

# Printer Problems



Study has been done on factors that influence the reliability of the paper feeding system in an inkjet printer. The feeding errors studied are 'double grabbing' and 'grasping failure'. The factors considered were studied in three experiments...

## Experiment



*feeding system*

A search for the best performing combination of the factors: roller and feeding-tray textures, roller force on the paper and feeding-tray position.

### Feeding-tray position

Inclined tray performs better than a horizontal tray.

### Roller force on the paper

Grasping failures are mainly dependent on the force applied by the roller to the paper.



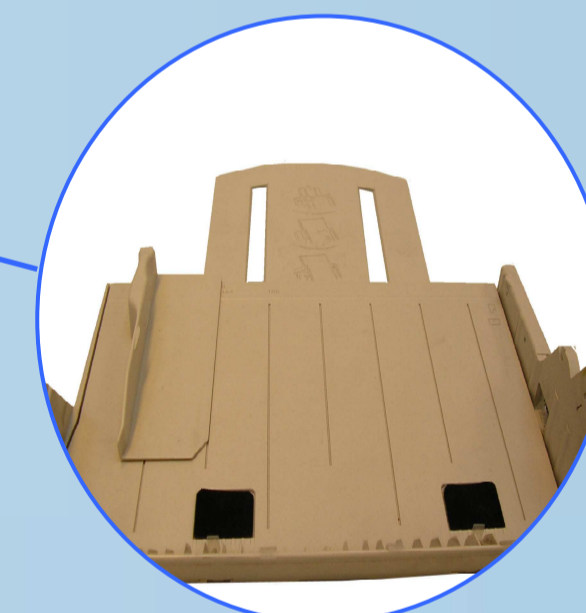
### Texture of the roller

Both failures were found independent of the texture of the roller.



### Feeding-tray pad material

Double grabbing is mainly dependent on the texture of the feeding-tray pad; cork and felt perform best.



## Experiment



*humidity*

Increasing humidity levels above approximately 80% results in a grasping failure



## Experiment



*paper dust*

Grasping failures occur when there is such an amount of paper dust on the rollers that its original texture is uniformly covered.

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