UDC 655.027

**AUTOTYPE TONE REPRODUCTION CORRECTION
FOR SQUARE RASTER ELEMENTS**

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***Research Methodology.*** *The methodological basis of the study is the correction of two-parameter autotype tone reproduction in the ink printing system. To solve this problem, we have used the theory of screening for the modulation of ink flows by the raster printing plate, the theory of errors — to determine the deviation of the characteristics of autotype tone reproduction from the linearity, simulation — for constructing a simulation model of two-parameter autotype tone reproduction for the correction and determination of the parameters of the correctional line and the construction of the characteristics of autotype tone reproduction.*

***Results.*** *In the conducted research, the method of r-correction for two-parameter autotype tone reproduction with a raster element of square shape has been worked out. The structural scheme of the simulation model of correction, which simultaneously computes the characteristics of the output and adjusted autotype tone reproduction and their deviation from the linearity, has been developed.*

***Novelty.*** *The scientific novelty of the obtained results is that a new method of nor­malized r-correction and determination of parameters of the correction line has been suggested and justified, which will serve for the correction of autotype tone reproduction at the stage of preparation of images prior to screening.*

***Practical Significance.*** *A simulation model of autotype tone reproduction in the Matlab package Simulink allows you to determine the parameters of the correction line, which provides the requirements for the linearity of the autotype tone reproduction when reducing the thickness of the ink on the tone interval.*