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TECHNOLOGICAL FEATURES OF DRYING
IN WEB OFFSET AROMA PRINTING

P. B. Petryk

*Ukrainian Academy of Printing,
19, Pidholosko St., Lviv, 79020, Ukraine
petryk@ukr.net*

**Research methodology.** Monitoring of aroma printing technologies is based on the elements of system analysis being conducted in the present article. The aroma influence on competitiveness, its advantages and disadvantages, methods of application have been shown. The nature of the drying process based on physical and chemical processes of the print varnish layer fixation has been analyzed.

**Results.** The process of aroma prints drying on web offset prints in the IR plasma dryers has been investigated. The advantages and the effectiveness in providing for the highest quality products have been shown. The factors which affect the rate of prints drying and fixation of its aroma varnish layer have been found.

**Novelty.** The process of paper print drying in the IR plasma dryer and advantages of treating paper in a state of free slack with its support on air buffer by the directional flow of air heated by gas burners have been studied for the first time. The process allows to diminish the heat load on the paper, to reduce the number of emergency shutdown during the process of drying of 5-7 meter long papers, moving through the drying machine, to improve the access of coolant to the surface of the varnish layer and to promote more rapid and complete drying.

**The practical significance** The usage of IR plasma dryers has been shown as a more economic effective way of aroma prints drying in web offset machines which reduces the weight and thickness of a square meter of the paper web and thereby reduces the costs. It has been shown that the design of the dryer has the ability to cut off the hot air supply, to reduce the temperature rapidly at the paper web wear or drying machine emergency shutdown and therefore to avoid the paper ignition.