



Types of Steam Boiler

The steam boiler from CN Boiler is a boiler product that produces steam. It belongs to a pressure vessel and is one of the special equipment. The working principle of the steam boiler is to burn the fuel of the boiler to generate heat, so that the heat heats the water in the boiler and converts the water into steam.



The application of steam boilers is mostly used for industrial production needs, such as chemical industry, food and beverage industry, metallurgical industry, clothing industry, etc. However, due to the working pressure of the steam boiler, after installation and commissioning, it is necessary to go to the local quality inspection department for inspection and acceptance, and go through various procedures before it can operate.

There are many types of steam boilers, which can be divided according to different types as follows:



Application: industry steam boiler, power station steam boiler

Capacity: small steam boiler, medium steam boiler, large steam boiler

Working pressure: low pressure steam boiler, medium pressure steam boiler, high pressure steam boiler

Combustion chamber: internal combustion steam boiler, external combustion steam boiler

Boiler drum arranged type: vertical steam boiler, horizontal steam boiler

Boiler body form: fire tube steam boiler, water tube steam boiler, water fire tube steam boiler

Installation method: integrated steam boiler, bulk steam boiler

Material: steel steam boiler, cast iron steam boiler, aluminum steam boiler

Furnace structure: double return steam boiler, triple return steam boiler

Fuel category: oil fired steam boiler, gas fired steam boiler, biomass steam boiler, coal fired steam boiler, electric steam boiler, waste heat steam boiler

When we choose steam boiler products, we will choose according to the fuel type. We will briefly analyze the steam boiler products of different



fuel types.

★ Gas Steam Boiler

Gas steam boiler is a steam boiler that burns natural gas, biogas, liquefied petroleum gas, gas, etc., which is the mainstream product in the current boiler products and the product we sell the most. It has one drum steam boiler and double drums steam boiler. The gas steam boiler main has WNS series and SZS series products.



Example: SZS10-1.6-Q=SZS series steam boiler, Rated steam capacity 10t/h, rated working pressure 1.6Mpa(16bar), Fuel is natural gas, biogas, liquefied petroleum gas, and so on.

★ Oil fired Steam Boiler

Oil fired steam boiler is oil-fired steam boiler is a boiler product that burns diesel or heavy oil, and its structure is similar to that of gas-fired steam boiler. It also has one drum steam boiler and double drums steam boiler. The oil fired steam boiler main has WNS series and SZS series products.



Example:WNS8-1.6-Y=WNS series oil fired steam boiler,Rated steam capacity 8t/h, rated working pressure 1.6Mpa(16bar), Fuel is diesel, heavy oil.



★ Coal Fired Steam Boiler



Coal steam boiler is the boiler that burns coal such as, it belongs to the traditional boiler products, the price is cheap, loved by customers, he has water hot pot boiler, water tube boiler. The coal steam boiler main has DZL series, SZS series and SHX series products. Different coals have

different combustion characteristics, we will design different boiler bodies according to the characteristics of coal, in order to achieve the



purpose of full combustion of fuel

Example: SHX10-1.6-All=SHX series circulating fluidized bed steam boiler,

Rated steam capacity 10t/h, rated working pressure 1.6Mpa(16bar),Fuel

All; All means Class II bituminous coal.

(Remark: WII:Class II anthracite, WIII:Class III anthracite, AI:Class I bituminous coal, All:Class II bituminous coal, AIII:Class III bituminous coal, H:lignite, P:lean coal)

★ Biomass fired steam boiler

Biomass steam boiler is a steam boiler product burning biomass, because the fuel of biomass steam is made of straw, wood chips, firewood, rice husks, palm and other agricultural waste processing, so its fuel cost is low, the operating cost is low, received a lot of customers favor, it is currently all boilers in the operating



cost of the boiler product. The biomass steam boiler main has DZL series and SZS series.

Example:SZL10-1.6-SCIII=SZL series steam boiler,Rated steam capacity 10t/h, rated working pressure 1.6Mpa(16bar), Fuel is biomass particles, rice rusk, palm shell, and wood chips etc.



★ Electric steam boiler

The electric steam boiler is a boiler product fueled by electricity. Because it burns electricity, it has the advantages of clean environmental protection, ultra-high thermal efficiency, and safe and reliable performance.

But the steam boiler also has the corresponding disadvantages, that is, the operation cost is too high. It is usually named LDR/WDR.



Example: LDR72-0.7=LDR series electricity steam boiler, electricity power 72 kw, rated working pressure 0.7Mpa(7bar), Fuel is electricity

★ Waste Heat Steam Boiler

Waste heat boiler is the boilers which use the waste heat in the waste gas, waste material or waste liquid in various industrial processes and the heat generated by the combustion of combustible substances to heat the water to a certain temperature. The waste heat boiler can produce steam through waste heat recovery to supply other production processes. Since the waste heat boiler greatly improves the utilization rate of the heat released by fuel combustion, so the waste heat boilers are very energy-saving.



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