

Printing humidification

Increasing profits with environmental control

50-60%rH
= maximum profits

By maintaining a level of 50-60% relative humidity (%rH) in printing and paper storage facilities the paper's moisture content will be maintained. This will eliminate paper curl, paper cracking and static build-up and will reduce web-breaks and mis-registration on multi-run jobs.

This will dramatically improve product quality as well as making printing more efficient by reducing machine downtime.

Humidifying printing and paper storage facilities will:

- Eliminate paper curl
- Eliminate paper cracking
- Eliminate static build-up
- Reduce web-breaks
- Reduce mis-register

We have over 30 years experience in helping the printing industry across the globe solve dry air problems. As specialists in humidification, we offer a wide selection of low energy and close control humidifiers for all printing and paper storage applications.

Our clients include:

Westway Offset • Pegasus Print • Daily Mail • Howard Labels
Teeside Press • Image Link • A Salvado & Comsal • Reed Print
News International • Waddingtons • Rizla • Daily Telegraph • La Poste
Cambridge University Press • Buckland Press • Real Casa de la Moneda
Kent Messenger • Mirror Colourprint • Field Packaging • Birmingham Press

Why humidify in the Print industry?

Humidity control in the print and paper industry is essential in order to maintain print quality and reduce downtime of machinery from having to address problems caused by a dry atmosphere.

Typically low humidity environments are created in cold periods, as heat generated by machinery and heaters dries the air. In the depths of winter, rH levels can be as low as 15-20%rH instead of the ideal 50-60%rH. Problems caused by dry air include:

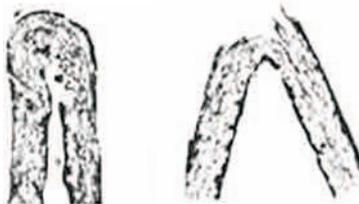
Paper curl

In dry conditions, moisture is drawn from the exposed surfaces of stacks or

rolls of paper and they shrink. However, the centre of the paper still maintains its original moisture content and this causes "tight edges" and the paper begins to curl.

Paper cracking

This can occur when the paper becomes dry.



With humidification

Without humidification

Mis-registration

Changes in humidity will cause the physical dimensions of the paper to change which results in mis-registration of colours in multi-pass jobs. Any change in the dimensions of the paper, however small, between runs of two or more colour processes and the colours will not line up.

Static electrification

When the relative humidity drops below the electrostatic threshold of 40%rH, the build-up of static is enhanced. This



results in sheets of paper sticking and mis-feeding on machines, not lying flat on each other or stacking properly as they emerge from the other end of the press.

Web breaks

In the lay-down and reel stand areas of large-scale web-based newspaper printers, the exposed edges of the reels dry. As the web runs at speed through the press, the dry edges are under tension compared with the centre. The slightest disruption of the edge will result in a 'web break', causing the paper to tear right across its width. Re-feeding through the press results in considerable downtime and production loss.



Why JS Humidifiers?

JS Humidifiers offers a comprehensive service of humidifier system design, installation and maintenance. Our range includes spray, steam and evaporative humidifiers and with over 30 years experience in print room and paper storage humidification we are ideally placed to advise you on which type will be most suitable for your specific application.



www.jshumidifiers.com

JS has a policy of continually improving products and performance. Actual specifications might vary from those shown.

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Bronze



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