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**EXPERIMENTAL STUDY OF THE DEPENDENCE OF COKE RESISTIVITY ON THE FINAL COKING TEMPERATURE**

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*The dependence of the resistivity on the final coking temperature was studied on cokes obtained from the charge of one of the leading coke plants in Ukraine in a laboratory furnace designed by SE "UKHIN" with electric heating. The increase in the final temperature naturally contributes to an increase in coke readiness and the degree of orderliness of its structure. This is manifested in an increase in coke strength (increased resistance to grinding forces and post-reaction strength, reduced abrasion), increased coke density and porosity, reduced reactivity, volatile substance yield and specific electrical resistance. The increase in the final temperature contributes to the deepening of thermochemical polycondensation processes of coke formation, which causes the loss of additional low-molecular weight products, resulting in a slight decrease in the yield of gross coke and its sulphur content with a simultaneous increase in ash content. The previously theoretically substantiated hypothesis about the exponential nature of the dependence of the decrease in the specific electric coke with an increase in the final coking temperature was experimentally confirmed. Processing of the obtained experimental data made it possible to determine the numerical characteristics of this dependence, which makes it possible to determine the rational level of final coking temperatures when producing coke for various applications. In particular, to produce coke with a resistivity not exceeding 0.1 ohm·cm, the final coking temperature should not be less than 957 °C. This is in line with the practice of coke production. To produce blast furnace coke with a lower resistivity, a higher temperature is required, while to produce ferroalloy coke with a higher resistivity, on the contrary, a lower temperature level is sufficient.*

Keywords: coal coke, electrical resistivity, final coking temperature, coke readiness, blast furnace coke, ferroalloy coke.

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