

MB-20-G

INERTGAS PURIFICATION SYSTEM



- Single reactor column on mobile platform
- Optimum performance for attached enclosure volumes up to:
 - 6 m³ with UDF
 - 5 m³ without UDF
- Removal of oxygen and moisture <1 ppm
- Automated box pressure and regeneration control
- Negative and/or positive pressure operation
- PLC with large multi-color touch panel display
- ECO Mode operation feature available
- Optional control and safety features available

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Clean. Engineering. Expertise.

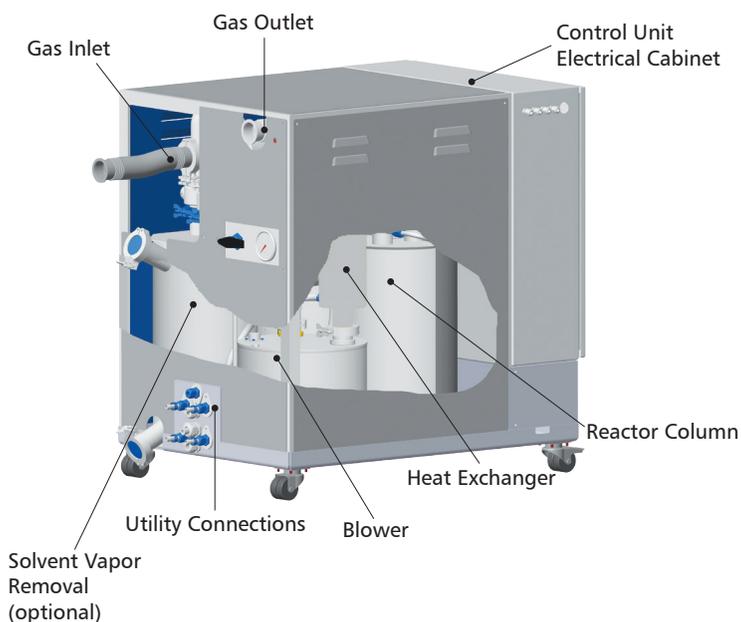
DESCRIPTION

MBRAUN's MB-20-G gas purifier is a mobile inert gas purification system that achieves and maintains ultra-low levels of oxygen and moisture in inert enclosures. Other features of the MB-20-G include a powerful Siemens control unit, multi-color touch panel display, vacuum pump, frequency controlled blower and an open platform so that the purifier can be easily retro-fitted with additional upgrades as it becomes necessary.

An integrated heat exchanger helps to keep the temperature inside the connected inert enclosure at optimal levels. Built on MBRAUN's high quality standards all subcomponents of the MB-20-G are made of stainless steel and are manufactured from distinguished suppliers.

The MB-20-G can also be equipped with an energy saving ECO Mode. This includes an automatic blower speed reduction at night (programmable time), as well as an automatic switch off of the vacuum pump. In ECO Mode operation the box pressure regulation in the range > 2 mbar is done without the vacuum pump.

Together, the MB-20-G purifier with MBRAUN's proprietary oxygen and moisture analyzer probes provide accurate and consistent monitoring of your working gas atmosphere with nearly maintenance free operation.



TECHNICAL DATA

Operation principle	Closed loop recirculation
Attainable purity level	Moisture < 1 ppm, Oxygen < 1 ppm
Max enclosure volume w/o UDF	Up to 5 m ³
Max enclosure volume w/ UDF	Up to 6 m ³
Number of purification lines per purifier	1
Number of reactor columns per line	1
Number of reactor columns per purifier	1
Reactor capacity per purification line*	
(O ₂) Oxygen	36 l
(H ₂ O) Moisture	1350 g
Regeneration	Automatic regeneration sequence
Control unit	Siemens PLC
Display	Large color touch panel
Box pressure control	Automatic pressure control with foot switch (± 15mbar)
Vacuum pump*	Rotary vane pump with 17 m ³ /h (10 CFM)
Blower (50 Hz / 60 Hz)*	Frequency controlled up to 88 m ³ /h
Main and side piping	Stainless steel 1.4301 (SUS 304)
Main and control valves	Electro-pneumatic
Electrical (FLA) (without options)	230 V/50-60 Hz, 6.4 A or 115 V/50-60 Hz, 13 A or 100 V/50-60 Hz, 15 A
Cooling water (optional)	2 bars max., (2-5 l/min)
Regeneration gas	N ₂ /H ₂ mix. or Ar/H ₂ mix. (H ₂ 2-10 %)
Working gas	Nitrogen, Argon or Helium
Size	820 x 600 x 848 mm (LxWxH)
Weight	151 kg (without vacuum pump)
Optional feature	Moisture and oxygen analyzer
Optional feature	ECO Mode
Optional feature	Solvent vapor removal
Optional feature	Regenerable solvent vapor removal
Optional feature	Recirculation chiller for optimal working environment (RCC)
Optional feature	Dry pump upgrade
Optional feature w/ MBRAUN glovebox	Automatic box purge unit
Optional feature w/ MBRAUN glovebox	Antechamber automatic pressure controlled
Optional feature w/ MBRAUN glovebox	Freezer and box cooling

*Technical note: Dependent upon operating conditions.

M. Braun Inertgas-Systeme GmbH (Headquarters)
 Dieselstr. 31 • D-85748 Garching • Germany
 Phone: +49 89 32669-0 • Fax: +49 89 32669-105
 Web: www.mbraun.de
 E-Mail Sales: info@mbraun.de
 E-Mail Service: service@mbraun.de

M. Braun Incorporated
 14 Marin Way • Stratham, NH • 03885 • USA
 Phone: +1 (603) 773 9333 • Fax: +1 (603) 773 0008
 Web: www.mbraunusa.com
 E-Mail Sales: info@mbraunusa.com
 E-Mail Service: service@mbraunusa.com