

HIGH PRESSURE (HP)

GAS PURIFIERS

MB100HP, MB 500HP, MB 2500HP



- Pre-purification of an in-house gas supply
- Dry gas supply (inert gas) for purge boxes
- In connection with a compressor for the recirculation of pneumatic operation gases for applications in inert gloveboxes
- Special applications on request (e.g. removal of moisture and other contaminations from ambient air)

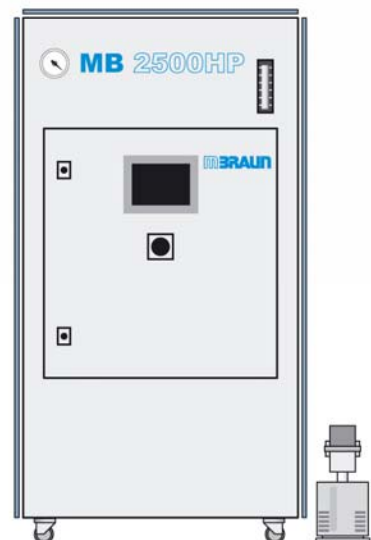
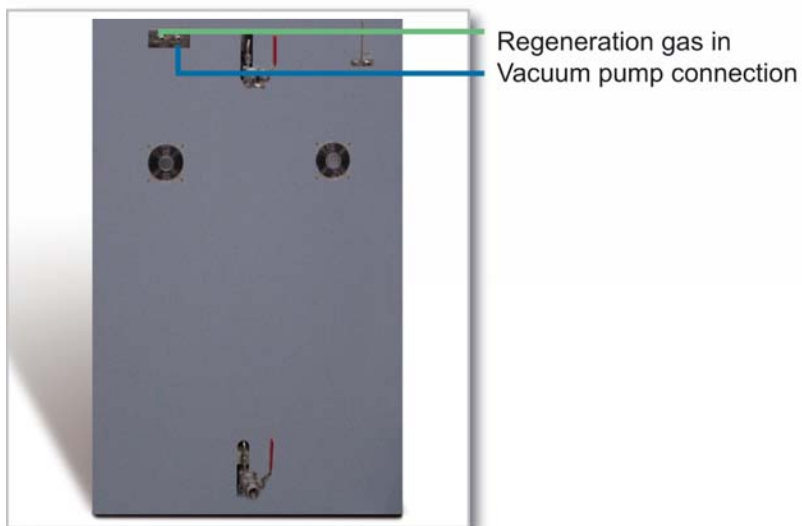
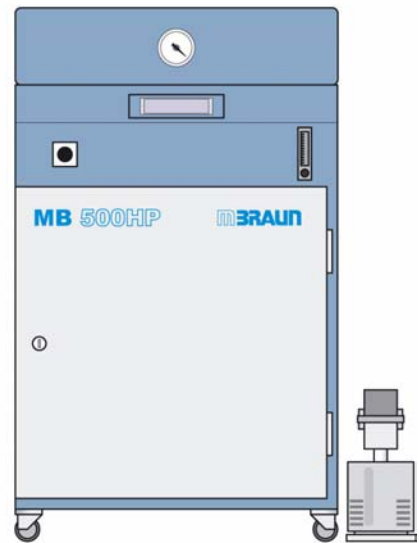
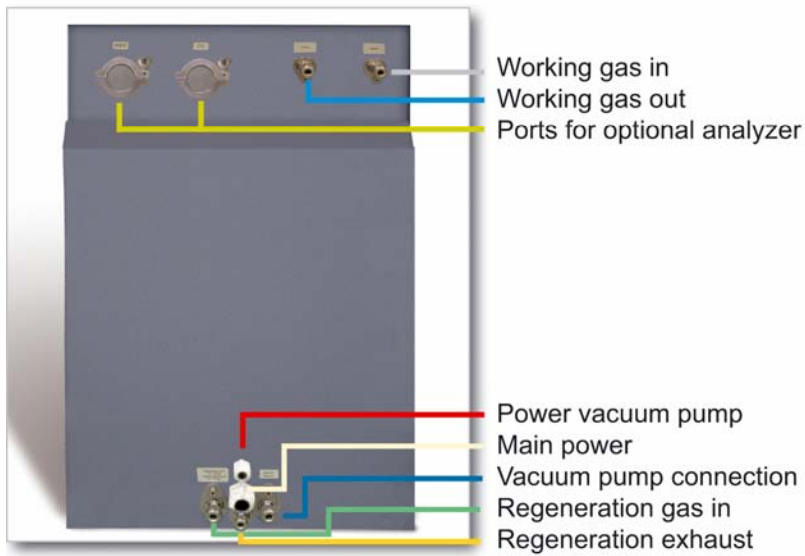
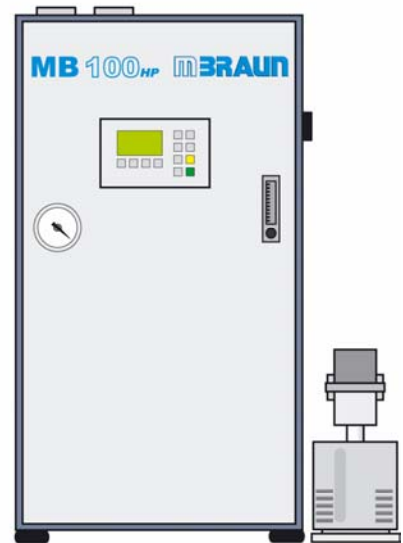
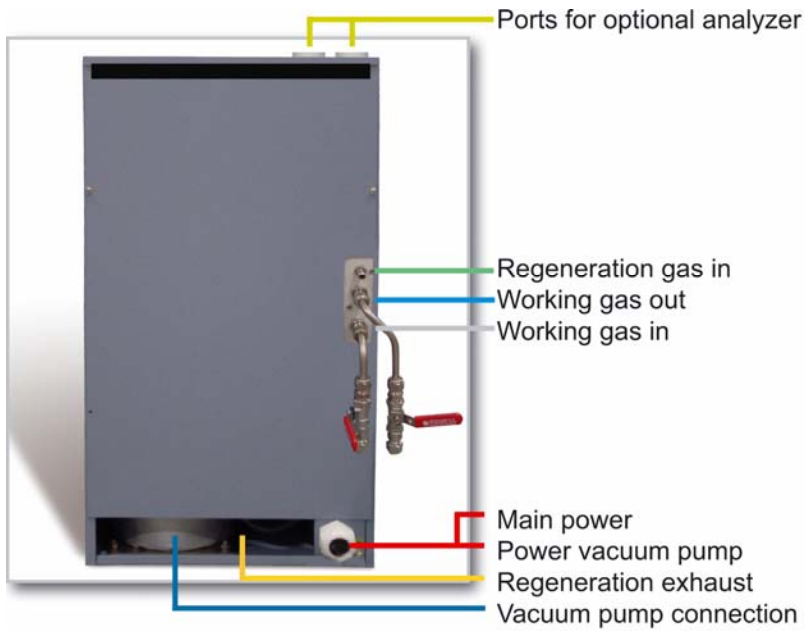
GAS PURIFIERS



Purification									
Moisture:	The adsorber utilizes a Zeolite based molecular sieve. The obtainable purity for H ₂ O is better than 1 ppm. The system is also capable of removing small quantities of residual hydrocarbons.								
Oxygen:	The removal of Oxygen is performed by means of a copper catalyst.								
System design									
Filter columns:	The High Pressure Gas Purifier is a system which allows for one filter column to be regenerated while the other is active. The regeneration of the filter medium is controlled by a Programmable Logic Controller.								
Technical Data									
	MB 100HP			MB 500HP			MB 2500HP		
Size:	width: 471 mm	height: 750 mm	depth: 500 mm	width: 600 mm	height: 1070 mm	depth: 875 mm	width: 700 mm	height: 1105 mm	depth: 1800 mm
Weight:	120 kg			230 kg			380 kg		
Filter type:	Stainless Steel dual filter columns								
Filter loading:	Molecular sieve and copper-catalyst								
Flow rate:	cont. flow 100 NI/min, * peak 200l/min (e.g. 16 l/min @ 6 bar) * =Gas flow at standard condition (25°C, 1013mbar)			cont. flow 500 NI/min, * peak 750l/min (e.g. 83 l/min @ 6 bar) * =Gas flow at standard condition (25°C, 1013mbar)			cont. flow 2500 NI/min, * peak 3000l/min (e.g. 417 l/min @ 6 bar) * =Gas flow at standard condition (25°C, 1013mbar)		
Working gas inlet pressure:	2 - 6 bar								
Power consumption:	1.5 kW			1.8 kW			9.0 kW		
Power supply:	230V / 50 Hz or 115 V / 60 Hz								
Regeneration gas:	4 l/min (1 m ³ /regeneration)			15-20 l/min (3.6 m ³ /regeneration)			75-100 l/min (13-18 m ³ /regeneration)		
Gas Specifications									
Inlet gas quality:	Gas quality: 99.996% (4.6) - 99.999% (5.0), oil-free, free of particles O ₂ concentration: <= 10ppm for continuous operation (max. 14hours) <= 40ppm (peak level, max. duration 5hours) H ₂ O concentration: <= 10ppm for continuous operation (max. 14hours) <= 40ppm (peak level, max. duration 5hours)								
Outlet gas quality:	O ₂ concentration <1 ppm @ 100 NI/min H ₂ O concentration <1 ppm @ 100 NI/min								
For special applications:	on request								

GAS PURIFIERS

Utilities



GAS PURIFIERS

Our Products at a Glance

From the compact or modular laboratory workstation to the large-scale system for industrial production, MBRAUN offers the right solution for every area of application.

Modular gloveboxes, high-performance gas purification systems (purity: <1 ppm H₂O, <1 ppm O₂ or <1 ppm N₂) and a large number of modular auxiliary equipment items are the basis on which individual systems with PLC control can be assembled.

Standard products

-Workstations

Labstar
Unilab
Labmaster sp / dp

-Modular boxes

MOD type series

-Industrial boxes

IE type series

-Special boxes, encapsulation enclosures

-Vacuum antechambers

Cylindrical design
Rectangular design

-Gas purification systems, closed circulation principle

Removal of O₂ - H₂O - N₂ - CO₂
Flow rates 15 m³/h to 180 m³/h
Special gas recovery systems

-Gas purification systems, continuous-flow

Removal of O₂ - H₂O
Flow rates from 100 l/min to 1000 l/min

-Solvent purification systems (SPS)

-Solvent absorption traps

Chemical adsorption principle
Cryogenic principle

-Heat treatment ovens

-Particle removal units

-Box Integrated ovens, temperature up to 600 °C
-High temperature vacuum ovens up to 2500 °C

-Oxygen analyzers 1000 ppm - 25 %

-Oxygen analyzers <1 ppm - 1000 ppm

-Moisture analyzers <1 ppm - 500 ppm

-Box integrations

Microscopes
Thermal-analysis measuring equipment
Spin coaters
Thin film deposition systems

-Customer-specific special production lines

Inertgas systems for laser welding technology
Inertgas systems for lithium battery production
Inertgas systems for discharge lamp production

-Process automation

-Process visualization

-Process handling

-Special facilities for Inertgas systems

The designs and operating principles of MBRAUN products are ideally matched, providing scope for subsequent system extensions.



M. Braun Inertgas-Systeme GmbH Head-Office Germany • Dieselstr. 31, D-85748 Garching • Phone: +49(0) 89-3 26 69-0

Fax: +49(0) 89-3 26 69-105 • E-Mail: info@mbraun.de

M. Braun Inc. USA • 14 Marin Way, Stratham, NH 03885 • Phone: +1-603-773-9333 • Fax: +1-603-773-0008 • E-Mail: info@mbraunusa.com

M. Braun Inertgas Systems (Shanghai) Co., Ltd. China • 828 Xin Jinqiao Road • Pudong Shanghai 201206, P.R.C.

Phone: +86-21-50320257 • Fax +86-21-50320229 • E-Mail: info@mbraunchina.com

M. Braun Service Japan • Yoshikawa building, 3rd floor • 6-32 Honcho, Wako-shi • Saitama 351-0114 • Phone: +81-48-452-6367 • Fax: +81-48-452-6368

Internet www.mbraun.com • www.mbraun.de • www.mbraunchina.com