Phone:86-371-56520102
Email:sales@cnboilersolution.com
Web:www.cnboilersolution.com

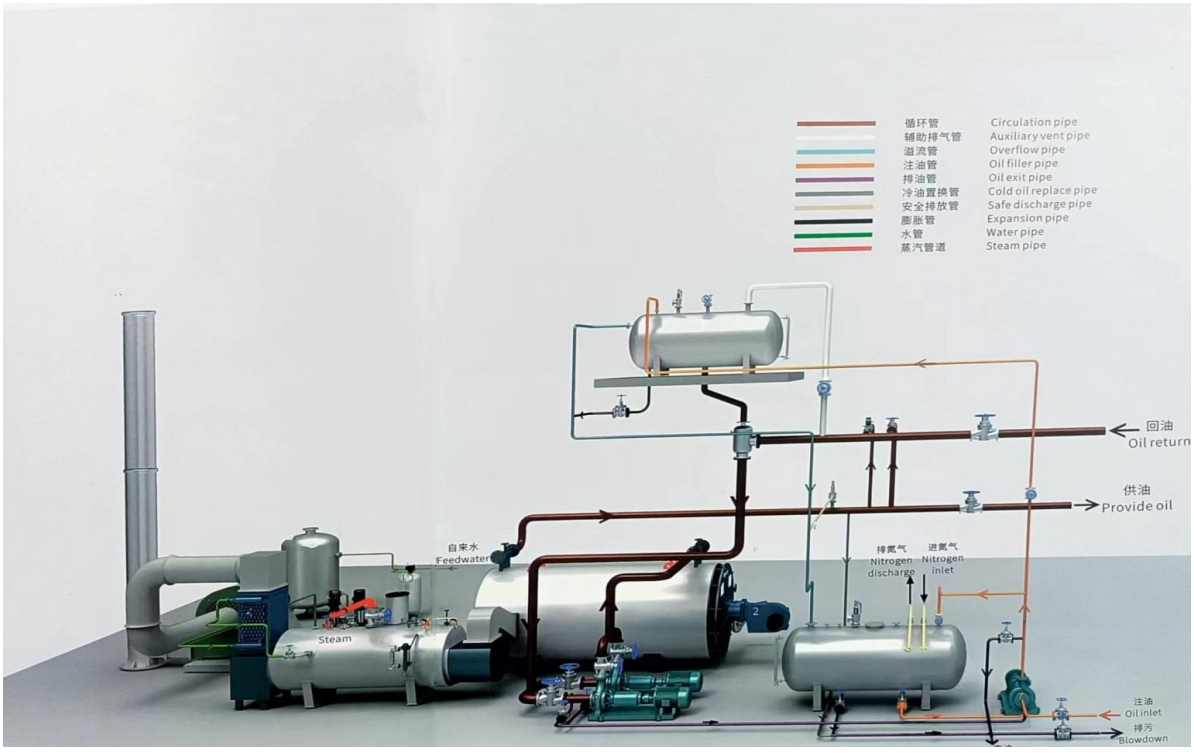
Gas Oil Fired Hot Oil Boiler

Overview of the Gas Oil Fired Hot Oil Boiler

The gas oil fired hot oil boiler adopts a three-pass circular coil structure, and the end of the coil adopts a shrinking coil, which effectively protects the furnace wall at the end of the boiler. It is equipped with an advanced combustion device, and the boiler operation is fully automated. The boiler heating surface includes four parts: furnace radiation heating surface, first convection tube bundle heating surface, second convection tube bundle heating surface, and economizer (waste heat boiler).

The Hot Oil Boiler System Composition

The hot oil boiler consists of a boiler main body, a control system, and auxiliary equipment.



The Hot Oil Boiler Main Body Technical Features

Phone:86-371-56520102
Email:sales@cnboilersolution.com
Web:www.cnboilersolution.com

★ The hot oil boiler is a special boiler developed based on the design logic of forced circulation; the boiler work with low working pressure to supply high temperature, so it is high safety performance and long service life.

★ Closed cycle heating, closed or open cycle system can be used according to actual needs, heat energy is transported, heat loss is small, energy saving effect is remarkable, and environmental protection effect is good.

★ The boiler adopts a multi-circuit coil design, which has the advantages of strong safety, sufficient heating surface, and high thermal efficiency.

★ The counter-current heat exchange process is adopted, which has well heat transfer effect.

★ The temperature difference between the boiler outlet flue and the heat transfer oil outlet can be controlled at about 30°C. With the boiler tail waste heat recovery system, the boiler exhaust gas temperature can be less than 170°C.

★ Using high-temperature hot oil, the oil outlet temperature of the liquid phase boiler can reach 350°C, and the oil gas temperature of the gas phase boiler can reach 450°C.

★ A variety of energy-saving devices at the end of the boiler are available for selection, using the boiler tail flue gas to generate steam, hot water, hot air, and other heating media to achieve high boiler efficiency.

The Hot Oil Boiler Control System

According to the customer's demand for thermal power, temperature, pressure and equipment configuration, the hot oil boiler control system is developed and designed to achieve the purpose of monitoring the parameters and status of the boiler,and realize the intelligent of boiler control.

Phone:86-371-56520102
Email:sales@cnboilersolution.com
Web:www.cnboilersolution.com

Hot Oil Boiler Control System Functions

1). Main Control: liquid level control of boiler, water tank, and oil tank; thermal oil pressure control; boiler system pressure control; temperature control, etc.Manual/automatic control of burners, pump valves, and other equipment, master, and backup switching.Water pump start and delay shutdown, water pump running status detection, and burner interlock.
2). Anti-freezing Functions: Make the boiler run safely and stably at night when unattended, and make the system work in an energy-saving state to prevent the pipeline from freezing.
3). Self-inspection Functions of the control system: continuous inspection.To alarm and interlock protection when abnormal.
4). It collects, records, saves, and manages important information and data functions.

Hot Oil Boiler Auxiliary Equipment

The heat medium oil system consists of boiler body, expansion tank, oil storage tank, circulating oil pump, oil injection pump, oil and gas separator and other equipment and oil pipelines.

Phone:86-371-56520102
Email:sales@cnboilersolution.com
Web:www.cnboilersolution.com

1) Burner

We can equip with different burner according to boiler parameter,fuel,Many burner brands meet different customers requirement.For natural gas fuel, we configure Riello, and for oil, we configure Baltur.

The burner brand: Baltur, Riello, Weishaupt, Hofamat, Honeywell, Ecoflam, Cavallo and so on.

The burner is equipped with a microelectronic control box, which can provide burner operating status and diagnosis of fault causes.

The improvement of the performance of the fan and the combustion head increases the scope of application of the burner and ensures the combustion efficiency of each operating point.

The unique design reduces the overall size, while providing ease of use and maintenance.

2) Injecting oil pump：

It is used for system oil filling and oil discharge, generally using a gear oil pump, and the oil supply is determined according to the system capacity

3) Expanded tank:

It is used to stabilize the system pressure and adjust the increased volume of the heat carrier due to thermal expansion. At the same time, it helps the system to dehydrate and exhaust steam. It is in a high level state during normal operation.

4) Storage oil tank:

It is used for the discharge of organic heat transfer material in the system, and the oil storage tank should be in a low liquid level state during normal operation, and it should be at the lowest position in the whole system.

5) Circulation oil pumps

It maintains the normal circulation of the organic heat carrier in the system, one for backup and one for use

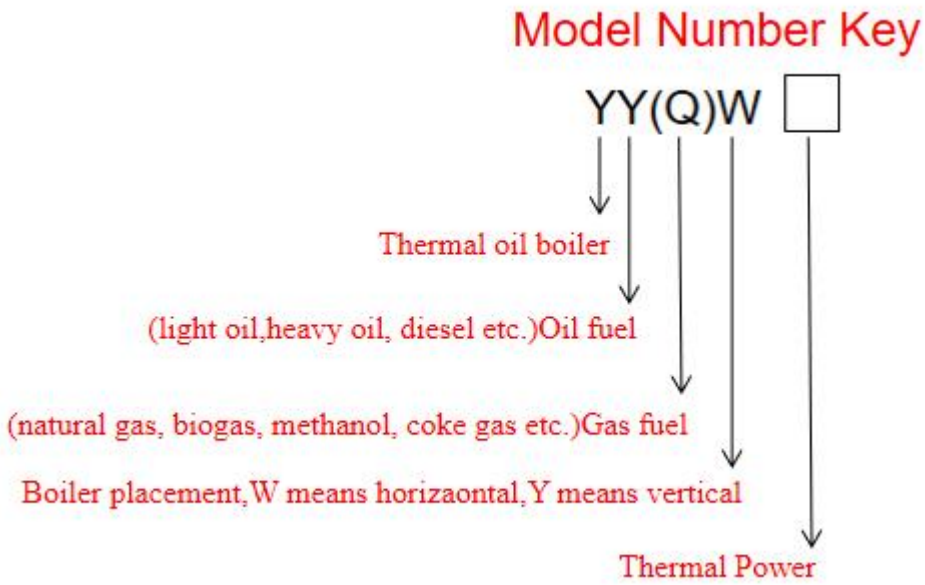
- Dual configuration, mutual backup

- Stainless steel, acid and corrosion resistant

Phone:86-371-56520102
Email:sales@cnboilersolution.com
Web:www.cnboilersolution.com

- Horizontal type structure,Compact structure and space saving

Parameter of the Gas Oil Fired Hot Oil Boiler



Example:YWQ-1000=YQW series thermal oil boiler,Rated thermal power 1000kw,Fuel gas or oil;Q means gas,Y means oil

Phone:86-371-56520102
Email:sales@cnboilersolution.com
Web:www.cnboilersolution.com

Model	YY(Q)W-700	YY(Q)W-1000	YY(Q)W-1200	YY(Q)W-1400	YY(Q)W-1800	YY(Q)W-2400	YY(Q)W-2800	YY(Q)W-3500
Rated thermal power/MW	0.7	1	1.2	1.4	1.8	2.4	2.8	3.5
Rated thermal power/x10^{4}kcal/h	60	80	100	120	160	200	240	300
Rated outlet oil temperature/℃	320							
Rated working pressure/MPa	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Heat efficiency（≥%）	92							
System installed capacity/kW	18	18	35	35	56	56	66	75
Max Transportation size:L×W×H(m)	3.55x1680x2050	3.8x1.68x2.05	3.8x2.0x2.4	4.25x2.0x2.55	4.9x2.2x2.6	5.25x2.45x2.95	6.05x2.45x2.95	6.65x2.55x3.0
Max Transportation Weight(t)	4.22	5	5.45	6.4	8.5	11.2	12.5	14
Note: Parameter is for reference only, if any changes should follow the factory technical data.								

Phone:86-371-56520102
Email:sales@cnboilersolution.com
Web:www.cnboilersolution.com

Model	YY(Q)W-4200	YY(Q)W-4600	YY(Q)W-6000	YY(Q)L-7000	YY(Q)L-8200	YY(Q)L-9400	YY(Q)L-10500	YY(Q)L-12000	YY(Q)L-14000
Rated thermal power/MW	4.2	4.6	6	7	8.2	9.4	10.5	12	14
Rated thermal power/x10^{4}kcal/h	360	400	500	600	700	800	900	1000	1200
Rated outlet oil temperature/℃	320								
Rated working pressure/MPa	0.8	0.8	0.8	0.8	0.8	1	1	1	1
Heat efficiency （≥%）	92								
System installed capacity/kW	95	95	140	140	140	200	200	240	300
Max Transportation size:L×W×H(m)	6.85x2.7x3.15	6.95x2.85x3.31	7.2x3.25x3.9	8.0x3.55x3.95	8.5x3.65x4.0	9.5x3.8x4.0	10.5x3.8x4.0	12.35x3.8x4.0	13.5x4.0x4.2
Max Transportation Weight(t)	15.8	18	24.5	28.5	33	39	55	60	65
Note: Parameter is for reference only, if any changes should follow the factory technical data.									

Phone:86-371-56520102
Email:sales@cnboilersolution.com
Web:www.cnboilersolution.com

Delivery Documents about Equipment

1.Boiler room design drawing
2.Boiler foundation drawing
3.Boiler body drawing
4.Boiler control system technical data
5.Boiler layout drawing
6.Valves& instruments drawing
7. Strength calculation data sheet
8. Certificate of Quality
9. Quality and Safety Inspection Certificates
10. Installation and operation instructions