

Flexography

Flexography (also called **surface printing**), often abbreviated to **flexo**, is a method of [printing](#) most commonly used for packaging.



A flexo print is achieved by creating a mirrored master of the required image as a 3D relief in a rubber or polymer material. A measured amount of ink is deposited upon the surface of the printing plate (or printing cylinder) using an anilox roll. The print surface then rotates, contacting the print material which transfers the ink.

Flexo is so named because it was originally used as a method of printing onto corrugated cardboard which has a very uneven surface. It is required that the printing plate surface maintain contact with the cardboard, which it does by being flexible. Also unprinted high points on the cardboard must not get printed by ink remnants not on the plate surface, which is achieved by ensuring a sufficient depth for the non-print areas of the plate.

Originally flexo printing was very low quality. In the last few decades great advances have been made in improvements to the plate material and the method of plate creation - usually photographic exposure followed by chemical etch, though also by direct laser engraving. Laser-etched anilox rolls also play a part in the improvement of print quality. Full colour picture printing now occurs.

Flexo has an advantage over lithography in that it can use a wider range of inks and is good at printing on a variety of different materials. Flexo inks, like those used in gravure and unlike those used in lithography generally have low viscosity. This enables faster drying and as a result, faster production. Typical products printed this way include brown cardboard boxes, flexible packaging, and wallpaper. A number of newspapers eschew the more common offset lithography process in favour of flexo.

External links

<http://www.flexography.org>