Selective Non-Catalytic Reduction (SNCR)

In the area of Frankfurt a special task was assigned to sonUtec: a Factory producing graphite electrodes needed a new waste gas treatment, to reduce its nitrous oxide (NOx) -Emissions. Two kilns were to be equipped with such a denitrification system.

A selective non-catalytic reduction was chosen as the technology, because the flue gas already had temperatures in the range of 900°C to 1 000°C. This allows the direct application of the reduction agent into the flue gas, as the reaction takes place without a catalyst. Also, investment and maintenance costs are lower for the customer.

The DeNOx unit was handed over as a turnkey installation, complete with reduction agent tank and dosing module.

Data:

- Volumetric flow: up to 25 000 m³/h
- Temperatures: 900 to 1000°C
- Concentrations: up to 1000 mg/m³ NOx
- Clean gas: lower than 350 mg/m³ NOx

Non-catalytic reduction (SNCR), installed in ISO-Container; stack with dosing platform

Sonneberg, August 2014