HIGHLY EFFICIENT FULLY AUTOMATIC FLUE GAS RECIRCULATION

World's first standard and highly efficiently controlled flue gas recirculation for primary air

EFFICIENT AND INNOVATIVE
Highly efficiently controlled flue gas recirculation for the primary air supply. Part of the flue gas is premixed with fresh air and fed via innovative air ducts to the combustion area under the grate.

- An intensive performance and combustion optimisation is achieved with different fuels (wood chips or pellets)

- The fresh air control damper (pos. C) including air actuator controls the primary fresh air flow range fully automatically. The hot rezi flue gas as well as the fresh air is supplied in an air duct (pos. A) ideally mixed under the grate. In the secondary area, a fresh air control damper (pos. D) ensures a fully automatic fresh air supply by means of a fresh air servomotor and doses fresh air, which is supplied via an air duct (pos. B) above the grate.

- This creates a perfect air supply for optimum combustion with maximum efficiency and minimum emissions

- Generation of lowest emission and dust values, in connection with the standard lambda control (ideal combustion conditions)

- Reduced thermal load on components due to lower combustion temperatures

- Innovative prevention of slag formation by falling below the ash melting point

- Significant reduction of NOx emissions

- Intelligent and innovative control of perfect air volumes for optimum combustion

ALTERNATIVE SYSTEMS

- If alternative systems do not have a standard fully automatic primary flue gas recirculation system, which regulates the primary air fully automatically via the control system, sub-optimal combustion values could occur with different material qualities, which could also lead to slag formation.