

Put into operation an Automated Control System of Electrostatic Filter of Kilns 105 and 106, in terms of software development, Voskresensk Cement Plant Lafarge (Voskresensk, Moscow Region, Russian Federation) August 2013 , March 2014



On Voskresensk cement plant successfully put into operation two electrostatic filter company FLSmidth Airtech (Denmark) for rotating kiln number 105 and 106.

Major work on the installation of electrostatic precipitators were conducted JSC "SNEF" and others. A total of 450 tons of equipment installed. Commissioning of new equipment manufactured by FLS (Denmark), allowed to reduce emissions by 5 times.

VOTUM ltd. as contractor JSC "SNEF", was developed a general functional specification (GFS), a detailed functional specification (DFS) and software for the PLC and the operator station.

List of equipment for automation control system for one electrostatic filter:

- PLC - S7-416-3 from Siemens;
- distributed control - ET200M, ET200S from Siemens;
- frequency inverter for motor of chimney flue - AS800 from ABB (750 kW);
- operator station - Rack IPC547B from Siemens.

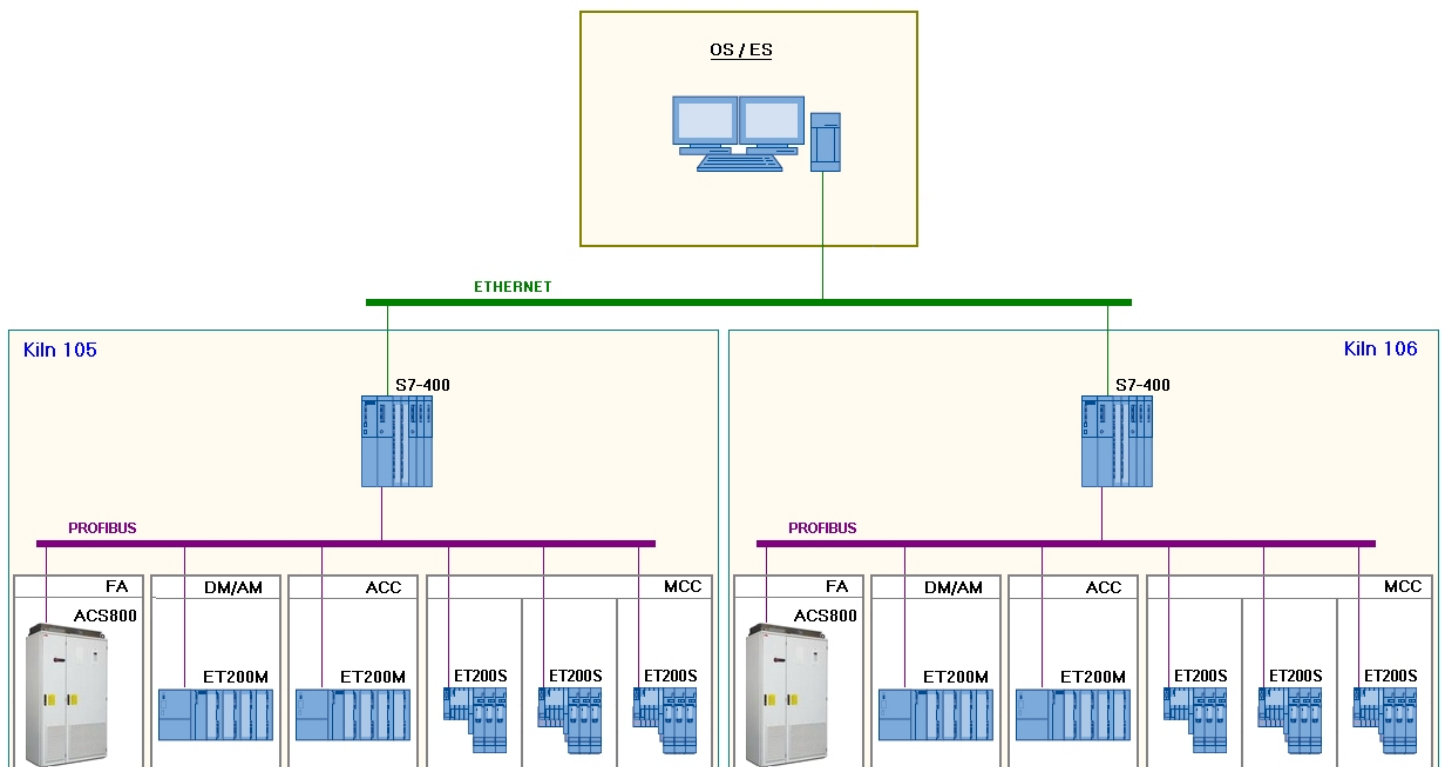
Number of signals:

DI = 161, DO = 42, AI = 29

ABB frequency converter control is performed via Profibus.

Software - PCS7, CEMAT LAFARGE version 6.1 from Siemens.

Block diagram of the technical means



System features:

- information gathering and centralized control of the main technological parameters;
- motorized equipment status monitoring and alarm system;
- remote, block and local control of electric processing equipment;
- program-logic control (automatic protection equipment in accordance with the process requirements);
- staff alert about violations of the work;
- automatic stabilization process parameters on the given optimal levels using standard PID algorithms and variable frequency drives;
- automatic continuous monitoring for capacity main blocks and devices ACS.

Mimic

