# TubeScan 100% Inspection System

## More effective • Easy to handle • Affordable • Risk-free

The major success at LabelExpo 2019 was a landmark achievement  a major step concerning the world wide recognition of the brilliant concept of the TubeScan. It confirmed that we are perfectly on track and the new features like, the 4K camera, VARIABLE  DATA, Color Monitoring, BI DIRECTIONEL mode and the new HYBRID cooperation meet perfectly the market needs.

## // Delta-E Monitoring*

- Delta E comparison against color monitoring zone defined in the master
- Multiple zones possible
- Zone size can be adjusted

Delta-E Inspection Results

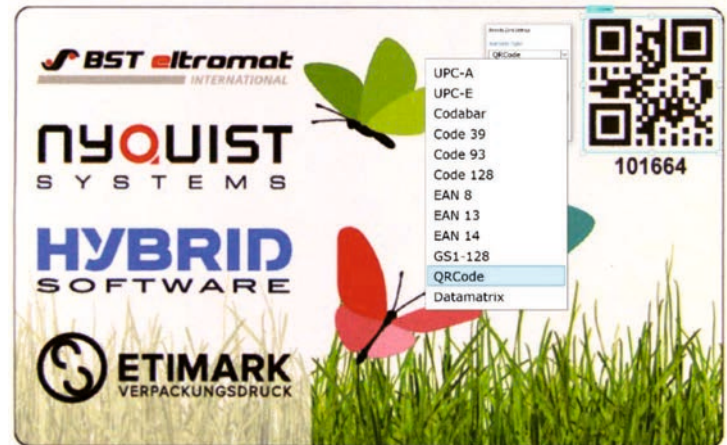| ID | ΔE |
|----|-----|
| 01 | 1.4 |



## // PDF Tool Box

- PDF Validation of Golden Image
- Import of MASKING, DIE CUTTING contour
- Import of inspection zone definitions



## // Smart Barcode verification*

- Decoding and grading of static and variable bar-codes in real-time
- Currently supported (see list in image)
- Available upon request (GS1 Databar1, Industrial 2 of 5, Interleaved 2 of 5, Pharmacode, Planet, Postnet, Aztec, Dotted Data Matrix, Maxicode, Micro QR, PDF417, MicroPDF417, Truncated PDF417, Composite, SEMI)

All number recognition applications require sample test by Nyquist!



## // Alphanumeric sequence recognition*

- Recognition of static & variable numbers in real-time
- Full alphanumeric recognition in preparation (on request)
- Teach mode
- GS1 Databar1 / Industrial 2 of 5 (standard 2 of 5) / Interleaved 2 of 5 (ITF-14) / Pharmacode / Planet / Postnet
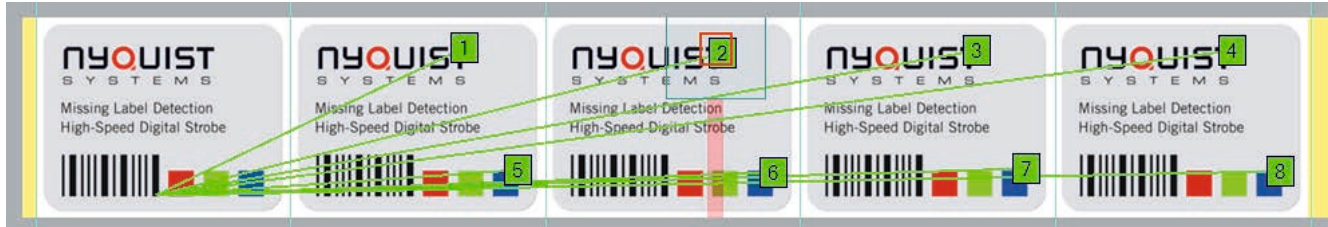
All number recognition applications require sample test by Nyquist!



*Optional Features

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# // Distance Monitoring Module[*]

• Distance monitoring with alarm and external OUTPUT
• Horizontal and vertical measuring possible
• Repeat length measurement when selecting one anchor point
• Measurement based on icon or horizontal / vertical edge
• New satellite function (one common reference for multiple measurements)
• Obtained results are stored ( can be exported and integrated in the report)
• Easy to set-up



[*]**Optional Features**

# // Some Facts & Figures about the TubeScan:

## 2
Available in 2 versions:
Digital Strobe & EagleView

## 3
Allows 3 levels:
BASIC, + & ++

## 4
Can integrate 4 different illuminations:
Front, Back, Contour & UV

## 8
Allows 8 different resolutions:
0.056 mm to 0.33 mm

## 11
Available 11 different inspection web width:
from 120 mm to 1100 mm

## 60
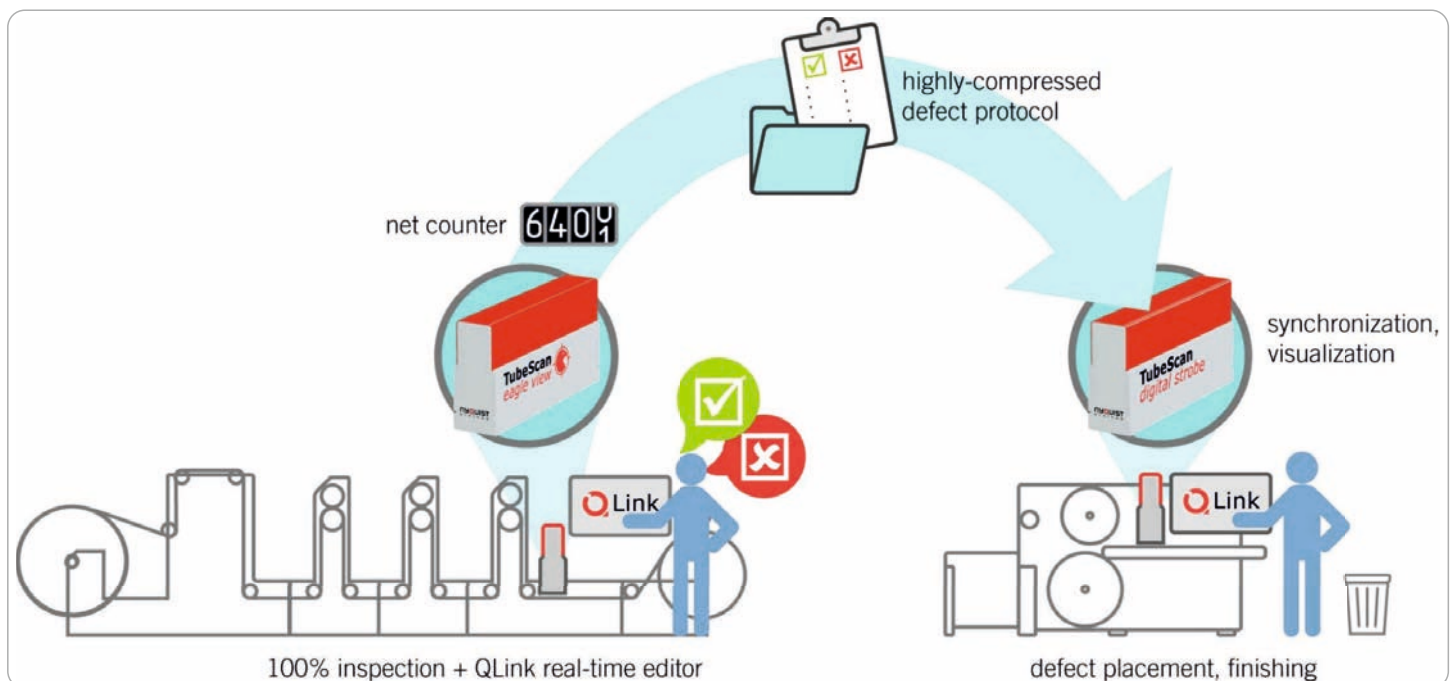TubeScan installations in
over 60 countries

## 600
Applications up to 600 m/min
production speed

## 1250+
Installations world wide

# QLink *Workflow for TubeScan*

## Unique Quality Assurance
## for Results that Count!

BST eltromat has expanded the TubeScan product portfolio with the new QLink Workflow, and has concentrated on synchronization, data handling and error editing. With QLink, TubeScan systems can be used for the automatic control of cutting machines and stand-alone 100% inspection systems.



**Q-Link PRESS** on printing press:
• Local high speed SSD data storage using latest technology
• Jobs accessible via LAN
• Highly compressed defect data to save on disk space
• Real-time roll map editing using QLink Editor
• Existing TubeScan system can be easily upgraded

**Q-Link REWINDER** on finishing machine:
• Select sealed roll from network
• Use local camera (QLink ICS) for synchronization and secondary inspection (no label or mark sensor required)
• Generate final roll report
• Existing TubeScan system can be easily upgraded

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## // Q-Link Synchronisation:

The Synchronisation is based on: Primary Digital Image processing and Safety function over ENCODER

• Missing Labels
• Remaining grid
• Misprinted marks
• Repeat length changes due to tension variations
• Side movement of the web

have no influence on the QLink synchronization. This results in :
• Once the starting point of the reel was set, you will never loose your position
• No sensor has to be adjusted as the QLink ICS / TubeScan is installed in a fix way and covers the entire web

## // Q-Link Flexibility:

Flexibility in use, as you can combine the PRESS and REWINDER inspection:

• You can activate the QLink whenever it makes sense
• The REWINDER DEFECT INSPECTION might not be activated (Tradiitonal WORK FLOW)
• The REWINDER DEFECT INSPECTION might work in parallel (to find additional events which may have
  occurred between press and inspection machine)
• The REWINDER DEFECT INSPECTION might work independently

Your Benefits:
• You are completely flexible and can use the TubeScan System also in cases where you have no protocol
  coming from the press or where the QLink Workflow is not needed or not possible.

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## // TubeScan: Celebrating 1250+ installations in 60 Countries.



1250+
installations
worldwide

Worldwide installations of TubeScan

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• Register Control • Viscosity Control • Density & Thickness Measurement • Process Automation