

Delivery and commissioning of PowerFlex 7000 medium-voltage frequency converters of air and flue gas fans and feedwater pumps for the Investment “Construction of gas boilers with auxiliary economies and construction of a steam turboset with auxiliary economies”

As part of the expansion of the Manufacturing Plant at the steel plant, two investments were carried out in parallel, in which Inrol Automatyka took an active part in the delivery and commissioning of 6 units of PowerFlex 7000 medium voltage frequency converters (with capacities from 500kW to 1150kW, 6kV). The units were used to power flue gas and air fans and feedwater pumps for the newly built gas blocks. The use of frequency converters made it possible to reduce the power consumption of the unit's own needs and increase the quality and range of control. Thanks to the full four-quadrant operation of PowerFlex 7000 drives, it is possible to decelerate and stop fans or pumps in emergency conditions with energy return to the mains. In addition, the use of drives makes it possible to optimize the mechanical operating conditions of the drive system by reducing the inrush currents of motors and causing mechanical. The possibility of omitting the frequency undesirable phenomenon of resonance.

Scope of work performed :

- Technical support in the creation of project documentation for the supplied frequency converters
- Supply of 6 units of PowerFlex 7000 frequency converters (current type) from Rockwell Automation:
 - Air Fans 2 x 500kW, 61A, 6kV
 - Exhaust Fans 2 x 560kW, 70A, 6kV
 - Feedwater Pumps 2 x 1150kW, 127A, 6kV
- Supervision of loading at the manufacturer, unloading at the site and foundation in the switchgear room
- Verification of the correctness of the mechanical assembly, electrical and control connections at the foundation site
- Commissioning of converters, participation in overall start-up of boilers and optimization of equipment operation
- Delivery of complete technical and quality documentation in the scope of supplies