

### **Annotation**

This diploma project provides for the reconstruction of Atyrau thermal power plant.

In the process of work, a gas turbine unit of the SGT-800 type and a boiler utilizer were installed.

In the economic part, work has been done to reduce capital investments and reduce harmful emissions using environmentally friendly resource-saving technologies that can quickly improve efficiency.

In the section of life safety, we have provided the area around the facilities and industries that have a harmful impact on the environment and human health.

The main goal of the diploma project is to reduce total costs and increase profits.