

Humidity really is very cool

By **Brendan Perring**
Editor

[@printmonthlyed](https://twitter.com/printmonthlyed)



Humidity Solutions are set for a big month in October, as its technology will be keeping the printing environment at The Print Show perfectly controlled.

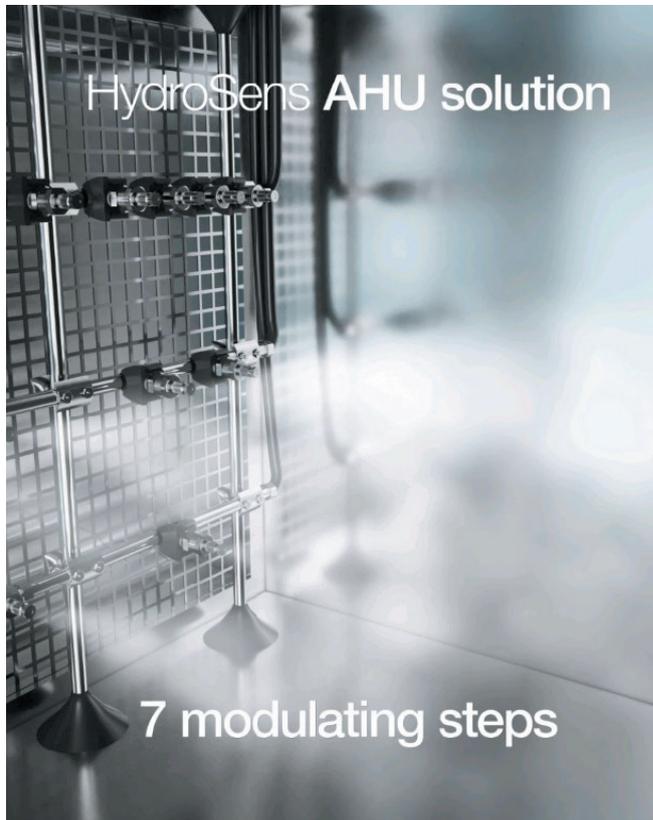
“Humidity control is a very important aspect of controlling the print environment but equally so is temperature. Heating a press hall is usually straightforward as the excess heat from machines and thermal gains help to heat the space and sometimes just needs a top up with the installation of heaters,” explains Alice Barker of Humidity Solutions.

She continues: “Cooling however can be very expensive. The solution can be to extract large air volumes which removes the heat and, in turn, brings in the cooler outside air. This is sometimes not efficient, and also depends on the outside air being cooler and clean with regards to dust particles or fumes. An alternative is to mechanically cool the air. This can be very expensive both on the capital cost and the electrical energy required.

“So how can a printer reduce temperature at a reasonable cost? The answer is to take advantage of adiabatic cooling. When cold water is atomised or evaporated then the air is cooled as the process of turning the water into humid air requires heat energy which is taken from the surrounding air. This is why village squares in hot climates have fountains to create a cool environment to sit by.”

Humidity Solutions’ Barker explains that it of course would not necessarily suggest a fountain in the factory, but of rather a high-pressure water system used to provide humidity control to also give low energy, low cost cooling in the summer months.

Barker concludes: “A dedicated indirect system could be



Top: The Airtec AHU solution is a must-see on stand E03. Bottom: Humidity Solutions Airtec high-pressure water system in action

used to cool the air by using an evaporative humidifier’s cooling effect to cool exhaust air as it is passed over a heat exchanger, so cooling the incoming fresh air. Energy transfer while water evaporates results in free cooling up to 12°C (21.5°F) and with low energy (< 1 kW) consumption ensuring an environmentally-friendly application.”

There are many alternatives and Humidity Solutions would

be pleased to discuss on stand E03 at The Print Show or to forward a copy of its *Humidity and Temperature Control for Print* book, which gives advice on how to achieve the perfect print condition for your press hall.

is Humidity Solutions stand number at The E03 Print Show

An educated investment

Falmouth University has expanded its textile digital print facility by purchasing a Mimaki TX300P-1800 from approved supplier R A Smart. The Mimaki machine will now support students from a range of courses, as some prepare for potential careers in the print and related industries.

The Mimaki TX300P-1800 can be set up with acid, reactive, pigment, or disperse dyes, and is suitable for applications such as textiles.

Freya Moses, senior technician at the university, says: “Digital print has become increasingly popular within the Fashion and Textiles Institute at Falmouth University, meaning the digital print facilities are in constant demand. We wanted to ensure that we could keep up with the high demand so it seemed like the perfect time to invest in a printer.”

The Mimaki TX300P-1800 can produce applications such as household textiles, fashion, and soft signage



IFS launches Slimbox

Intelligent Finishing Systems (IFS) has started September with a bang, after teaming up with Belgian firm Fit Things to deliver the Slimbox laser cutter to the UK and Ireland. Slimbox can be used via a computer or even an app on your phone.

Managing director of IFS, Bryan Godwyn, comments: “With operations looking at ways to add differentiation, Slimbox enables them to create branded, made to measure, packaging that reduces overpacking and introduces a more environmentally considered on-demand approach.”

IFS announced a new partnership with Fit Things, and will be the UK and Ireland distributor of its Slimbox laser cutter

