InlineCutoff Control & InlineCutoff Control Dynamic

The smart sensor system for recording process parameters as the basis for the cut-off register measuring system

High level of automation thanks to modern camera technology

The InlineCutoff Control system is based on the Smartkamera. The compact design of this camera and the consequent low space requirement make the Smartkamera suitable for varied applications in the production process. The system is used to determine the position of measurement subjects on running paper lines (e.g. for cut register control) and may be installed after the printing unit, in the folding or reversing structure or in the folding machine. Thanks to the high measurement frequency of modern camera technology, every copy is measured at all line speeds.

Camera system as an intelligent sensor

The robust measurement technology consisting of a camera with a lens, flash lighting and a built-in processor sets new standards in reliability and availability. In addition to measurement value recording per se, complete signal preparation and signal processing is now also combined in a single housing. The performance and quality of the computer technology built in in addition to the pure camera function allow the smallest marks to be assessed on the basis of the required characteristics in real time and on the spot and the processed results to be made available. The system works fully automatically, if required also on a motorized traverse, and is incorporated into manroland's suite of machines.

The cut-off register measuring system is integrated into the controller design of the printer on the software side and communicates with other units (reel splicer, washer unit, web-tension control).

The cut-off register control unit supported by marks minimizes paper waste after set-up and during run up and run out. Other advantages of an automatic cut-off register control are the reduction in set-up time and the release of operators.

Inconspicuously small marks are placed at random and measured at high frequency. The accuracy of an absolute positional measurement is 0.1 mm (accuracy relative to a machine reference) at a speed range of 0.1 to 17 m/s (for the measurement of relevant areas).

Highlights

- Modern camera technology with high measuring frequency
- Compact design, small space requirements
- Spot marks are small and can be placed as desired
- Full integration into the PECOM-X product family
- Minimal waste rates due to intelligent strategies of automatic control
- Option: motor-driven adjustment of measuring heads