

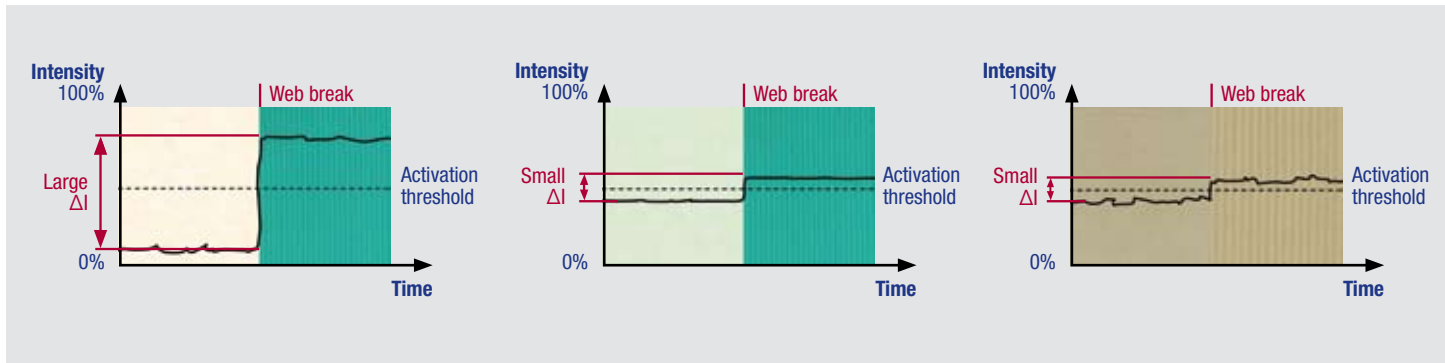


Thanks to its special measurement, OnC WebDetect detects breaks even under the most difficult optical conditions.

No more faulty detections

Brown isn't just brown any more

Optical differentiation between brown board and brown dryer fabric is a challenge for break systems. Unfounded break detections are thus often the consequence. However, thanks to another measurement procedure, OnC WebDetect functions more reliably than any other system.



A slight color difference, for example, with transparent or packaging paper, make differentiation between paper web and dryer fabric difficult for color detectors.

The optical systems for web break detection that are current today usually do not work flawlessly. Since they detect a break by means of RGB detectors, they malfunction with difficult color relations such as in the case of a slight color difference between paper web and fabric in the dryer section. Thus – especially in the production of board and packaging material, faulty detections regularly occur since only with difficulty could existing systems differentiate between the brown web and the brown fabric. Transparent paper webs, as occur with low basis weights or high moisture contents, lead to the same problem.

on a new product – OnC WebDetect. In contrast to conventional color detectors, OnC WebDetect employs a measurement principle which uses special optical characteristics of the dryer fabric and the paper web.

The measurements are recorded successively at start-up and afterward used as references. Slight color differences, such as the ones that occur due to aging and fading clothing, are thus effortlessly coped with. Changing paper characteristics in the dryer section, e.g., moisture fluctuations, are likewise no longer a problem for break detection.

so that external light influences are compensated for and the measurement signal is filtered. The activation thresholds can thus be precisely calculated for a break alarm and adapted to the current production conditions on an ongoing basis. Since OnC WebDetect offers no image evaluation or cause analysis but instead a pure break detection system, the measurements can be evaluated almost without time lag. This allows a quick reaction in the case of breaks.

Comfortably from the control room

OnC WebDetect is integrated into the customer’s existing process control system by means of a Profibus interface or conventional inputs/outputs. Thus the referencing of fabric and web and further operation can be done comfortably from the control room. An adjustment directly at the electronic system on site is not necessary. Even at start-up, no special calibration or parameterization of the sensor electronic system in the field is

With OnC WebDetect, slight color differences are effortlessly coped with.

However, as a papermaker, if you don’t want to run the risk of unnecessary downtimes due to faulty break detections or even put up with the danger of machine damage due to undetected breaks, you can now rely

Quick processing

Along with the new measurement procedure, use of a microchip also contributes to reliable results. All measured values are processed in it

required. Only the sensor head has to be adjusted, which can be done by an automation expert from Voith.

Since OnC WebDetect was specially developed for and tailored to the paper industry, handling of the system is extremely user-friendly. In addition, OnC WebDetect is almost maintenance-free, since the sensor head is protected from contamination by air flushing.

First customers convinced

Already before the official launch, the first customers were convinced by the new product. OnC WebDetect was tested for several months under production conditions on the PM 1 of the Adolf Jass Schwarza GmbH paper mill in the Thuringian city of Rudolstadt.

The conditions in the dryer section of the PM 1 were until now a challenge for break systems: since

corrugating medium or test liner is produced, color detectors thus had difficulty in reliably detecting breaks.

However, things were very different with OnC WebDetect. After a short time, the system worked flawlessly and thus contributed to the smooth operation of the facility. Especially the simple referencing, which can be done manually or automatically via the process control system, make life easier. The operating personnel no longer has to run back and forth in order to set the sensors; instead, two mouse clicks suffice.

Due to the much lower outlay, referencing is done more frequently and thus there is very high reliability of the break detection.

The times in which the measurement signal fluctuated or slowly faded after a detected break are also a thing of the past. Through use of the


microchip with OnC WebDetect, changing production conditions have no influence on the functioning of the sensor and thus faulty break detections are prevented. The customer profits from increased production, since the machine is not shut down unnecessarily.

On Focus: OnC WebDetect

ProSafety	+	+	+	+
ProRunnability	+	+	+	+
ProSpeed	+	+		
ProSpace	+	+		

Section: drying
 Width: all
 Paper grade: all

Contact



Bernhard Dellekart
 bernhard.dellekart@voith.com



“We will also rely on OnC WebDetect in the future.”

M. Habeck, Plant Manager, Jass Schwarza



“It was a big advantage for us that we were able to reliably detect web breaks in the pre-dryer section with OnC WebDetect. Thanks to the referencing on fabric and paper and the sophisticated technology, reliable break detection can be done even with a slight color difference. Constantly changing production conditions are no problem for the system as well. For that reason, we will also rely on OnC WebDetect in the future.”