

Inking System -- Roller Temperature

The ideal Roller Temperature is 25°C--28°C, below 22°C ink transfer will reduce significantly- i.e. lots of ink on rollers but a lack of density on the sheet. The printed work may look flat and an increase in Piling may be experienced. Above 30°C the ink will start to allow more water in (emulsify), it will also tend to mist and fly the warmer it gets. Above 35°C ink/water is very difficult to control.

Scumming/Tinting is likely--Damps will be very high.

How Temperature effects Ink Transfer

- #1 Viscosity
- #2 Ink Shear
- #3 Reciprocation of Roller Train
- #4 Temperature Controlled Inking Roller Train
- #5 Cylinder Pressures, ie Blanket to Plate
- #6 Workplace Temperature
- #7 Gearside or Workside of Press

This information from the [GATF-The Graphic Arts Technical Foundation of America](#)