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## **The Improvement of Robot Management Algorithm Used for Moving Objects**

Automated decision applications, fully automated and cost effective production, implementation of innovative technologies and possibility to remove harmful factors having a negative impact on the worker's health are of the main focus for modern industrial enterprises.

All above mentioned promotes the great popularity of applying production automation on the base of industrial robots which give the possibility to provide the highest rate of productivity and accuracy of treatment stage and avoid such issues as production faults and idle time which are common features of human beings. Robotized relocation of loads is technology often applied to provide maintenance of conveyor machines and other equipment. High speed of industrial robot performance and its positioning accuracy as well as possibility to use this technology in harmful environment are obvious advantages over human work.

Also, such fact as robot's capability to manipulate very heavy objects should be kept in mind. As the result, the industrial robots used to maintain transporters and conveyors can be frequently seen. The industrial robot will easily cope with objectives set, and the worker will be assigned a task to fulfill the work of a controller-operator to choose a necessary working program.

In Ukraine the using of robots is still limited. So, in 2007 about 200 robotized systems totaling about 8000 industrial robots around the country were implemented. Taking for comparison such countries as the USA, European countries and Japan where 34, 43 and 59 thousand of robotized systems were implemented for the same period of time respectively. Insufficient knowledge of Ukrainian technical specialists and poor management of the enterprises, desire to avoid big costs needed for implementing robotized systems and low cost of manual work are the main reasons of lagging behind developed countries.

In the majority of used systems types of control either are incomplete (software and hardware tools control), or require the operator's presence at the control panel and following his completing tasks. The most rational are systems of automatic control of the robot capable to react to external affects, supervise robot position and make the decision on further movement. Controlling the robot means to supply the necessary control signals to the actuators making the mechanics move. For the control system, it is necessary to choose and calculate the control algorithm to provide necessary quality of system operation of control with a robot drive. The gradual increase in the number of automated robotic systems makes it necessary to increase the quality of these systems associated with providing ready-made solutions for new facilities.