

ROBOTICS IN AUTOMOBILE INDUSTRY

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The research is dedicated to the role of robotics in automobile industry. Revealing of this topic is very important to the recent stage of engineering development. The work is divided into three main parts: the movement of main parts that come from factories by automated lines; the assembly of major parts and checking a car on a test track.

After the melting of all the main parts in the factory, they are loaded on the conveyor and go further to the assembly line. After the body and all other parts are cast, all the parts of the automobile go to the conveyor. Manual labor is not popular at all stages of manufacturing, robots do almost everything themselves. On the conveyor different models are mixed. After welding, the body passes inspection and is sent to the paint shop, which not only coats, but also produces anti-corrosion treatment by robots. Next starts the assembling of the major parts of the car. Then there is a meeting of body and chassis that move through along parallel lines. They align the engine, transmission to the body to help special automatic bogie. At the final stage of the assembly the wheels are put on the car and process liquids run through it, after which the machine is ready and gets on the stand of quality control. The last step is checking a car on a test track. At this stage, noise and scratches are identified, as well as the serviceability of all equipment.

Enabling robots to make our lives easier is a reasonable solution for individuals and society as a whole. So, without automatization today's industry is impossible because it's simpler, easier and much faster.