

Air thermostating system of a head block of a rocket contains fans, filters, air coolers, air electrical heaters, an air supply pipeline, a cold box with an electronic analyzer of air samples, placed on a service tower of the main unit and connected respectively to the air supply pipeline by means of a main and auxiliary pipelines, and a launch control panel system. The cold box with the electronic analyzer of air samples is in a form of a hollow hermetic cube, moreover on the side faces of the hollow cube there are windows, oppositely to the respective windows there are light sources with lenses, a measuring photodetector of light scattered by aerosol particles of air supplied to the main unit, with amplifiers of a signal, a calibrator of the mentioned photodetector and absorber of light not scattered of aerosol particles, and the auxiliary air supply pipeline connects air supply pipeline to the hollow hermetic cube.