

Boiler system planning – Basic

The most important parameters at a glance

Steam output: indicates how many kilograms or tons of steam are required per hour. Attention: When dimensioning, the own use of the system is often forgotten.

System output = boiler output – own use

Required system output: kg/hour

The own use by the feed water treatment is usually between 5 and 20 %. It can be greatly reduced by waste heat recovery.

Do peak loads occur only occasionally or is the system operated with full loads over long periods of time?

- Rarely peak load
 Longer full load times

If necessary, the boiler size can be reduced by a steam accumulator (cost saving).

Pressure: the most important criterion is the average operating pressure. The safety pressure of the boiler is always higher than the operating pressure.

Average operating pressure: bar

Fuel: Depending on the fuel and boundary conditions, different burner/combustion chamber combinations are suitable. Multi-fuel burners are an advantage when high demands are placed on plant availability or when, for example, biogas is available.

Main fuel:

- Natural gas Light oil Ethanol
 H L Heavy oil Animal fats
 Biogas Diesel

External waste heat sources

- yes no

