

THEORETICAL AND EXPERIMENTAL RESEARCHES REGARDING FINDING OUT OF A REGRESION FUNCTIONS AT EDM MANUFACTURING

Emilia Iuras¹, Oana Anton² & Sanda Cretu³

¹ Scientifically Institute of Research and Technological Engineering for Technology of Machine Building "Presum Proiect" of Iassy, ^{2,3} Technical University "Gheorghe Asachi" of Iassy

Corresponding author: Emilia Iuras, iurasemilia@yahoo.com

Abstract: Theoretical-experimental study regarding finding out of the multiple regression functions for output technological parameters (wearing of tool electrode γ_{ES} , working productivity Q_p , working speed V_p , absolute wearing of tool electrode U_a , roughness of the surface R_a and dimension of gap S) that describes the EDM working process with a thick electrode is the central point of this paper. Also has been determined, with some programs Gauss sum S_g and also coefficient of multiple regression r^2 . **Key words:** output technological parameters, functions of multiple regressions, EDM