UDC 681.1.056

DEVICE OF NUMERICAL CONTROL INSTALLATION FOR CUTTING INTO STRIPS OF LEATHER MATERIALS ROLLS

O. R. Каzmirovych, B. V. Durniak, R. V. Каzmirovych

*Ukrainian Academy of Printing,
19, Pidholosko St., Lviv, 79020, Ukraine
kazmoleh@gmail.com*

**Research methodology.** Experimental method while designing and researching the physical model of the numerical control device installation for cutting semi-finished leather into strips and some of its units and knots, mathematical modeling.

**Results.** The laboratory sample of anti-interference device of numerical control units for cutting leather into strips based on a series of logical elements of “Logic And” has been designed which is made on the basis of highly anti-interference digital integrated circuits series K511 (similar H1xx series firms «Silicon General Inc.) and electric drive using a stepper engine type SHD - 5D1MU3 “ШД-5Д1МУ3”.

**Novelty.** The anti-interference device of numerical control for cutting leather into strips semi-finished leather materials has been proposed. The main target functions management of training features semi-finished leather materials are formed as an important component of automated control system of preparatory processes in segmented production.

**The practical significance.** UNSSHM CNC device has been designed, which can significantly increase the productivity and the accuracy of the strips cutting of the semi-finished materials which has been presented and accordingly to it can increase the percentage usage of the expensive material which provides the calculation of sliced strips. The introduction of CNC device UNSSHM on stationery and book factories, including through the development of scientific and technical support of regional cluster «Paper and Printing» and in the educational process on discipline «Designing of information and control devices printing equipment» has been anticipated.