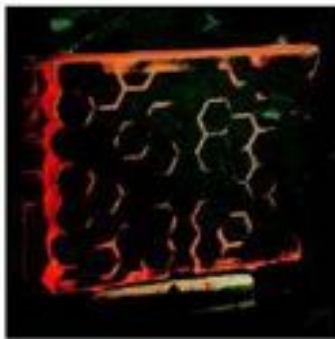


# Total combustion on the ceramic honeycomb grate

Stone is the oldest and most proven material suitable for building a fireplace. On no other material is burnout as complete as on a ceramic grate. Ceramic in wood firing is a patent of nature.



In order to use a ceramic grid that offers all the advantages of a hot stone plate while being able to withstand all mechanical requirements, it was necessary to construct a honeycomb grid of high-alloy cast steel and to insert strong, ceramic grid segments.

The honeycomb construction of the grate frame guarantees the ceramic segments also therefore are protected against damage even when log pieces are carelessly and forcefully thrown onto the grate.

The ceramic insert stones are provided with air inlet openings. The incoming primary air can thus be led to the charcoal bed, where it is most favorable for optimal combustion.



The honeycomb-shaped ceramic grate increases the efficiency of the boiler, since it was developed to bring in the primary combustion air and is provided with air inlet openings. Through substitution of insert stones with air inlet openings by stones without openings, the quantity and pattern of incoming air under the glowbed can be regulated and the boiler can be adjusted to various shapes and types of wood fuel.

Part of the incoming airflow through the air inlets spreads laterally over the glowbed and supports the gasification process. A low-emissions gas mixture is achieved, which is subsequently led into the secondary combustion chamber and then completely burned out.

Dividing the large grate assembly into many small sections makes it impossible for ceramic pieces to crack under the enormous heat impact that occurs during the burnout phase.

Ceramic honeycomb grates offer special advantages for boilers used in carpentry shops, cabinet manufacturing, or sawmills, since the waste materials from these applications, just like wood chips or straw pellets, require more underfeed combustion air into the glow bed, compared to what is necessary for logwood.

**Thanks to this superior grate combination of cast steel and ceramic, it is possible to preserve all of the advantages of a ceramic grate without taking the risk of repeated grate breakage.**