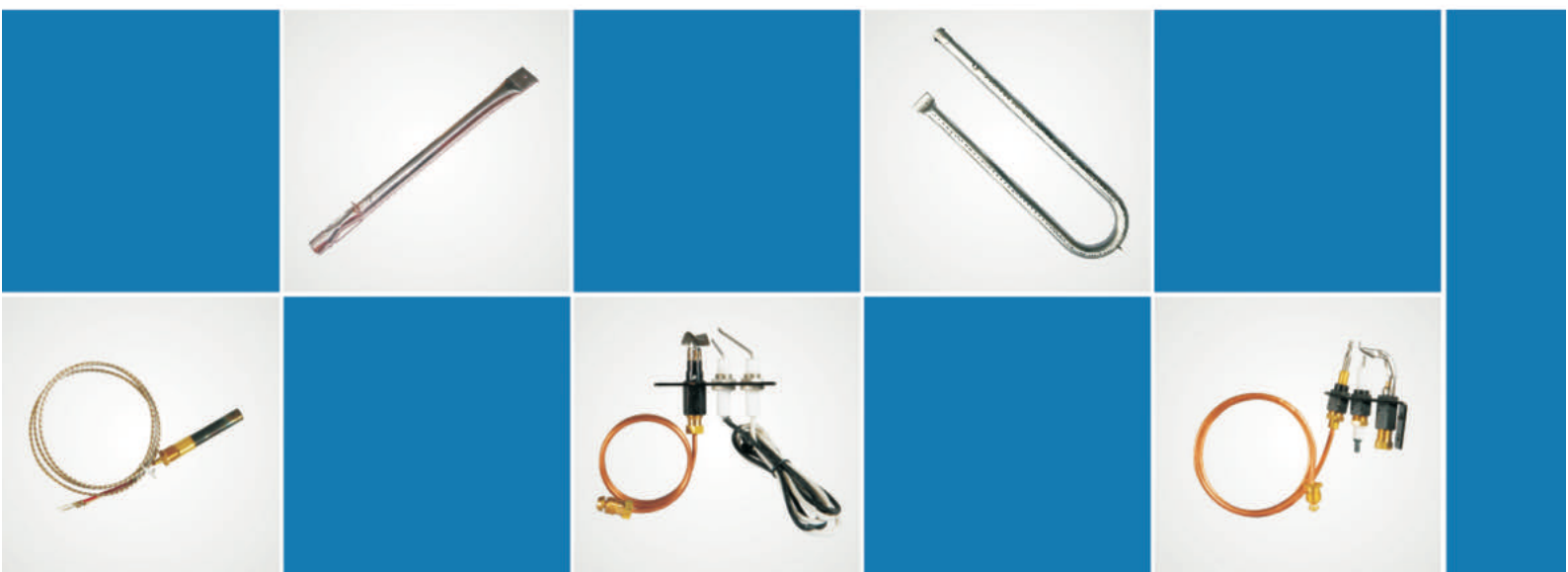




*Be Your Professional Supplier for*



**GAS BURNER • PILOT BURNER • ODS • THERMOCOUPLE  
ELECTRODE • IGNITOR AND NOZZLE**

CHANGXING BENNENG GAS APPLIANCE CO.,LTD



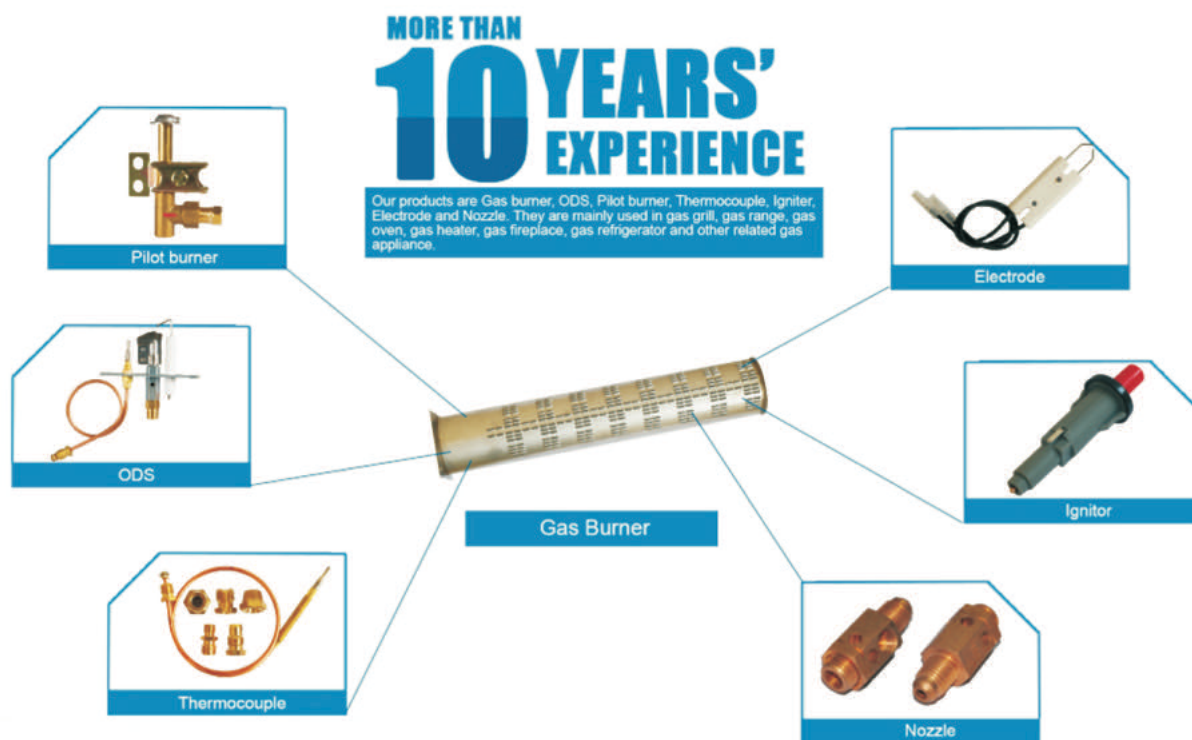
## Company Profile ▶▶

Changxing Benneng Gas Appliance Co., Ltd is specialized in designing and manufacturing of gas appliance accessories, including Safety Combustion System and Safety Ignition System.

Our products are Gas burner, ODS, Pilot burner, Thermocouple, Igniter, Electrode and Nozzle. They are mainly used in gas grill, gas range, gas oven, gas heater, gas fireplace, gas refrigerator and other related gas appliance.

The plant covers an area of 12 thousand square meters and has a number of highly qualified staff. We are good at exploring and design new models for customers to meet their special specification requirements. Since we have been designing and owning production experience for several years, now our products are exported to many countries.

# Customization, Design, Manufacture



## GAS BURNER

Gas burner is a device to generate a flame to heat up products using a gaseous fuel such as acetylene, natural gas or propane. Some burners have an air inlet to mix the fuel gas with air to make a complete combustion. Acetylene is commonly used in combination with oxygen.

It has many applications such as soldering, brazing and welding, the latter using oxygen instead of air for getting a hotter flame which is required for melting steel. For laboratory uses a natural gas fired Bunsen burner is used. For melting metals with melting points of up to 1100 °C such as copper, silver and gold a propane burner with natural drag of air can be used.

• B5501



• B5502



• B5503



• B5504



• B5505



• B5506



• B5507



• B5508



• B5509





# GAS BURNER

• B5510



• B5511



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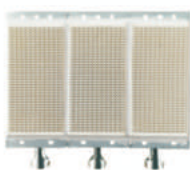
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• B5515



• B5516



• B5517



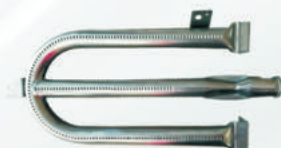
• B5518



• B5519



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• B5521



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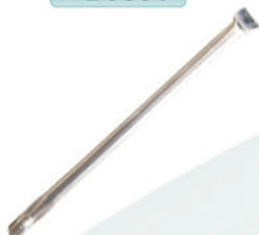
• B5529



• B5530



• B5531



• B5532



• B5533



# GAS BURNER

• B5534



• B5535



• B5536



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• B5538



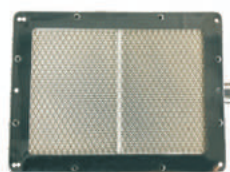
• B5539



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## PILOT BURNER

Pilot Burner is used as ignition system in various gas appliances. There are mainly two types, thermoelectric type safety device and ion-detection safety device.

●Thermoelectric type safety device: It is assembled by thermocouple, pilot and electrode.

Main function: To ignite the main burner without deflagration, to stabilize the flame of main burner, and to cut off the energy source when the flame is put out by external factors.

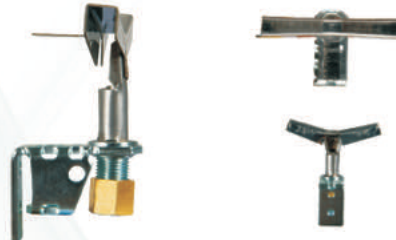
●Ion-detection safety device: It is assembled by pilot, detection electrode and ignition electrode.

Main function: To ignite the main burner without deflagration, to stabilize the flame of main burner, to detect flame normality, and to reignite or cut off the energy source when the flame is put out by external factors.

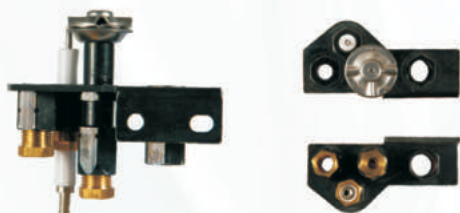
● B880201



● B880202



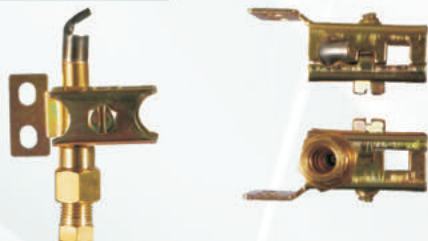
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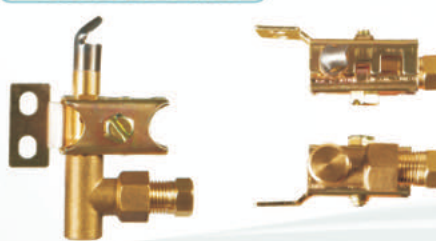
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● B880205-1SN



● B880205-1SNS



● B880205-1STD



● B880205-2SN



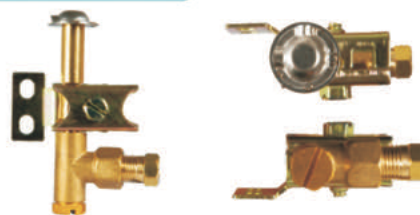


# PILOT BURNER

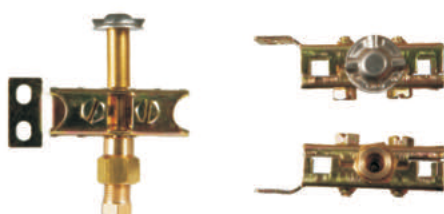
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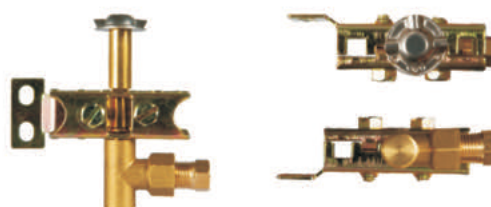
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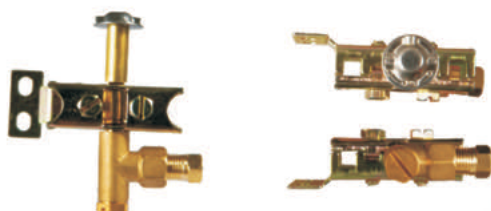
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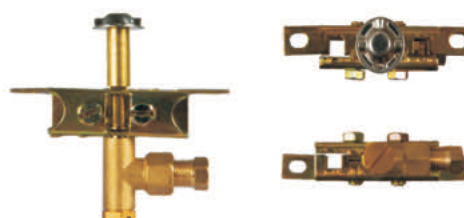
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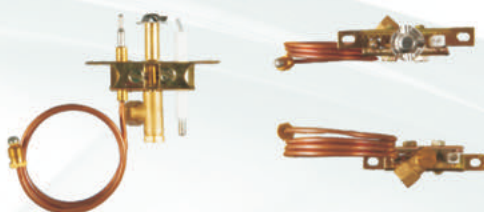
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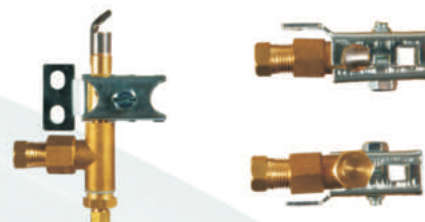
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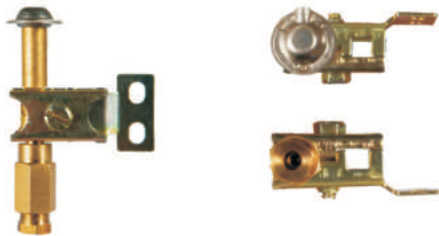
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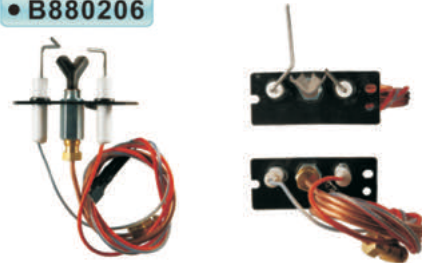
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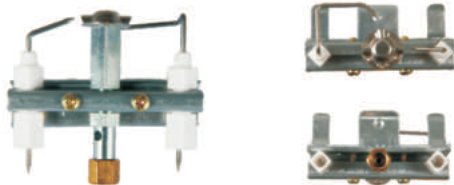
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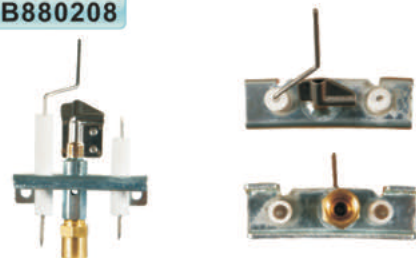
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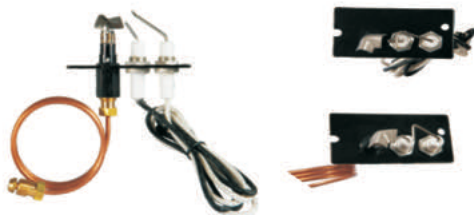
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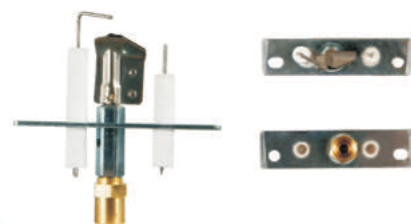
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• B880209



• B880210



• B880211



• B880211A-1



# PILOT BURNER

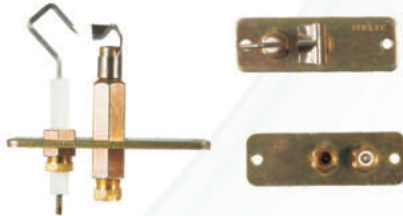
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• B880213



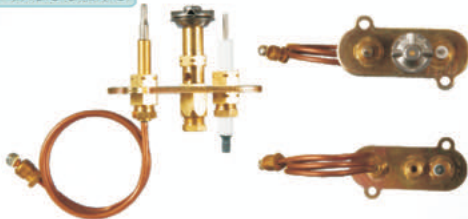
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• B880215



• B880216



• B880217



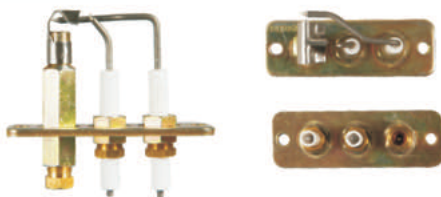
• B880218



• B880219



• B880220



• B880202A



• B880202B



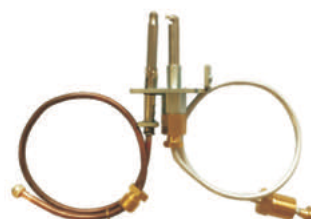
• B880221



• B880222



• B880223



• B880224



• B880225





# PILOT BURNER

•B880226



•B880227



•B880228



•B880229



•B880230



•B880231



•B880232



•B880233



•B880234



•B880235



•B880236



•B880237



**•B6601****•B6602****•B6603****•B6604****•B6605****•B6606****•B6607****•B6608**

# Other Fittings

• B6609



• B6610



• B6611



• B6612



• B6613



• B6614



• B6615



• B6616

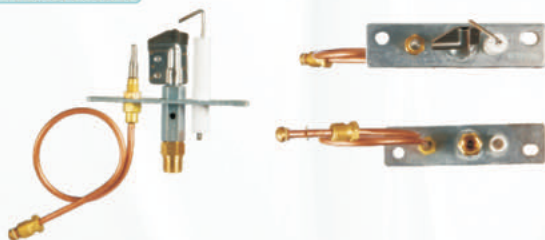


## ODS

Oxygen Depletion System is called ODS for short. When gas appliance is working in a unvented space for some time, the oxygen is involved in chemical reaction and produced  $\text{CO}_2$  and  $\text{H}_2\text{O}$  during combustion. In this case, the oxygen content in this unvented space is decreasing while  $\text{CO}_2$  content is increasing. People will feel uncomfortable when oxygen content arrives the level 16% ~ 17% or higher. It will even cause toxicosis when  $\text{CO}_2$  content arrives the level 4% or higher.

While Oxygen Depletion System can avoid above dangers and promise safe operation in unvented space. It will cut off the energy source so that gas appliance stop working to assure personal safety once oxygen content arrives the level 18.5% ~ 19.5% and  $\text{CO}_2$  content arrives the level 0.8% ~ 1.5%.

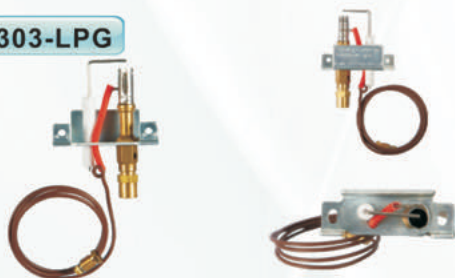
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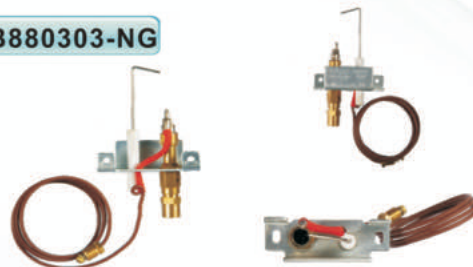
• B880302



• B880303-LPG



• B880303-NG



• B880304

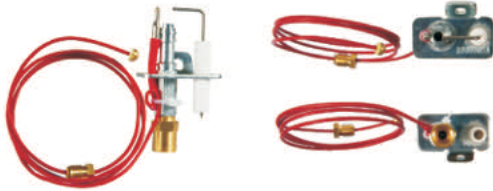


• B880305





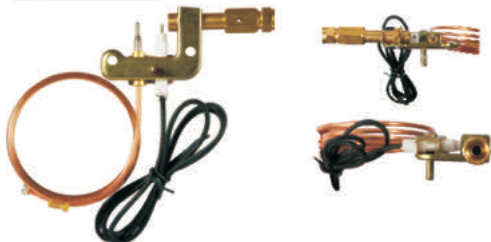
• B880305A



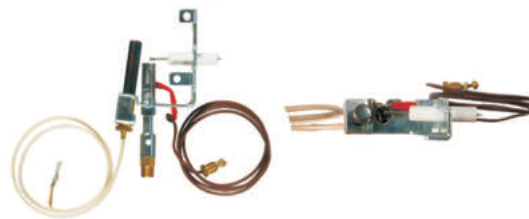
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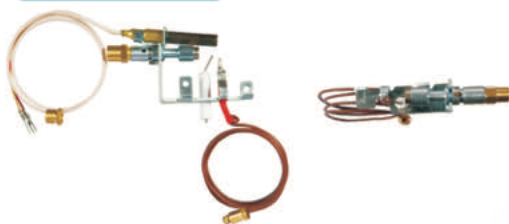
• B880307



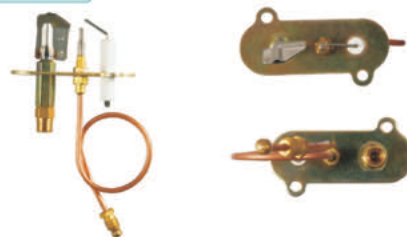
• B880308-LPG



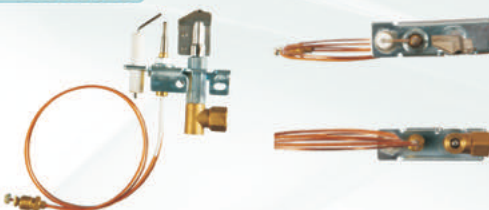
• B880308-NG



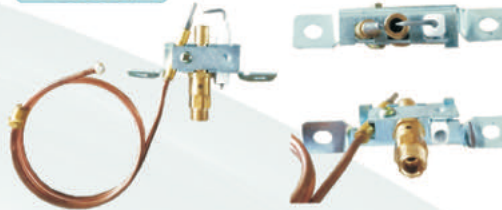
• B880309



• B880310



• B880311



## THERMOCOUPLE

Thermocouple is an electrical device consisting of two different conductors forming electrical junctions at differing temperatures. A thermocouple produces a temperature-dependent voltage as a result of the thermoelectric effect, and this voltage can be interpreted to measure temperature. Thermocouples are a widely used type of temperature sensor.

Commercial thermocouples are inexpensive, interchangeable, are supplied with standard connectors, and can measure a wide range of temperatures. In contrast to most other methods of temperature measurement, thermocouples are self powered and require no external form of excitation. The main limitation with thermocouples is accuracy; system errors of less than one degree Celsius ( $^{\circ}\text{C}$ ) can be difficult to achieve.

Thermocouples are widely used in science and industry; applications include temperature measurement for kilns, gas turbine exhaust, diesel engines, and other industrial processes. Thermocouples are also used in homes, offices and businesses as the temperature sensors in thermostats, and also as flame sensors in safety devices for gas-powered major appliances.

• B2201



• B2201A



• B2202



• B2203



• B2204



• B2205



• B2206



• B2207



• B2208



# THERMOCOUPLE

• B2209



• B2210



• B2211



• B2212



• B2213



• B2214



• B2215



• B2216



• B2217



• B2218



• B2219



• B2220





## ELECTRODE

Electrode is made up of ceramic body, electrode pin, with or without cable, bracket and terminals.

Ceramic body: 95 % Aluminum, Steatite with glazed or no glazed layer

Electrode pin: OCR25AL5, SUS310, SUS304

Cable: UL1332, UL1911, UL3573, UL3257

Bracket: SPCC, SUS304

Terminals: Various quick connect terminals are available

Advantage: Long life, Anti-high temperature, Corrosion resistance

Application: Gas cooker, Water heater, Gas oven, Gas boiler, Andiron, BBQ

• B4401



• B4402



• B4403



• B4404



• B4405



• B4406



• B4407



• B4408



• B4409



• B4410



• B4411



• B4412





• B4413



• B4414



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• B4425



• B4426



• B4427



## IGNITOR

Piezo ignitor uses the piezoelectric effect of the piezoelectric ceramic to generate high voltage ignition and ignite flammable gases. It can be used for a variety of gas appliances, such as gas stoves, gas heaters, gas water heaters, gas refrigerators.

• B3301



• B3302



• B3303



• B3304



• B3305



• B3306



• B3307



• B3308



• B3309



• B3310



• B3311



• B3312



• B3313



# Nozzle & Injector

• B3314



• B3315



• B3316



• B3317



• B3318



• B3319



• B3320



• B3321



• B3322



• B3323



• B3324



• B3325



• B3326



• B3327



• B3328



• B3329



## Nozzle & Injector

Nozzle is an essential part for gas appliance. Its main function is adjusting the gas flowrate, which directly effect the working condition of burning.

Nozzles are of two types: convergent and divergent.

The convergent-divergent Nozzles are therefore used to accelerate the fluid which is choked to supersonic speeds in the convergent sections. This process is considered to be more efficient than making the convergent Nozzle to expand externally. The Nozzles are of different types and are commonly round tubes used to perform different functions.

The material is copper, brass, stainless steel and aluminized steel. Covered area and spraying effect can be adjusted, it can be adjusted to the artificial fog, flat fog effect, simple atomizing effect, which require a low water pressure with far range.

• B1101



• B1102



• B1103



• B1104



• B1105



• B1106



• B1107



• B1108



• B1109





# Nozzle & Injector

• B1110



• B1111



• B1112



• B1113



• B1114



• B1115



• B1116



• B1117



• B1118



• B1119



• B1120



• B1121



• B1122



# One Stop Solutions



## OUR CERTIFICATE

Through great effort by all the staff, we have attained ISO9001 quality system and CE certifications. Being good in quality and low in price, we have expanded to some foreign markets, such as America and Europe.





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