turning ideas into solutions

mBRAUN
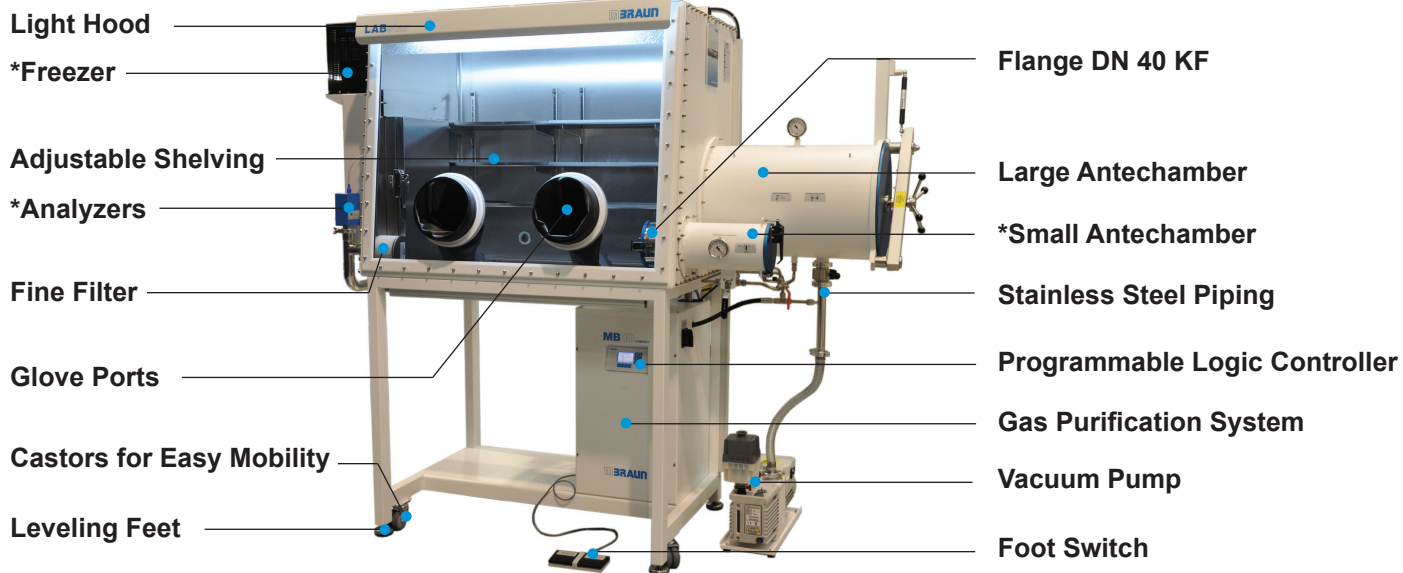
STANDARD GLOVEBOX WORKSTATIONS
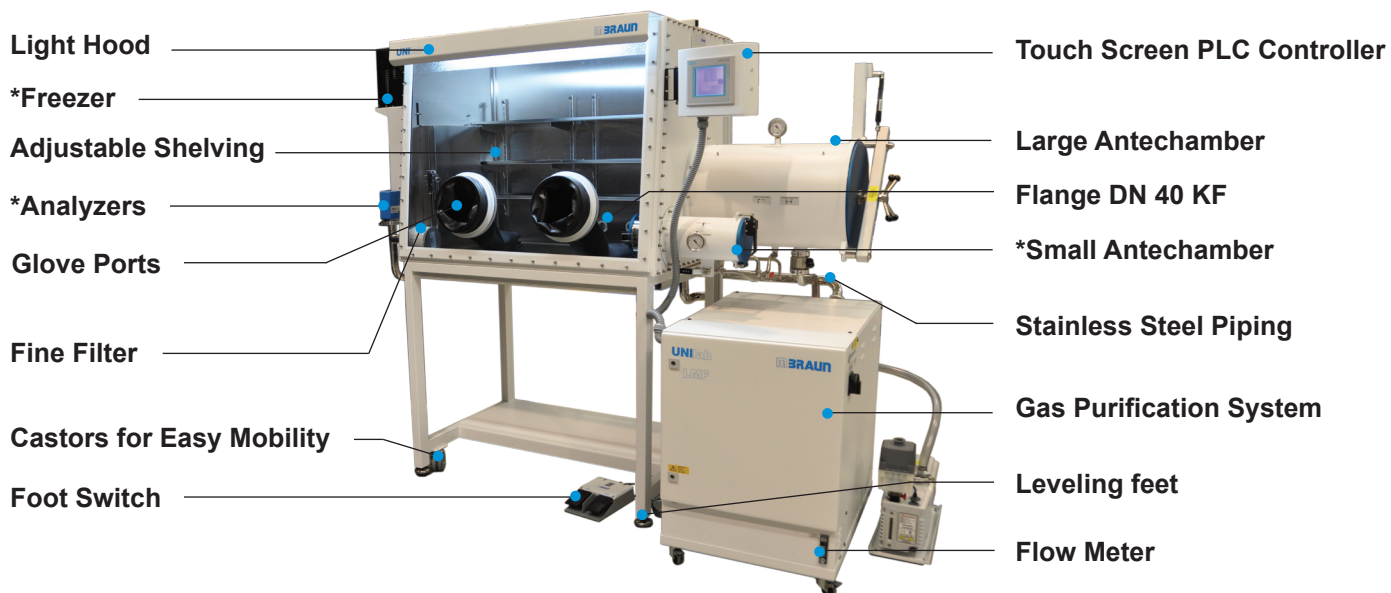
INERTGAS TECHNOLOGY
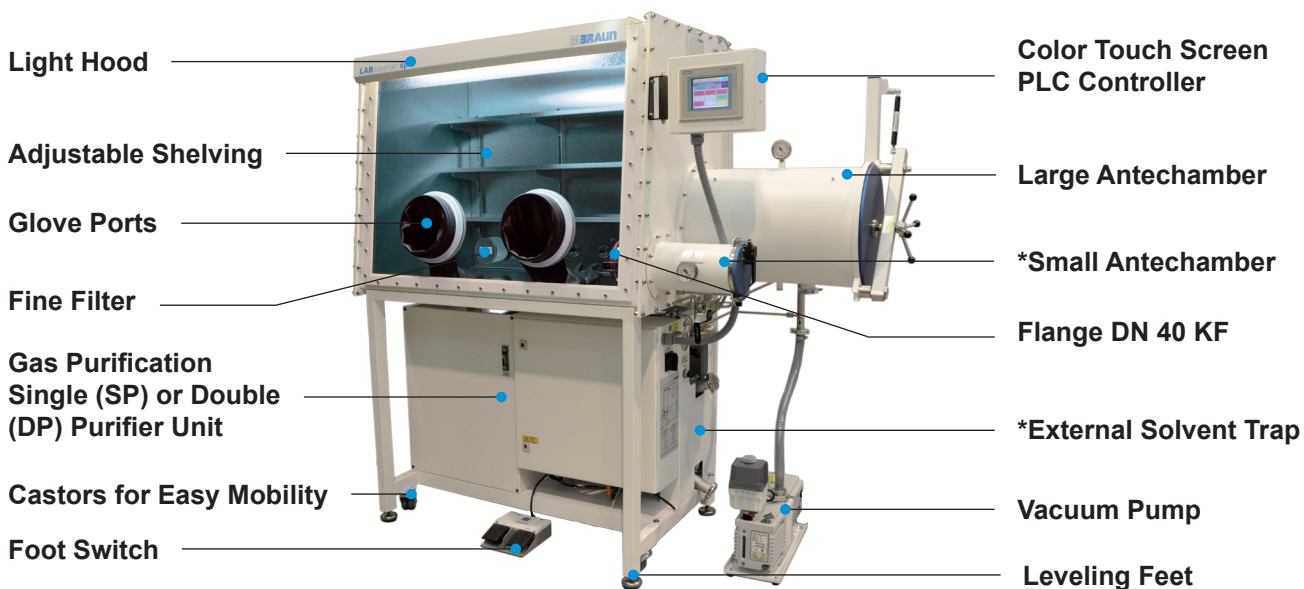
UL C E

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Light Hood

*Freezer

Adjustable Shelving

*Analyzers

Fine Filter

Glove Ports

Castors for Easy Mobility

Leveling Feet

Flange DN 40 KF

Large Antechamber

*Small Antechamber

Stainless Steel Piping

Programmable Logic Controller

Gas Purification System

Vacuum Pump

Foot Switch

*LABstar glovebox workstation is pictured with optional features

Light Hood

*Freezer

Adjustable Shelving

*Analyzers

Glove Ports

Fine Filter

Castors for Easy Mobility

Foot Switch

Touch Screen PLC Controller

Large Antechamber

Flange DN 40 KF

*Small Antechamber

Stainless Steel Piping

Gas Purification System

Leveling feet

Flow Meter

*UNIlab glovebox workstation is pictured with optional features

Light Hood

Adjustable Shelving

Glove Ports

Fine Filter

Gas Purification Single (SP) or Double (DP) Purifier Unit

Castors for Easy Mobility

Foot Switch

Color Touch Screen PLC Controller

Large Antechamber

*Small Antechamber

Flange DN 40 KF

*External Solvent Trap

Vacuum Pump

Leveling Feet

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

GLOVEBOX CONFIGURATIONS MAY VARY

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 H_2O/O_2 single 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
- H_2O/O_2 analyzer
- Freezer
- Box filter with activated charcoal
- Microscope equipment
- Dry scroll pump
- Automatic antechamber controls
- Siemens PLC touch screen controller
- 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 glovebox is a ready to operate high quality glovebox that includes a large main antechamber, 10 cfm vacuum pump, and Siemens touch screen controller. 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:
- Siemens PLC touch screen controller
- Large main antechamber
- Three glovebox sizes available
- Vacuum pump
- Automatic regenerable H_2O/O_2 single 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
- H_2O/O_2 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 glovebox is the top of the line workstation featuring a modular designed workspace, large main antechamber, 10 cfm vacuum pump, and Siemens color touch screen controller. The LABmaster offers automatic regenerable oxygen and moisture gas purification units with single or double filter columns that purify glovebox atmosphere to levels of less than 1 ppm oxygen and moisture.

LABmaster sp/dp Standard Features:
- A variety of modular glovebox sizes available
- Siemens PLC touch screen controller
- Large main antechamber
- Vacuum pump
- Automatic regenerable H_2O/O_2 single (sp) / double (dp) 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
- H_2O/O_2 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

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 220 mm Diameter
	• Box Light	Fluorescent Front Mounted Lamp
	• Stainless Steel Shelving	[2] (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	SS 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
	• Attainable Purity	H_2O < 1 ppm, O_2 < 1 ppm
	• Vacuum Pump (*Dry pump avail.)	Rotary Vane Pump = 10 cfm
	• Regeneration	Auto Regeneration w/ Auto Restart Feature
	• Capacity	20L O_2 Removal & 1000G H_2O Removal
	• Main Valves	Electro-pneumatic
	• Encapsulated Blower	Single Speed without Frequency Controller
	• Piping	SS 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	[6]Programmable Logic Controller
	• Box Pressure Control	Automatic box pressure control with foot switch (+15mbar, -15mbar)
	• 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 2 double acceptance test) (4.) Square Antechamber design and T-chamber designs are available. (5.) Timed antechamber control can be included as an optional

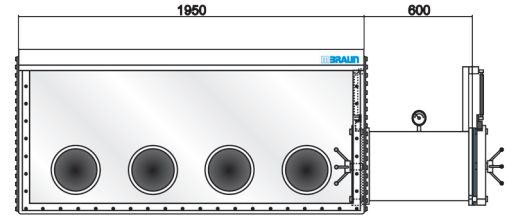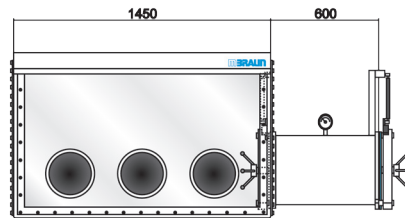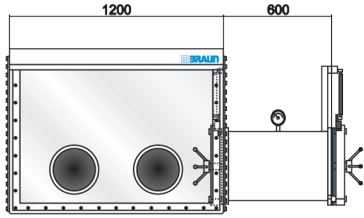| UNIlab Workstation	LABmaster Workstation	MOD Workstation
1200mm (L) x 780mm (D) x 920mm (H) 1450mm (L) x 780mm (D) x 920mm (H) 1950mm (L) x 780mm (D) x 920mm (H)	Lengths: 1250mm, 1500mm, 1800mm Depths: 780mm, 1000mm, 1200mm Height: 900mm **Modular Sizes**	Lengths: 1250mm, 1500mm, 1800mm Depths: 780mm, 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 220 mm Diameter	POM 220 mm Diameter	POM 220 mm Diameter
Fluorescent Front Mounted Lamp	Fluorescent Front Mounted Lamp	Fluorescent Front Mounted Lamp
[2] (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
SS 1.4301 (US Type 304)	SS 1.4301 (US Type 304)	SS 1.4301 (US Type 304)
Aluminum	Aluminum	Aluminum
[5] Manual Operation	[5] Push Button Evac. & Refill (semi Auto)	Manual and Push Button Evac. and Refill Available
$<10^{-5}$ mbar l/s (Class1)	$<10^{-5}$ mbar l/s (Class1)	$<10^{-5}$ mbar l/s (Class1)
Single Purifier Unit	Single Column (SP) / Double (DP)	MB 20G, MB 200G, MB 300G & MB 600G available
H_2O < 1 ppm, O_2 < 1 ppm	H_2O < 1 ppm, O_2 < 1 ppm	H_2O < 1 ppm, O_2 < 1 ppm
Rotary Vane Pump = 10 cfm	Rotary Vane Pump = 10 cfm	Rotary Vane Pump = 10 cfm
Auto Regeneration w/ Auto Restart Feature	Auto Regeneration w/ Auto Restart Feature	Auto Regeneration w/ Auto Restart Feature
30 Liters O_2 Removal & 1300G H_2O Removal	30L O_2 Removal & 1300G H_2O Removal	30L up to 180L O2 removal & 1300L up to 3000L H2O removal
Electro-pneumatic	Electro-pneumatic	Electro-pneumatic
Multiple Speeds with Frequency Controller	Multiple Speeds with Frequency Controller	Multiple Speeds with Frequency Controller
SS 1.4301 (US Type 304)	SS 1.4301 (US Type 304)	SS 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
5.7" Siemens B/W PLC Touch Screen	5.7" Siemens Color PLC Touch Screen	5.7" Siemens Color PLC Touch Screen
Automatic box pressure control with foot switch (+15mbar, -15mbar)	Automatic box pressure control with foot switch (+15mbar, -15mbar)	Automatic box pressure control with foot switch (+15mbar, -15mbar)
Yes	Yes	Yes
Yes	Yes	Yes
Yes	Yes	Yes

sided hanging shelves. Additional shelving options are available. (3.) < 0.05 vol%/h at negative pressure of 10 mbar at constant temp. (measured at final item. (6.) The Programmable Logic Controller can be upgraded to the optional touch screen interface.
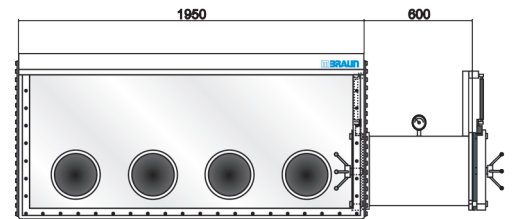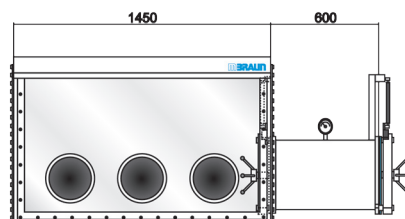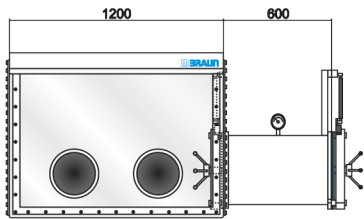
LABstar
WORKSTATION

Weight = 400 kg / 550 kg

1200 mm (L) x 780 mm (D) x 920 mm (H)	1450 mm (I) x 780 mm (D) x 920mm (H)	1950 mm (L) x 780 mm (D) x 920 mm (H)

UNIlab
WORKSTATION
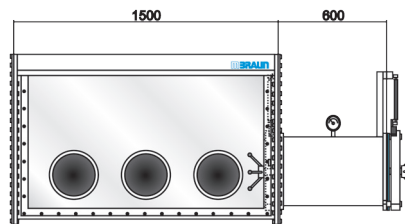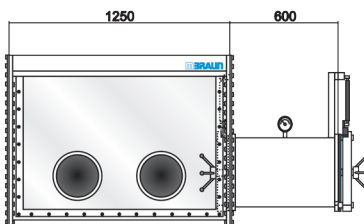
Weight = 400 kg / 600 kg

1200 mm (L) x 780 mm (D) x 920mm (H)	1450 mm (L) x 780 mm (D) x 920mm (H)	1950 mm (L) x 780 mm (D) x 920 mm (H)

LABmaster SP/DP
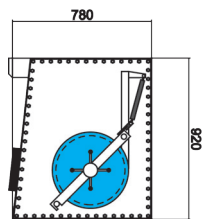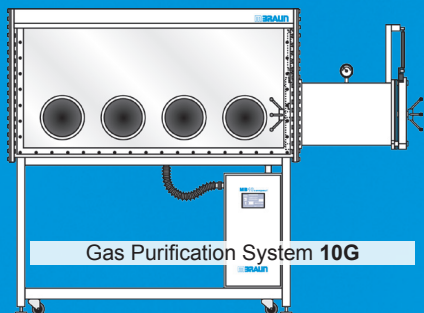## WORKSTATION

Weight = 400 kg / 600 kg
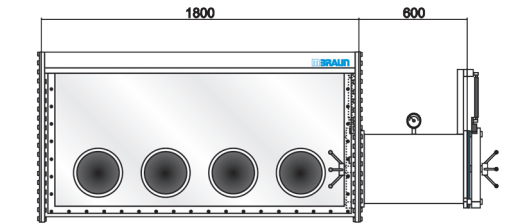
1250 mm (L) x 780 mm (D) x 900 mm (H)	1500 mm (L) x 780 mm (D) x 900 mm (H)	1800 mm (L) x 780 mm (D) x 900 mm (H)

MOD-Box
MODULAR WORKSTATION

Weight = 400 kg / 600 kg
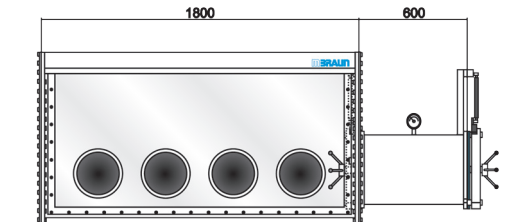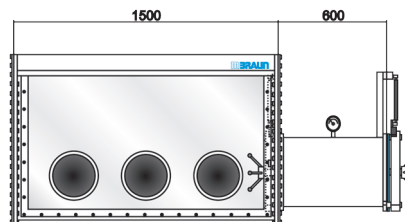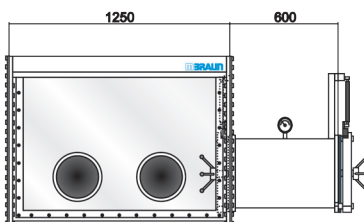
1250 mm (L) x 780 mm (D) x 900 mm (H)	1500 mm (L) x 780 mm (D) x 900 mm (H)	1800 mm (L) x 780 mm (D) x 900 mm (H)

780

920

Volume:

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

780

920
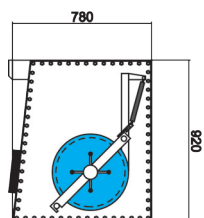
Volume:

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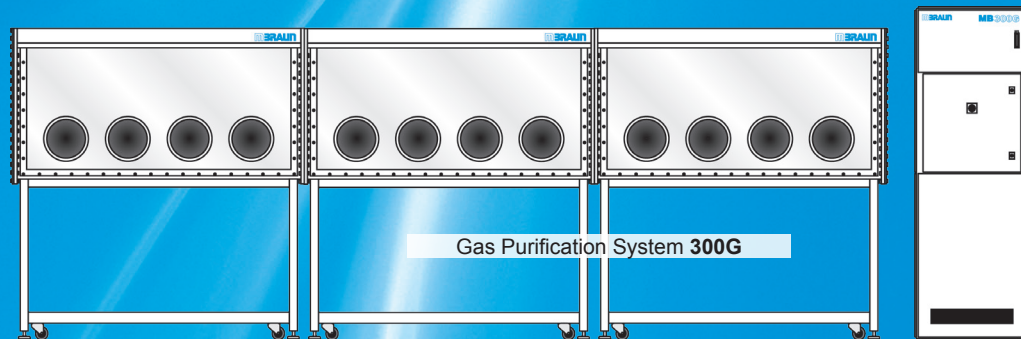1450 (L) = 1.0 m³
1950 (L) = 1.4 m³

Gas Purification System **10G**
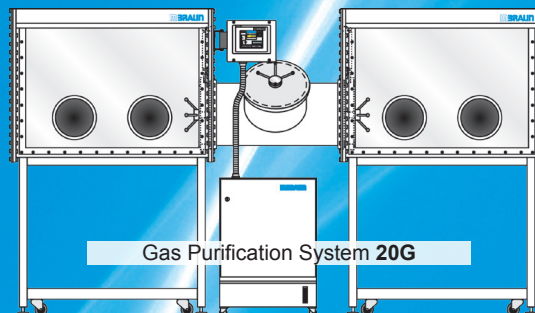
Gas Purification System **20G**
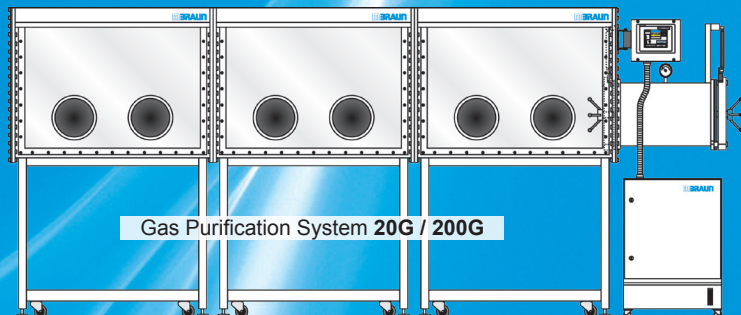
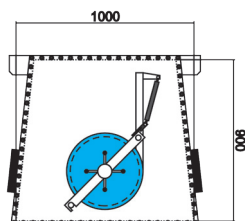Gas Purification System **20G / 200G**

Gas Purification System **300G**
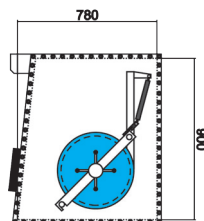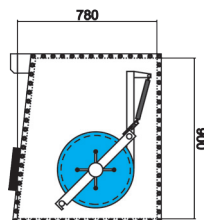
780

900

1000

900

1200

900

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:

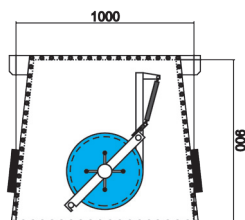1250 (L) = 1.2 m³
1500 (L) = 1.5 m³
1800 (L) = 1.8 m³

780

900

1000

900

1200

900

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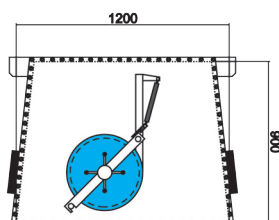
1250 (L) = 1.2 m³
1500 (L) = 1.5 m³
1800 (L) = 1.8 m³

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