

ANNOTATION

The diploma project examines the existing methods of asphalt concrete pavement quality control and substantiates the need to build an automated road surface quality control system. The developed system measures such parameters as asphalt density, its planarity and the temperature of the mixture during laying. For the diploma project, modern low-cost sensors, microcontrollers, radio elements, which have a small error and ensure high accuracy, speed and productivity of road surface quality control, were chosen.

In the diploma project, a structural diagram of an automated road surface quality control system, a functional diagram of an automated road surface quality control system, an electrical schematic diagram of an automated road surface quality control system, and an assembly diagram of an automated road surface quality control system were developed. In addition, a block diagram of the automated road surface quality control system was constructed. road surface quality control systems.

Keywords: automated system, quality control, asphalt concrete, temperature sensor, thickness sensor, planarity sensor, gyroscope, accelerometer.