

# Oxy-hydrogen Generator

---From Okay Energy

OH100-OH600



OH1500



OH3000



OH5500



OH7500



OH10000



# 1. What is oxy-hydrogen generator

Oxy-hydrogen Generator is also called Brown Gas Generator or HHO Gas Generator, it separates water ( $H_2O$ ) into mixed hydrogen and oxygen. The mixed Oxygen and Hydrogen gas has a wide range of applications, such as heating, welding, cutting, polishing, boiler combustion supporting etc. to replace LPG or other fuels in many industries. When burned, this gas only produces water and has no pollutants, and it can burn 100%. It's a new energy in 21<sup>st</sup> century.

## 2. Why I use oxy-hydrogen generator?

### 2.1 Maximum Safety

- a. Steady, reliable fuel delivery. Fuel is available immediately after machine is switched on. No volatile fuel tanks which can rupture or explode.
- b. Multiple safety devices, including overheating and in-sufficient water cut-off switches, will automatically turn off power to ensure the safety of both equipment and user.

### 2.2 Environmentally Friendly

- a. The Fuel generated by our machines burns completely without creating pollutants, toxic fumes, or public nuisance.
- b. Does not generate hydrocarbons, carbon monoxide, or carbon dioxide.

### **2.3 High Mobility**

- a. Our generators are equipped with wheels for easy moving the generators to do the job.
- b. Our generator immediately can generate fuel as soon as you need it, no need of gas tank.
- c. Fuel can be used for continuous working for long time.

### **2.4 High Temperature & Calorific value**

- a. Calorific value is 34000Kcal/kg
- b. The flame temperature is over 2800°, it can melt refractory metals and non-metals

### **2.5 Low Cost & Maximum Economy**

- a. Fuel is generated using only electricity and clean soft water.
- b. Both economical and practical when compared to the currently used LPG, Propane, or acetylene.

### **2.6 Low Heat Dispersal**

Use of this fuel provides a more focused heat source with less heat loss, maintaining a more comfortable, safer, lower fatigue working environment.

## **3. Application Range**

### **3.1 Jewelry Industry:**

- a. For welding kinds of chain and string made of platinum, gold, silver, copper, stainless steel, etc.
- b. For mending tiny sand holes on jewelry casting
- c. For jewelry repairing (reforming, casting, welding)

### **3.2 Electronic Industry:**

For welding enameled wire, welding LED wafer, flame-treating circuit board.

### **3.3 Medical Industry:**

- a. For welding metal fittings and mending sand holes in dentistry
- b. No-carbon flame disinfection or glass sealing

### **3.4 Laboratory:**

Providing convenient, safe and clean oxyhydrogen flame

### **3.5 Organic Glass Industry:**

Quick and fine polishing for acrylic (organic glass), solving problems that grinding wheel cannot achieve.

### **3.6 Boiler Combustion Supporting:**

Because oxyhydrogen gas can burn completely and has the characteristic of catalysis, so it can help the fuel in boiler burned totally, to save fuel for boiler.

### **3.7 Other metal welding and melting etc.**

## 4. About Okay Energy Technology

Okay Energy Co., Ltd specializes in research, manufacturing oxy-hydrogen generator, owned many patents.

### 1) Patented Integration of Water Electrolysis Cell Forming

Our electrolysis cell Integration is used in Large Module in order to make sure no Leakage, Explosion-proof, and Long Life Cycle.

### 2) Patented Electrolysis Power Supply based SCM

Our Power Supply is special designed for Electrolysis.

For example:

2.1 Constant current control by temperature feedback control

2.2 Current adjusted by user to meet the constant flux  
of oxy-hydrogen gas

2.3 Efficient energy conversion (AC TO DC) based IGBT

2.4 Special cooling design for working 24 hours continues.

### 3) Patented Multi-layer ANTI-FIRE Water Seal Technology

Water Seal Device is important unit of oxy-hydrogen generator, this unit is designed for backfire-proof, It works 100% ok.

### 4) Automatic Water Level Detection Technology

We design by ourselves, it used for detect the water level of the electrolysis cell and water -deposit tank. When water is too low, the alert lamp is light. When water is lowest, the power supply switches off to proof the oxy-hydrogen generator.

## 5) Water Automatic Replenishment Technology

When water of the electrolysis cell is too low, the system will auto pump water from water-deposit tank.



## 6) High-efficiency Gas Water Separator Technology

This Technology is used to separate the water from gas in order to ensure the gas is pure. If the oxy-hydrogen gas has some water even little, the temperature of the oxy-hydrogen flame will become lower.

## 7) Electrolyte -Automatic Cycle Technology

We used static way to realize Electrolyte Cycle, don't used pump because the pump is a mechanic unit that is easily damaged.

# 5. Technical Specifications

Model Number	OH100	OH200
		
AC Voltage Requirement (V)	220,Single phase	220,Single phase
Power Consumption (kW/h)	0.4	0.8
Max Gas Output(L/h)	100	200
Max. Working Pressure (kg/cm2)	1.3	1.9
Max. Water Consumption (L/h)	0.05	0.11
Water Feed	manual	manual
Dimensions - L*W*H (mm)	435*308*540	485*300*540
Gross Weight (kg)	15	20

<b>Model Number</b>	<b>OH300</b> 	<b>OH400</b> 
	<b>AC Voltage Requirement (V)</b>	<b>220,Single phase</b>
	<b>Power Consumption (kW/h)</b>	<b>1.2</b>
	<b>Max Gas Output(L/h)</b>	<b>300</b>
	<b>Max. Working Pressure (kg/cm2)</b>	<b>1.3</b>
	<b>Max. Water Consumption (L/h)</b>	<b>0.17</b>
	<b>Water Feed</b>	<b>manual</b>
	<b>Dimensions - L*W*H (mm)</b>	<b>640*245*550</b>
<b>Model Number</b>	<b>OH600</b> 	<b>OH1500</b> 
	<b>AC Voltage Requirement (V)</b>	<b>220,Single phase</b>
	<b>Power Consumption (kW/h)</b>	<b>2.5</b>
	<b>Max Gas Output(L/h)</b>	<b>650</b>
	<b>Max. Working Pressure (kg/cm2)</b>	<b>1.3</b>
	<b>Max. Water Consumption (L/h)</b>	<b>0.33</b>
	<b>Water Feed</b>	<b>manual</b>
	<b>Dimensions - L*W*H (mm)</b>	<b>1050*300*540</b>
	<b>Gross Weight (kg)</b>	<b>25</b>
	<b>Gross Weight (kg)</b>	<b>32</b>
	<b>AC Voltage Requirement (V)</b>	<b>380,three phase</b>
	<b>Power Consumption (kW/h)</b>	<b>4.5</b>
	<b>Max Gas Output(L/h)</b>	<b>1500</b>
	<b>Max. Working Pressure (kg/cm2)</b>	<b>1.9</b>
	<b>Max. Water Consumption (L/h)</b>	<b>0.9</b>
	<b>Water Feed</b>	<b>manual</b>
	<b>Dimensions - L*W*H (mm)</b>	<b>1200*800*1200</b>
	<b>Gross Weight (kg)</b>	<b>200</b>

<b>Model Number</b>	<b>OH3000</b> 	<b>OH5500</b> 
	<b>AC Voltage Requirement (V)</b>	<b>380,three phase</b>
<b>Power Consumption (kW/h)</b>	<b>9</b>	<b>17</b>
<b>Max Gas Output(L/h)</b>	<b>2700</b>	<b>5000</b>
<b>Max. Working Pressure (kg/cm2)</b>	<b>1.9</b>	<b>1.9</b>
<b>Max. Water Consumption (L/h)</b>	<b>1.8</b>	<b>2.8</b>
<b>Water Feed</b>	<b>auto</b>	<b>auto</b>
<b>Dimensions - L*W*H (mm)</b>	<b>1300*800*1300</b>	<b>1500*800*1450</b>
<b>Gross Weight (kg)</b>	<b>330</b>	<b>396</b>
<b>Model Number</b>	<b>OH7500</b> 	<b>OH10000</b> 
	<b>AC Voltage Requirement (V)</b>	<b>380,three phase</b>
<b>Power Consumption (kW/h)</b>	<b>23</b>	<b>31</b>
<b>Max Gas Output(L/h)</b>	<b>7200</b>	<b>10000</b>
<b>Max. Working Pressure (kg/cm2)</b>	<b>1.9</b>	<b>1.9</b>
<b>Max. Water Consumption (L/h)</b>	<b>4</b>	<b>5.6</b>
<b>Water Feed</b>	<b>auto</b>	<b>auto</b>
<b>Dimensions - L*W*H (mm)</b>	<b>1650*800*1500</b>	<b>1520*900*1490</b>
<b>Gross Weight (kg)</b>	<b>552</b>	<b>610</b>

*10 Models in total for choosing, if you need other model, we can customize it according to your requirement.*

Shenzhen BCTC Technology Co., Ltd.  
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## Certificate of Compliance

**Client:** **Key Energy Equipment Co., Ltd.**  
No.27, Wenzhou Road, National High-Tech Industry Development Zone, Changsha, China

**Manufacturer:** **Key Energy Equipment Co., Ltd.**  
No.27, Wenzhou Road, National High-Tech Industry Development Zone, Changsha, China

**Product:** **Car Engine Carbon Cleaning System (Oxy-hydrogen Generator, Water-Welding Machine, HHO Generator)**

**Trademark:** **KEY ENERGY**

**Model:** **CCS1500  
CCS1500, CCS2300, CCS3300, CCS400, CCS800, CCS1000, CCS3000, CCS5000, CCS7500, CCS9000, CH1500, CH2000, CH3000, CH4000, CH5000, CH7500, CH9000, CH10000, CH15000**

**Test Report TCF:** **TEST013M1001-1**

The EUD described above has been found in compliance with the requirements of the EC EMC Directive 2004/108/EC and LVD Directive 2006/95/EC with amendments.

**Test Standard:** **EN 12100: 2010  
EN 60204-1: 2000+A2: 2010**

**Remarks:**  
The statement is based on a single evaluation of one sample of above mentioned products. It does not imply an assessment of the whole production. The manufacturer should ensure that all production in series production are in conformity with the product sample declared in the report.



Nov. 21, 2013

The certificate of conformity is based on a single evaluation of the submitted sample(s) of the above mentioned product. It does not imply an assessment of the whole product and relevant. Directives have to be observed.

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**Test Standard:** **EN 50422: 2010  
EN 61000-6-1: 2009+A12: 2009+A12: 2009+A13: 2008  
EN 50424: 2010  
EN 61000-6-2: 2009  
EN 61000-6-3: 2005+A12: 2009+A12: 2008  
EN 10100-4-1: 2012, EN 10100-4-4: 2008  
EN 10100-4-6: 2009, EN 10100-4-8: 2009  
EN 10100-4-11: 2004**

The EUD described above has been found in compliance with the EMC Directive 2004/108/EC. It is possible to issue CE marking to demonstrate the compliance with this EMC Directive. It is only valid in connection with the test report number: BCTC-13115101



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**Test Standard:** **EN 50950-1: 2006+A1: 2009+A1: 2010+A12: 2011+A12: 2011**

The EUD described above has been tested by us with the listed standards and found in compliance with the LVD Directive 2006/95/EC. It is possible to issue CE marking to demonstrate the compliance with this LVD Directive. It is only valid in connection with the test report number: BCTC-13115175.



Nov. 21, 2013

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***Okay Energy Equipment Co.,Ltd***