

Labelling and Inspection

Roll-to-Roll Quality Control for Labels/Booklets

Clinical Trials, Pharma, Medtech



A Baumer Company

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QR-LABEL INSPECTOR: UNWIND-PRINT-INSPECTION-REWIND

Print and 100%-control of labels, including flagging and removal of faulty prints

modular and compact – 100% a big number for small numbers

An optical, automatic quality assurance solution offers numerous advantages. High-precision image processing technology ensures reliable inspection and documentation of product and process quality in real time.

Labels are often pre-printed and then applied to the products manually or using a labeling system. The labels identify and describe the products (content information, track and trace, UDI...). Typically, the relevant data is available as a code combined with human-readable text. In certain industries, legibility must be guaranteed without technical means. Poor printing can lead to misinterpretation of the imprint. To avoid follow-up costs and reduce consumer risk, a 100% inspection is essential. Bad labels must be marked or removed.

The QR-Label Inspector combines highest demands with smallest footprint!

flexible

- Modular System
- Small to medium order volume
- **Diverse labels and booklets**
- Connections to LMS, MES, ERP
- **Diverse printer integration**
- Customer workflow integration
- Just-in-Time production
- **Manual or automatic invalidating labels**

efficient

- **Excellent set-up time and high productivity**
- Fast Changeover
- **Integrated Article/Order Management**
- Integrated Layouting too
- **One user interface for printer and camera**
- Central article, audit trail and user management
- Very small footprint
- Reduced stock management



secure

- **QualiReader PI Software**
- **Simple operation with low demands on the operator**
- **Automatic Teach-Inno** printing and physical teachin necessary
- **100% full area control**
- Consistency of labeling and inspection data
- Serialization, accounting and data logging across systems
- Any fonts
- **Patient Kit Numbers**
- Audit Trail

System description

Labels are unwound, printed and inspected by a high-resolution camera. The camera checks the printed image with decimal point accuracy, reads codes and text and can detect defects. By checking any pre-printed labels using various methods, it is possible to detect any mix-up. If an error is detected, the label is automatically pulled back, marked/overprinted and documented. A bad label can be removed manually in the standard version and the printing process can be restarted by acknowledging the action. The printed labels are either wound onto a roll or stacked.

The QualiVision printing and inspection system is based on the successful QualiReader PI software, which enables printing process control, printing and inspection.



QualiReader PI – centrepiece of labelling and inspection

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Digital Reference

- Print templates (pdf, etc) with codes, variable data, symbols, various fonts/texts
- Other print templates are camera images or direct layout creation in QualiReader PI

Simultaneous teach-in of printer and camera

QualiReader PI processes the digital print template

1. Step:

- An article is created once
- Automatic setup of printer and camera

2. Step:

- Order is selected and started
- Data output to print system

Automated configuration of image processing for full area and dot-by-dot inspection

Your benefits at a glance:

- Maximum efficiency with maximum reduction of human error thanks to minimal set-up effort and automatic teach-in
- High process reliability and simplified documentation thanks to consistent labelling and inspection data
- 100% inspection: full-area (print and non-print)! Decimal point accuracy! Codes, images and international fonts
- Process efficiency thanks to integrated bad label handling (e.g. overprinting in case of bei NOK)
- Flexible, scalable solution
- Safety through compliance with legal regulations
- Validated and proven technology in Pharma, MedTech and Food
- Labels, booklets: static, variable, serialized data; pre-printed and unprinted
- Clinical Trial Application: Patient Kit Number Management
- Connection to label management systems (LMS), MES, ERP for your automated workflow

PRODUCT FEATURES

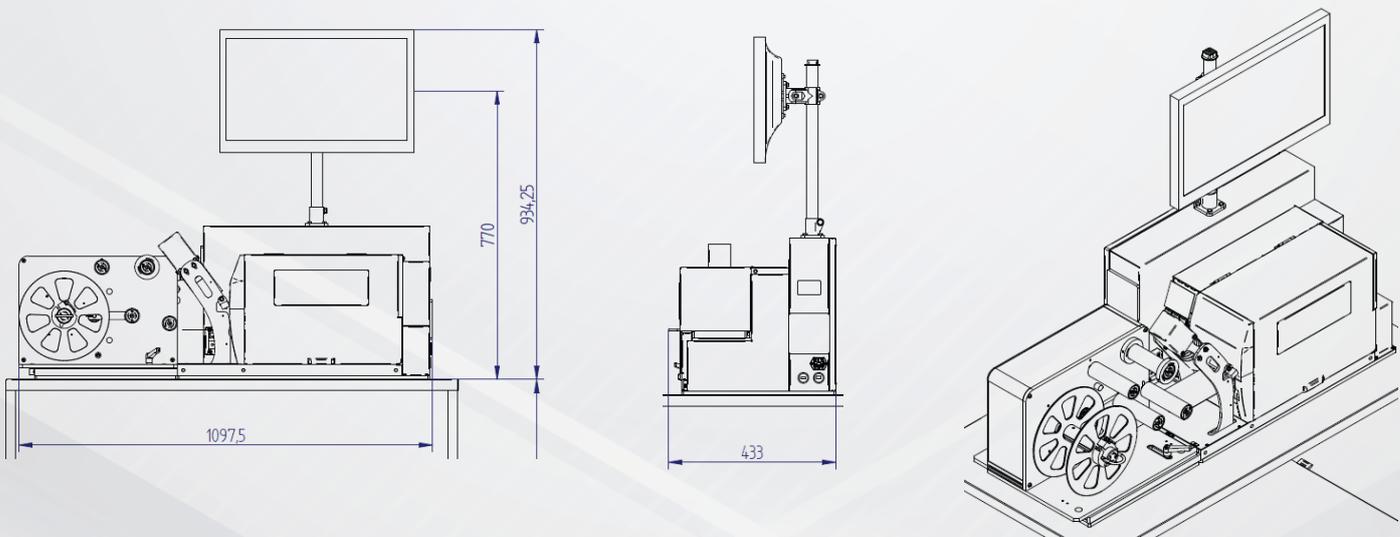
Printer and Rewinder	
Label specifications	Label width 25-114 mm, paper thickness 0.08-0.17 mm, maximum diameter of roll 200 mm or 340 mm
Printer specification	Thermal printer, maximum print width 104 mm, print resolution 305 dpi, other printers on request

Functionality	
Item and job management	Yes: Optional remote control via standard XML Protocol, customer-specific adapter on request
Print control	Complete control: Code, text (regardless of character set), pictograms
Serialisation	Balancing of pre-prints and serialisation (GS1, NTIN, UDI, China Coding)
Mixing control	Text, code or image
Data logging and report	Job-based with generation of customer-specific reports
Computer, operation	Windows 10 operating system, 19 Inch TFT touchscreen monitor (set-up via touchscreen)
User administration	Standard 4 level (compliant with 21 CFR Part 11)
Handling of NIO labels	Overprint-modus, manual removal

Camera system	
Software	QualiReader PI
Camera type	Monochrome line scan camera
Typical resolution	720 dpi

General	
Size	L = ca 1015 mm, W = ca 305 mm, H = ca 346 mm
Connection	230VAC/1A 50Hz

Options	
21 CFR Part 11	Pharma-compliant operation and logging
Integration with production planning	Standard XML protocol, customer-specific adapter on request
Code grading	Code grade estimate pursuant to ISO-IEC15415/16022, ISO-IEC15415/18004 and ISO-IEC15415/16023
Qualification (IQ, OQ, PQ)	Validatable software modules for applications in the pharma, medical technology and cosmetics sector
External spooling bolt	Maximum roll diameter 340 mm



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