



Milk of Lime Station



Negative Pressure Kiln



Positive Pressure Kiln

Maguin's technology is based on the expertise of FOURS DELOT Kilns, which Maguin acquired in 1995 and has since been further developed.

Maguin offers coke- or anthracite-fuelled vertical kilns that were specifically developed for sugar plants, with more than 100 new kiln references in addition to a number of renovations of existing installations.

The Maguin offer includes complete installations with milk of lime preparation station, individual equipment supply or repairs of existing lime kiln parts following an audit by our specialists. The audit may include a complete mass and heat balance of the juice purification station.

#### MAIN FEATURES

- / Homogeneous and precise mix of combustible and stones
- / Excellent ergonomics of the kiln
- / Homogeneous load distribution in the kiln
- / Precise and automatic milk of lime density control
- / Closed loop milk of lime circulation
- / Automatic operation control based on the consumption of the milk of lime station

#### ADVANTAGES

- / High single line capacity 15 to 400 t/d CaO
- / High running flexibility
- / Low combustible consumption **< 7% on lime stone**
- / High CO<sub>2</sub> content in the gas **> 39%** (pressurized kiln)
- / Low levels of unburnt material
- / Long refractory life time
- / Very low dust emissions levels
- / No hot spots
- / High level of desanding of the milk of lime

## TECHNICAL DETAILS

A complete installation includes a kiln for lime calcination and gas production, and a milk of lime preparation unit.

The process starts with the kiln load feeding in the combustible and stone respective silos followed by precise mix preparation thanks to vibrating extractors.

The mix is then transferred by a skip to the air tight loading chamber at the top, followed by a rotary hopper for the homogeneous load distribution into the kiln.

CO<sub>2</sub> laden gas from the calcination is removed at the top of the kiln, cleaned in a wet scrubber and pumped to the juice purification station.

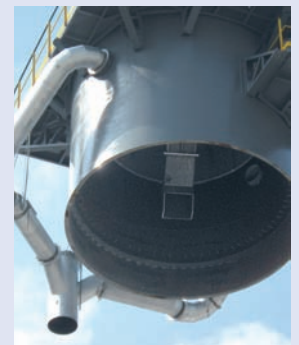
Lime is extracted at the bottom of the kiln by vibrating extractors (through an airtight chamber in the case of a pressurized kiln) and further processed in the milk of lime preparation unit: lime is first mixed with water in a friction driven slaker to produce a milk; the milk is then desanded in a double line desanding circuit and its density is precisely and automatically adjusted in a closed loop circuit. Milk consumption automatically controls the kiln running.



Slaker



Airtight loading chamber



Rotary feeding hopper

