
THE COKE OVEN GAS PRODUCTION'S VOLUME ANALYSIS OF UKRAINIAN COKE-CHEMICAL ENTERPRISES IN 2020

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It has been carried out the properties, production volume and application balance analysis of coke oven gas, produced in 2020 by seven Ukrainian coke-chemical enterprises and plants, located at the territory controlled by Ukraine. Studies have been established the total volume of raw coke oven gas to be purified from hydrogen sulfide (given up to 4000 kcal/m³) – 4223,4 million m³ and the degree of its purification – 88,7 %, which compared to 2019 is less by 1,8 % (in quantitative terms per 76 million m³) and 1,1 %, respectively. Physico-chemical properties indicators of heating coke oven gas in terms of hydrogen sulfide and naphthalene mass concentration, as well as lower specific calorific value, corresponded to the norm for the I grade. The total volume of coke oven gas (given up to 4000 kcal/m³), produced by coke-chemical enterprises and plants, was equal to 4239,7 million m³, coke oven gas output from 1 ton of dry charge – 351 m³, which compared to 2019 is less by 2,0 % (in quantitative terms per 87082 thousand m³) and more by 0,3 % (in quantitative terms per 1 m³), respectively. According to 6 enterprises, the volume of purified coke oven gas (given up to 4000 kcal/m³) used for own needs amounted to 70 %, provided for metallurgists and other consumer's needs – 25 %, unused – 5 %.

Because of consequences of hostilities, the issue of the ability of domestic coke-chemical enterprises to manufacture products becomes very relevant.

The analysis presented in the article should be used to assess the losses caused to Ukrainian enterprises and plants by the armed aggression of the Russian Federation.

Keywords: analysis, coke-chemical production, coke oven gas, fuel, moisture, coal tar, crude benzene, hydrogen sulfide, condensation, purification, directions of the application, balance.

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