Wet Electrostatic Precipitator

Project: Coke oven gas / Tata Steel Ijmuiden
Wet Electrostatic Precipitator for tar precipitation

Client: Tata Steel
Location: Ijmuiden, The Netherlands
Completion: April 2015
Type of Contract: Turnkey, Fixed Price
Type of Filter: Tar ESP 241 / SW250 / 5000

Special Features:
The Wet ESP with Envirotherm technology needed to be revamped after 25 years of operation. The Envirotherm ESP was chosen as the best available technology to remove the tar content from coke oven gas with 99.8% efficiency.

Scope of supply:
Design, supply of the internals of the filter and a new high-voltage control system as well as erection and commissioning supervision.

Process Conditions:
- Gas Flow (actual): 55,000 m³/h
- Temperature: 27 °C
- Inlet Dust Burden: 2 g/m³ (STP, dry)
- Dust to be collected: Tar
- Guaranteed Emissions: ≤ 4 mg/m³ (STP, dry)
- Length of honeycomb bundle: 5000 mm
- Number of honeycombs: 2 x 241