

EPCB BOILER

Keep Professional, Keep Development, Keep Quality!



QINGDAO EAST POWER INDUSTRY EQUIPMENT CO., LTD.

Add: No. 39, Shiling Road, Laoshan District, Qingdao, Shandong, China

Tel: +86-532-66717007

Fax: +86-532-66717006

Email: info@epcbboiler.com

Web: www.epcbboiler.com

EPCB
BOILER BROCHURE



Qingdao East Power Industry Equipment Co., Ltd



Company Profile:

Qingdao East Power Industry Equipment Co., Ltd is located in Qingdao China, specializing in the design and production of boilers. Our main products include coal fired boilers, oil gas fired boilers, biomass fired boilers, electric boilers and some boiler accessories. These boilers are environment-friendly and energy-saving. Our products have been approved by the Provincial Environment Department.

We can manufacture and supply boilers as per CE, ASME and EAC standards, also with these certifications.

Our boilers have been used well in all Chinese regions and have been exported to more than 60 countries, such as Australia, Thailand, Vietnam, Pakistan, Bangladesh, Mexico, Philippines, Kazakhstan, Uzbekistan, Russia, Nigeria, Mongolia, Kenya, Africa, Ecuador, Latin America, etc.

Quality Control System:

- Each worker must have the related Certificates before joining us and starting work.

- Each production process is marked the Work Number of the Workman and Inspector and the information is input to computers. We can check the responsible persons swiftly.

- Each welding line is inspected rigorously with radiographic test and X-ray is saved to official files.

- Each boiler is tested seriously with water pressure and inspected by the Institute of Specific Equipment Inspection and Research of Shandong Province and then get the Qualified Certification of Boilers.

We offer products with high quality and competitive prices and we hope to have good cooperation with you.



Fixed Grate Manual Coal/Biomass Fired Boiler



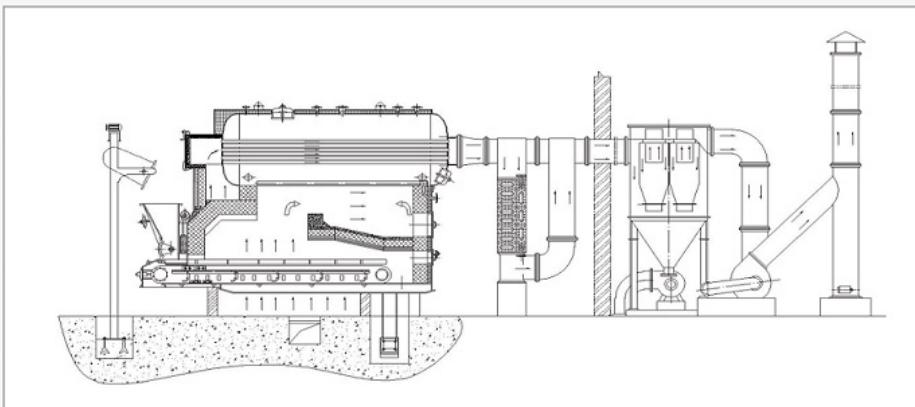
PRODUCT DESCRIPTION:

- Solid fuel in the high temperature furnace stay a long residence time, after several times wind distribution, fully burning, thermal efficiency is high without black smoke.
- Less ash residue, the environmental indicators such as soot carbon dioxide, sulphur dioxide is better than the national discharge standard, and conform to the current international emission reduction policies.
- Adapt to a variety of solid fuel, coal, wood, charcoal, waste jute, waste fabric and so on.
- Fuel burning continuous, stable working condition, can guarantee the steam output.
- Manual feeding, remove slag, simple operation, without cumbersome procedures, start quickly.

Item/Type	Fixed Grate Manual Coal/Biomass Steam/Hot Water Boiler										
Rated capacity t/h	0.5	1	2	3	4	6	Rated capacity MW	0.35	0.7	1.4	
Rated steam pressure MPa	0.7/1.0	0.7/1.0/1.25	1.0/1.25	1.0/1.25	1.25	1.25	Rated steam pressure MPa	0.7	0.7	0.7	
Rated steam temperature C	170/184/194	170/184/194	170/184/194	184/194	194	194	Supply water temperature C	95	95	95	
Feed water temperature C	20	20	20	20	20	20	Return water temperature C	70	70	70	
Heated area m ²	radiation / convection	1.42/12.1	4.55/20.12	7.3/41.4	10.06/ 74.1	12.1/ 16/ 129.6	Heated area m ²	radiation / convection	2.3/ 16.2	4.55/ 20.12	6.17/ 39.5
	Suitable fuel type	Coal/Wood/Charcoal/Jute/Fabric,etc.						Suitable fuel type			
Boiler heat efficiency %	79.2	80.2	81.1	81.2	81.6	81.7	Boiler heat efficiency %	79.6	81	81.6	
Fuel consumption kg/h	64.53	127.45	252.07	377.64	501.05	760.65	Fuel consumption kg/h	44.94	88.33	175.37	
Effective area of grate m ²	1	1.5	2.72	3	3.98	5.89	Effective area of grate m ²	0.98	1.5	2.4	
Transportation size of boiler mm	length	3270	4270	4900	5840	6735	Transportation size of boiler mm	length	2970	3782	4900
	width	1664	1920	2560	2660	2660		3000	width	1950	1800
Weight of largest parts of boiler transportation (ton)	height	2725	2870	3470	3520	3520	Weight of largest parts of boiler transportation (ton)	height	2660	2870	3222
	Weight of largest parts of boiler transportation (ton)	7	11/11.6	16	25	27		30	7	11	15.5

Notes: 1. This form is only for reference, if any changed, please refer to factory's technical documents.
2. The calorific value of fuel in this form is based on the calorific value as follows: biomass-18800KJ/kg.

Single Drum Chain Grate Coal/Biomass Fired Boiler



PRODUCT DESCRIPTION:

- The single drum is designed with thread boiler smoke pipe, arch tube sheet. Layout is compact, small volume.
- Threaded pipe technology can strengthen heat transfer and simplify the flue gas return trip. Boiler is simple in structure, easy maintenance.
- Water pipes and fire tubes balance convection heating surface, high thermal efficiency.
- High standards, high-quality auxiliary equipment, accessories and automated control can ensure the boiler is safe and stable.
- Multiple safety protection, electrical overload protection, over-pressure protection, low water level protection, over-pressure alarm, high water level alarm and so on.

Item/Type		Single Drum Chain Grate Coal/Biomass Fired Steam Boiler								
Rated capacity t/h		1	2	4	6	8	10	12	15	20
Rated steam pressure MPa		0.7/1.25	0.7/1.25/1.6	1.25/1.6	1.25/1.6	1.25/1.6	1.25/1.6	1.25/1.6	1.25/1.6	1.25/1.6
Rated steam temperature °C		170/194	170/194/204	194/204	194/204	194/204	194/204	194/204	194/204	194/204
Feed water temperature °C		20								
Boiler thermal efficiency %		78.1	80.2	82.3	82.5	82.5	82.9	82.9	83.1	83.1
Body heating area m ²		22.99	48.7	96.34	148.15	174.4	226.2	276	374.5	669
Fuel & consumption	Fuel type	Class II Soft Coal, Biomass, Wood Chips, Wood Pellets, Rice Husk, Palm Kernel Shell, etc.								
	Coal kg/h	91.61	178.43	347.75	520.36	693.81	863.08	1035.70	1291.51	1722.01
Size of boiler largest parts mm	Biomass kg/h	132.40	257.87	502.57	752.03	1002.71	1247.34	1496.80	1866.50	2488.67
	Length	4600	5800	6700	7000	7300	7600	7600	8500	9500
	Width	1900	2600	2700	3000	3000	3200	3200	3400	3800
	Height	2900	3500	3500	3500	3500	3500	3500	3500	7100
Weight of boiler largest parts ton		18	22	30.1	40	21/14	23/17	23/19	21/24	25/24

Item/Type		Single Drum Chain Grate Coal/Biomass Fired Hot Water Boiler								
Rated capacity MW		0.7	1.4	2.8	4.2	5.6	7	10.5	14	
Rated working pressure Mpa		0.7	0.7	0.7	1	1	1	1	1	
Supply water temperature °C		95	95	95	115	115	115	115	115	
Return water temperature °C		70	70	70	70	70	70	70	70	
Boiler thermal efficiency %		77.39	79.8	81.55	82	82.3	82.8	83.1	83.3	
Body heating area m ²		25.3	48.3	92.7	136.3	160	259.2	369.04	475.33	
Circulation water flow m ³ /h		24	48	96	144	192	240	360	480	
Fuel & consumption	Fuel type	Class II Soft Coal, Biomass, Wood Chips, Wood Pellets, Rice Husk, Palm Kernel Shell, etc.								
	Coal kg/h	92.45	179.32	350.95	523.53	695.50	864.12	1291.51	1717.88	
	Biomass kg/h	133.61	259.16	507.19	756.62	1005.14	1248.84	1866.50	2482.70	
Supply heat area m ²		8000	16000	32000	48000	56000	80000	120000	160000	
Size of boiler largest parts mm	Length	5400	5900	5900	6800	7100	7500	8200	9100	
	Width	2000	2500	2800	3200	3200	3200	3400	3400	
	Height	30000	3300	3500	3400	3500	3500	3200	3500	
Weight of boiler largest parts ton		18	22	30.1	38	49	28/35	25/24	32/23.6	

Notes: 1.This form is only for reference, if any changed, please refer to factory's technical documents.

2.The calorific value of fuel in this form is based on the calorific value as follows: Class II soft coal-27170KJ/kg; biomass-18800KJ/kg

Double Drums Chain Grate Coal/Biomass Fired Boiler



PRODUCT DESCRIPTION:

- The series boilers belong to water tube boilers, designed for blown on surface, and the steam quality is pretty good.
- Steam boilers are divided into saturated steam boilers and superheated steam boilers, and can meet customers' different steam temperature needs.
- For the application of different fuels, the boiler grate is divided into two series, chain grate and reciprocating grate, which can be applicable to all types of coal and biomass fuel combustion.
- Boiler adopts quick assembly structure. The 4-6t/h boiler is completely assembled in our factory before delivery. The boiler above 6t/h is composed of 2 main components, upper boiler proper and chain grate bases parts, will be installed in user's factory with short installation time.
- Boiler capacity is 4-35Ton/hr (2.8-29MW).

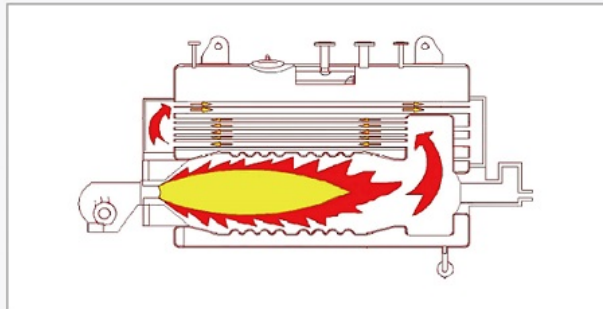
Item/Type		Double Drums Chain Grate Coal/Biomass Fired Steam Boiler							
Rated capacity t/h		4	6	8	10	12	15	20	25
Rated steam pressure MPa		1.25/1.6/2.5	1.25/1.6/2.5	1.25/1.6/2.5	1.25/1.6/2.5	1.25/1.6/2.5	1.25/1.6/2.5	1.25/1.6/2.5	1.25/1.6/2.5
Rated steam temperature °C		194/204/226	194/204/226	194/204/226	194/204/226	194/204/226	194/204/226	194/204/226	194/204/226
Feed water temperature °C		20	20	60	60	60	104	104	104
Boiler thermal efficiency %		81.54	81.6	81.8	82.2	82.5	82.5	82.8	83.7
Heating area m ²	Boiler body	99.68	155.5	181.63	233.6	298	316.7	456	625.3
	Economizer	69.76	140.6	183.1	209.3	209.3	225	242.4	267.8
Fuel & consumption	Fuel type	Class II Soft Coal, Biomass, Wood Chips, Wood Pellets, Rice Husk, Palm Kernel Shell, etc.							
	Coal kg/h	350.99	526.10	699.75	870.43	1040.72	1300.90	1728.25	2137.08
	Biomass kg/h	507.26	760.33	1011.29	1257.96	1504.06	1880.08	2497.69	3088.54
Size of boiler largest parts mm	Length	7500	6800	6900	7900	8100	9300	11500	11500
	Width	2800	3200	3100	3400	3100	3300	3300	3300
	Height	3500	3500	3500	3500	3500	3500	3500	3500
Weight of boiler largest parts ton		30	40	55	45/30	50/30	52/31	55/34	56/37

Item/Type		Double Drums Chain Grate Coal/Biomass Fired Hot Water Boiler							
Rated capacity MW		2.8	4.2	5.6	7	8.4	10.5	14	
Rated working pressure MPa		0.7	1	1	1	1	1	1.25	
Supply water temperature °C		95	115	115	115	115	115	130	
Return water temperature °C		70	70	70	70	70	70	70	
Boiler thermal efficiency %		81	81.2	82.5	83.1	83.2	83.2	83.5	
Heating area m ²	Boiler body	146.8	155.5	196.7	300	279	322	415.8	
	Economizer	/	104.6	157	174.4	210	218	413	
Fuel & consumption	Fuel type	Class II Soft Coal, Biomass, Wood Chips, Wood Pellets, Rice Husk, Palm Kernel Shell, etc.							
	Coal kg/h	353.33	528.69	693.81	861.00	1031.96	1289.95	1713.76	
	Biomass kg/h	510.64	764.07	1002.71	1244.34	1491.41	1864.26	2476.75	
Size of boiler largest parts mm	Length	6100	6300	6900	7900	8100	9300	11500	
	Width	2500	2700	3100	3100	3100	3300	3300	
	Height	3500	3500	3500	3500	3500	3500	3500	
Weight of boiler largest parts ton		30	43	54	46/29	48/30	49/31	49/37	

Notes: 1.This form is only for reference, if any changed, please refer to factory's technical documents.

2.The calorific value of fuel in this form is based on the calorific value as follows: Class II soft coal-27170KJ/kg; biomass-18800KJ/kg

Horizontal Fire Tube Automatic Oil/Gas Fired Boiler



PRODUCT DESCRIPTION:

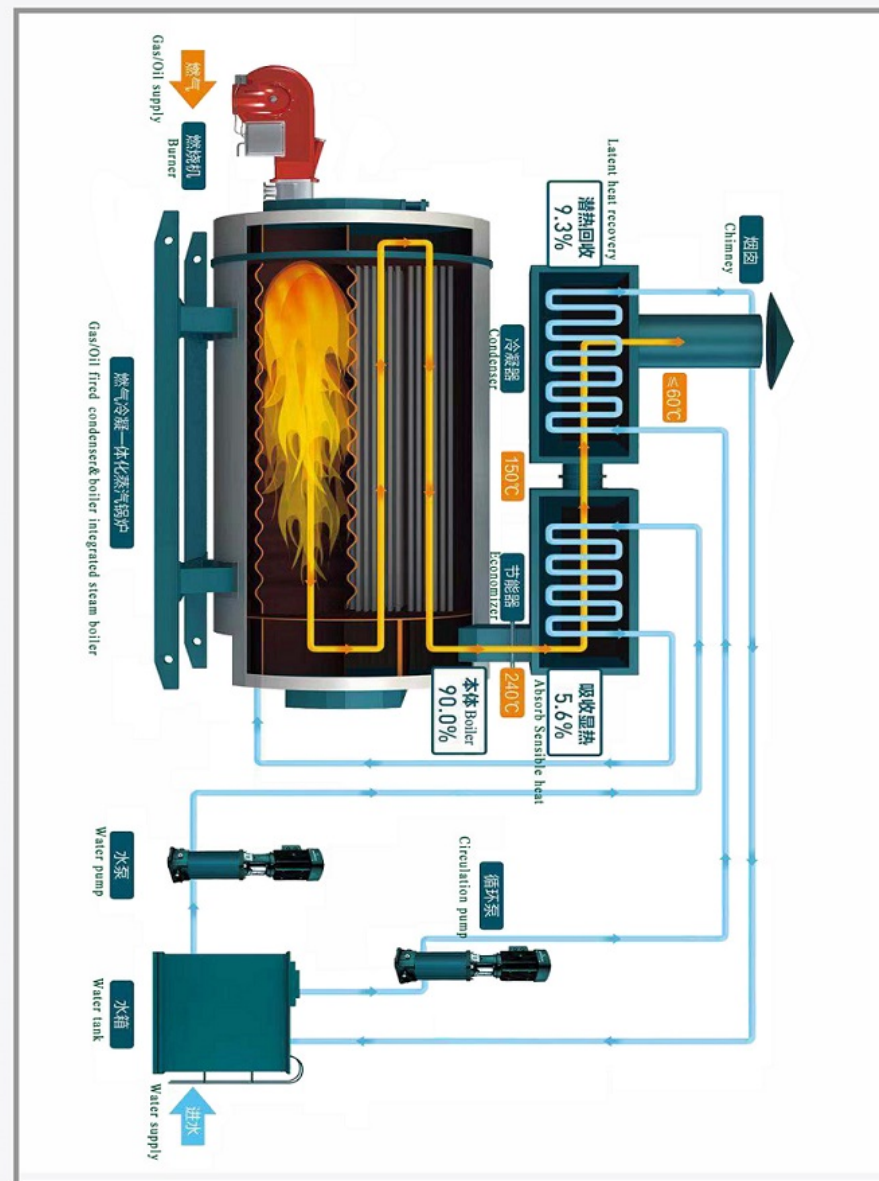
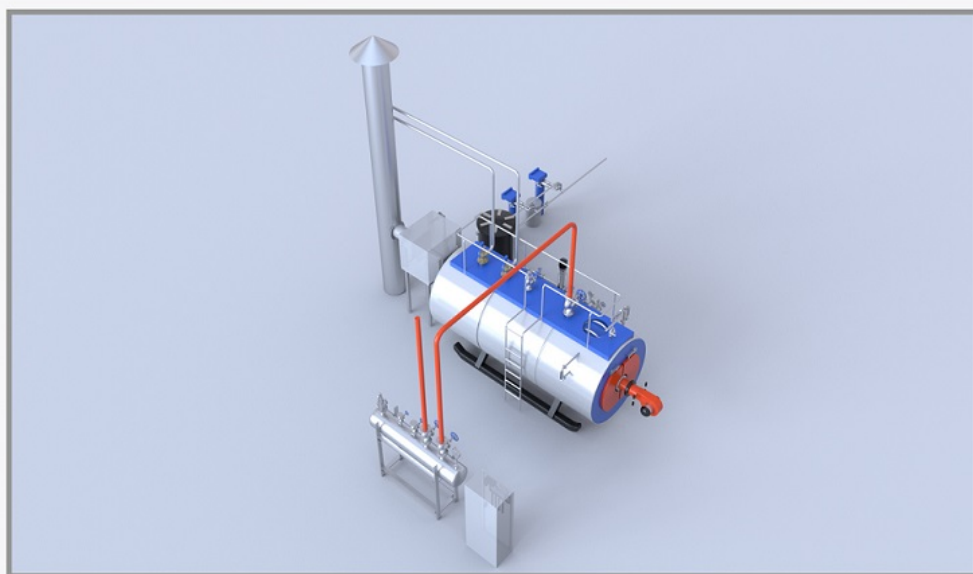
- Horizontal fire tube oil/gas fired steam boiler adopts the three pass technologies, to extend the heat exchange process, sufficient heat transfer, the combustion chamber adopts wet back structure, prolongs service life.
- Boiler adopts automatic control, easy operation, can reduce the amount of operated personnel, reduce the labor intensity.
- Multiple safety interlocking protection, such as electrical overload protection, overpressure protection, low water level protection, overpressure alarm, high water level alarm and so on.
- Boiler leaves our factory with complete equipment, equipped with well-known brand burner (Italy Baltur, Riello, Ecoflam, Unigas, Germany Weishaupt, Finland Oilon, etc.), reliable water pump and primary instruments & valves, etc.
- High thermal efficiency, stable output, strong load adaptability, low harmful gas emission and noiseless operation.

Item/Type	Horizontal Fire Tube Automatic Oil/Gas Fired Steam Boiler												
Rated capacity t/h	0.5	1	1	2	3	4	5	6	8	10	15	20	
Rated steam pressure MPa	0.7/1.0/1.25/1.6												
Rated steam temperature °C	170/184/194/204												
Boiler thermal efficiency %	91.2	91.8	91.7	92.4	92.55	92.6	92.5	92.9	93.1	93.4	93.5	93.7	
Body heating area m ²	Boiler body	13.05	21.15	33.14	45.1	67.87	80.37	110.5	140.13	194.27	142.3	218.5	275.3
	Economizer	10.4	18.6	20.4	26.1	30.4	43.41	46.5	57.1	74.4	112.6	155	225.5
Boiler water volume m ³	1.19	2.49	3.96	5.6	6.25	7.54	8.9	8.5	13.9	19.5	24.5	31.5	
Flue diameter mm	φ250	φ350	φ380	φ420	φ450	φ520	750x410	800x410	940x520	850x500	1200x600	1500x600	
Diameter of water inlet pipe DN	25	40	40	40	40	50	50	50	50	50	65	80	
Main steam valve diameter DN	50	65/25	65/40	80/40	100/40	100/40	125/40	125/40	150/40	150/40	200/50	200/65	
Safety valve diameter DN	40	50	2x40	2x40	2x40	50+40	2x50	2x65	2x65	2x80	2x100	2x100	
Blowdown pipe diameter DN	40	40	40	40	40	40	40	40	40	2x50	2x50	2x50	
Fuel consumption	Diesel kg/h	24.61	48.91	73.44	97.18	145.53	193.94	242.68	289.96	385.79	480.69	720.26	958.29
	Natural gas Nm ³ /h	29.44	58.50	87.84	116.24	174.07	231.97	290.28	346.84	461.45	574.96	861.52	1146.25
Largest transportation size mm	Length	2550	3100	3750	3660	4600	4900	5250	5850	6500	6240	8500	9200
	Width	1450	2200	1950	2700	2200	2300	2350	2400	2600	2850	3500	3950
	Height	1740	2200	2250	2630	2500	2650	2680	2700	2850	3100	4000	4350
Largest transportation weight ton	2.3	3.6	4.4	5.3	8	8.7	11.2	12.5	17.8	22	32.5	40.5	

Item/Type	Horizontal Fire Tube Automatic Oil/Gas Fired Hot Water Boiler										
Rated capacity MW	0.7	1.05	1.4	2.1	2.8	4.2	5.6	7	10.5	14	
Rated working pressure MPa	0.7	1	1.25	1	1.25	1.25	1.25	1.25	1.25	1.25	
Supply/return water temperature °C	95/70	115/70	115/70	115/70	115/70	115/70	115/70	115/70	115/70	115/70	
Boiler thermal efficiency %	92.4	91.78	92.3	93.2	92	92.6	92.7	93.4	93.5	93.5	
Body heating area m ²	23.13	30.99	40.81	64.7	79.4	128.6	176.3	234.2	360.2	409.5	
Boiler water volume m ³	2.23	3.9	3.5	5.28	6.05	7.97	10.382	15.47	21.5	28.5	
Flue diameter mm	320x200	490x260	462x262	580x320	650x320	800x400	800x400	850x500	1100x500	1300x500	
Diameter of return water pipe DN	80	100	100	125	150	200	200	200	200	250	
Diameter of water supply pipe DN	80	100	100	125	150	200	200	200	200	250	
Safety valve diameter DN	40	40	50	50	50*2	50*2	65*2	80*2	2x100	2x125	
Blowdown pipe diameter DN	40	40	40	40	40	50	50	50	3x50	3x50	
Fuel consumption	Diesel kg/h	48.6	73.4	97.3	144.5	195.2	290.9	387.5	480.7	720.3	960.3
	Natural gas Nm ³ /h	58.1	87.8	116.4	172.9	233.5	348.0	463.4	575.0	861.5	1148.7
Largest transportation size mm	Length	3150	3400	3600	4460	4600	5600	5600	6800	7200	7900
	Width	1560	1660	1600	1900	2100	2250	2250	2800	3250	3650
	Height	1900	2200	2200	2300	2400	2700	2650	3100	3350	3750
Largest transportation weight ton	3.25	4.2	4.8	8.1	9	12	15.2	22	36.6	45.7	

Notes: 1.This form is only for reference, if any changed, please refer to factory's technical documents.

2.The calorific value of fuel in this form is based on the calorific value as follows: Natural gas-37600KJ/Nm³, diesel-45980KJ/kg.



Automatic Condensing Type Oil/Gas Fired Boiler



PRODUCT DESCRIPTION:

- Full-wet back three-return fire tube structure, flame combustion in the combustion chamber under micro-positive pressure, low combustion heat load, less harmful gas emissions.
- Equipped with condenser in the flue gas outlet to condense steam in flue gas, absorb latent heat of steam condensation, and further improves thermal efficiency.
- The condenser is installed on the top of the boiler body, reducing the area occupied and the condensate water generated on the heat transfer surface can also be discharged naturally.
- With high quality imported burners, the emission of harmful gases (NOx) is greatly reduced. the concentration of harmful gases in flue gas is lower than the national standard, belonging to green environmental protection products.

Item/Type		Automatic Condensing Type Oil/Gas Fired Boiler									
Rated capacity t/h		1	2	3	4	6	8	10	12	15	20
Rated steam pressure MPa		1.0/1.25/1.6									
Rated steam temperature °C		184/194/204									
Boiler thermal efficiency %		96.4	96.5	96.6	96.8	96.6	96.7	96.8	96.8	96.6	96.9
Supply water temperature °C		20									
Calculated heat transfer area m ²		53	90.8	149	193.4	271.7	354.9	421.9	510	551.7	706
Boiler water volume m ³		3.6	5.6	6.2	6.7	11	14.7	18	21	28.7	32
Fuel consumption	Diesel kg/h	46.6	93.0	139.4	185.5	278.9	371.4	463.8	556.6	697.1	926.6
	Natural gas Nm ³ /h	55.7	111.3	166.8	221.9	333.6	444.3	554.8	665.7	833.9	1108.4
Condenser	Type	Fin Tube Type									
	Model	LNQ1	LNQ2	LNQ3	LNQ4	LNQ6	LNQ8	LNQ10	LNQ12	LNQ15	LNQ20
	Safety valve Interface mm	DN40x2			DN40x50		DN40x2				
	Vent	DN51x2			DN51x65		DN51x2				
Largest transportation size	Length mm	3340	4220	4590	4960	6562	6500	6900	7800	8000	8460
	Width mm	1926	2215	2280	2460	2711	2930	2930	2900	3300	3460
	Height mm	1935	2540	2630	2630	3034	3200	3360	3400	83800	3750

Horizontal Water Tube Automatic Oil/Gas Fired Boiler



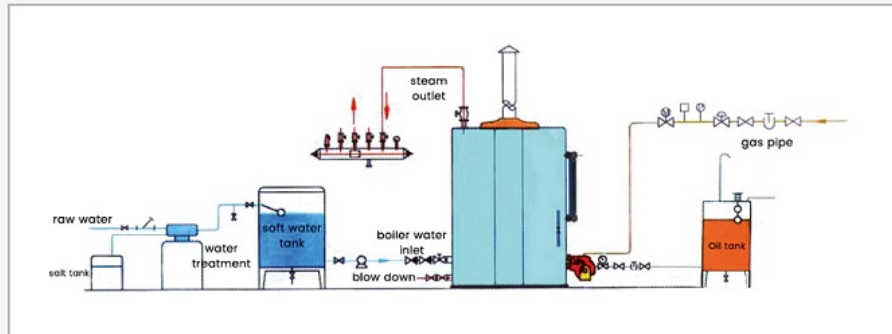
PRODUCT DESCRIPTION:

- Double drums D type, water tube and full membrane wall compact structure, easy to install and less investment.
- Fully sealing structure, no air leakage, better combustion, large output, less weight.
- Big furnace hearth, enough heating surface, fuel combustion completely, high heat efficiency .
- Big steam and water space, strong adaptability to load variability.
- PLC fully automatic control and multiple interlock protection, equipped with imported burner & reliable auxiliaries, ensure the boiler operate safety and performance.

Item/Model	Horizontal Water Tube Automatic Oil/Gas Fired Steam Boiler					
Rated steam capacity (kg/h)	2000	4000	6000	10000	20000	35000
Rated steam pressure MPa	1.25/1.6/2.5					
Rated steam temperature °C	194/203/225/400					
Design efficiency %	89	90.35	89.67	90.24	89.17	90.3
Heated area m ²	68.8	125.3	165.1	210	435.2	906
Economizer heating surface m ²	14.84	37	49.8	144	236	413
Available fuel	diesel / heavy oil / natural gas / LPG					

Notes: This form is only for reference, if any changed, please refer to factory's technical documents.

Vertical Fire Tube Oil/Gas Fired Boiler



PRODUCT DESCRIPTION:

- Boiler with automatic ignition, process control, water level control, temperature control, over pressure protection and other functions, is safe and reliable.
- An openable ash clean door is set at the bottom of the boiler. The top cover of the boiler can be opened for easy cleaning ash and prolonging the endurance of the boiler.
- Flow interrupters are set in the fire tube to slow down the rate of the mist flow and increase the heat efficiency.
- Boiler with output less than 300 kg/h is two-pass structure and boiler with output more than 500 kg/h is three-pass structure. Long travel heat exchange with good heat transfer effect.
- Big water capacity, large steam storage space, stable output, strong load adaptability.

Item/model	Vertical Fire Tube Oil/Gas Fired Steam Boiler								
Rated steam capacity t/h	0.1	0.2	0.3	0.5	0.8	1.0	1.5	2.0	
Rated working pressure MPa	0.4/0.7	0.4/0.7	0.4/0.7	0.4/0.7/1.0	0.7/1.0	0.7/1.0	1.0	1.0/1.25	
Saturated steam temperature °C	152/170	152/170	152/170	152/170	170/184	170/184	184	184/194	
Design efficiency %	≥ 92								
Heated area m ²	2.85/3.53	5.2/5.67	8.8	11.34	18.4	23.1	26.05	29.38	
Boiler water capacity m ³	0.45	0.454	0.931	1.086	1.37	2.76	2.27	2.27	
Flue diameter mm	Φ170	Φ160	Φ250	Φ250	Φ320	Φ350	Φ350	Φ400	
Diameter of feed water pipe	DN25	DN25	DN25	DN25	DN40	DN40	DN40	DN40	
Main steam tube diameter	DN25	DN40	DN40	DN50	DN65	DN65	DN65	DN80	
Safety valve diameter	DN40	DN40	DN40	DN40	2xDN40	2xDN40	2xDN40	2xDN40	
Blowdown tube diameter	DN40	DN40	DN40	DN40	DN40	DN40	DN40	DN40	
Fuel consumption	Diesel kg/h	4.9	9.8	14.6	24.4	39.0	48.8	73.2	97.6
	Natural gas Nm ³ /h	5.8	11.7	17.5	29.2	46.7	58.4	87.6	116.7
	LPG Nm ³ /h	2.1	4.3	6.4	10.7	17.2	21.5	32.2	42.9
Boiler size mm	Length	1000	1000	1200	1300	1550	1750	1800	2100
	Width	950	1000	1150	1200	1520	1700	1800	1950
	Height	1900	1960	2200	2600	2650	3050	3100	3200
Transportation weight (kg)	450/730	650/735	990/1100	1500/1800	2400	2600/2850	4100	5400/5600	

Item/Model	Vertical Fire Tube Oil/Gas Fired Hot Water Boiler											
Rated heat capacity kw	60	80	120	180	230	350	470	580	700	1050	1400	
Rated heat power Kcal/h	5x10 ⁴	7x10 ⁴	10x10 ⁴	15x10 ⁴	20x10 ⁴	30x10 ⁴	40x10 ⁴	50x10 ⁴	60x10 ⁴	90x10 ⁴	120x10 ⁴	
Rated working pressure MPa	0											
Saturated steam temperature °C	85/60											
Design heat efficiency %	≥ 92											
Heating area m ²	1.85	2.3	3.25	6.45	6.9	10.8	14.5	15.2	20.8	27	48.44	
Boiler water capacity m ³	0.126	0.17	0.222	0.316	0.371	0.783	0.93	1.751	1.907	2.31	2.8	
Flue diameter mm	Φ108	Φ160	Φ160	Φ250	Φ250	Φ250	Φ250	Φ280	Φ360	560*210	600*220	
Diameter of feed water pipe DN	40	50	50	65	65	65	65	80	100	65	65	
Blowdown tube diameter DN	50	40	50	50	50	50	50	50	50	40	40	
Fuel consumption	Diesel kg/h	4.3	5.7	8.6	12.8	16.4	24.9	33.5	41.3	49.9	74.8	99.8
	Natural gas Nm ³ /h	5.1	6.8	10.2	15.3	19.6	29.8	40.1	49.4	59.7	89.5	119.3
	LPG Nm ³ /h	1.9	2.5	3.8	5.6	7.2	11.0	14.7	18.2	21.9	32.9	43.9
Boiler size mm	Length	700	800	800	1100	1100	1300	1200	1450	1400	1600	1720
	Width	800	900	900	1000	1000	1400	1150	1400	1400	1600	1720
	Height	1350	1600	1700	1800	1980	2140	2280	2270	2600	2700	3060
Transportation weight kg	220	260	320	480	500	800	910	1400	1700	2700	3500	

Notes: 1.This form is only for reference, if any changed, please refer to factory's technical documents.

2.The calorific value of fuel in this form is based on the calorific value as follows: Natural gas-37600KJ/Nm³, diesel-45980KJ/kg, LPG-98500KJ/Nm³.

Oil/Gas Fired Thermal Oil Boiler

PRODUCT DESCRIPTION:

- Boiler heating surface adopts compact circular coils, heating surface layout is adequate, effectively reducing the heat load on the surface of the tube, is safer to use heat conducting oil.
- The fuel is burned in the combustion chamber composed of inner coils and absorbed most of the heat by the radiation heating surface, then the high temperature flue gas enters the convective heating surface and carries on heat transfer.
- Boiler has good sealing, large expansion space, three-pass flue gas, equipped with air preheater, thermal efficiency can reach 92%.
- A variety of operation safety protection, so that the boiler operation is safer and simpler, high temperature control accuracy ($\pm 1^\circ\text{C}$), good combustion effect.



Item/Type		Oil/Gas Fired Thermal Oil Boiler																
Rated thermal power	kw	350	600	900	1200	1500	1800	2300	2900	3500	4700	5900	7000	8200	9400	10500	12000	14000
	$\times 10^4(\text{Kcal/h})$	30	50	75	100	130	150	250	250	300	400	500	600	700	800	900	1000	1200
Boiler thermal efficiency %		92	92	92	92	92	93	93	93	93	93	93	93	93	93	94	94	94
Design pressure MPa		1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Max. working temperature $^\circ\text{C}$		320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320
Medium circulation flow m^3/h		40	58	100	100	100	160	160	200	200	260	300	340	400	520	600	600	680
Medium volume m^3		0.4	0.6	0.6	0.8	1.2	2.1	2.6	3.5	7.8	8.4	8.8	10.5	11.2	11.5	13	15	18
Main pipe diameter DN		100	100	125	125	125	150	150	200	200	200	250	250	250	300	300	300	350
Installation capacity kw		14.5	18	31	37.5	49.5	57.5	61.5	75	75	98.5	121.5	148.5	155	195	235	235	295
Fuel type		Diesel, Heavy oil, Natural gas, LPG, Coke oven gas																
Fuel consumption	Diesel kg/h	24.4	41.8	62.7	83.7	104.6	124.1	158.6	200.0	241.4	324.1	406.9	482.8	565.5	648.3	716.4	818.8	955.2
	Natural gas Nm^3/h	29.2	50.0	75.0	100.1	125.1	148.5	189.7	239.2	288.7	387.7	486.7	577.4	676.4	775.4	856.9	979.4	1142.6
Boiler size	Vertical type m	1.3 \times	2 \times	2.1 \times	2.2 \times	2.2 \times	2.4 \times	2.7 \times	2.8 \times	3.2 \times	3.2 \times	3.3 \times	3.5 \times	3.62 \times	3.7 \times	3.65 \times	3.65 \times	3.98 \times
	(Diameter \times H)	2.5	2.3	3.5	3.5	4	4.4	5.1	6.5	6.7	7"	7.5	8.2	9.2	9.6	11	11	11.8
	Horizontal type m	1.2 \times	1.7 \times	1.82 \times	1.92 \times	1.95 \times	2.4 \times	2.52 \times	2.8 \times	2.92 \times	3.23 \times	3.26 \times	3.26 \times	3.62 \times	3.6 \times	3.65 \times	3.65 \times	3.98 \times
(Diameter \times L)	2.4	3	3.5	4	4.3	4.3	5.3	6.3	6	6.7"	7.45	7.9	9	9.48	10.4	10.6	11.5	

Coal/Biomass Fired Thermal Oil Boiler

PRODUCT DESCRIPTION:

- Closed-circuit circulation, liquid phase heat transfer, heat loss is small, energy saving effect is obvious, and operation cost is low.
- Adopts perfect running control and safety monitoring device with safety, reliability and easy operation.
- Automatic temperature control function can achieve stable heating and precise temperature regulation, and meet different requirements of users.
- Fast temperature rise, high thermal efficiency, with overload capacity at a certain degree to ensure output of boiler.
- Compact structure, convenient transportation, short installation period and fast commissioning effect.

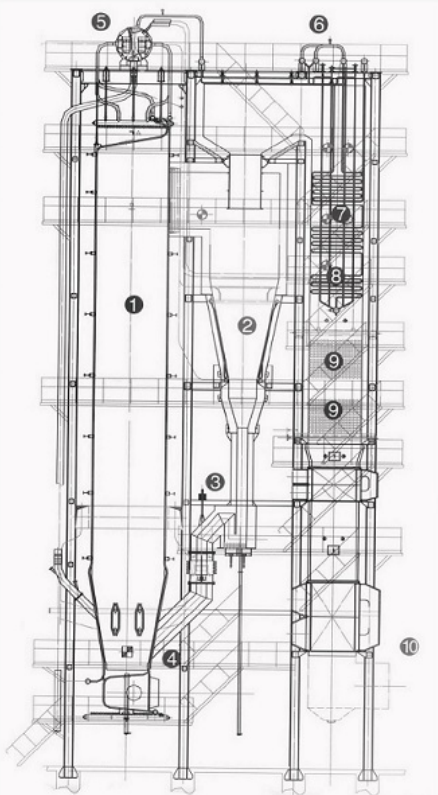


Item/Type		Coal/Biomass Fired Thermal Oil Boiler																
Rated thermal power	kw	700	1000	1200	1400	1900	2300	2900	3500	4100	4700	5900	7000	8200	9400	12000	14000	
	$\times 10^4(\text{Kcal/h})$	60	80	100	120	160	200	250	300	350	400	500	600	700	800	1000	1200	
Boiler thermal efficiency %		76	76	76	78	82	83	83	83	83	83	84	84	84	84	84	85	
Design pressure MPa		1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
Max. working temperature $^\circ\text{C}$		320	320	320	320	320	320	320	1.1	320	320	320	320	320	320	320	320	
Medium circulation flow m^3/h		80	100	100	100	160	160	200	200	200	260	300	340	400	520	500	620	
Medium volume m^3		0.61	0.78	0.97	1.12	1.7	2.6	3	3.2	3.5	4.1	4.6	6.2	8.9	12.6	13.6	14.8	
Main pipe diameter DN		100	125	125	125	150	150	200	200	200	200	250	250	250	300	300	350	
Installation capacity kw		28	40	48	55	75	77	100	100	120	140	175	215	215	270	315	380	
Fuel type		Class II/III Soft Coal, Biomass, Wood Chips, Wood Pellets, Rice Husk, etc																
Fuel consumption	Coal kg/h	94.1	134.5	161.4	183.5	238.8	283.2	357.1	431.0	504.9	578.8	717.9	851.8	997.8	1143.8	1460.2	1683.5	
	Biomass kg/h	136.1	194.4	233.2	265.1	342.3	409.3	516.1	622.9	729.7	836.5	1037.6	1231.0	1442.0	1653.1	2110.3	2433.0	
Boiler weight ton		/	/	/	/	25	32	33	39	41	67	70	80	98	108	115	130	
Boiler size	Length	4385	4685	4685	4685	6000	6400	5700	7000	7600	8900	8900	10000	11000	11220	12610	11350	
	Width	2150	2500	2500	2500	2200	2400	2400	2850	2900	3290	3290	3310	3400	3560	3560	3950	
	Height	4650	4900	5210	5710	4300	4800	5070	5200	5400	5750	6000	5850	5850	5850	5850	9000	

Notes: 1.This form is only for reference, if any changed, please refer to factory's technical documents.

2.The calorific value of fuel in this form is based on the calorific value as follows: Class II soft coal-27170KJ/kg; biomass-18800KJ/kg.

Circulating Fluidized Bed (CFB) Power Plant Boiler



- ① Furnace
- ② Cyclone Separator
- ③ U Loop Seal
- ④ Lighting Burner
- ⑤ Drum
- ⑥ Boiler Plat Form
- ⑦ High-temperature Superheater
- ⑧ Low-temperature Superheater
- ⑨ Economizer
- ⑩ Air Preheater



PRODUCT DESCRIPTION:

- Circulating fluidized bed is low-temperature fluidization combustion, therefore, the nitrogen oxides emissions of this boiler is much lower than that of ordinary coal fired boiler, and this kind of boiler could directly desulfurized during combustion process. Circulating fluidized bed boiler with high desulfurization rate is economical.
- Circulating fluidized bed boiler could adopt various coal types and has high combustion
- The ash of circulating fluidized bed boiler has high activity, thus it is easy to realize comprehensive utilization without secondary pollution.
- Circulating fluidized bed boiler could adjust its load in a wide range. Lowest load can be reduced 30% of full capacity.

Item/Type		Circulating Fluidized Bed (CFB) Power Plant Boiler			
Rated capacity t/h		35	75	130	220
Rated working pressure MPa		3.82/5.3	3.82/5.3	3.82/5.3	9.81
Rated steam temperature °C		450/500	450/500	450/500	540
Rated feed water temperature °C		150	150	150	215
Boiler heating area m ²	Radiation heating surface	188	380.3	777.39	858
	Mixes-heating surface	-	-	-	242
	Superheater	345.5	633	1089.5	2840
	Economizer	663	1448	2721.98	4303
Air preheater		746	1743	2514.5	8746
Fluidized bed area m ²		4.43	7.7	15.2	24.556
Design coal type		Soft Coal, Lean Coal, Anthracite			
Design thermal efficiency %		88.3	90	90	89.2
Grain size of coal mm		≤10	≤10	≤8	0~10
Grain size of desulfurizer mm		≤2	≤2	≤1.5	0~1.5
Desulfurization efficiency %		≥80	≥80	≥90	≥90
Ca/S Ratio		2.5	2.5	2.5	2.5
Hot air temperature (primary/secondary air) °C		130/120	145/135	207/201	231/235
Smoke extraction temperature °C		150	150	~140	135
Transportation weight of Max. parts Kg		10488	15538	18485	61718
Outside dimension of after-installed (LxWxH) M		2.7X9.2X14.9	33.85X12X16.25	43.2X11.85X20.93	24.7X23X48.9

Notes: This form is only for reference, if any changed, please refer to factory's technical documents.

Skid-mounted (Modular) Type Oil/Gas Thermal Oil Boiler



PRODUCT DESCRIPTION:

- The boiler is fully assembled. The boiler body, high/low level tanks, pumps, chimney, other accessories and parts are installed on a frame as a whole. The structure is more compact, less land occupation and convenient for transportation. It can be transported to the user's factory as a whole. Users don't need to install on site, as long as the boiler as a whole is located on the foundation.

Item/Model		Skid-mounted (Modular) Type Oil/Gas Thermal Oil Boiler						
Rated thermal power	KW	350	500	700	930	1200	1400	2000
	x10 ⁴ Kcal/h	30	40	60	80	100	120	160
Boiler thermal efficiency %		≥92						
Design pressure MPa		1.1						
Max.temperature of medium °C		300						
Medium circulation flow m ³ /h		30	30	60	80	100	100	160
Medium volume m ³		0.25	0.4	0.51	0.68	0.74	1	1.6
Installation capacity KW		9	9	16.5	23.5	23.5	38.5	46.5
Fuel & consumption	Diesel kg/h	27.11	38.73	54.22	72.04	92.95	108.44	154.92
	Natural gas Nm ³ /h	32.43	42.33	64.86	86.17	111.18	129.71	185.31
Boiler body size mm	Length	2526	2935	3665	3950	4325	4750	5000
	Width	1510	1510	1910	1910	2135	2135	2150
	Height	1656	1656	2080	2080	2250	2250	2560
Boiler body weight kg		1600	1800	3160	3490	4630	5000	7535
Overall dimension of modular type mm	Length	5000		6800		8200		9500
	Width	2100		2100		2100		2400
	Height	5500		5500		5700		6000
Overallweight of modular type kg		4000		5000		7000		12000

Automatic Electric Heating Hot Water Boiler

PRODUCT DESCRIPTION:

- Adopting advanced & high quality electric heating tube, its surface load is low, the thermal efficiency is high, and its service life is longer. The electric heating tube groups can be manually started or stopped, so that users can adjust the power of the boiler flexibly.
- Adopting microcomputer controller with LCD display screen, the boiler running state can be clearly visible. All operations are done easily through buttons.
- The boiler has advanced circuit design, the routing is tidy and reasonable, easy operation and maintenance. All electrical components are from well-known brand, such as SIEMENS, Schneider, Honeywell, etc. Users can designate the brand.
- Using electricity as the fuel, environmental protection, energy-saving, pollution-free & wide applicability.



Item/Type		Automatic Electric Heating Hot Water Boiler													
Rated thermal power	KW	60	90	120	180	240	360	480	600	720	960	1080	1440	2160	
	x10 ⁴ Kcal/h	5	7	10	15	20	30	40	50	60	80	90	120	180	
Rated working pressure MPa		0													
Power consumption KW*n		15*4	15*6	24*5	24*8	24*10	24*15	24*20	24*25	24*30	24*40	24*45	24*60	24*90	
Supply water temperature °C		85													
Return water temperature °C		60													
Thermal efficiency %		98													
Supply heat area m ²		500	700	1000	1500	2000	3000	4000	5000	6000	8000	9000	12000	18000	
Boiler water capacity m ³		0.135	0.163	0.299	0.345	0.426	0.56	0.71	1.225	1.23	1.98	2.35	2.85	5.82	
Supply water pipe diameter DN		G2"	50	G2"	G2"	G2"	65	65	80	100	100	100	150	150	
Return water pipe diameter DN		G2"	50	G2"	G2"	G2"	65	65	80	100	100	100	150	150	
Blowdown pipe diameter DN		G2"	40	G2"	G2"	G2"	65	65	80	65	80	100	125	125	
Size of boiler largest parts mm	Length	950	950	1130	1300	1300	2000	2160	2100	2200	2400	2600	2700	3200	
	Width	730	730	930	900	900	1050	1000	1200	1200	1750	1460	1460	2400	
	Height	1100	1100	1080	1300	1400	1350	1400	1600	1700	2050	1850	1900	2700	
Weight of boiler kg		200	210	280	400	550	650	700	900	1500	1580	1650	1900	3500	

Notes: This form is only for reference, if any changed, please refer to factory's technical documents.

Automatic Electric Steam Boiler

PRODUCT DESCRIPTION:

- All components marked with UL,CAS,CE safety certification identifications; fully dip electric heating components are fastened on the flange, which make it is easy to replace.
- The heating component is made of erosion resistance stainless steel, heating tube and INCOLOY800 alloy steel, it possesses the property of long continuous operating endurance, erosion resistance, relief dirty and low surface load;. The circuit is design with fuse to make sure the oblique electric wave is under control. So the circuit is safe.
- Main machine and control system are separated for the high power boiler to avoide the component from interfering and heat producing components from aging.
- Dynamical digital control is applied to the control system.Is has the functions of PID adjustment, pump interlock; heat producing work alternately, real time parameter display.



Item\Type	Automatic Electric Steam Boiler									
Rated heat capacity kw	36	75	144	144	216	360	720	1080	1440	
Rated steam capacity t/h	0.05	0.1	0.2	0.2	0.3	0.5	1	1.5	2	
Rated working pressure MPa	0.4	0.4/0.7	0.4	0.7	0.4/0.7	0.7	0.7/1.0	1	1	
Power x class number Kw x n	12X3	15X5	24X6	24X6	24X9	24X15	24X30	33X32	24X60	
Saturated steam temperature °C	154	154/170	154	170	154/170	170	184	184	184	
Designed thermal efficiency (%)	≥98									
Rated operational voltage	~ 380 V									
Mode of connection	three-phase three-wire system									
Steam caliber DN	20	25	40	40	40	50	65	65	80	
Inlet diameter DN	20	25	25	25	25	25	40	40	40	
Safe vavle diameter DN	25	40	40	40	40	40	2X40	2X40	4X40	
Blowdown valve diameter DN	25	40	40	40	40	40	40	40	40	
Boiler weight Kg	160	220	420	486	500/ 550	1980	2245 /2300	2600	4000	
Outlook size	Length mm	700	890	1180	1120	1220	2450	2450	2800	2500
	Width mm	470	700	960	970	980	1700	1800	2000	2000
	Height mm	1250	1310	1470	1520	1520	1700	2000	2050	2300

Successful Overseas Cases



6Ton/h Gas Fired Boiler in Uzbekistan



4Ton/h & 12Ton/h Coal Boiler in Pakistan



10Ton/h Wood Chips Fired Boiler in Ukraine



4Ton/h Oil&Gas Dual Fuel Boiler in Myanmar



20Ton/h Gas Fired Boiler in Kuwait



3Ton/h Wood Fired Boiler in Angola



2Ton/h Heavy Oil Fired Boiler in Bangladesh



1Ton/h Diesel Fired Boiler in Philippines



2Ton/h Biomass Fired boiler in Ghana



75Ton/h Circulating Fluidized Bed Boiler in Cuba



6Ton/h Wood Fired Boiler in Thailand



2Ton/h Gas Fired Boiler in Spain



2Ton/h Heavy Oil Fired Boiler in Kenya



4Ton/h Wood Fired boiler in Mongolia



500kg/h Diesel Fired boiler in Indonesia



2Ton/h Diesel Fired boiler in Nigeria



500kg/h Wood Fired Boiler in Madagascar



6Ton/h Coal Fired Boiler in Sri Lanka



2.5Ton/h Oat Hulls Fired Boiler in Serbia



0.7MW Gas Fired Hot Water Boiler in Kazakhstan