

TAISHAN GROUP

Coal Fired Boilers



POWERING THE WORLD WITH INNOVATIVE ENERGY SOLUTIONS

Company Introduction

1978

Independent Factory

1978 Named as "Taian City Boiler Factory."

1994

Joint-Stock System Reform

1994 Joint-stock company renamed as "Taishan Group Co., Ltd.,

2002

Merging And Reorganization, Privatization Transformation

2002 Core enterprise transformed to privatization.

2010

Expanded Operation

2006 Held Shandong Luneng Mount.Tai Electric Equipment Co., Ltd. 2010 Registered Weihai Shidao Heavy Industry Co., Ltd.

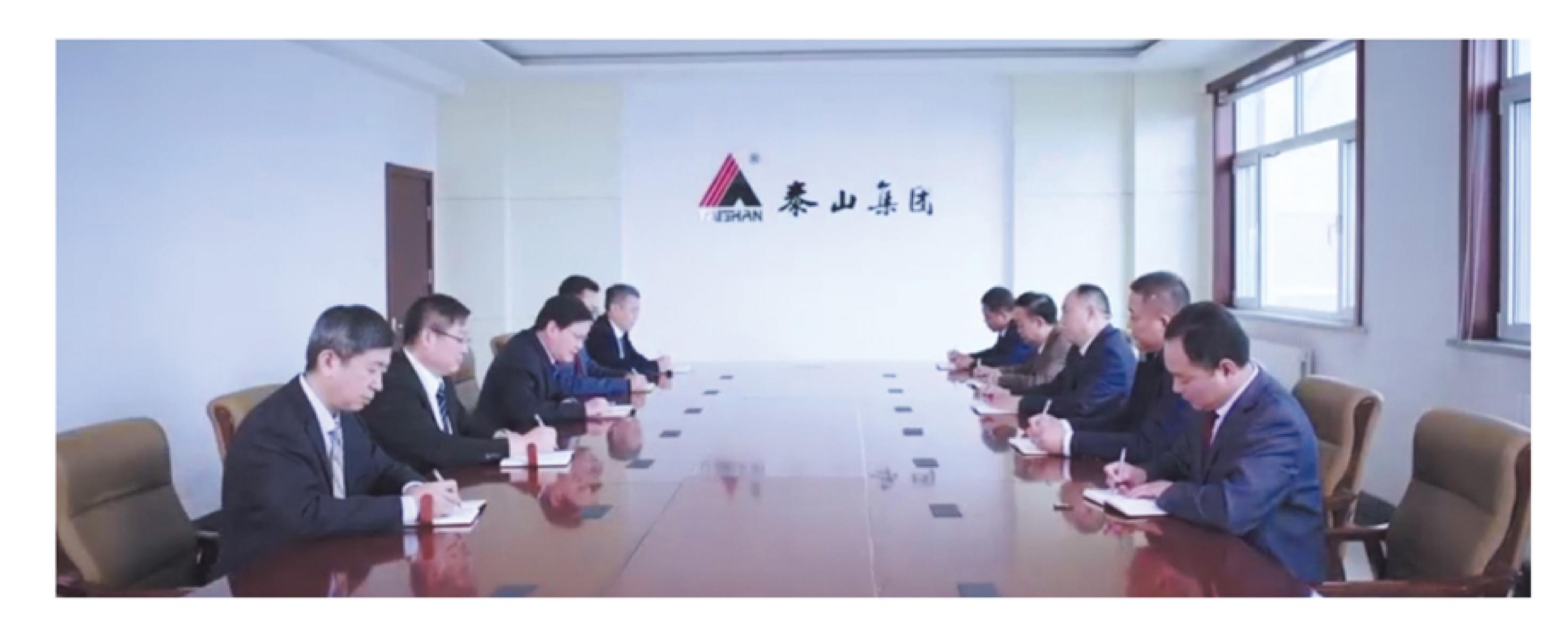
2017

Industrial Chain Extension

2017 Acquired Shandong Yineng Engineering Design Co., Ltd.
2020 Registered Taishan Combustion Control (Taian) Co., Ltd.
2023 Registered New Grid (Shandong) Energy Equipment Technology Co., Ltd.

TAISHAN GROUP

Since 1978



Founded in 1978, TaiShan Group has nearly 50 years of experience and know-how in combustion technology. With excellent performance and fabulous quality, TaiShan Group has become a well-known leading coal, biomass and waste to energy solution provider.

TaiShan Group's manufacturing facilities span over 378,000 square meters, with an annual turnover of over 500 million USD. Our design team comprises over 50 senior engineers and 80 chief designers. In the past decade, we have completed over 25 EPC projects and 500 boilers overseas. We are dedicated to delivering high-quality boilers and A-Z services, and have a professional engineering, fabrication, QC, erection, and aftersales team to ensure best customer experience.



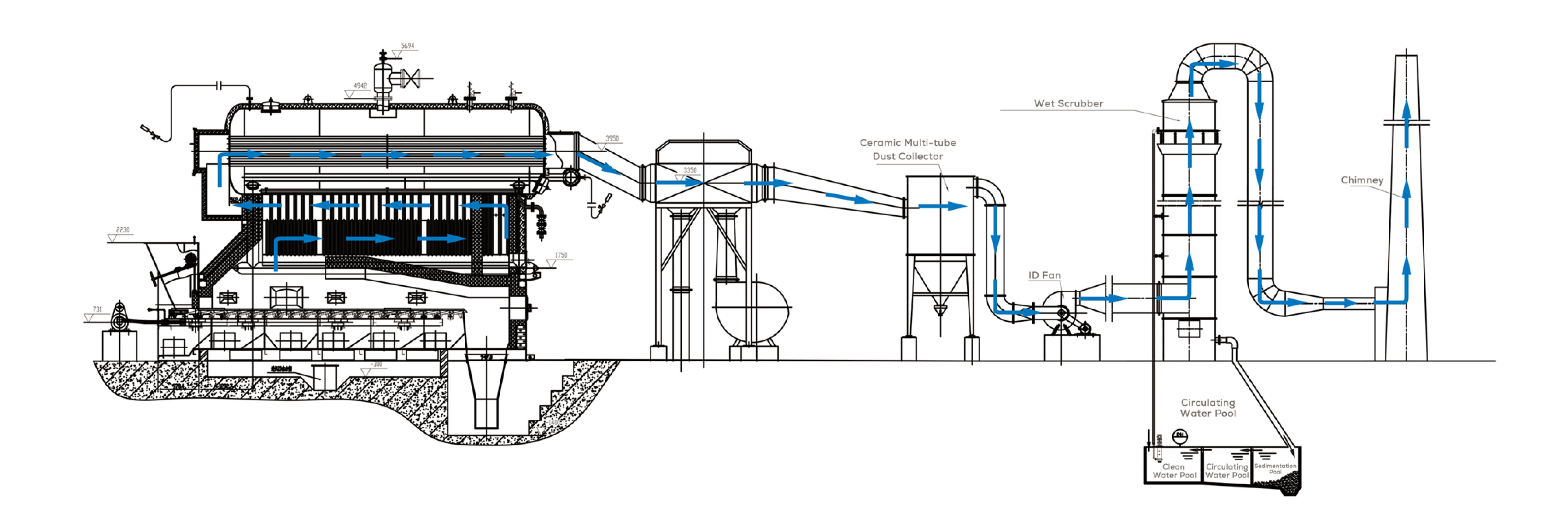
COAL FIRED BOILERS

Coal fired boilers are our competitive and high-performance industrial boiler products in domestic and overseas markets, which is often classified into coal fired steam boiler and coal fired hot water boiler.

All our 'TAISHAN' brand coal fired boiler, which include DZL series coal boiler, SZL coal fired steam boiler, DHL coal boilers, SHL coal steam boiler and CFB boiler, have the following characteristics: High thermal efficiency, Preferable environment effect, High safety, Easy operation, Integrated control, Compact structure.

Taishan Group had been specializing in delivering one-stop industrial boiler solutions to worldwide customers since its foundation in 1994. All our fired coaled boilers can be customized based on your special requirements.

Boiler Flue Gas System Drawing



Double Drum Longitudinal Layout Water Tube Chain Grate Boiler



SZL

Capacity: 2-35t/h

Working pressure: 1.0 MPa /1.25 MPa / 1.6 MPa / 2.5 MPa

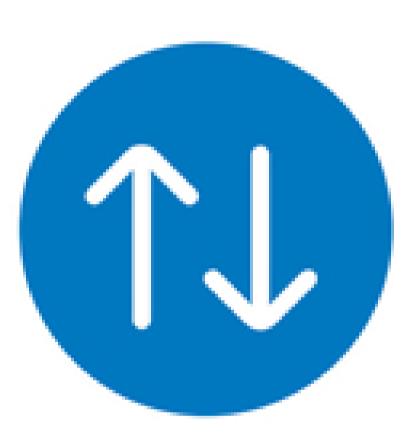
Operating temperature: 183°C / 193°C / 204°C / 226°C

Suitable fuel:

Soft coal, Anthracite coal, Brown coal, Sub-bituminous coal

Application Industry:

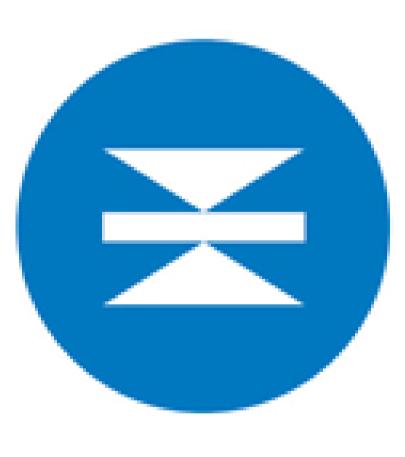
Heating, chemical industry, food, tobacco, textile, printing and dyeing, feed, medicine, building materials, wine, rubber, hospital



Ex-work by upper and lower separate parts, lay out by single floor layout. With compact structure, easy installation and less civil investment.



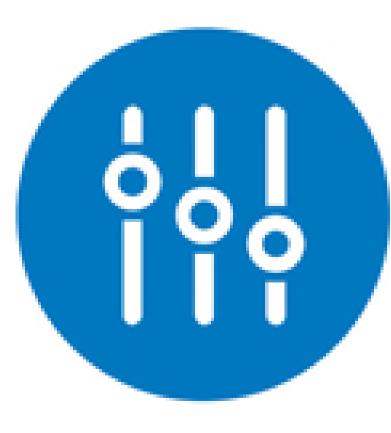
Automatic control at water feeding, coal feeding, chain grate running, dust removing, ID air control.



Two sides feeding air,
separate air chamber,
separate adjustment.
Adjustment, avoiding partial
burning caused by uneven air
distribution under grate.



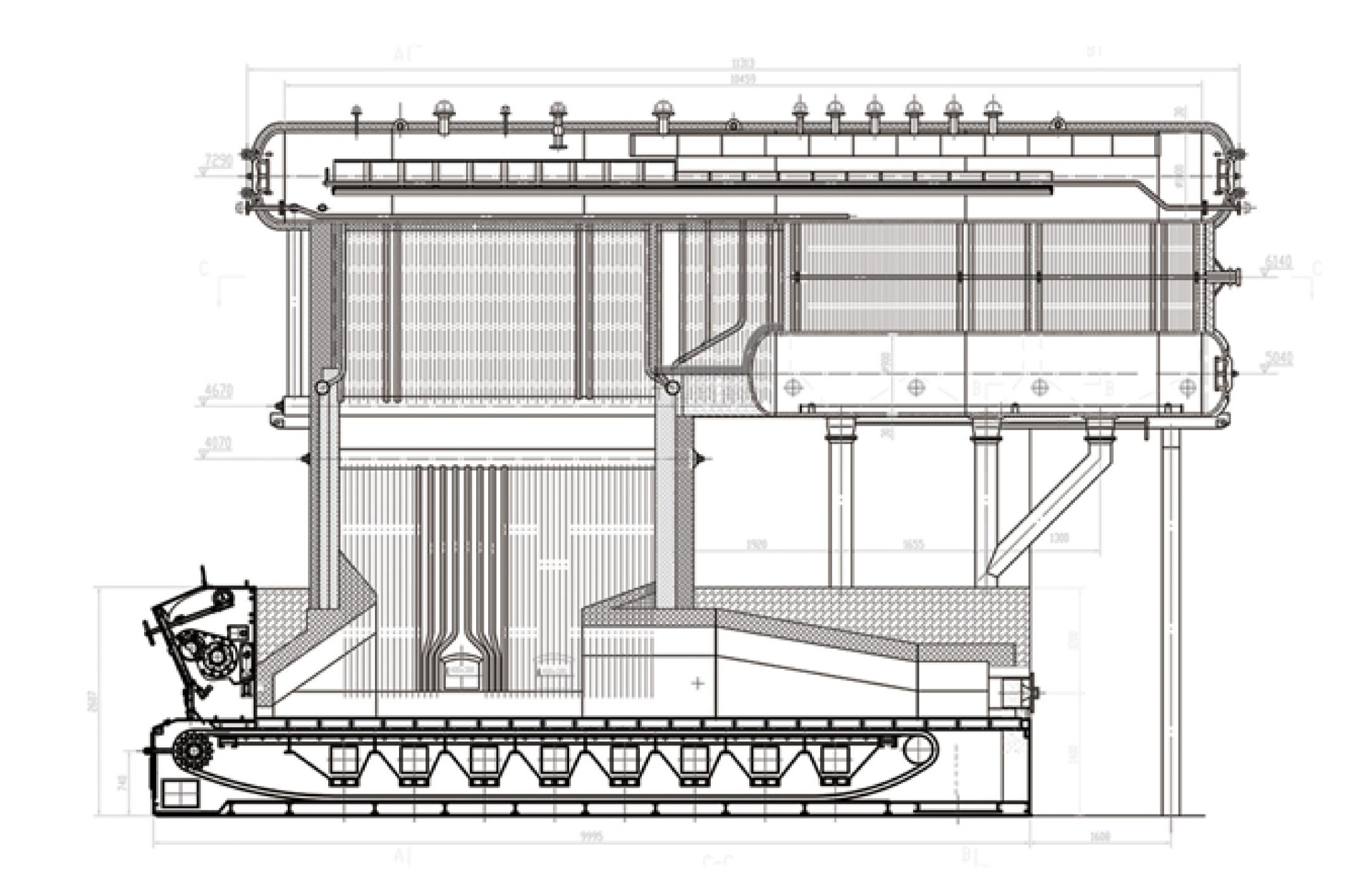
Use high strength small flake grate bar, avoid the breakage of the plate, reduce coal leakage.



Add rolling wheel under the chain grate, the sliding friction change into rolling friction, reduce the grating running resistance, improve the reliability.



Sufficient heating surface, high efficiency, With heat efficiency 3–4% higher than national standard.



	Technical Data of SZL Coal Fired Steam Boiler												
Model	Rated Evaporation Capacity (t/h)	Rated Steam Pressure (MPa)	Feed Water Temperature (°C)	Rated Steam Temperature (°C)	Radiation Heating Area (m²)	Convection Heating Area (m ²)	Economizer Heating Area (m²)	Active Grate Area (m²)	Coal Consumption (kg/h)				
SZL6-1.25-All	6	1.25	105	193	18.7	121	104.64	7.643	854.5				
SZL6-2.5-AII	6	2.5	105	226	18.7	121	104.64	7.643	830.2				
SZL10-1.25-AII	10	1.25	105	193	26.5	162	209.28	11.72	1422				
SZL10-1.6-All	10	1.6	105	204	26.5	162	209.28	11.72	1431.3				
SZL10-2.5-All	10	2.5	105	226	26.5	162	279.1	11.72	1435.7				
SZL15-1.25-AII	15	1.25	105	193	44	280	261.6	17.25	2133.1				
SZL15-1.6-All	15	1.6	105	204	40	255	261.6	17.25	2138.6				
SZL15-2.5-All	15	2.5	105	226	40	255	261.6	17.25	2377.2				
SZL20-1.25-All	20	1.25	105	193	75.6	360.8	236	21.06	3135.14				
D	1. The fuels applicable to this model are: bituminous coal, anthracite, lean coal and lignite, among which lignite generally adopts horizontal reciprocating grate. 2. According to users' requirements, we can produce hot water boilers with rated heat power of 1.4-58MW and rated outlet pressure of 0.7-1.6MPa.												

TAISHAN GROUP

3. Design thermal efficiency is 81~82%.

4. Heat efficiency and coal consumption is calculated by LHV 19845KJ/Kg (4740kcal/kg).

Double Drum Horizontal Layout Water Tube Chain Grate Boiler



SHL

Capacity: 6-75 t/h

Working pressure: 1.0 MPa /1.25 MPa / 1.6 MPa / 2.5 MPa

Operating temperature: 183°C / 193°C / 204°C / 226°C

Suitable fuel:

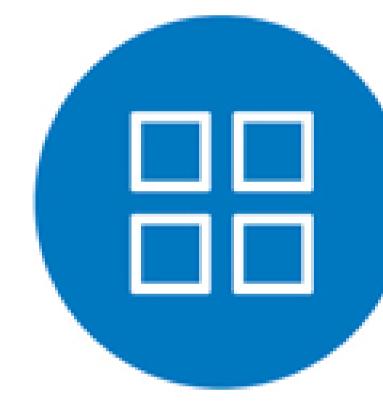
Soft coal, Anthracite coal, Brown coal, Sub-bituminous coal

Application Industry:

Heating, chemical industry, food, tobacco, textile, printing and dyeing, feed, medicine, building materials, wine, rubber, hospital



The outlet power of boiler is enough; design efficiency is high.



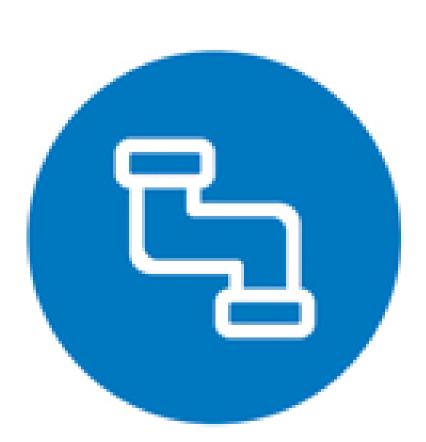
The boiler adopts flake chain grate, without coal leakage, heat loss of fuel is little.



The wind chamber is independent and sealed.



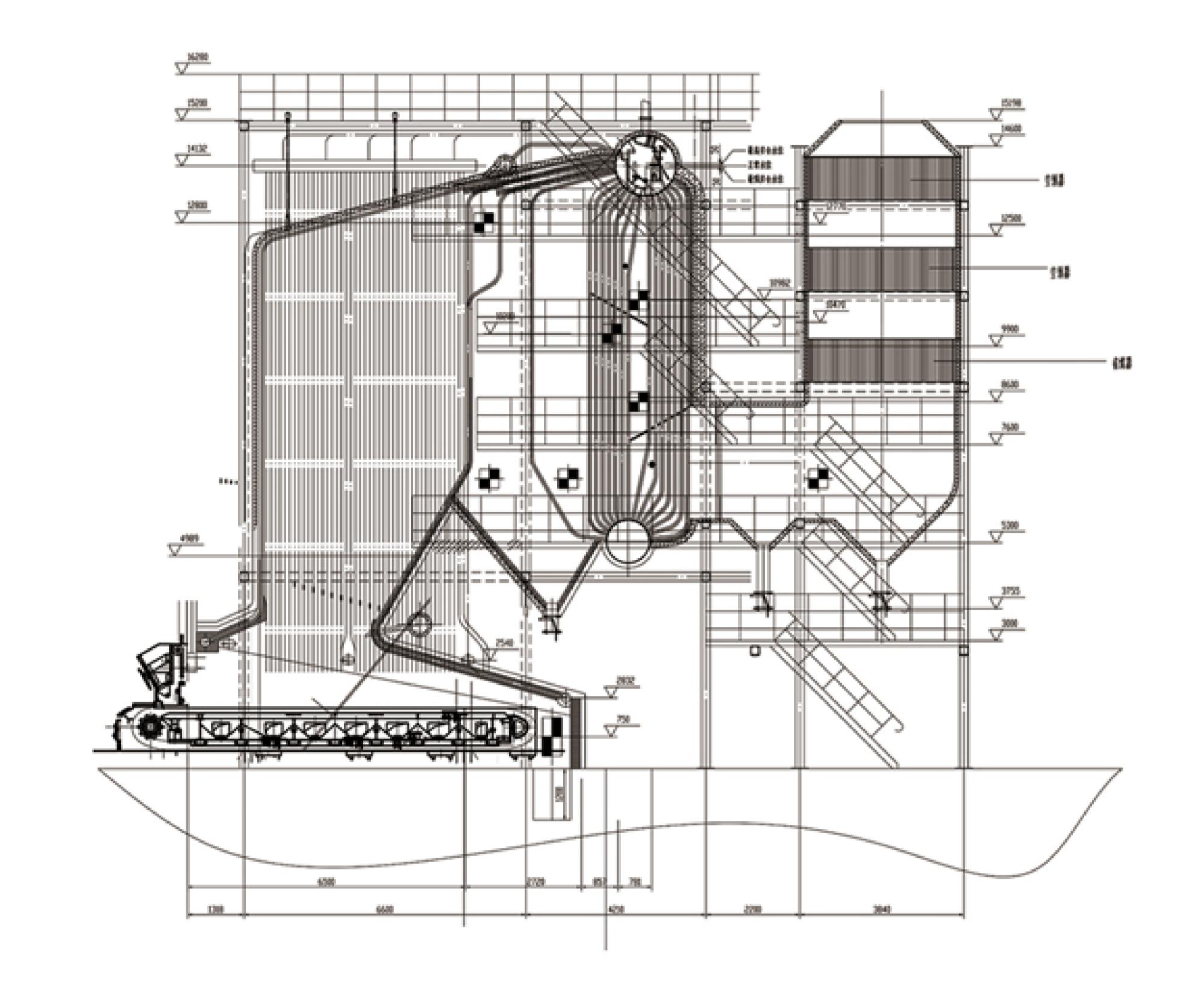
The air pre-heater is installed at the rear heat surface, promote timely and full burning of the fuel.



The outlet of furnace sets slag proof tube, which avoids slag-bonding of convection tubes, improves the heat transfer effect.



Convection tubes sets guide plates for flue gas, which guides the smoke to scour the tube and improve heat transfer coefficient.



	Technical Data of SHL Coal Fired Steam Boiler													
Model	Rated Evaporation Capacity (t/h)	Rated Steam Pressure (MPa)	Feed Water Temperature (°C)	Rated Steam Temperature (°C)	Radiation Heating Area (m ²)	Convection Heating Area (m ²)	Economizer Heating Area (m ²)	Air Preheater Heating Area (m ²)	Active Grate Area (m²)	Coal Consumption (kg/h)	Flue Gas Temperature (°C)			
SHL10-1.25-All	10	1.25	105	193	42	272	94.4	170	12	1491	155			
SHL15-1.25-All	15	1.25	105	193	62.65	230.3	236	156.35	18	2286	159			
SHL20-1.25-All	20	1.25	105	193	70.08	434	151.16	365.98	22.5	2930	150			
SHL20-2.5/400-All	20	2.5	105	400	70.08	490	268	365.98	22.5	3281	150			
SHL35-1.25-All	35	1.25	105	193	135.3	653.3	316	374.9	34.5	4974	144			
SHL35-1.6-AJI	35	1.6	105	204	135.3	653.3	316	379.9	34.5	5007	141			
SHL35-2.5-All	35	2.5	105	226	135.3	653.3	273.8	374.9	34.5	5014	153			
SHL40-2.5-All	40	2.5	105	226	150.7	736.1	253.8	243.7	35	5913	148			
SHL45-1.6-All	45	1.6	105	204	139.3	862.2	253.8	374.9	40.2	6461	157			
SHL75-1.6/295-AIII	75	1.6	105	295	309.7	911.7	639.7	1327.7	68.4	10163	150			
PARTITURE.	2.According to us	able to this model sers' requirements	s, we can produce							h.				

10 TAISHAN GROUP

3. Design thermal efficiency is 81~82%.

4.Heat efficiency and coal consumption is calculated by LHV 19845KJ/Kg (4740kcal/kg).

Single Drum Longitudinal Layout Fire Tube Chain Grate Boiler



DZL

Capacity: 1-100 t/h

Working pressure:

1.25 MPa / 1.6 MPa / 2.5 MPa/3.82MPa/5.29MPa/9.8MPa

Operating temperature:

193℃ / 204℃ / 226℃/ 450℃/ 485℃/ 540℃

Suitable fuel:

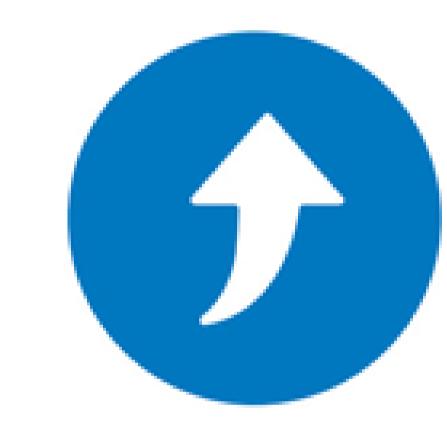
Soft coal, Anthracite coal, Brown coal, Sub-bituminous coal

Application Industry:

Heating, chemical industry, food, tobacco, textile, printing and dyeing, feed, medicine, building materials, wine, rubber, hospital



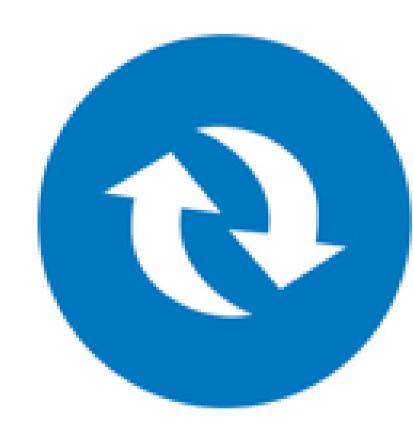
Reasonable heat surface and burning device, heat efficiency is 4%~5% higher than national standard.



Reasonable flue gas speed, heating surface without ash deposition and no abrasion, under the condition of no soot-blowing, the boiler can work full-load, high-efficiency and safety in long term.



The big and tall boiler furnace can be designed according to the different fuel to improve the burning rate of fuel and remove black smoke.



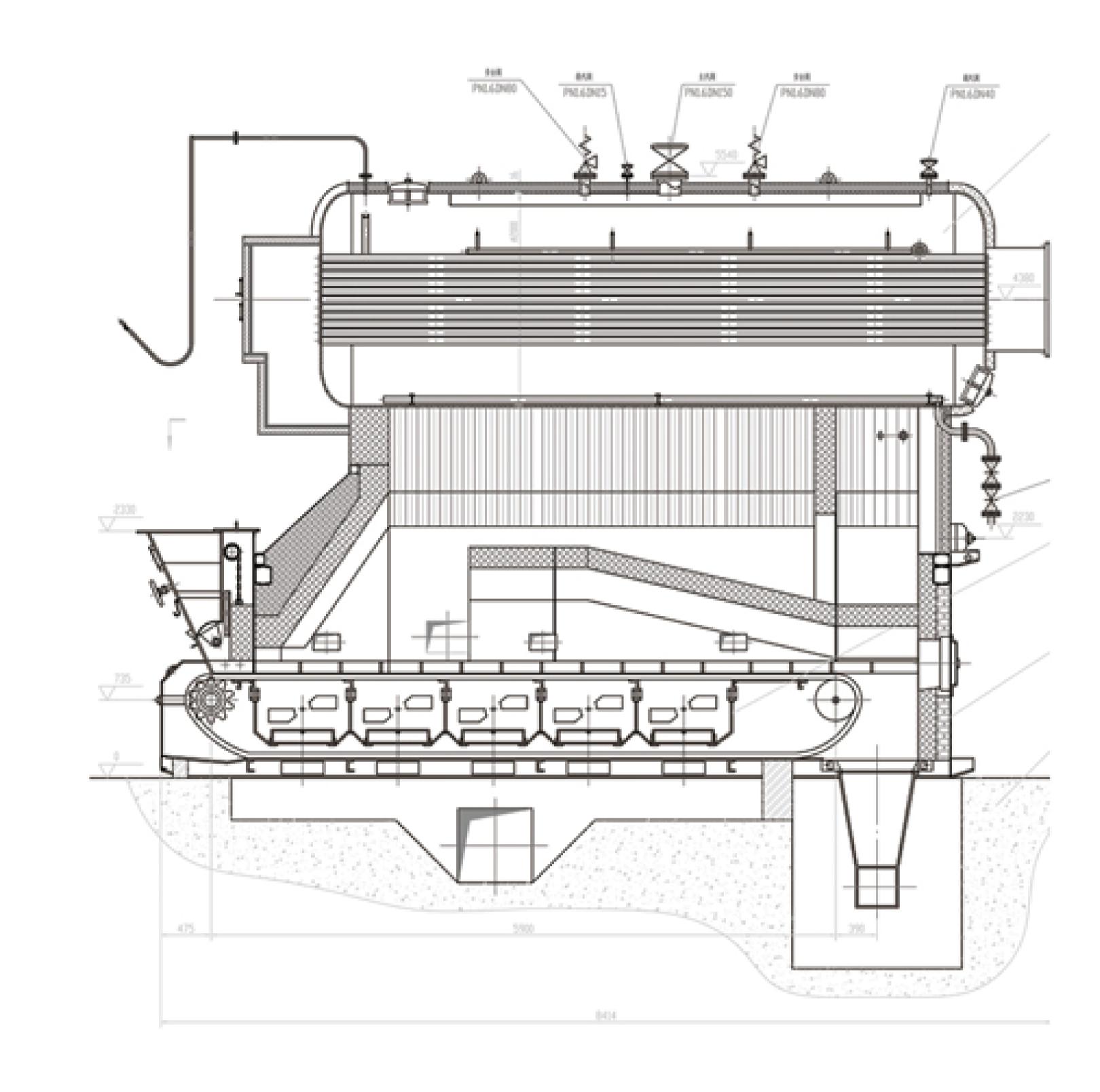
All independent loop and reasonable coal boiler injected circulation are specially designed and adopted for the hot water boilers. The medium speed in loop of heat surface is higher than national standard.



1-20T/H & 0.7-14MW boiler adopt big and high strength grate, add rolling device improves the boilers' safety, lessen coal leakage and adjust burning conveniently.



Over 20T/H & 14MW boiler adopt flake type or beam type chain grate, less coal leakage, convenient burning adjustment. Closed soot cleaning avoid second pollution and save time and labor.



Technical Data of DZL Coal Fired Steam Boiler											
Model	Rated Evaporation Capacity (t/h)	Rated Steam Pressure (MPa)	Feed Water Temperature (°C)	Rated Steam Temperature (°C)	Radiation Heating Area (m ²)	Convection Heating Area (m²)	Economizer Heating Area (m ²)	Active Grate Area (m²)	Flue Gas Temperature (°C)	Coal Consumption (kg/h)	
DZL1-0.7-All	1	0.7	20	170	4.21	20.68	9.66	1.852	152	170.74	
DZL1-1.0-All	1	1	20	184	4.21	20.68	9.66	1.852	160	172.93	
DZL2-0.7-AII	5	0.7	20	170	6.43	39.23	16.56	3.15	152	338	
DZL2-1.0-All	5	1	50	184	6.43	39.23	16.56	3.15	161	341.71	
DZL2-1.25-AII	2	1.25	20	193	6.43	39.23	16.56	3.15	164	343.63	
DZL4-0.7-All	4	0.7	50	170	10.55	90.45	16.56	5.18	154	664.18	
DZL4-1.0-All	4	1	20	184	10.55	90.45	16.56	5.18	163	673.22	
DZL4-1.25-AII	4	1.25	50	193	10.55	90.45	16.56	5.18	164	676.27	
DZL4-1.6-All	4	1.6	20	204	10.55	90.45	53.13	5.18	169	682.11	
DZL6-1.25-AJI	6	1.25	105	193	18.19	121.9	53.13	7.55	165	863.6	
DZL6-1.6-All	6	1.6	105	204	18.19	121.9	104.64	7.55	169	872.6	
DZL8-1.25-AII	8	1.25	105	193	22.14	158.86	104.64	9.34	161	1148	
DZL8-1.6-All	8	1.6	105	204	22.14	158.86	130.8	9.34	165	1157.8	
DZL10-1.25-All	10	1.25	105	193	25.8	200.38	130.8	10.98	160	1423.8	
DZL10-1.6-All	10	1.6	105	204	25.8	200.37	261.6	10.98	162	1442.74	
DZL12-1.25-All	12	1.25	105	193	25.8	250.17	261.6	12.78	149	1714.5	
DZL12-1.6-All	12	1.6	105	204	25.8	250.17	117.72	12.78	150	1721.8	
DZL15-1.25-All	15	1.25	105	193	34.12	331.62	117.2	16.24	159	2167.89	
DZL15-1.6-All	15	1.6	105	204	34.12	331.62	212.4	16.24	164	2164.7	
DZL20-1.25-AII	50	1.25	105	193	53.78	411.8	212.4	20.84	153	2868.63	
DZL20-1.6-AII	50	1.6	105	204	53.78	411.8	476.16	20.84	159	2884.7	
DZL25-1.25-AII	25	1.25	105	193	99.21	457.78	476.16	24.67	152	3551	
DZL25-1.6-AllV	25	1.6	105	204	99.21	457.78	520.8	24.67	156	3556	
DZL30-125-AII	30	1.25	105	193	44.5	628.6	520.8	26.88	156	4230	
DZL30-1.6-AII	30	1.6	105	204	44.5	628.6	520.8	26.88	160	4254.5	
DZL35-1.25-All	35	1.25	105	193	87.2	744.2	520.8	35	155	4970.3	
DZL35-1.6-All	35	1.6	105	204	124.7	685	520.8	35	158	4967.8	
DZL40-1.25-All	40	1.25	105	193	125.88	759.61	729.12	35	143	5612.3	
DZL40-1.6-AII	40	1.6	105	204	125.88	759.61	729.12	35	146	5650.3	
DZL45-1.6-All	45	1.6	105	204	14.11	1003.54	729.12	37	150	6374.9	
Remark	1.The fuels applicable to 2.According to users' n	equirements, we can p									

12 TAISHAN GROUP

3.Design thermal efficiency is 81-82%.

4. Heat efficiency and coal consumption is calculated by LHV 19845KJ/Kg(4740kcal/kg).

Single Drum Horizontal Layout Corner Tube Chain Grate Boiler



DHL

Capacity: 10-100 t/h

Working pressure: 1.0 MPa /1.25 MPa / 1.6 MPa / 2.5 MPa

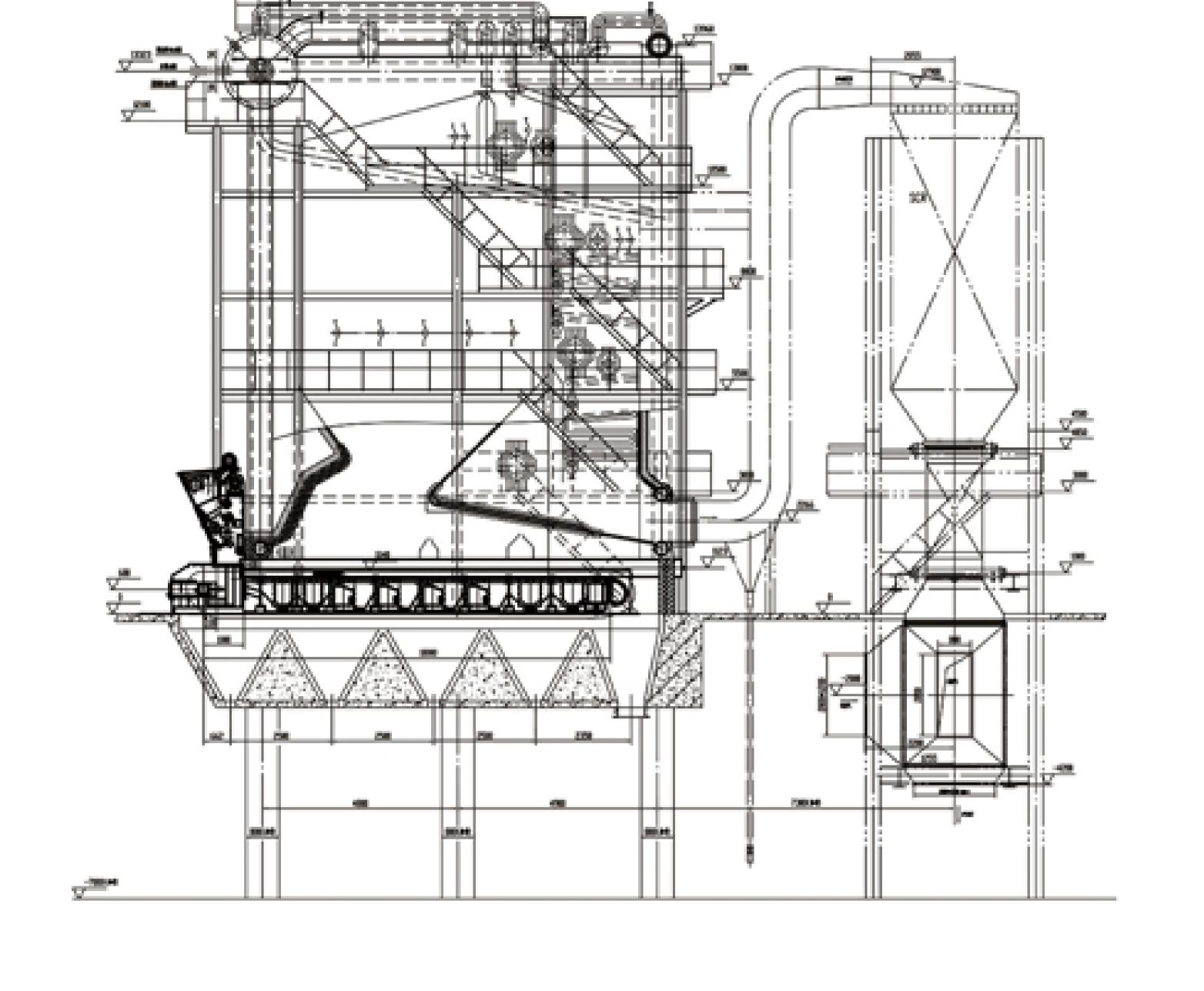
Operating temperature: 183°C / 193°C / 204°C / 226°C

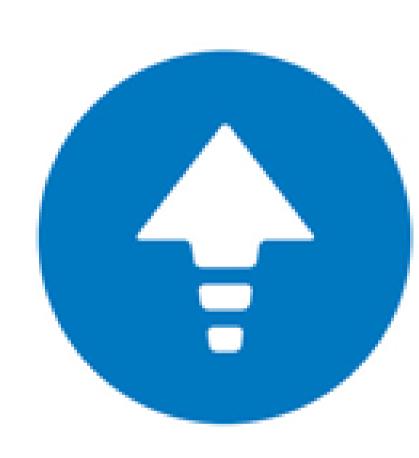
Suitable fuel:

Soft coal, Anthracite coal, Brown coal, Sub-bituminous coal

Application Industry:

Heating, chemical industry, food, tobacco, textile, printing and dyeing, feed, medicine, building materials, wine, rubber, hospital





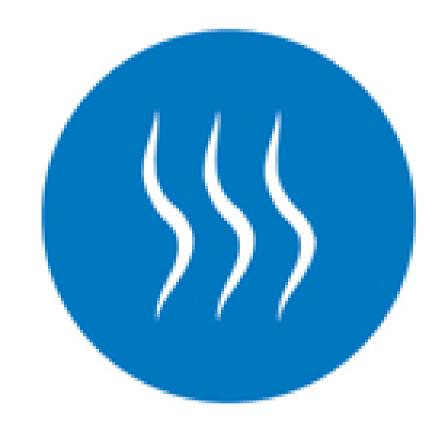
High efficiency, low fuel consumption; low operating costs.



High safety level, panel-type heating surface in the furnace, furnace heated evenly.



Improve the furnace temperature field to ensure safe operation of the boiler.



Reasonable flue gas speed, heating surface without ash deposition and no abrasion.



The big and tall boiler furnace can be designed according to the different fuel.



Environmental protection effect is good, use multi-level dust removal.

	Technical Data of DHL Coal Fired Steam Boiler												
Model	Rated Evaporation Capacity (t/h)	Rated Steam Pressure (MPa)	Feed Water Temperatur e (°C)	Rated Steam Temperatur e (°C)	Radiation Heating Area (m²)	Slag Screen Heating Area (m²)	Superheater Heating Area (m²)	Convection Heating Area (m²)	Economizer Heating Area (m²)	Air Preheater Heating Area(m ²)	Active Grate Area(m²)	Coal Consumption (kg/h)	Flue Gas Temperatur (°C)
DHL35-3.82-AII	35	3.82	105	450	152	35.4	271	/	630	693.3	31.4	6310	143
DHL65-1.6-All	65	1.6	105	204	421.4	/	/	1085.1	826	410.3	63	7792	152
DHL65-3.82-AII	65	3.82	105	450	293	59	510	/	923	1179	61.34	10940	160
Remark	1. The fuels applicable to this model are: bituminous coal, anthracite, lean coal and lignite, among which lignite generally adopts horizontal reciprocating grate. 2. According to users' requirements, we can produce hot water boilers with rated heat power of 7-116MW and rated outlet pressure of 0.7-1.6MPa. 3. Design thermal efficiency is 81~82%. 4. Heat efficiency and coal consumption is calculated by LHV 19845KJ/Kg (4740kcal/kg).												

Circulating Fluidized Bed Coal Boiler



CFB

Capacity: 6-90 t/h

Working pressure:

1.25 MPa / 1.6 MPa / 2.5 MPa/3.82MPa/5.29MPa/9.8MPa

Operating temperature:

193℃ / 204℃ / 226℃/ 450℃/ 485℃/ 540℃

Suitable fuel:

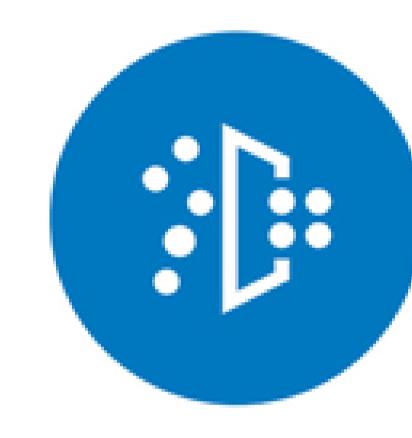
Soft coal, Anthracite coal, Brown coal, Sub-bituminous coal, Washery rejects, Peat

Application Industry:

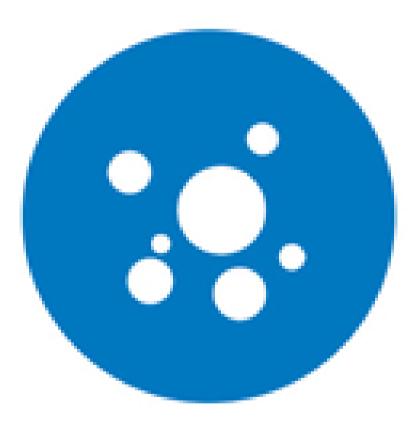
Heating, chemical industry, food, tobacco, textile, printing and dyeing, feed, medicine, building materials, wine, rubber, hospital



Burning efficiency reaches 95%–99%, high burning rate, heat efficiency above 87%.



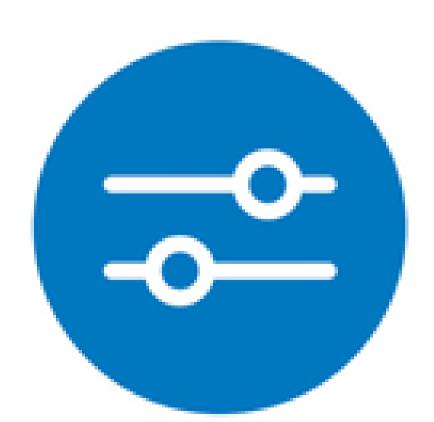
Energy-saving, high efficiency, high flexibility of fuel, which can satisfy the burning of many kinds of fuel.



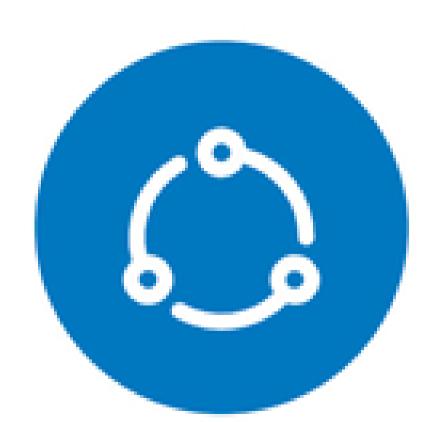
Limestone can be added in bed material during burning process reacts with SO2 of flue formulates sulphate, desulphuration can satisfy environment protection.



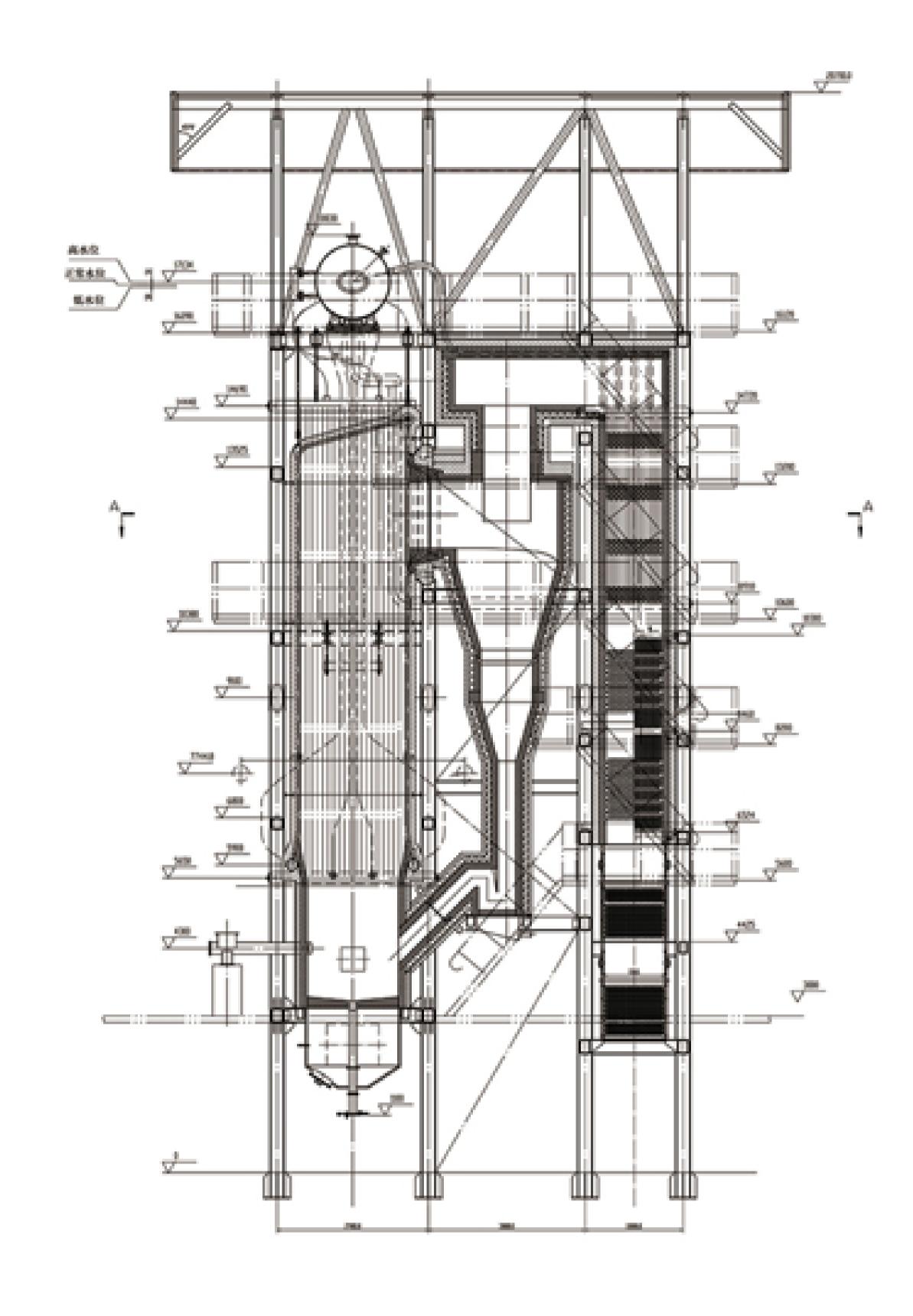
Reasonable wind distribution and low temperature or furnace can control formulation of NOx and really reach environment protection.



Big adjusting range load can be adjusted to 30–110%.



High automatic control makes boilers running safely and economically in long term.



	Specifications of CFB Steam Boiler													
Model	Rated Evaporation Capacity (t/h)	Rated Steam Pressure (MPa)	Feed Water Temperature (°C)	Rated Steam Temperature (°C)	Fuel Consumption (kg/h)	Flue Gas Temperature (°C)	Primary Air Temperature (°C)	Secondary Air Temperature (°C)	Ratio of Primary Air to Secondary Air					
TG35-3.82-M	35	3.82	150	450	8595	150	150	150	1:1					
TG75-3.82-M	75	3.82	150	450	18418	150	150	150	1:1					
TG75-5.29-M	75	5.29	150	485	18321	150	150	150	1:1					
TG130-3.82-M	130	3.82	150	450	31924	150	180	170	1:1					
TG130-5.29-M	130	5.29	150	485	31756	150	180	170	1:1					
TG130-9.8-M	130	9.8	215	540	30288	150	200	200	1:1					
TG220-3.82-M	220	3.82	150	450	54025	150	200	200	1:1					
TG220-5.29-M	220	5.29	150	485	53742	150	200	200	1:1					
TG220-9.8-M	220	9.8	215	540	51256	150	200	200	1:1					
TG440-13.7-M	440	13.7	250	540	102520	150	200	200	1:1					
	1. TG steam boile	rs are suitable for	all types of fuels.											

I G steam boilers are suitable for all types of fuels.

2. Fuel particle is £10mm, and limestone particle is £2mm.

Design efficiency is 88%.

Desulphurization efficiency is 90%.

5.According to users' requirements, we can produce hot water boilers with rated heat power of 5.6-160MW and rated outlet pressure of 1.0-2.5MPa.

6. Heat efficiency and fuel consumption is calculated by LHV 12670KJ/Kg(3026kcal/kg).

Our Partner

As of 2022, Taishan Group has successfully sold over 7,000 coal-fired boilers worldwide, spanning across 20 countries and regions including Mongolia, Pakistan, Thailand, Vietnam, among others.

This widespread presence has extended the role of coal in various industries such as centralized heating, textiles, paper manufacturing, rubber, and food production.































PARTNER



Center Central Heating Project

10Gcal/h 1.6Mpa GB

BYUCKSAN ENGINEERING CO., LTD.

Mongolia's Ministry of Energy, with funding from Korea's Export-Import Bank, enlisted Korean Byucksan Engineering to oversee a heating upgrade in 10 provinces. TaiShan Group subcontracted for boiler installations, aiming for October 2023 completion. We supplied 22 sets 10Gcal/h CFB hot water boilers, 2 sets 5Gcal/h CFB hot water boilers and 9 sets 2.4Gcal/h step grate hot water boilers.

SAILUN VIETNAM CO., LTD

Sailun Tyre is a globally renowned tire

manufacturing company.

Due to the factory's expansion in

2017, we supplied one set 35TPH coal

CFB boiler. It is the first EPC project
in Vietnam. In 2020, Sailun Vietnam
expanded its production again and we
supplied another 75TPH coal CFB boiler.



VIETNAM NATIONAL COAL AND MINERAL INDUSTRIES GROUP

Vietnam National Coal and Mineral Industries Group (VINACOMIN) is the largest coal and mineral company in Vietnam and serves as a leading enterprise in the country's coal and mineral industry. We supplied two sets 170TPH coal fired CFB boilers.



Aksu Sunshine Thermal Company plays a vital role in Xinjiang's energy industry. The project started operating in winter 2019, significantly improving local heating conditions. We supplied two sets 116MW coal CFB hot water boilers.







Textile Factory Steam Boiler Project

20t/h 1.25Mpa GB

UTOPIA INDUSTRIES (PRIVATE) LTD

UTOPIA is a well-known textile enterprise group in Pakistan with several printing, dyeing, and fabric companies. It is a leading manufacturer and supplier of distinctive fabrics for hotels, residences and rentals, catering to a global clientele. UTOPIA has operations in the United States, Canada, Australia, Europe, and Asia. We supplied them one set 20TPH coal fired steam boiler for their production.

M.Y BARI MILLS (PVT) LTD

Bari Mills is a top family textile mill, exporting bath products to major retailers, hotels, and healthcare industries. Key markets are US, Canada, Australia, and Europe. We supplied a 15TPH coal fired steam boiler.



CROWN TEXTILE

CROWN TEXTILE is a major local knitting apparel production enterprise that primarily exports to Europe and America. We supplied them one set 15TPH coal fired steam boiler.



NIDA TEXTILE MILLS (T) LTD

NIDA Textile Mills is a renowned textile conglomerate in Tanzania, includes printing, dyeing, and fabric companies. We supplied one set 10TPH coal fired boiler for production needs.





CUSTOMER EVALUATION

Byucksan Engineering Co., Ltd.

Taishan Group's unparalleled expertise, reliability, and our longstanding friendship make them the ideal choice for our central heating project in Mongolia. Their proven track record ensures seamless project execution, and the trust forged over the years guarantees mutual success.

Fazal Paper Mills

We opt for Taishan Group for our 20-ton coal-fired boiler, driven by their exceptional industry reputation, advanced technology, and commitment to reliability. Taishan's proven track record aligns perfectly with our production requirements, ensuring a cost-effective and sustainable solution for our paper manufacturing needs.

UTOPIA INDUSTRIES (PRIVATE) LTD

Their reliable performance and efficient energy utilization have positively impacted our operations. Taishan's professionalism, timely delivery, and responsive support contribute to a successful partnership, aligning with UTOPIA 's commitment to quality and sustainability.

BEST INDUSTRY GROUP

They go beyond being mere equipment suppliers; they are strategic partners. Through the supply of over 20 coal-fired steam boilers, Taishan Group has demonstrated exceptional expertise and an understanding of customer needs. Their team is consistently responsive, ensuring the robust and efficient operation of our production lines. We look forward to deeper collaboration in the future.



Tel: 0086-538-6619632

Web: www.coalbiomassboiler.com

Email: boao@taishanboao.com

Add: No.1169 Beitianmen Street,

High-tech Industrial Development Zone,

Tai 'an City, Shandong Province