

## The Impact of Ink Viscosity on the Enhancement of Rotogravure Optical Print Quality

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### Abstract:

This purpose of this paper is to examine the impact of ink viscosity on gravure optical print quality. The paper is a case study carried out in a well known gravure printing house in Egypt.

The research methodology and the analysis has employed an interpretive approach. The experimental approach has been used, since the aim was to find the correlation between ink viscosity and gravure optical print quality.

This paper shows that a small difference in viscosity can produce major variations in density and contrast print quality. also dot sharpness is very much influenced by viscosity. lower viscosity will often show dot gain, causing the image to lose its sharpness and print (dirty). Ink that is run at a high viscosity may also cause inconsistent ink densities on the substrate, causing mottling.

As a result, it finds that ink is transferred the substrate that the ink viscosity influence the optical print quality and smoothness of dots. Ink must flow out of the cells to give a smooth and unblemished print surface.

As a main conclusion, keeping viscosity regulated helps to maintain print quality to great extent.

### Keywords:

- *Gravure*
- *ink viscosity*
- *dot gain*
- *density*
- *print quality*
- *mottling*

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