

ABSTRACT

The master's thesis consists of an introduction, six main chapters, general conclusions and a list of used literature and sources. The thesis contains 92 pages, 28 illustrations, 28 tables and 13 references.

Thus, the goal of the master's thesis is the development of an automated quality control system for painting car body parts during repair work.

To achieve the set goal, the following tasks must be solved:

1) analyze the process of applying a paint coating on car body parts, highlight the main stages and technological operations and determine the main parameters (indicators) of quality that must be controlled;

2) to analyze the known methods of controlling the quality parameters of paint coating on car body parts. Determine the standards and requirements for the quality of the paint coating application process;

3) to develop a structural diagram of the automated system of quality control of the application of paint coating of car body parts;

4) to develop a functional scheme for automating the control of quality indicators of the process of applying a paint coating to car body parts;

5) develop an electrical structural diagram of an automated quality control system for applying paint and varnish covering car body parts, calculate and select an element base;

6) to develop an algorithm of the automated system of quality control of the application of paint coating of car body parts;

7) to develop a start-up project on the topic "automated quality control system for the application of paint coating of car body parts".

The object of the study is the process of applying a paint coating to car body parts during repair work.

The subject of the study is an automated system of quality control of the application of paint coating of car body parts.

Approbation of the results of the master's thesis. The results presented in the master's thesis were reported at the 19th All-Ukrainian Scientific and Practical

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