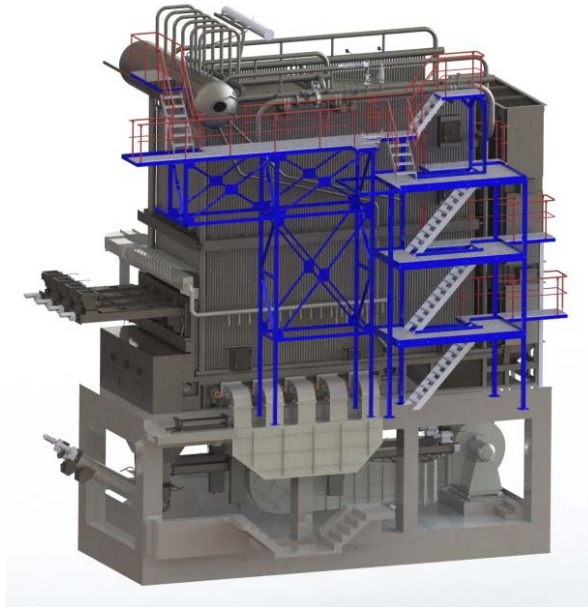


GRATE STEAM BOILER TYPE – VKP-E

Use:

The grate steam boiler VKP-E is designed for production of steam with nominal working overpressure of steam up to 6.5 MPa with temperature of superheated steam up to 510 ° C. Robust construction, high efficiency, simple installation and long working life make VKP-E boilers one of the top products.



Technical description:

This is a new concept of coal-fired boilers following the proven previous VKP series. The main differences are that the boiler is fully membranes, with easily accessible pressure parts of the boiler in case of repair, and modifications of the boiler due to environmental regulations are also taken into account.

The boiler is designed as membrane, water-tube, single-drum, with natural water circulation. The pressure system is self-supporting with a transversely positioned drum. The lower frame of the pressure system consists of two lateral chambers interconnected by transverse chambers from which all the tubes delimiting the combustion chamber and the second draught are led out. The combustion chamber consists of tube walls consisting of generating tubes and irrigation tubes. A two-stage superheater is located in the upper part of the combustion chamber. The superheater is of horizontal construction, fully drained. In the second draught is the boiler evaporator.

As a standalone blocks are economizer and water air heater.

Insulation made of mineral wool is suspended on the membrane walls of the combustion chamber. The whole boiler has a steel casing from the galvanized sheet.

Combustion devices consist of a chain counter grate and fuel feeding with spreader. The boiler is delivered in separate transport blocks comprising a substantial part of the delivery.

The boilers burn brown coal (soft coal) and black coal (hard coal) including biomass.

Boiler type - size	VKP-E	8	12	16	25	30	40
Nominal steam output	t/h	8	12	16	25	30	40
Nominal steam pressure	MPa	1,2 - 6,5					
Nominal steam temperature	°C	190 - 510					
Supply water temperature	°C	105 - 145					
Informative efficiency	%	≥ 87					