UDC 655.28.022

**CALIBRATION OF TECHNOLOGICAL PROCESS OF MANUFACTURING OF FLEXOGRAPHIC PRINTING PLATES**

**V. E. Nykyruy, V. Z. Mayik**

*Ukrainian Academy of Printing,  
19, Pid Holoskom St., Lviv, 79020, Ukraine  
nik\_volod@ukr.net*

***Research methodology.*** *The technique, which allows controlling the quality and repeatability of plate-making processes by CtP technology and direct laser engraving technology has been developed.*

***Results.*** *We offer using compensation curves with a matching coefficient k as the main tool to control the plate-making process in the above technologies. The compensation curve is based on compensation coefficients for each percent of raster wedge, counting optical dot gain of plate-making process in each of the zones. One advantage of this technique is the ability to customize the plate-making processes using a compensation curve with a matching coefficient which equals a specific value, such k = 0,85. Inherently, the matching coefficient is a coefficient of increase or decrease of the area of printing element in regard to the design. To get the value of the matching coefficient equal to 0.85, we should set the area of printing elements of all raster zones from 1 % to 100 % on the plate and the equivalent area of corresponding zones in the design with this coefficient.*

***Novelty.*** *A new method of calibration process of manufacturing flexographic printing plates has been offered.*

***Practical significance.*** *It can be used to calibrate the printing and prepress flexographic processes and quality control of manufacturing flexographic printing plates by CtP and by direct laser engraving technologies.*