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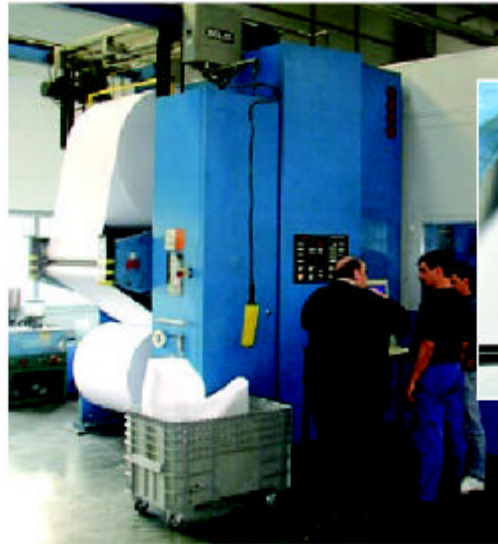
Bayropa Jung GmbH, situated in Wertingen, Germany celebrated its 25th anniversary in the year 2000. The "paper tiger", as Bayropa are also known, not only have extensive printing experience, but also possesses state-of-the-art roll-offset printing machinery with paper-widths up to 100 cm, and DIN A4 production lines for pre-printed laser paper with a throughput of 6600 sheets per minute. Of course, Bayropa is also using state-of-the-art technology for their humidity measurement.

Humidity is a very important parameter in the paper and printing industry. Humidity influences the characteristics of a printing process, especially in high volume laser printers. When the paper humidity is not correct, the paper tends to curl, and hence is unacceptable to customers.

Problem: Statistical data alone is not enough to maintain high quality. Paper manufacturers only provide average humidity values for paper webs of more than 10m in width. Therefore, single paper rolls may well be out of tolerance. This is the result of the paper production process, which delivers paper webs of 10 m width, that are cut into smaller webs only at the end of the manufacturing process.



The solution is online measurement of equilibrium relative humidity (ERH)



The measurement principle grants a practical and low priced measurement of equilibrium humidity and temperature on the moving paper web

and temperature on the web, running at 500m per minute. It serves to detect and reject rolls that are out of tolerance.

The online measurement at Bayropa Jung is achieved with one ROTRONIC BFC-DIO web probe at the machine input, and one at the output of the machine, with the measurement data managed with HygroFlex transmitters. On-line measurement offers the following advantages:

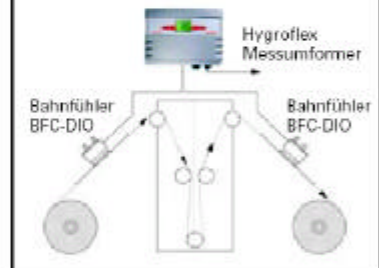
- Uninterrupted measurement of ERH and temperature on the moving web, and hence the possibility to control the process.
- Avoidance of finish problems by customers
- Simple logging of the measurement values with validated ROTRONIC HW3 Windows software
- Alarm function when exceeding threshold values

A consistent and defined humidity is of great importance when paper is being printed in order to achieve good printing results.

Web probe BFC-DIO

The web probe BFC-DIO is installed directly under or above the moving

Schematic diagram with two BFC-DIO web probes



web, but without direct contact. The humidity and temperature of the paper creates a microclimate in the confined space in and around the measurement chamber that is directly measured. With this simple and well-priced instrument, paper quality can be monitored without interruption, and important conclusions can be made in order to increase the productivity and profitability.