

BIOMATIC SYSTEM

Solid fuel injection system for the firing of clay products with:

- Biomass.
- Micronized petcoke.
- Mix of the previous fuels in whatever rate.



Fuel feeding set and mixing of fuels: biomass feeder (front) and micronized petcoke silo (right).



Fuel distribution and injection, dimensioned according to the low heat value of biomass.



Solid fuel injectors can be adapted to the existing gas injectors for an automatized switch of fuel (gas / solid fuel).



Firing with biomass provides surprisingly good firing quality.

- The preferential consumption of biomass provides significant savings in energy costs while dramatically reducing CO₂ emissions.
- Any timely lack of sufficient biomass is completed by consumption of another low cost solid fuel: micronized petroleum coke whose market availability is guaranteed.
- Automatic switch of fuel or change in the composition of the solid fuel mix.
- Minimum maintenance.
- Operational safety.

The installation consists of five distinguishable parts:

Biomass feeder

Biomass is fed to this receptor, which transports it through a belt feeder to the mixing point where it meets the micronized petcoke.

Micronized petcoke storage silo

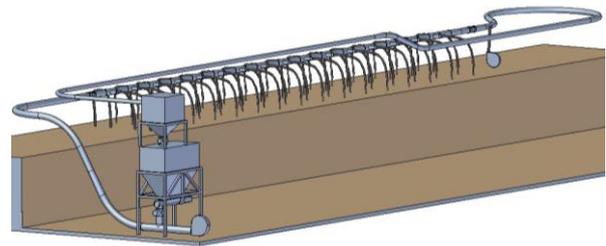
The silo receives micronized petcoke directly from the silo-truck, and it is subsequently transported by a screw feeder to the mixing point with the biomass.

Mixing point of biomass and petcoke

This biomass/petcoke mixing point is a box where the mixing takes place between the two fuels: petroleum coke micronized from the silo, and biomass from your feeder. From this box the mix is conveyed by a screw feeder to the kiln feeding hopper.

Kiln feeding hopper

This hopper receives and stores the mix of biomass and petcoke (at the desired ratio by the user), for subsequently feeding the dose to the kiln's closed circuit. All the fuel that is not injected into the kiln returns to the hopper through the bag filter installed on the top.



Kiln feeding circuit

The fuel is introduced into the closed distribution circuit entirely managed pneumatically. In the firing zone there is a number of pneumatic distribution valves with the necessary exits to the fuel injectors that provide the solid fuel into the kiln.



Micronized petcoke silo (front), and biomass feeder (left).