

INFLUENCE OF PROPERTIES OF THE PRINTING DEVICE ON THE PRINTING PROCESS

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Introduction. A printing machine is a device that physically brings together all the elements of the process. It ensures the supply of printing materials to the area of contact with the printing form in the printing apparatus, the transfer of the printed matter to the drying devices and the control and correction of the register in each printing apparatus.

Objectives. To define the influence of properties of the printing device on the printing process.

Methods. The surfaces of the two cylinders are contacted during the print processes. As a result of the contact, the necessary pressure is created for the transfer of ink, value of which is a guarantee of the quality of the product. The surface's cone of the shape cylinder and its total beating should be small and not exceed 0.0125 mm during revolving on the journals (Geiger, 2013, p. 90).

Results. Mounting a printing cylinder is an important process. The printing cylinder is mounted on sliding bearings or roller bearings. The radial heartbeat of the bearings should be negligible. The minimum allowable value of the radial beat bearings is 0.003 mm. The advantages of roller bearings include the fact that they do not need permanent lubrication as plain bearings. Sliding bearings need to be constantly greased to ensure a low rate of wear.

Conclusion. Summing up, many flexographic printing machines use the control ring instead of a support to reduce the vibration of the cylinders. The control ring had a slightly smaller diameter than the support ring. They serve to check center distance and parallelism of the axes of the cylinders. They are not in contact with each other. In this case, the gaps between them are controlled by the probes.

References:

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