1. International Journal of Electrical and Electronic Engineering and Telecommunications Volume 7, Issue 4, 1 October 2018, Pages 146-151

Automation of industrial sites with mechatronic systems (Article)

Alontseva, D.L. Email Author, Krasavin, A.L. Email Author, Russakova, A.V. Email Author, Kadyroldina, A.T. Email Author

Department of Instrument Engineering and Technology Process Automation, D. Serikbayev East Kazakhstan State Technical University, Ust-Kamenogorsk, Kazakhstan

Краткое описание

This paper describes developing an intelligent automated system of controlling an industrial robot manipulator, that allows producing items by plasma cutting according to a given 2D or 3D model of the product; carrying out product surface hardening treatment: coating application using microplasma method, and plasma irradiation modification of surfaces of complex shape products. The results are implemented at a pilot production site equipped with advanced laboratory and industrial complex for microplasma processing of materials on the basis of an industrial robot Kawasaki RS-010LA (Kawasaki Robotics, Japan). Testing technological solutions on the experimental production site with the quality control of products processed by new technologies was carried out. © 2018 Int. J. Elec. & Elecn. Eng. & Telcomm.