



Okay Energy

**HHO Oxyhydrogen Flame
Quartz Vacuum Sealing System**

Okay Energy Equipment Co.,Ltd

www.okayenergy.com

Okay Energy Equipment Co., Ltd



- ◆ Okay Energy, founded in 2006, 12 years development
- ◆ 18 design & invention patents, over 30 products series
- ◆ ISO 9001 factory, all products passes CE, FCC, SGS and test report

Oxyhydrogen Flame Quartz Vacuum Sealing Solutions for Labs



Okay Energy quartz vacuum sealing system is mainly used for oxygen-free and water-free vacuum-sealed storage of samples. The whole set includes oxyhydrogen generator, oxyhydrogen anti-backfire device, quartz tube vacuum sealing device, vacuum pump (Mechanical pump or molecular pump set), and quartz tube clamps, etc. The standardized and customized precision quartz tube joint/clamps can accurately match with the quartz tube, to ensure the airtightness of the quartz tube.



Vacuum Pump



You can choose **mechanical pump** or **molecular pump set**
to vacuum the quartz tube
according to the vacuum degree requirements.

Quartz tube Vacuum Sealing Device



Quartz tube vacuum sealing device is used for vacuum sealing samples under oxygen-free and water-free conditions by dynamic sealing technology. Quartz tube is vacuumed during auto rotating and inert gas filling at the same time, which is easy to operate, with high vacuum and high sealing efficiency.



Oxyhydrogen Flame Quartz Vacuum Sealing System

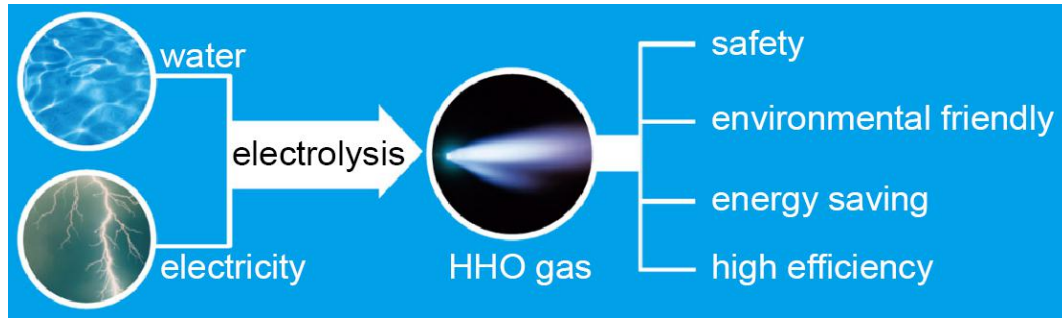
- Quartz tube is vacuumed during rotated, dynamically sealed, evenly heated, and with high sealing efficiency. Easy to operate, safe and reliable;
- Suitable for different diameter and length quartz tube sealing, can be tilted to meet different experimental needs;
- A inert gas filling interface is reserved, which can be controlled separately;
- With digital display to adjust the rotation speed, suitable for quartz tube pull sealing method and quartz plug sealing method;
- Simple operation, compact structure, precise design, small size, economical, and optimal vacuum;
- Built-in powder anti-reflux device prevents the material from being pumped away by the vacuum pump, protecting the vacuum pump;
- Different size quartz tube clamps can be provided to seal different diameter quartz tubes;
- Equipped with vacuum isolation valve for use with glove box;
- Flexible connection to the vacuum pump for seamless connection;
- Single-station, multi-station sealing machine can be provided;



Oxyhydrogen Flame Sealing System



Working Principle



Oxyhydrogen generator uses water as raw material, water molecule (HHO), through electrolysis, decomposes water into oxygen and hydrogen, hydrogen is combustible, oxygen assists combustion, and this two gas ignite to form a oxy-hydrogen flame, which is generally speaking “Water to fire” is a clean and recyclable energy source that can replace acetylene, propane, liquefied gas and other gas.



Advantages

Okay Energy oxyhydrogen generator with **SIX** core technologies:

1.Expllosion-proof and anti-leakage integrated electrolyzer; 2.Dry and wet combined with double-effect flame arrester technology; 3.Front anti backfire oxy-hydrogen flame torch technology; 4.PLC touch screen control system; 5.PMW high efficiency electrolytic power supply technology; 6.Gas flow regulation adaptive system; 7.Cloud service system

Oxyhydrogen Flame Sealing System

Only consume water and electricity with no carbon emission



Replace gas cylinders(oxyacetylene)



Features

Only consume water and electricity,
no need gas cylinders

Flame focused, with high temperature
of 2800°

Clean gas, Non-toxic and odorless

Used by demand, with no gas storage

Over-pressure protection, automatically
anti backfire

Advantages of Oxyhydrogen Flame Sealing System

14 models,
Min. gas output 100L/H,
Max. gas output 20000L/H

Gas production is adjustable, with water lack alarm, over-pressure and over-temperature protection, and without gas storage features

Model selection according to quartz tube diameter and wall thickness



A variety of flame torches and nozzles are available, showing different flame states

Large PLC touch screen control system, simple operation

Electronic Flame Arrestor, Pressure Regulator, Electronic Igniter, and Smart Flame Regulator are optional to meet different flame requirements

Oxyhydrogen Flame Quartz Vacuum Sealing system



OH100-OH600



OH800-OH1000

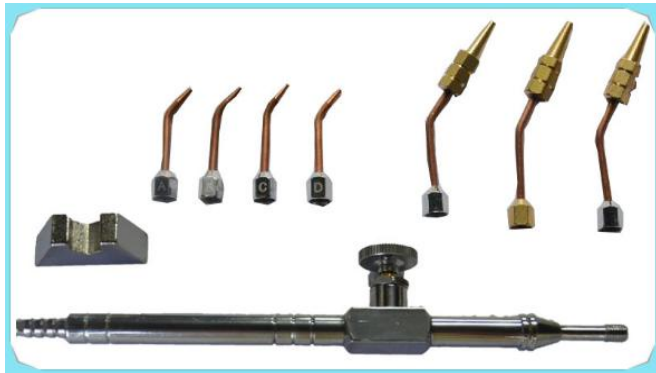


OH2000-OH3000

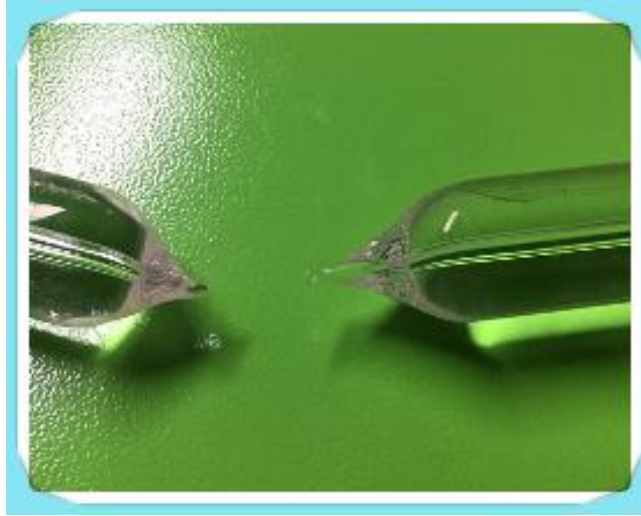


OH5500-OH20000

Oxyhydrogen torch and nozzles



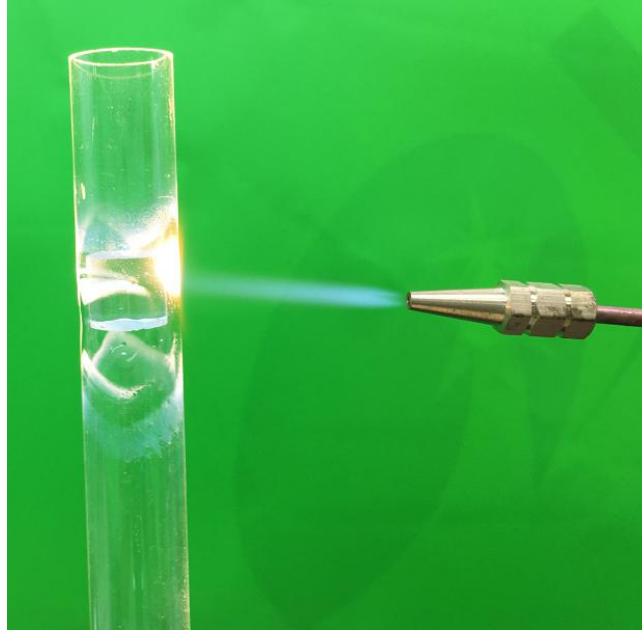
Sealing picture



Step 1: Heat and soften the quartz glass, and pull it into a “8” shape.

Step 2: After vacuum, finish the sealing.

Quartz Plug inside (solid quartz column) sealing effects

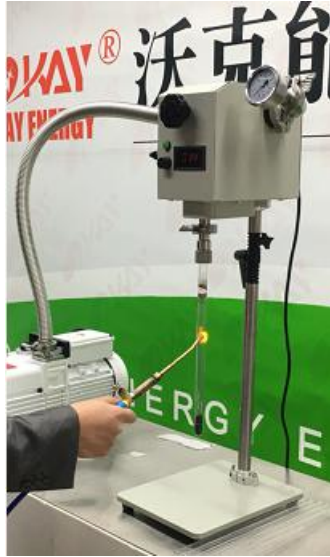


Step1: Burn 3-4 pits on the wall of the quartz tube

Step2: Add the material, plug in and vacuum

Step3: Reaching to vacuum degree, sealing the plug with quartz tube wall.
Finish the sealing.

TWO sealing methods (suitable for Pull sealing and Plug sealing)



Automatic rotary sealing: oxyhydrogen generator with quartz tube sealing machine to complete the sealing, vacuuming, gas filling at a time.



Manual sealing: First, put the material into the tube; Second, use the oxyhydrogen flame to pull the quartz tube into "8" shape; Finally, do vacuum. After reaching the required vacuum degree, use oxyhydrogen flame to seal "8" shape.

Large diameter quartz tube sealing system



- The system consists of sealing lathe and oxyhydrogen flame sealer
- The sealing lathe is suitable for pull sealing and plug sealing
- Can seal quartz tube within 100mm diameter
- The quartz tube rotates concentrically, and the rotation speed can be adjusted and digitally displayed
- Both left and right chucks can be set and move
- Customized solution is welcome

Customers' Case



Jordan University of Science and Technology

جامعة العلوم والتكنولوجيا الأردنية



Customers' Case





Welcome contact us if you have any
other demand!

Okay energy equipment Co.,Ltd.