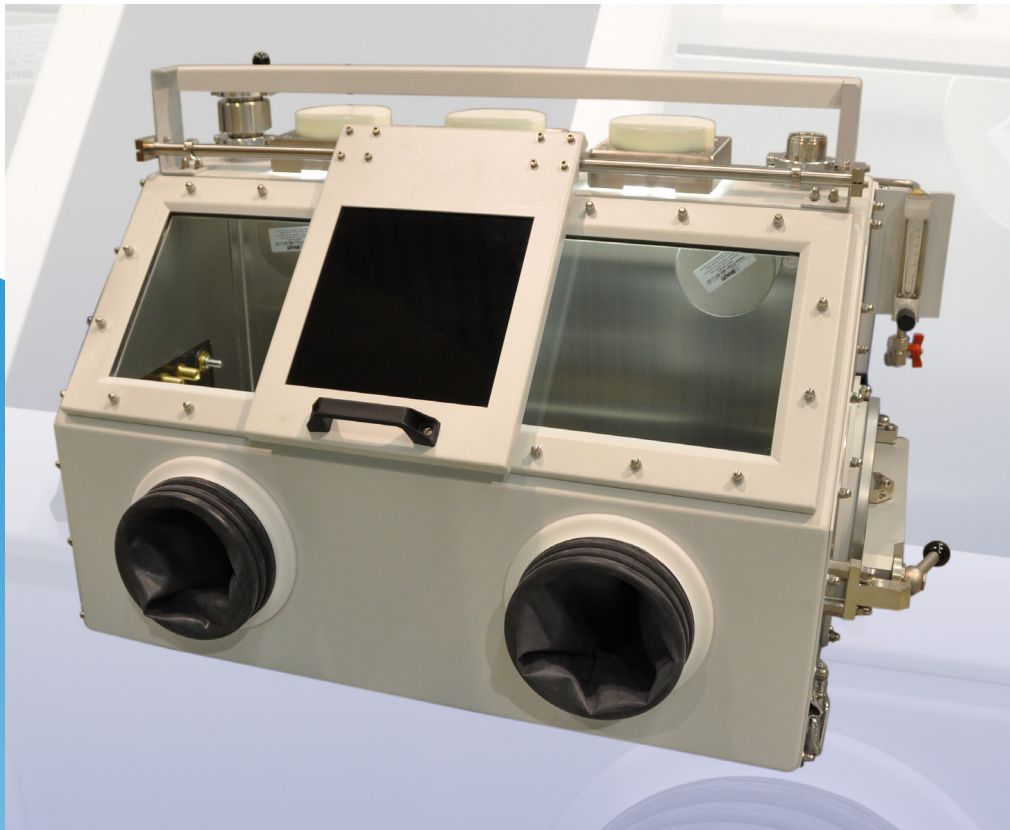


## **MB TIG-1010**

**STAINLESS STEEL TIG WELDING CHAMBER**



**INERTGAS TECHNOLOGY**

- TIG welding in pure argon
- No additional gas protection necessary
- Simple welding of complicated structures
- Low gas consumption
- Easy handling
- Robust and sturdy construction for every day use
- Mobile, can be carried to different work places
- Ready for welding within 10 ppm oxygen in about 10 minutes
- Easy manual operation
- Side door  $\varnothing 250$  mm
- Bench top system

## Basic equipment

- Stainless steel welding chamber with box wide window made of safety glass. No contamination through poly carbonates.
- Fast start up. Oxygen level blow 10ppm within about 10 minutes with a purge flow of 300l/min.
- Gas consumption: About 3m<sup>3</sup> for start up, after that 5 litres per minute are sufficient.
- Welding eye protection window can be moved to desired position. Can be opened for better visibility.
- Side door with a diameter of 250mm
- Lighting (more than 1000Lux) of complete work space for good visibility
- Manual control of purge flow with flow meter for precise adjustment of gas usage
- Standard Butyl rubber gloves for easy handling
- Gas outlet and additional pressure safety valve for safe operation
- Removable, insulated connection board for integration of different feedthroughs for power, gas, water and ground if necessary.
- Standard connection for existing oxygen sensor. No new sensor must be purchased.
- Weight about 60kg equipped with handles.

## Side Wall with Door



- **Manual Door with one hand operation.**
- **Manual shut off valve**
- **Flow regulation with manual flow control in the range from 30 to 300 l/min.**

## Technical Data

### Inside Dimensions:

- Length: 870mm
- Depth: 470mm
- Height front: 280mm
- Height back: 530mm

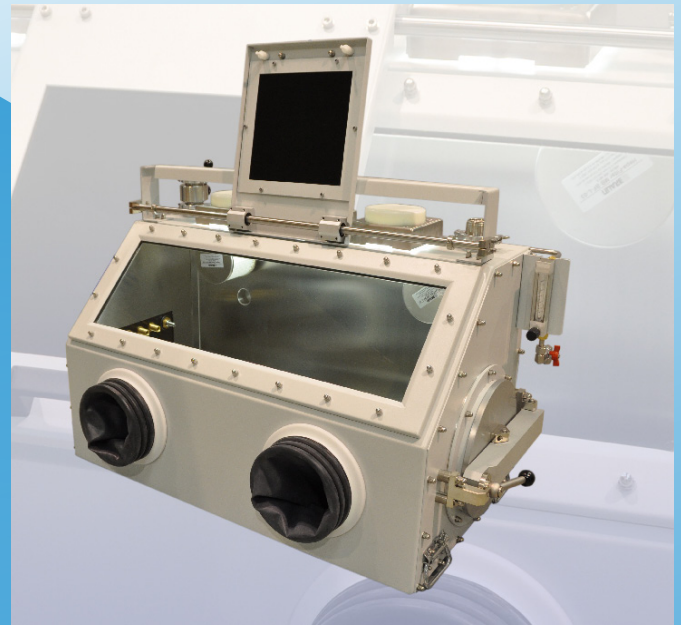
Volume: 190 l

### Dimensions for transport:

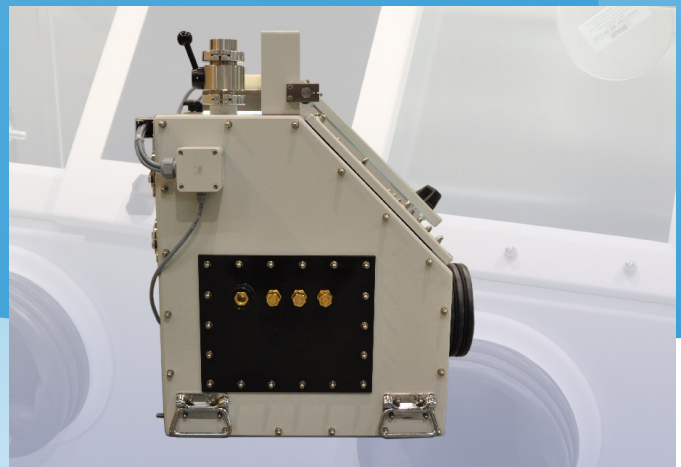
1070 mm (W) x 620 mm (D) x 690 mm (H)

Weight: 60kg

## Weld box with eye protection



## Side Wall with Connection Board



- Connection Board is equipped with standard welding feed throughs like DINSE or bulkhead fittings. Others upon request.
- Board can be removed for integration of additional feedthroughs.

## Easy Operation Explained in 15 Short Steps\*:

1. Plug in the cable for light and turn on light.
2. Connect the gas outlet with an exhaust or put it outside the building.
3. Connect your welding equipment to the connection board on the left side.
4. Connect your oxygen monitor to the back side\*\*.
5. Connect welding argon grade 4.6 or better to the flow meter on the right side.
6. Load welding good through door and close it.
7. Open regulation valve on top left side.
8. Open red regulation valve at flow meter.
9. Start purging with desired flow rate. Regulate flow rate with flow meter. With 300l/min you will reach below 10ppm in about 10 minutes.
10. Get a cup of tea or coffee.
11. Reduce flow rate below 30 l/min.
12. Start welding.
13. When done, turn off gas flow with red regulation valve at flow meter.
14. Open door and take your welding good.
15. Turn off light to safe electric energy!

## Options:

### Purge Antechamber

- Size: Diameter 250mm, length 500mm
- Antechamber with inside and outside door.
- Antechamber can be purged to 10ppm level within 4 minutes.
- For glove box only one time initial purge necessary.
- Only low stand by purge flow required. Resulting in reduced gas consumption.

### MB 10G Gas Purification System

- Standard gas purification for removing oxygen and moisture out of glove box systems.
- After initial setup no argon gas is necessary for maintaining the box atmosphere.
- PLC controlled with operation panel
- Automatic regeneration (filter cleaning)
- High purity in the glove box: oxygen and moisture below 1ppm

\* For details please refer to the user manual.

\*\* If necessary you can order a new oxygen sensor with MBraun.



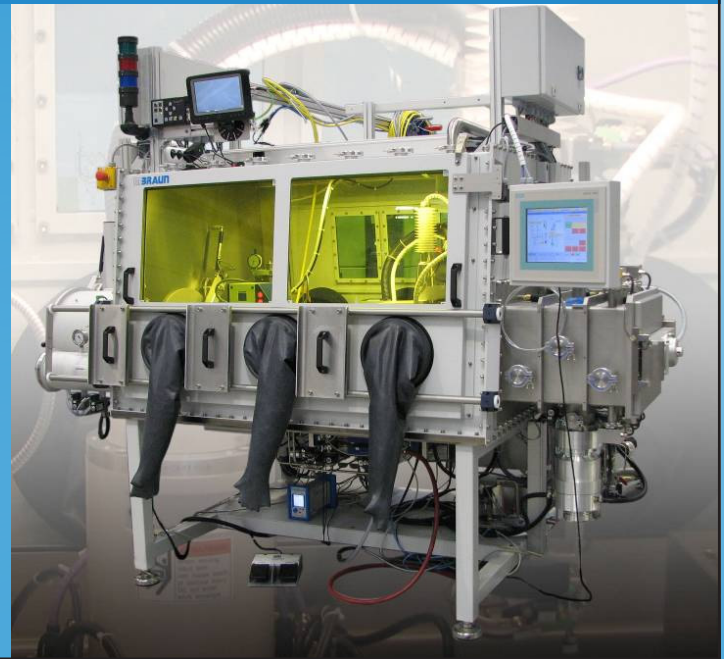
## Tig Welding Applications

- Two workstations for simultaneous TIG welding.
- Specially sized antechambers (800x800x1000mm) for big parts
- High performance vacuum pumps for fast antechamber evacuation
- High performance gas purification O<sub>2</sub> and H<sub>2</sub>O concentration below 1ppm (i.e. argon grade 6.0 or better)
- Rotation table inside the glove box for easy positioning
- Cooling unit in ceiling for convenient work temperature



## Laser Welding Applications

- Integrated laser welding glove box including laser and positioning system
- State of the art solid state laser
- Picture recognition for automated positioning
- Automated robot handling
- Bake out antechamber for drying the products before welding
- Special features for safe laser operation



Please contact MBRAUN for more information