



## **Mathematical Modeling of Technological Parameters of the Work of Bucket Wheel Excavators SR, 1300**

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**Abstract:** This paper presents the results of research in to the dependency between the technical and technological parameters of bucket wheel excavators in operation on the marly clay formations of surface coal mines in Kosova, according to analysis and design of experiments models that use first order  $2^k$  orthogonal plans incorporating many factors. These types of computer simulation models were presented in such a way that perpetuated the dependence of the exponential equation for each parameter with the interpretation of a 3D graphics application module- MATLAB.

**Keywords:** *Excavator, technological parameters, design of experiments, mathematical modelling.*

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