



**ELCOM d.o.o.** is specialized in Totally Integrated Automation (TIA), containing electrical engineering and software development for the automation of production processes and machines, production of MCC and control cabinets as well as onsite installation, commissioning and acceptance testing (FAT, SAT, SIT)

## Automation of Electrofilters

**Customer: JP Elektroprivreda BIH**



## Certificates

We have proven our competence as Siemens Solution Partner Automation in the following areas:

- Automation System SIMATIC
- Human Machine Interface SIMATIC HMI
- Process Control System PCS7

## Process description

The electrofilter removes the incombustible parts of the coal, which are carried in the fluegas stream as flyash. The fluegases stream after leaving the steam generator, coming from the air preheater, in the electrofilter through parallel, 30 cm wide openings. These gases are formed by plate-formed positively charged electrodes. Electrically isolated spray electrodes are suspended on which a negative voltage is applied. Under the influence of the electrical field the flow ash settles on the positive plate electrodes.

The filtered dust is shaken by an automatic, periodic vibration of a hammer mechanism from the plates, falls into the dust funnel and is subsequently lead to the flyash silos. From here it is transported for further use as building material in the cement industry.

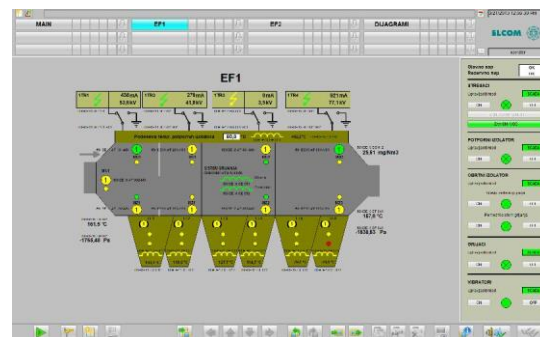
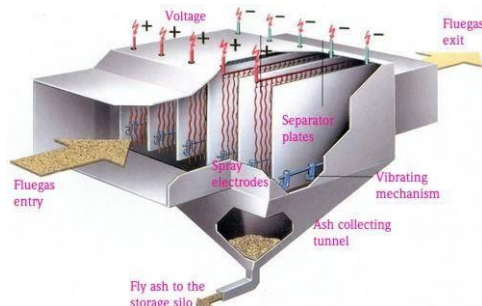
The separating part in electrofilters is nearly 99,9%. The flyash collecting in the separators or discharge funnels is fine, dry and abrasive with a typical temperature of 140°C and a granulation size of up to 300 micrometers.

## Solution

System of Automation and Control is combined from next components: Central Unit PLC S7-300, Profibus and Modbus communications modules in direct connection with 8 KRAFT cells which are distributed in two lines. There are 4 cells with output voltage of 134kV and 4 cells with output voltage of 93kV who are directly controlled from the PLC.

Distributed stations ET200M with signal modules (analog, digital I/O) located in facilities trough which are all connected over PROFIBUS network on the central units equipped with the communications modules for connection with the DCS system of the Unit 6.

One operator stations for visualisation and controlling electrofilters and monitoring of the process.



## Information about the Siemens Solution Partner Program

Under the Siemens Solution Partner Automation and Power Distribution Program, we join forces with our Solution Partner. By merging our product and systems expertise with the application and industry knowledge of our partners, we have created a common basis for the fast, smooth and highly efficient implementation of your requirement – customized solutions for your competitive advantage.

[www.siemens.com/automation/solutionpartner](http://www.siemens.com/automation/solutionpartner)

## ELCOM d.o.o.

M.M.Dizdara-Stupine B-2  
75 000 Tuzla  
Bosnia and Herzegovina  
Phone: +387 35 305-700  
Fax: +387 35 305-710

[www.elcom.ba](http://www.elcom.ba)  
[info@elcom.ba](mailto:info@elcom.ba)

