

VOLCANO SERIES

STEAM BOILERS

SOLID FUEL PRE FURNACE STEAM BOILERS



HIGH CAPACITY
**NON-STOP
EFFICIENCY**



Steam Production Capacity

3.000 kg/h - 25.000 kg/h



Operating Pressure

3-16 Bar



Thermal Capacity

2.093 kW - 17.442 kW



Design Type

Pre Furnace, Water-Tube with Rear Scotch-Type
Wet-Back, Fire-Tube, 5 Pass



Fuel Type

Lignite, Bituminous Coal, Pulverized Coal, Pellets,
Olive Pomace, Olive Stones, Wood, Wood Chips,
Wood Dust, Sawdust, Plywood Waste,
Chipboard Scrap, Hazelnut Shells, Cherry Stones,
Walnut Shells, Straw, Sunflower Husks, Compressed
Bio-Pellets, Pellets, Peanut Shells, Almond Shells,
Fruit Pulp, Poultry Manure, Rice Husks

Capacity Table

Model	Steam Capacity (kg/h)	Thermal Capacity (kcal/h)	Thermal Capacity (kW)	Thermal Capacity (MW)
VOLCANO 150A**	3.000	1.800.000	2.093	2,09
VOLCANO 175A**	3.500	2.100.000	2.442	2,44
VOLCANO 200A**	4.000	2.400.000	2.791	2,79
VOLCANO 250A**	5.000	3.000.000	3.488	3,49
VOLCANO 300A**	6.000	3.600.000	4.186	4,19
VOLCANO 350A**	7.000	4.200.000	4.884	4,88
VOLCANO 400A**	8.000	4.800.000	5.581	5,58
VOLCANO 500A**	10.000	6.000.000	6.977	6,98
VOLCANO 600A**	12.000	7.200.000	8.372	8,37
VOLCANO 800A**	16.000	9.600.000	11.163	11,16
VOLCANO 1000A**	20.000	12.000.000	13.953	13,95
VOLCANO 1250A**	25.000	15.000.000	17.442	17,44

* Please contact us for higher capacities.

Combustion System

Underfeed, Mechanical Screw-Fed, Stoker-Fired
Depending on capacity: Rotary Grate, Reciprocating
Piston Grate

Ekotek reserves the right to modify product specifications, dimensions, and visual representations due to ongoing production processes. Visuals are representative only; actual product color, dimensions, and accessories may differ.

EKOTEK
Heat Technology
+90 (256) 231 15 95



Volcano Series - Solid Fuel Fired Front Furnace Steam Boiler

<https://www.ekotekkazan.com/product/volcano-series-solid-fuel-fired-front-furnace-steam-boiler>

About the Product

In the Volcano Series solid fuel fired front furnace steam boilers, a front furnace made of a water tube bundle is added to a traditional 3-pass Scotch type smoke/flame tube steam boiler to ensure sufficient heat transfer area for solid fuel combustion.

Description

Our boilers are designed for fuel with a minimum of 4,500 kcal/h (flame temperature 1200 C°). For using lower calorific value fuels, please contact our company.

Detailed Description

In our front furnace boilers, there are blowdown and flanged cleaning systems on the lower collectors. During boiler heat load calculations, optimal heat load is given to the boiler heating surface area. The addition of a front furnace completely eliminates the issues of insufficient heat transfer surfaces encountered in standard gas/oil-fired steam boilers during solid fuel applications. The need for extra heating surfaces and a combustion chamber is addressed by the front furnace, making solid fuel combustion efficiency much higher than in 3-pass Scotch type boilers designed for solid fuel combustion.

If requested, our solid fuel boilers can be equipped with automatic ash discharge and automatic lignite coal feeding systems. The large water and steam volume provide high performance under intensive and continuous working conditions, as well as during sudden steam withdrawals. The high heating surface area allows for the production of drier and higher energy steam.

Ekotek Heat Technologies uses 5 types of safety systems in our solid fuel fired front furnace steam boilers:

- Steam Temperature
- Mechanical Pressure
- Digital Pressure
- Safety Valve
- Chimney Temperature Controls

In addition, all safety systems, including boiler feed pumps, are provided as standard in duplicate. With optional features, you have full control with PLC touch screen control, Modbus RTU (Remote Terminal Unit RTU). Take control with Ekotek technology.

Our products operate quietly and do not cause noise pollution. The primary air sent by the fan ensures controlled and clean smokeless combustion. The boiler is produced with corrugated furnaces according to pressure values, enhancing the boiler's strength and resistance to thermal stress. The smoke tubes are welded to the mirror, providing safer and longer-lasting operation. Heat loss is reduced by strong insulation with glass wool or rock wool. Its elegant appearance ensures compatibility with its surroundings. Installation and maintenance are easy.

If requested, our steam boilers can be delivered as a package with all accessories. For different fuel types, such as pellets, dust fuel, wood chips, etc., please contact us!