

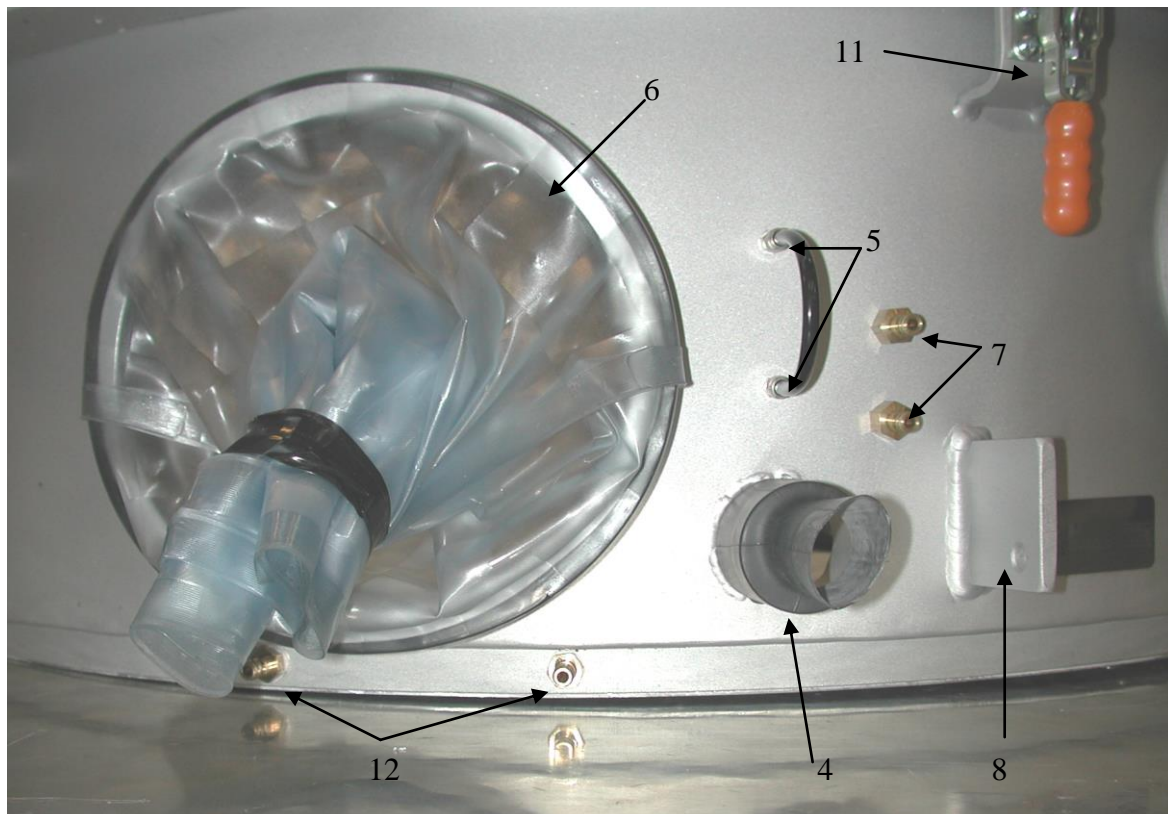
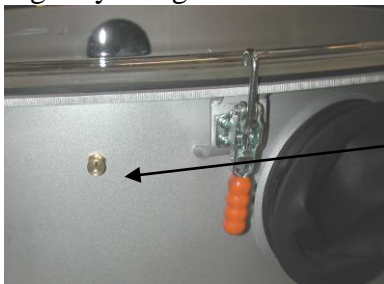
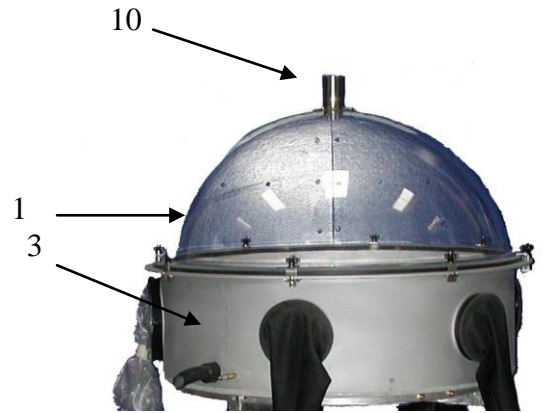
Instruction

WS Argon Chamber



View:

1. Acrylic dome.
2. Ring with two pair of soft welding gloves for extra height.
(Not included, not ill.)
3. WS Argon Chamber, bottom.
4. Input for welding tube.
5. Connection for WS Oxy Integral, in- and output.
6. Plastic hood.
7. Extra gas channels - if needed.
8. Connection for the frame.
9. Input for wolfram electrodes during welding.
10. Vent hole.
11. Hasps.
12. Integral gas channels.
13. When using only one gas bottle.



WS Argon Chamber set up

Pull the welding torch through the rubber tube (4), gas lens and gas cup must be removed first. It is important that a coaxial welding cable is used to prevent oxygen being trapped within sheathing. Arrange the welding hose all the way around inside the chamber to ensure full use of it. The plastic hood (6) must then be taped securely around the welding hose.

The earth connection can be to the frame that the argon chamber is mounted to (if metal) otherwise to (8) on the chamber itself.

When using oxygen measuring equipment the input must be connected at (5). A tube is mounted inside the chamber and the measurement instrument outside. When no measurement equipment is used it is important to connect the two tube ends. (5).

Secure the plastic hood tight with tape as illustrated below.



Place the parts to be welded inside the bottom of the argon chamber. It is important not to cover more holes in the base plate than necessary. Plates can be placed vertically against the inner wall of the chamber. Place the welding wire and electrodes etc. in the chamber. To shorten the purge time a small plate of copper or stainless steel can be inserted to burn off some of the oxygen.

Seal the WS Argon Chamber by placing the dome centrally on the lower half and secure with the hasps.

Attention! Be careful not to over tighten the hasps, this may cause damage to the acrylic dome!

Connecting argon to the WS argon chamber.

It is recommended to purge at 100 l/min. using one or two sources connected to (13). The benefit of using two bottles is that the flow meter does not ice up. Make sure to measure the flow at the point of connection to the chamber, as there is always a drop in pressure from the regulator/flow meter. Always keep argon delivery hoses as short as possible. Connect tubes (12) using a quick coupling link series 21.

The purging time for a WS argon chamber \varnothing 1000mm is around 20-25 min before you reach 25 ppm of oxygen inside the chamber - depending on the size of the parts placed in the chamber. During purging the gloves must be pushed into the chamber several times to squeeze the oxygen out of them to reduce purge time. Increasing the gas flow can also shorten the purge time.

After the initial purge time (20/25 min) the gas flow may be reduced prior to welding to 50-60 l/min.

Avoid quick and sudden movements of gloves. This may allow unwanted oxygen to enter the argon chamber.

Use the big plastic hood when bringing new items into the WS argon chamber. Tighten the plastic hood as close to chamber as possible with one hand, open the other end of the hood and insert the new items, re-close the end of the hood and push the new items into the chamber. This reduces the then tighten the open end of the hood, at the other side of the item. This reduces the amount of unwanted oxygen entering the chamber. Now tie the plastic hood up again and make sure it is airtight.

After finishing welding the WS argon chamber must be rinsed by purging again for approximately 5 min. depending on the volume of oxygen in the chamber.

Important

Always allow the welded pieces to cool below 250°C **before** disconnecting the gas.

Safety

When using the WS Argon chamber in smaller rooms' air circulation is of high importance. Alternatively a ventilation tube fitted to the outlet on the top of the dome must be fitted.