <li>Electric Ergonomic Lift Table, 304 Stainless Steel, on frame and feet, locking casters.</li> </ul>
PART #: ACC7230S	CART, 72 x 30, POWDER COATED STEEL CART
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