



turning ideas into solutions

mBRAUN

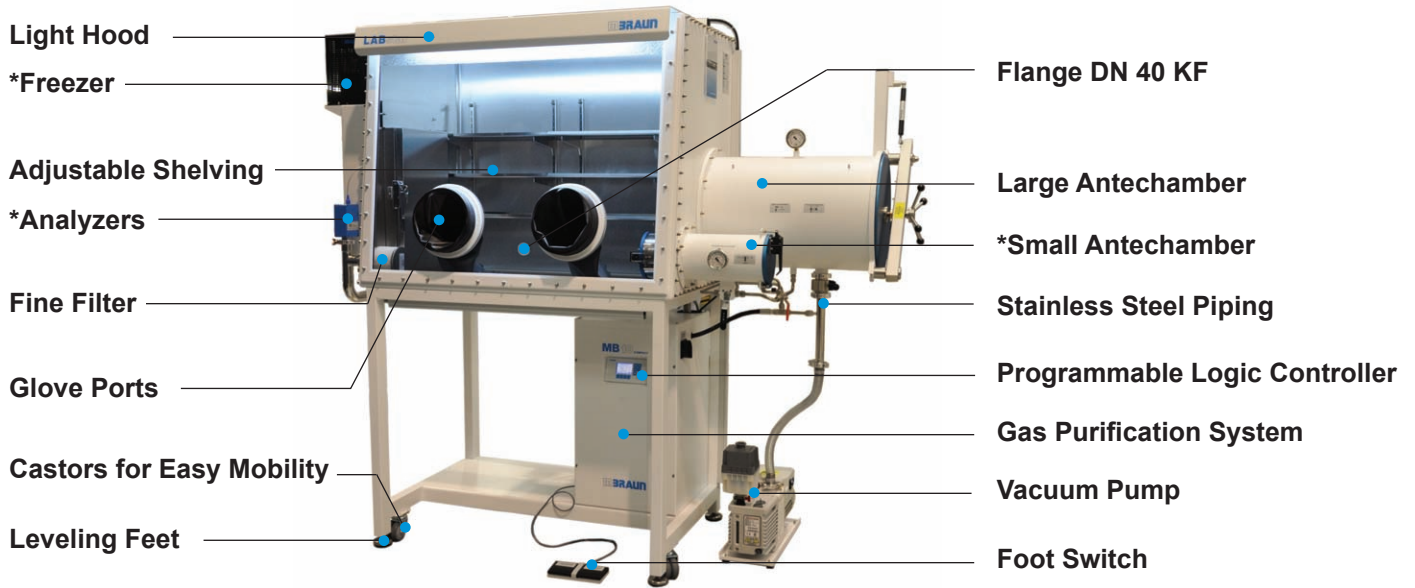
STANDARD GLOVEBOX WORKSTATIONS



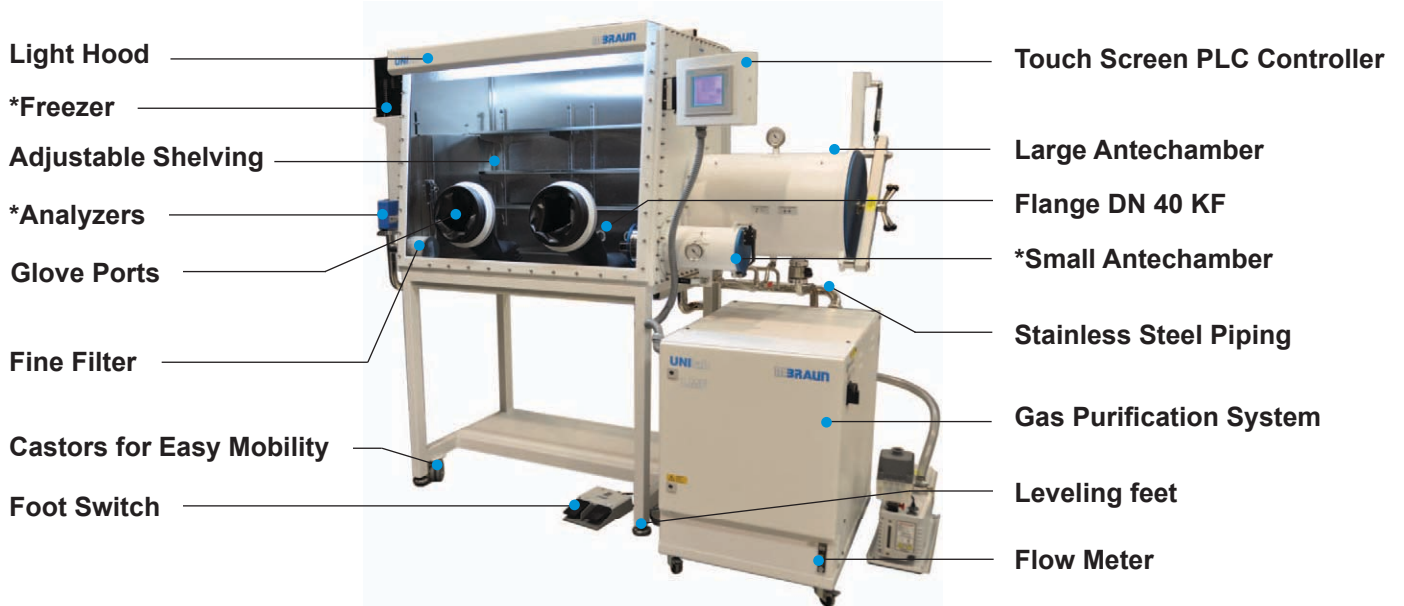
INERTGAS TECHNOLOGY



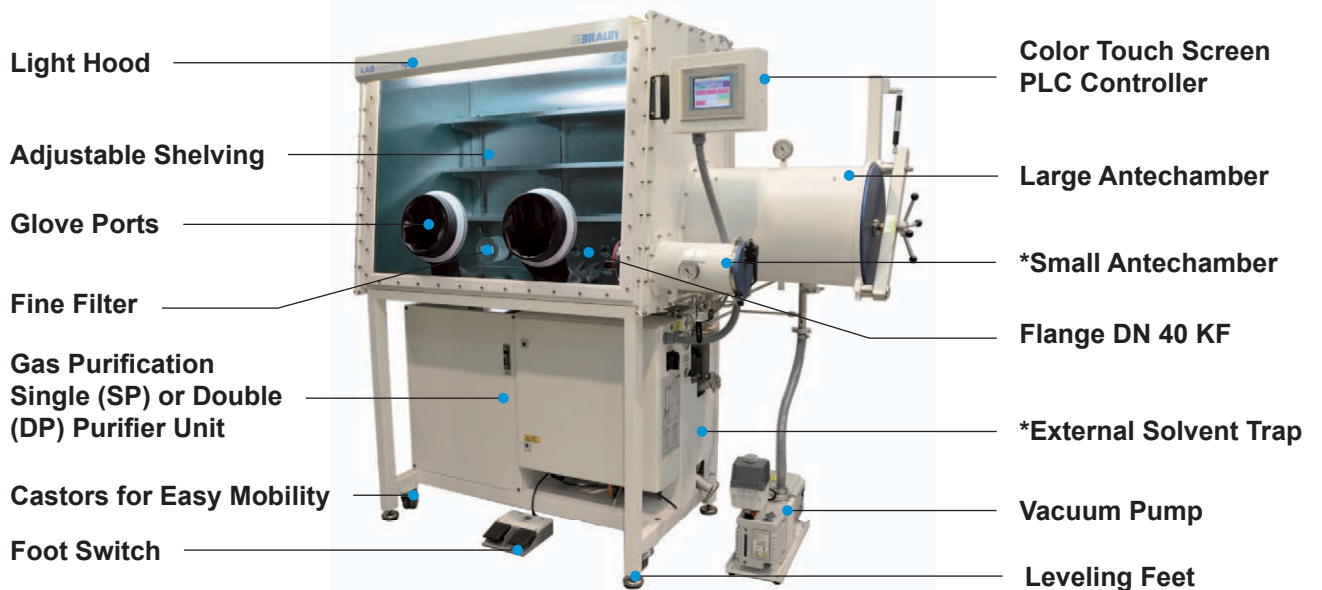
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*LABstar glovebox workstation is pictured with optional features



*UNIlab glovebox workstation is pictured with optional features



*LABmaster SP/DP glovebox workstation is pictured with optional features

LABstar

WORKSTATION

The LABstar workstation is a ready to operate high quality glovebox system that meets your specific application requirements. The LABstar workstation features a large main antechamber, 10 cfm vacuum pump, and programmable logic controller (PLC). Other standard features include an automatic regenerable oxygen and moisture single column inert gas purification system that purifies the glovebox atmosphere to levels of less than 1 ppm oxygen and moisture.

LABstar Standard Features:

- Programmable logic controller
- Large main antechamber
- Three glovebox sizes available
- Vacuum pump
- Automatic regenerable H₂O/O₂ single column inert gas purifier
- World-wide operation using standard power supply
- Integrated high vacuum feedthroughs
- Stainless steel adjustable shelving
- Stainless steel piping

LABstar Optional Features:

- Mini-antechamber
- H₂O/O₂ analyzer
- Freezer
- Box filter with activated charcoal
- Microscope equipment
- Dry scroll pump
- Automatic antechamber controls
- PLC controller with touch screen monitor
- Auto purge function
- Other options available

UNIlab

WORKSTATION

The UNIlab workstation is the next step up from the LABstar workstation in the MBRAUN standard glovebox line. The UNIlab workstation is a ready to operate high quality glovebox that includes a large main antechamber, 10 cfm vacuum pump, and a PLC controller with touch screen monitor. The UNIlab workstation features an automatic regenerable oxygen and moisture single column inert gas purification system that purifies the glovebox atmosphere to levels of less than 1 ppm oxygen and moisture.

UNIlab Standard Features:

- PLC controller with touch screen monitor
- Large main antechamber
- Three glovebox sizes available
- Vacuum pump
- Automatic regenerable H₂O/O₂ single column inert gas purifier
- World-wide operation using standard power supply
- Integrated high vacuum feedthroughs
- Stainless steel adjustable shelving
- Stainless steel piping

UNIlab Optional Features:

- Mini-antechamber
- H₂O/O₂ analyzer
- Dry scroll pump
- Freezer
- Box filter with activated charcoal
- External solvent absorber
- Auto purge function
- Microscope equipment
- Automatic antechamber controls
- Other options available

LABmaster SP/DP

WORKSTATION

The LABmaster workstation offers additional features and benefits compared to the UNIlab and LABstar workstations. The LABmaster workstation is the top of the line glovebox featuring a modular workspace, large main antechamber, 10 cfm vacuum pump, and a PLC controller with color touch screen monitor. The LABmaster offers automatic regenerable oxygen and moisture gas purification systems with single or double filter columns that purify the glovebox atmosphere to levels of less than 1 ppm oxygen and moisture.

LABmaster SP/DP Standard Features:

- A variety of modular glovebox sizes available
- PLC controller with color touch screen monitor
- Large main antechamber
- Vacuum pump
- Automatic regenerable H₂O/O₂ single (SP) / double (DP) column inert gas purifier
- World-wide operation using standard power supply
- Integrated high vacuum feedthroughs
- Stainless steel adjustable shelving
- Stainless steel piping

LABmaster SP/DP Optional Features:

- Mini-antechamber
- H₂O/O₂ analyzer
- Freezer
- Vacuum oven 250°C and 600°C
- Box filter with activated carbon
- External solvent absorber
- Dry scroll pump
- Microscope equipment
- Mechanical door locks
- Automatic antechamber controls
- Auto purge function
- Other options available



MBRAUN GLOVEBOX WORKSTATIONS

LABstar Workstation

Glovebox	• Sizes (Internal Workspace)	1200mm (L) x 780mm (D) x 920mm (H) 1450mm (L) x 780mm (D) x 920mm (H) 1950mm (L) x 780mm (D) x 920mm (H)
	• Modular in Design	No
	• Material	Stainless Steel 1.4301 (US Type 304)
	• Feedthroughs	(2) DN 40 KF Pieces Included (1) Electrical
	• Dust Filter (0.3 µm)	(1) Gas Inlet, (1) Gas Outlet, Class H 13
	• Windows	Scratch Resistant Polycarbonate
	• Gloves (Optional Sizes Available)	⁽¹⁾ Butyl .4mm Thick
	• Glove Port (Oval Ports Available)	POM 220mm Diameter
	• Box Light	Fluorescent Front Mounted Lamp
	• Stainless Steel Shelving	(3) 1000mm Length x 220mm Depth
	• Leak Rate (Oxygen Method)	<0.05 vol%/h Typical (Class 1)
• Leak Rate (Press. Change Method)	⁽³⁾ <0.05 vol%/h (Class 1)	
Large Antechamber	• Type	⁽⁴⁾ Cylindrical w/ Stainless Steel Sliding Tray
	• Size (Inside Dimensions)	390mm Diameter x 600mm Length
	• Material	Stainless Steel 1.4301 (US Type 304)
	• Door	Aluminum
	• Vacuum	⁽⁵⁾ Manual Operation
	• Leak Rate	<10 ⁻⁵ mbar l/s (Class 1)
Gas Purifier	• Purifier	Single Column Gas Purifier Unit
	• Attainable Purity	H ₂ O < 1 ppm, O ₂ < 1 ppm
	• Vacuum Pump (Dry Pump Available)	10 cfm Rotary Vane Pump
	• Regeneration	Auto Regeneration
	• Capacity	20L O ₂ Removal & 1000G H ₂ O Removal
	• Main Valves	Electro-pneumatic
	• Encapsulated Blower	Single Speed without Frequency Controller
	• Piping	Stainless Steel 1.4301 (US Type 304)
	• Flow Rate	20 m ³ /h at ΔP= 60 mbar
	• Electrical Power	230 V/50-60 Hz, 10 A or 115 V / 50-60 Hz, 20 A or 100 V/ 50-60 Hz, 20 A
Controller	• Controller	⁽⁷⁾ Programmable Logic Controller
	• Box Pressure Control	Automatic Box Pressure Control w/ Foot Switch (+15 mbar, -15 mbar)
	• Multi-language Operation	Yes
	• Trending Capabilities	Optional Feature
	• Touch Panel Design	Optional Feature

(1.) A variety of gloves (Hypalon, Neoprene and Butyl) and thickness sizes are available upon request. (2.) Double sided gloveboxes include at final acceptance test) (4.) Square antechamber, L-chamber and T-chamber designs are available. (5.) Timed antechamber control can be Controller can be upgraded to the optional touch screen interface.



UNilab Workstation

LABmaster Workstation

MOD Workstation

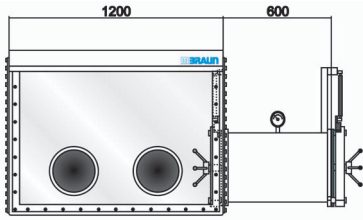
1200mm (L) x 780mm (D) x 920mm (H) 1450mm (L) x 780mm (D) x 920mm (H) 1950mm (L) x 780mm (D) x 920mm (H)	Lengths: 1250mm, 1500mm, 1800mm Depths: 780mm, 1000mm, 1200mm Height: 900mm Modular Sizes	Lengths: 1250mm, 1500mm, 1800mm Depths: 780mm, 1000mm, 1200mm Height: 900mm Modular Sizes
No	Yes	Yes
Stainless Steel 1.4301 (US Type 304)	Stainless Steel 1.4301 (US Type 304)	Stainless Steel 1.4301 (US Type 304)
(2) DN 40 KF Pieces Included (1) Electrical	(4) DN 40 KF Pieces Included (1) Electrical	(4) DN 40 KF Pieces Included (1) Electrical
(1) Gas Inlet, (1) Gas Outlet, Class H 13	(1) Gas Inlet, (1) Gas Outlet, Class H 13	(1) Gas Inlet, (1) Gas Outlet, Class H 13
Scratch Resistant Polycarbonate	Scratch Resistant Polycarbonate	Scratch Resistant Polycarbonate
⁽¹⁾ Butyl .4mm Thick	⁽¹⁾ Butyl .4mm Thick	⁽¹⁾ Butyl .4mm Thick
POM 220mm Diameter	POM 220mm Diameter	POM 220mm Diameter
Fluorescent Front Mounted Lamp	Fluorescent Front Mounted Lamp	Fluorescent Front Mounted Lamp
(3) 1000mm Length x 220mm Depth	⁽²⁾ (3) 1000mm Length x 220mm Depth	⁽²⁾ (3) 1000mm Length x 220mm Depth
<0.05 vol%/h Typical (Class 1)	<0.05 vol%/h Typical (Class 1)	<0.05 vol%/h Typical (Class 1)
⁽³⁾ <0.05 vol%/h (Class 1)	⁽³⁾ <0.05 vol%/h (Class 1)	⁽³⁾ <0.05 vol%/h (Class 1)
⁽⁴⁾ Cylindrical w/ Stainless Steel Sliding Tray	⁽⁴⁾ Cylindrical w/ Stainless Steel Sliding Tray	⁽⁴⁾ Cylindrical w/ Stainless Steel Sliding Tray
390mm Diameter x 600mm Length	390mm Diameter x 600mm Length	390mm Diameter x 600mm Length
Stainless Steel 1.4301 (US Type 304)	Stainless Steel 1.4301 (US Type 304)	Stainless Steel 1.4301 (US Type 304)
Aluminum	Aluminum	Aluminum
⁽⁵⁾ Manual Operation	⁽⁶⁾ Push Button Evac. & Refill	⁽⁶⁾ Manual & Push Button Evac. & Refill Available
<10 ⁻⁵ mbar l/s (Class 1)	<10 ⁻⁵ mbar l/s (Class 1)	<10 ⁻⁵ mbar l/s (Class 1)
Single Column Gas Purifier Unit	Single Purifier (SP) / Double Purifier (DP)	MB 20G, MB 200G, MB 300G & MB 600G available
H ₂ O < 1 ppm, O ₂ < 1 ppm	H ₂ O < 1 ppm, O ₂ < 1 ppm	H ₂ O < 1 ppm, O ₂ < 1 ppm
10 cfm Rotary Vane Pump	10 cfm Rotary Vane Pump	10 cfm Rotary Vane Pump
Auto Regeneration w/ Auto Restart Feature	Auto Regeneration w/ Auto Restart Feature	Auto Regeneration w/ Auto Restart Feature
30L O ₂ Removal & 1300G H ₂ O Removal	30L O ₂ Removal & 1300G H ₂ O Removal	30L up to 180L O ₂ Removal & 1300G up to 3000G H ₂ O Removal
Electro-pneumatic	Electro-pneumatic	Electro-pneumatic
Multiple Speeds with Frequency Controller	Multiple Speeds with Frequency Controller	Multiple Speeds with Frequency Controller
Stainless Steel 1.4301 (US Type 304)	Stainless Steel 1.4301 (US Type 304)	Stainless Steel 1.4301 (US Type 304)
84 m ³ /h at ΔP= 60 mbar	84 m ³ /h at ΔP= 60 mbar	84 m ³ /h up to 310 m ³ /h at ΔP= 60 mbar
230 V/50-60 Hz, 10 A or 115 V / 50-60 Hz, 20 A or 100 V/ 50-60 Hz, 20 A	230 V/50-60 Hz, 10 A or 115 V / 50-60 Hz, 20 A or 100 V/ 50-60 Hz, 20 A	230 V/50-60 Hz, 10 A or 115 V / 50-60 Hz, 20 A or 100 V/ 50-60 Hz, 20 A
PLC Control w/ Touch Screen Monitor	PLC Control w/ Color Touch Screen Monitor	PLC Control w/ Color Touch Screen Monitor
Automatic Box Pressure Control w/ Foot Switch (+15 mbar, -15 mbar)	Automatic Box Pressure Control w/ Foot Switch (+15 mbar, -15 mbar)	Automatic Box Pressure Control w/ Foot Switch (+15 mbar, -15 mbar)
Yes	Yes	Yes
Yes	Yes	Yes
Yes	Yes	Yes

2 hanging shelves. Additional shelving options are available. (3.) < 0.05 vol%/h at negative pressure of 10 mbar at constant temperature (measured included as an optional item. (6.) Timed antechamber control and fully automatic antechamber controls are available (7.) The Programmable Logic

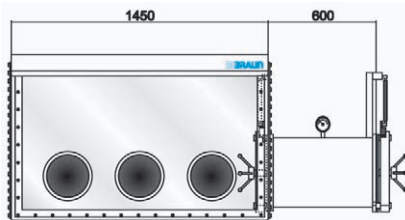
LABstar

WORKSTATION

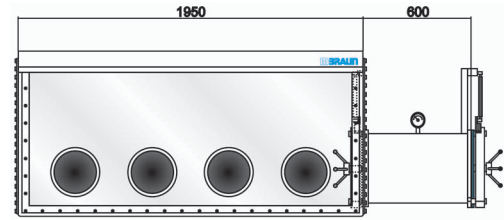
Weight = 400 kg / 550 kg



1200 mm (L) x 780 mm (D) x 920 mm (H)



1450 mm (L) x 780 mm (D) x 920 mm (H)

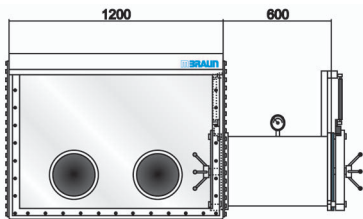


1950 mm (L) x 780 mm (D) x 920 mm (H)

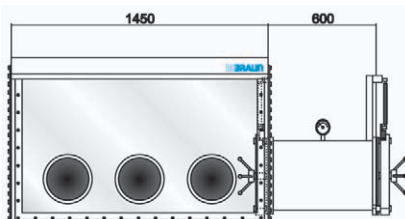
UNIlab

WORKSTATION

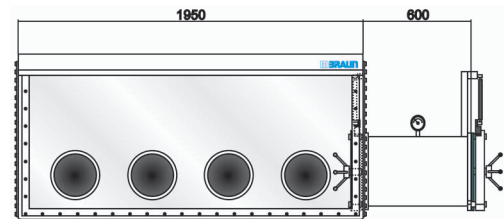
Weight = 400 kg / 600 kg



1200 mm (L) x 780 mm (D) x 920 mm (H)



1450 mm (L) x 780 mm (D) x 920 mm (H)

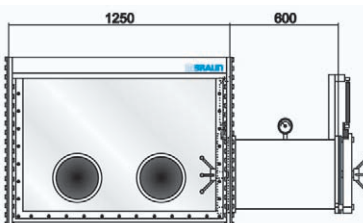


1950 mm (L) x 780 mm (D) x 920 mm (H)

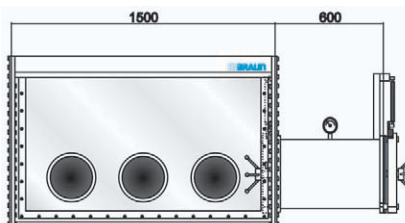
LABmaster SP/DP

WORKSTATION

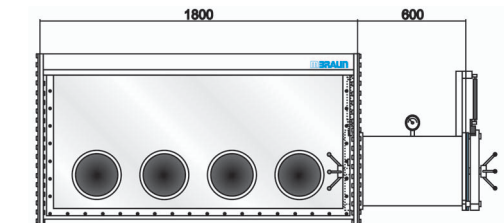
Weight = 400 kg / 600 kg



1250 mm (L) x 780 mm (D) x 900 mm (H)



1500 mm (L) x 780 mm (D) x 900 mm (H)

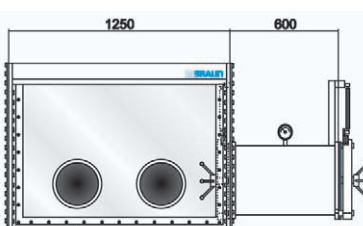


1800 mm (L) x 780 mm (D) x 900 mm (H)

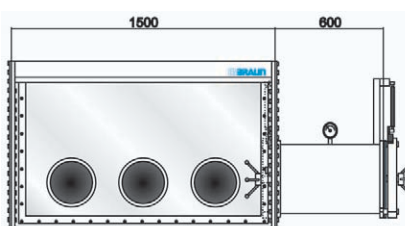
MOD-Box

MODULAR WORKSTATION

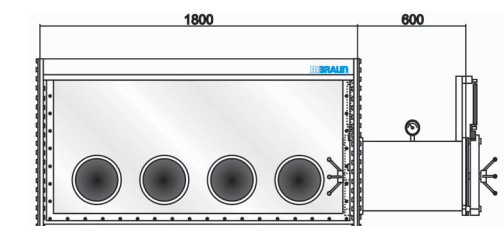
Weight = 400 kg / 600 kg



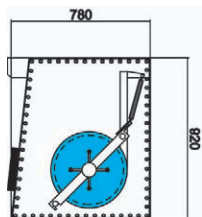
1250 mm (L) x 780 mm (D) x 900 mm (H)



1500 mm (L) x 780 mm (D) x 900 mm (H)

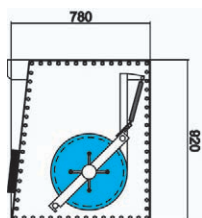


1800 mm (L) x 780 mm (D) x 900 mm (H)



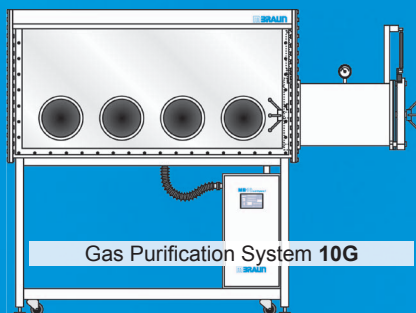
Volume:

- 1250 (L) = 0.8 m³
- 1450 (L) = 1.0 m³
- 1950 (L) = 1.4 m³

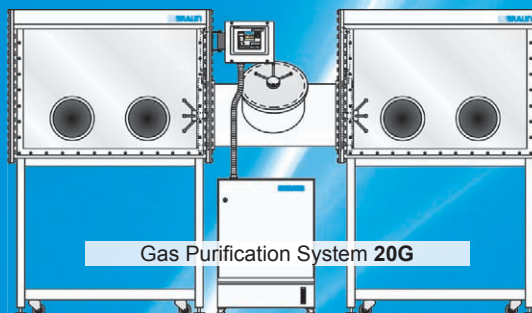


Volume:

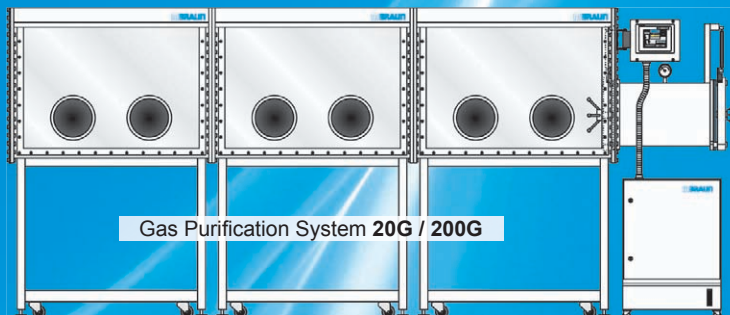
- 1250 (L) = 0.8 m³
- 1450 (L) = 1.0 m³
- 1950 (L) = 1.4 m³



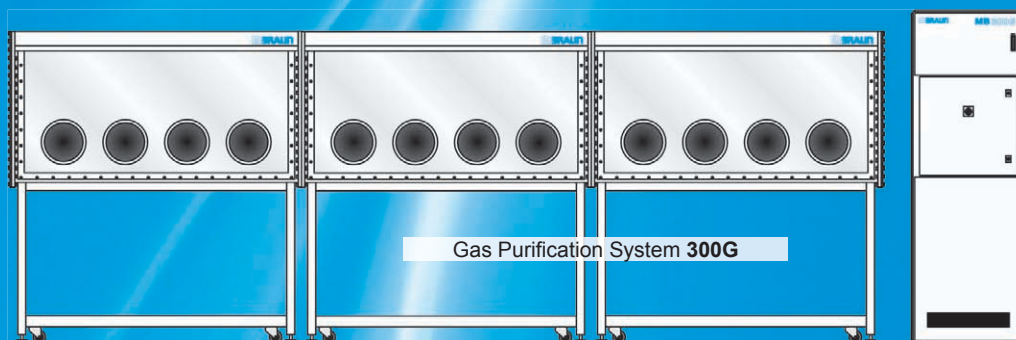
Gas Purification System 10G



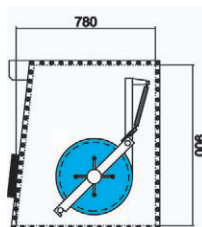
Gas Purification System 20G



Gas Purification System 20G / 200G

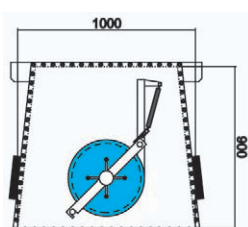


Gas Purification System 300G



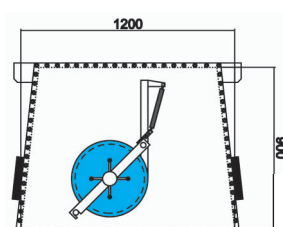
Volume:

- 1250 (L) = 0.8 m³
- 1500 (L) = 1.0 m³
- 1800 (L) = 1.2 m³



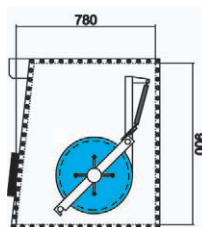
Volume:

- 1250 (L) = 1.0 m³
- 1500 (L) = 1.2 m³
- 1800 (L) = 1.5 m³



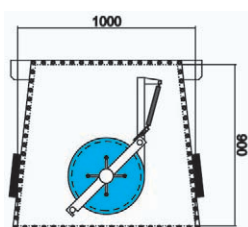
Volume:

- 1250 (L) = 1.2 m³
- 1500 (L) = 1.5 m³
- 1800 (L) = 1.8 m³



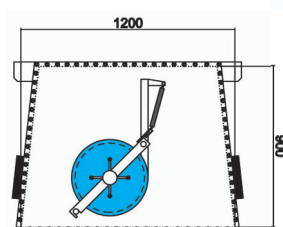
Volume:

- 1250 (L) = 0.8 m³
- 1500 (L) = 1.0 m³
- 1800 (L) = 1.2 m³



Volume:

- 1250 (L) = 1.0 m³
- 1500 (L) = 1.2 m³
- 1800 (L) = 1.5 m³



Volume:

- 1250 (L) = 1.2 m³
- 1500 (L) = 1.5 m³
- 1800 (L) = 1.8 m³



Germany



M.Braun Inertgas-Systeme GmbH (Headquarters)

Dieselstr. 31 • 85748 Garching • Germany
Phone: +49 89 32669-0 • Fax: +49 89 32669-105
www.mbraun.de • info@mbraun.de

USA



M.Braun Incorporated

14 Marin Way • Stratham, NH • 03885
Phone: +1 603-773-9333 • Fax: +1 603-773-0008
www.mbraunusa.com • info@mbraunusa.com

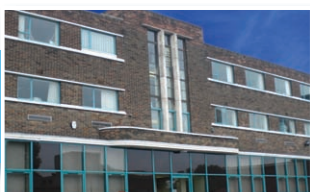
USA West Coast



M.Braun West Coast Office

Suite 206 • 2570 North First Street • San Jose, CA • 95131
Phone: +1 408-273-4594 • Fax: +1 408-273-4694
www.mbraunusa.com • info@mbraunusa.com

UK & Ireland



M.Braun UK & Ireland

Mansfield Business Center • Ashfield Avenue • Mansfield
Nottinghamshire • NG18 2AE • United Kingdom
Phone: +44 1623 404329 • Fax: +44 1623 404277
www.mbraun.co.uk • info@mbraun.de

China



M.Braun Inertgas System Co. Ltd. (Shanghai)

828 Xin Jinqiao Road • Pudong Shanghai 201206 • P.R.C
Phone: +86 21 5032 02 57 • Fax: +86 21 5032 02 29
www.mbraunchina.com • info@mbraunchina.com



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