

A gas-turbine unit has cascade pressure exchanger with channel for discharge of compression gas and channel for supply of compression gas connected to combustion chamber and gas inlet branch pipe of the turbine. In the channel for discharge of compression gas a heat exchanger is placed, the output branch pipe of that one by means of a pipeline with pump installed in it is connected to water tank, and output branch pipe is connected to the window for supply of compression medium of utilization cascade pressure exchanger, the window for discharge of compressed air of that one is connected with air main to gas inlet branch pipe of the turbine, and the window for discharge of compression medium by pipeline with condenser placed in it is connected to water reservoir.