

ROLAND InlineInspector 2.0 with PDF-verification and QualityMask



Fig.1: High resolution camera above the last printing unit.



Fig. 2: Blast air blows the sheet flat on the cylinder during inspection.

Complete verification, avoidance of misprints

With PDF-verification and QualityMask for ROLAND 700 and ROLAND 900 series.

Ever faster, ever more colors – the potential output of printing presses is continually rising. Keeping quality at a constantly high level is a great challenge for printers. Even with the highest demands on quality for packaging, label and commercial printing, the ROLAND InlineInspector 2.0 enables you to minimize the risk of complaints and relieves your operators of laborious quality control activities.

Detect even the smallest faults. The ROLAND InlineInspector 2.0 detects even the smallest hickeys, splashes, scratches, streaks or substrate defects. This is ensured by a high-resolution RGB camera and a specially developed line-scan lens. The camera is installed above the last printing unit and the last printing unit before the sheet turning station. The InlineInspector 2.0 inspects every sheet even at maximum printing speed. A tab inserter automatically flags faulty sheets. After every print run an inspection report is created and stored on the hard disk or internal network.

PDF-verification

The PDF-verification offers the possibility to verify the printed reference sheet against the proofed customer-PDF. The process is as follows: After the PDF of the customer proof is loaded automatically, the printed reference sheet is captured and verified against the PDF during the make ready procedure. Deviations between the PDF and the reference sheet are displayed on the monitor. During production, every sheet is verified against the released reference sheet.

QualityMask

Control – only as much as necessary. To meet the different quality requirements, the printer sets the sensitivity level before starting production. The QualityMask offers the possibility to define individual areas on the sheet for different inspection sensitivity levels. Non relevant areas outside the copy, or areas that are less important such as glue flaps, can be excluded from inspection. This saves unnecessary flagging of non-relevant faults.

This function ensures an individual inspection quality, which is adapted to the different standards of quality.

With the ROLAND InlineInspector 2.0 your quality assurance system has a completely new basis. Your customers will be delighted with the higher product quality, you avoid cost-intensive manual quality control and the paper waste allowance is considerably reduced.

PDF-verification

- PDF is automatically loaded with job data
- For PDF-verification the system loads a PDF of the entire sheet or all single copies of a collected form
- Layers and spot colors in the customer PDF can be separated manually or automatically with the inspection software
- Plate or prepress errors are recognized immediately
- Automatic text check, also for foreign languages
- Complies guidelines of e.g. pharmaceutical package inserts or folding carton

QualityMask

- Inspection areas can automatically be defined with technical information in the customer PDF (e.g. cutline)
- Only relevant areas on the sheet are inspected
- Determination of different inspection sensitivities on the sheet
- QualityMask can be adapted during production

Sheet guiding with ROLAND InlineInspector 2.0

Clocked air blows the sheet flat on the cylinder so that the entire sheet is inspected to ensure the highest quality.



Fig. 3: Marking of defective sheets with strip inserter in the delivery.

Perfect interaction with ROLAND InlineSorter

Due to the option ROLAND InlineSorter it is no longer necessary to sort out faulty sheets of the pile. The ROLAND InlineSorter discharges automatically all faulty sheets which that are detected with the ROLAND InlineInspector 2.0.

Option ROLAND InlineNumbering (NEW)

A high-resolution inkjet print head is installed on the suction feedboard and prints a consecutive number on every sheet. Any defect during the print run is reported in a gallery where every sheet number is assigned to the corresponding defect.



Fig. 4: Cutting of inspection report

Benefits

- An outstanding marketing instrument
- Reduced paper waste and material allowance
- Control of substrate quality control
- Documented quality as PDF-file
- Drastic reduction of complaints
- Makes life easier for press operators
- A must for quality printers
- Essential for streamlining the manufacturing processes
- Definable quality requirements with the QualityMask
- High-end automatization

Upgrade

The retrofitting depends of machine series and has to be clarified in individual cases.