



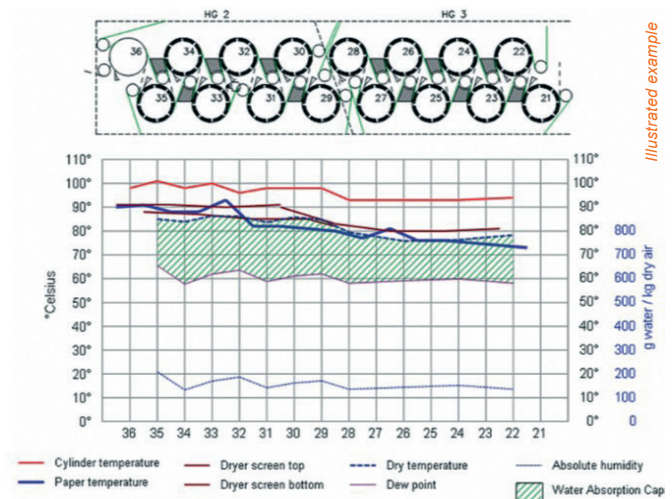
# Dryer section analysis

The objective of a dryer section analysis is to check the conditions inside the dryer hood by measuring pocket air conditions and the surface temperatures of clothing, paper sheet and drying cylinders. The dew point as well as the relative and absolute moisture are worked out from dry and moist air temperature.

To achieve this, measurements are taken at approximately 50cm from the front side of the paper sheet. Measuring the cylinder temperatures provides information about the course of the heat curve in terms of the necessary uniformity of the temperature increase as well as about potential irregularities (such as “flooded” cylinders). It also allows statements regarding superfluous warming of the clothing in a slalom group by e.g. inner cylinders. It is necessary to keep an eye on the temperature of the paper sheet in order to avoid problems such as fibre deposits at the first few drying cylinders. Generally, a uniform increase of the cylinder temperatures and therefore also those of the paper sheet should happen. Too much of a difference between the two will lead to fibre plucking and even to complete rupture of the paper sheet. In the diagram you can see dry temperature, dew point and absolute air humidity. The difference between dry temperature and dew point is marked by hatching. The larger the difference, the higher the water absorbency of the air and the faster the moisture can be evacuated.

### Prerequisites:

In order to carry out the measurement and to ensure high quality results a stable machine speed with constant production is required. The hood should be loaded as highly as possible.



### Time frame:

One working day should be planned for the measurement. This time frame also includes a preliminary report, which will be discussed on site.

### Customer benefits:

- The inspection provides a reliable information about the status in the dryer section.
- The measurements can provide information about possibly existing bottlenecks and/or drying problems.
- The diagram representing the values measured shows clearly any problem in the dryer section.
- In particular when a hood and heat exchanger balance is conducted in conjunction with a dryer section analysis, optimising potentials for more efficient energy use and/or energy savings can be pointed out.