

Effect of Wire Cutting Process on the Variables of Surface Roughness

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Abstract

This paper was focused on intervening variables in wire cut process such as pulse on time, pulse off time, voltage, type of wire which is used in experiments, They Show that 98.9% of the observed variability in MRR could be explained by the independent variables. This means that the correlation coefficient between the observed value of the dependent variable and the predicted value based on the regression model is high as this means that the statistical model could predict the Ra with about 98.5 % and 95.9 % accuracy of the testing data set for coated wire respectively.

Keywords

Wire EDM, Surface Roughness

Biography

Ali I Al-Mosawi holds a master's degree in Materials Engineering; he worked as Assistant Lecturer in University of Babylon/Iraq for the period May 2005-January 2006, and worked as a Lecturer in the Department of Mechanics/Technical Institute of Babylon for the period January 2006-May 2012. He also worked as a Lecturer at the Department of Machines and Equipments/Technical Institute of Babylon for the period May 2012- April 2014.

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engineering sciences, Direct research journal of chemistry and material science Progressive Academic Publishing, UK., International Journal of Research in Mechanical Engineering, American Journal of Science and Technology, Journal of Medical Biomedical and Applied Sciences (JMBM), International Journal of Computer and Advanced Engineering Research (IJCAER), Advanced Research in Engineering Sciences, International Journal of Applied Science, Journal of Natural Sciences (JNS), Science and Technology journals, IOSRD International Journal of Engineering, International Association of Computer Science and Information Technology (IACSIT), Science and Engineering Institute (SCIEI), World Academy of Science, Engineering and Technology (WASET), World Academy of Research in Science and Engineering (WARSE), International Society for Development and Sustainability (ISDS), International Institute of Chemical, Biological & Environmental Engineering (IICBEE) (Scientific Board of Chemical, Civil, Agricultural and Environmental Engineers), International Association of Engineers (IAENG), Scientia Research Library, IAENG Society of Chemical Engineering, IAENG Society of Industrial Engineering, IAENG Society of Mechanical Engineering, Industrial Engineering and Operations Management (IEOM) Society, Khawarizmi Science Society Iraqi Writers Union of the Internet, Iraqi Society of Professionals, Research Gate Network.

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