Abstract

Based on the analysis of work and developments to improve the efficiency and optimization methods for the operation parameters of gas turbine and combined cycle plants, it was concluded that the effectiveness of the combined cycle depends on the efficiency of its individual elements. The paper considers the possibilities of increasing the efficiency of gas turbines due to the transition from a simple cycle to schemes with regeneration and a two-stage heat supply, combined cycle plants by increasing the parameters of steam in a steam turbine installation. The thermal schemes of gas turbines and gas turbines were simulated and calculated in the MathCAD software environment.