The main aim of the work is to analyse the airflow character and fluid variables of the air nozzle of Jetring spinning system computationally. In numerical simulation, ANSYS 12.1 package program and Fluid Flow (CFX) analysis method was used. Our numerical analysis differs from the literature regarding to three contributing causes. One of them is the type of the solution algorithm. Standard and also modified $k$-$\omega$ turbulent models were widely used for the numerical analyses of the nozzle in which pressurized air is fed. In our study, Shear Stress Turbulent (SST) model is preferred regarding to the solution duration and also solution stability. The second contributing cause is the boundary condition and solution validation. Mass flow values of the air in the nozzle were measured by electronic mass flow meter and the values were compared with the calculated values obtained by the numerical analysis. The last cause is the yarn component of the Jetring system. Contrary to assumption of the insignificant effect of the yarn on to the airflow in the literature, the yarn was modeled and the area from where the yarn is passing was included to the numerical analysis. Consequently, we determined the calculated and measured values are almost compatible. It was observed different types of airflow in mainly three different parts of the nozzle with different air velocities and pressure values.