

## TubeScan 7.2 Release Report

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### 1 7.2.61

- Option introduced to not display errors on the graphical defect queue when the corresponding signal output is disabled.  
**“ShowDisabledSignalTypes”** in **DefectQueueSettings**, only changeable via xml-file or the extended settings dialogue  
*If, for example, no signals are to be output for defects from the distance measurement, no error entries are displayed for them on the graphical defect queue*

### 2 7.2.60

- Skipping a defect was not possible in *Pharma Mode* via graphical defect queue.
- Make I2C frequency configurable in HardwareSettings

### 3 7.2.59

- Fix Calibration Tool

### 4 7.2.58

- Updated PDF libraries
- Pause/Resume Cameras at first timeout (by default off)
- EagleView changes:
  - Introduced averaging of sync led offset
  - Bugfix: avoid sending invalid trigger offset / pulses of cylinder image to controller, causing that EV camera won't grab any more images
  - Added new parameter *TraversingCameraWaitForNextImageTimeout\_ms* to adjust EV camera timeout to hardware settings. Default value: 5000 ms.
  - Added new parameters to adjust SyncLed offset orientation parameters to *EagleViewSyncLedsSettings*

### 5 7.2.57

Fixes / Improvements:

- Graphical Defect Queue
  - Buttons erroneously deactivated or not working
  - If the option “ShowNextDefectToBePlaced” was activated, “un”-skipping was not possible
  - Improved auto selection of defect after machine stopped
  - Window getting minimized after opened settings dialog
- Allow to store Y Offset for EV supporting points for each scan mode
- Allow to adjust traverse correction on UI

## 6 7.2.56

### Fixes:

- Fixed incorrect state of software trigger check box in settings window after camera or job reload
- Validate loaded lanes to prevent missing lane dividers on screen
- Skipping defects via graphical defect queue
- Show next defect to be placed on defect queue
- Reinitialize EV camera after time out at system start, or when machine is stopped
- Fixed distortion settings inversion issue

### Improvements:

- No longer mark new QLink rolls as “Untitled”

## 7 7.2.55

### Improvements:

- Changed BSTe Logo to BST Group logo
- Do not unload roll but resynchronize qlink rewinder when tubescan counter get reset

### Fixes:

- Due to a bug when EnableBadRegistrationSuppressionVoting or EnableBadRegistrationSuppressionExtreme is set to true, the suppressed registration box for a grid would not get activated again after suppression for the following repeats. Now, the registration gets enabled again after suppression for the new repeats.
- The roll ID is now correctly displayed in the RollMapWindow if only the OrderID is used for QLink production input, furthermore TubeScan no longer asks for renaming

- Fixed license problem with IDS cameras.
- Unstable live image if registration zone is on the very bottom of the reference image
- including downsampling calculations in LaneErrorSizeClassification()

## 8 7.2.54

### Improvements:

- New option ShowQLinkButtonAlsoForArchiver in QLinkConfiguration to be able to start QLink Viewer from an QLinkArchiver licensed press. This version also does not close but hide the QLinkViewer while TubeScan is still running

### Fixes:

- Restore of performance counters called endless
- Amount of allocated camera image memory was not correct (introduced with v7.2.53)

## 9 7.2.53

### Improvements:

- Use PDF calibration for horizontal lens distortion compensation, instead of multiple supporting points in EagleView
- Renamed *Back Light 2* to *Contour Light* in inspection settings
- Adjust index of master camera in hardware settings

### Fixes:

- Deactivate Inspection Button when reference image was discarded by settings change (e.g., flash)
- MV cameras recover from being unplugged
- DefectQueue improves its appearance over and over again if registration is not working well (e.g., pinhole detection/deactivated y-registration) or web is flattering so that the registration has a wide range of operation. That causes unnecessarily high workload.
- Possible exception on startup caused by obsolete settings handling

## 10 7.2.52

### Improvements:

- Store sync led offsets per scan mode

## Fixes:

- Display of averaged reference image in subsampling mode
- Error when starting with invalid file format for snapshot recording
- OCR cannot decode lower 'w' when using predefined alphabets
- Custom alphabet is neither applied nor saved
- Defects were not shown correctly on GraphicalDefectQueue after repeat height changed
- Change maximum for proportional factor for vertical EV registration from 1 to 3
- Don't request camera image from I2C defect handling

**11 7.2.51**

## Improvements:

- Try to fix performance counters automatically

## Fixes:

- Fixed possible out of boundary of the subsampled image.
- Wrong calculation of defect distance to target/spice table on Graphical Defect Queue
- Fix alphabet for alphanumeric increment/decrement in barcode and ocr

**12 7.2.50**

## Fixes:

- Fix loading of default job
- Fix exception in signal queue handling (in camera thread)

**13 7.2.49**

## Fixes:

- Fixed possible crash, when number of ring buffer lines set too high
- Exception, when multiple repeats in live view together with subsampling
- Pharma Mode and Rewind Reverse
- Fix loading job exception via hotfolder interface

**14 7.2.48**

## Fixes:

- Avoid problem at TubeScan start, if distance monitoring is not licensed and no measurement zones are defined

## 15 7.2.47

### Fixes:

- Avoid 'Nothing to inspect' message, if at least one feature zone exists
- ArgumentOutOfRangeException if placement is not licensed -> introduced by 7.2.44
- Pumping live view when multiple repeats in live view
- Black image shown when going backwards in RewindReverse mode

### Improvements:

- QLink Press/Archiver mode only with OrderID

## 16 7.2.46

### Fixes:

- Corrected not inspected area when repeat was skipped by registration
- Introduce retry for MatrixVision I2C exceptions
- Don't disable InspectionActive on none processible repeats
- Enable InspectionActive on inspection button change

## 17 7.2.45

### Improvements:

- Log files are no longer flooded since defect signal and IO pins changes are no longer logged by default
- minor performance enhancement
- minor UI enhancements
- MIL is no longer initialized without license for either Barcode or OCR

## 18 7.2.44

### Improvements:

- Test signals in settings window can now be activated also when camera is turned on

- PharmaMode does not show message window but posts state changes to the TubeScan status bar
- New rewind mode for machines running in reverse without having to activate PharmaMode
- In rewind mode “RewindReverse” the GraphicalDefectQueue now can show a configurable range in front of the camera
- To open the DefectQueueSettings from GraphicalDefectQueue the default system password is required now
- New option to disable confirmation of each defect in rewinder control mode
- Skipping defects via GraphicalDefectQueue is always possible as soon as the machine has stopped
- New option to always display the next defect to be placed while the machine is still running, in order to be able to skip this defect

**Fixes:**

- Hide PDF button in zone editor if not licensed
- Fixed access to d: drive in simulation mode, or with IDS cameras and white balance turned off
- Corrected gain increment / decrement steps in calibration tool
- PharmaMode correctly sets/resets slowdown and reverse signal
- PharmaMode correctly places multiple defects in rewinder control mode
- PharmaMode starts to reinspection at the correct repeat again

## 19 7.2.43

**Fixes:**

- Show I2C transfer errors in the camera status window
- Handle single image request errors and show it in the camera status window
- Reset MV USB transfer errors during camera initialization

**Improvements:**

- Allow frame rate up to 1000 fps in software trigger mode for MV cameras
- Additional meta data stored in raw film filenames for simulation

## 20 7.2.42

**Fixes:**

- TubeScan Remote Control: Warning coming also, when it was disabled
- Handle I2C transfer
- Fixed new line issue in barcode and OCR csv result files
- Exception on click/tab on a textbox (normally a keypad or numpad would pop up)
- Removed two checkboxes from OCR zone details and settings panel
- Fixed incorrect assignment of inspection zones, if sub-sampling is enabled
- Waste zones are correctly drawn now, when roll map lane arrangement is set to bottom up
- Properly skip waste areas that were cut out (waste rewinder, QLinkRewinder)

#### Improvements

- Added missing Spanish translations for QLinkPress

## 21 7.2.41

#### Fixes:

- Defects now are correctly shown in strobe window via GraphicalDefectQueue with subsampling enabled
- Prevent inspection of 'black camera images' when TubeScan detects that the waste rewinder is active (only QLink rewinder) or the machine is running backwards (only pharma mode)
- TubeScan shows all defective areas also in QLink rewinder/editor now

## 22 7.2.40

#### Fixes:

- Fine registration might not work, if reference image is shifted and the registration moved to an area not visible before (the problem was introduced in 7.2.31)
- Incorrect orientation in measurement result after selecting a defect on the roll map
- Averaging settings hidden, when coarse inspection is enabled
- Fix PDF validation for PDFs with multiple pages
- Fixed black image in calibration tool when EV camera is attached to PC
- QLink Editor/Viewer/Rewinder now shows defect sizes correctly
- Debouncing for DigitalIO module

#### Improvements:

- Further major improvements on barcode and OCR handling and user interface

- Barcode zone settings UI now shows detected value and detailed information
- Barcode zone settings restructured; Added a window for more detailed information about the current selected barcode
- Option to show TubeScan in movable and resizable windows
- PDF reports now contain length information
- Movable windows for all TubeScan windows

## 23 7.2.39

### Fixes:

- Memory leak after roll reset
- Black EagleView image after start

## 24 7.2.38

### Fixes:

- Add uninspected repeat for repeats, which have been skipped by registration
- Added white balance for mv stripe cameras

## 25 7.2.37

### Improvements:

- EagleView with Matrix Vision stripe cameras
- Inspection not stopped after settings change
- Rework lane dialog
- Rectangles around defective bar codes in live view

### Fixes:

- Inspection settings not taken into account for inspection after settings change.
- Fixed, that font size score not updated after changing font size manually in OCR module
- Fixed, that check box 'As Default' in number recognition is unresponsive
- Number of defective repeats is shown correctly now in VDP and Distance Monitoring results after new roll / counter reset (also defect history is reset from now on)
- Removed options to save snapshot recordings as 'Tiff' or 'Png' images from the checkbox under the snapshot recording tap in the settings window
- Lanes not updated without zone processing
- Inspection active independent from alarm set

- QLink Press/Rewinder automatic defect zoom
- Fixed, that color saturation might not have been applied correctly to mv cameras

## 26 7.2.36

### Fixes:

- After a job was loaded, TubeScan did not always show the live image when the machine starts again
- Inspection used not updated repeat number (one too low) in very rare cases

## 27 7.2.35

### Improvements

- Usability of OCR/OBR zone editor

### Fixes

- Fixed, that maximum number of zones could not be changed for barcode, OCR and deltaE zones
- Fix viewing of defects from defect queue, when subsampling is enabled
- Fix teaching for enabled subsampling

## 28 7.2.34

### Fixes

- Defects were not displayed when they appear but delayed to the target position even without placement license
- Web-/Lane-Offset did not work when image is rotated or mirrored

## 29 7.2.33

### Fixes

- Defect counters were not updated and signals not sent when errors appear on specific lanes (only without changing number of lanes previously)

## 30 7.2.32

### Fixes

- Fixed, that the front light LEDs might not flash after resuming the camera; in case the LEDs are not flashing directly after the start of TubeScan, the problem should disappear after stopping and resuming the stripe cameras once.
- Fixed, that OCR detection possibly did not work correctly, if reference image was rotated
- TubeSync client crash when changing repeat height before camera was started

#### Improvements

- Possibility to move Web-/Lane-Offset instead of lanes

## 31 7.2.31

#### Improvements:

- Allow to enable or disable individual grading letters for the barcode module in *BarcodeSystemSettings.xml*
- Extended functionality of the auto font size detection in the OCR module
- Alphanumeric VDP evaluation

#### Fixes

- Final stop doesn't work when both "SlowDownSpeed" and "SlowDownOvershoot" are set to zero.
- Lost repeat in rollmap when moving reference image and taking new reference image
- Fix initialization of alarm signal when used together with defect control
- Fixed, that barcode and OCR zones not masked out correctly, if subsampling is enabled
- Uncaught Exceptions might be reported multiple times to the user.
- DefectQueue shows wrong error after machine stopped

## 32 7.2.30

#### Fixes

- Fixed, that the zoom buttons did not work in the EagleView window
- Fonts, added to *UserVisibleFonts* in *NumberRecognitionSystemSettings.xml*, now appear in the font combo box in the zone settings window of a number recognition zone
- SlowDown/FinalStop signals were not applied correctly
- Placement logic did not stop all defects using SlowDown/FinalStop

- Correct final stop behaviour, when multiple signals have been over run.

### 33 7.2.29

#### Fixes

- TubeScan does not automatically stop after reaching configured repeat count or good count
- QLinkRewinder finishes current production roll even if it is still in production by the press if NYCAMOrders is linked to a QLinkPress location

### 34 7.2.28

#### Fixes:

- Empty roll information fields in QLink press/rewinder

#### Improvements:

- New option for TubeScan synchronization in defect count window
- New option to disable error messages for synchronization (but only for the current session)

### 35 7.2.27

#### Improvements:

- Included Portuguese translations
- Alarm length setting gets disabled, when defect control is enabled.
- Dynamically configurable snapshot recording
- Backup old settings before updating to new revision
- Only graphical defect queue with pharma mode

#### Fixes:

- Prevent moving lanes with auto matrix detection
- Report can now be deleted after viewing it
- Fix tiff image snapshot recording
- Moving reference image when auto matrix is enabled
- Fixed possible "The Application object is being shut down." exception

## 36 7.2.26

### Improvements:

- TubeScan master slave communication infrastructure

## 37 7.2.25

### Improvements:

- Data validation over csv database for variable data feature

### Fixes:

- Fixed not working coarse registration
- Fixed that normal inspection was applied in the area of a new barcode or number recognition zone

## 38 7.2.24

### Improvements:

- Allow to ignore vertical and / or horizontal coarse registration offsets
- Added parameter to UISettings.xml to allow to change Coarse Registration suppression and limitation parameters in the settings dialog (disabled by default)

### Fixes:

- Machine not stopping in rewinder control if going too fast to stop at target position
- Speed Strobe warning not coming for Matrix Vision cameras
- EnvironmentSettings not saved
- Error MessageBox if no license/no camera or wrong camera
- Skipping defects in pharma mode was not possible
- QLink Rewinder exception "COMException [...] outstanding read or write lock"
- Frozen count buttons after closing settings dialog in QLink Press/Archiver while in production

## 39 7.2.23

### Improvements:

- Text inspection default settings

### Fixes:

- Fixed, that histogram zone possibly displayed in full repeat height, although it is limited
- The maximum height for the limited histogram zone can no longer exceed the repeat height
- Exception when loading job with averaging enabled

## 40 7.2.22

### Improvements

- Limit vertical search area for coarse registration

### Fixes:

- Fixed possible exception in text inspection after inspection start (occurred e.g., after repeat length has been changed)

## 41 7.2.21

### Improvements

- Move graphical defect queue to screen if it is located not on screen

### Fixes:

- Fixed that rewinder did not stop properly in *PharmaMode* on rewinder control
- Fixed that measurement results were not updated anymore after machine stop (only for *DefectQueue* enabled)

## 42 7.2.20

### Improvements

- Deactivate splash evaluation by setting splash length to 0

### Fixes:

- Fix exception message when skipping through defect queue
- Handle exceptions when teaching from defect queue
- Fix exception when displaying multiple repeats in live view
- Fix zone data not applied
- Fix exception during inspection
- Fix fine registration on reference image setup

## 43 7.2.19

### Fixes:

- Update from 6.2
- Camera errors now are properly reset after job load
- Library loader error when MIL is not installed
- Exception when displaying more than one repeat in live view

### Improvements:

- User now can filter also by roll id and resort QLink Editor/Rewinder roll list
- Jobs now get loaded synchronously
- “Fast AutoWaste”: inspect only every second repeat in auto waste mode if all lanes are bad
- “Fast WebWaste”: inspect only every second repeat in auto waste mode if at least one lane is bad

## 44 Revision 7.2.18

### Improvements:

- Additional logfile for signals
- BDE interface now also logs the containing data
- Load pdf for comparison via barcode scanner with wildcards
- Added sub-sampling processing for faster inspection
- Speed up of coarse registration
- Log TubeScan serial number and TeamViewer ID in log file

### Fixes:

- Update of MeasurementSettings from 5.6
- Chain button change not applied in text inspection settings window
- Defect gets shown on wrong reference image when viewed by rollmap (offset in web direction)
- Bad defect image after machine/camera stops
- Correct TubeScan serial number in QLink roll ticket

## 45 Revision 7.2.17

### Improvements:

- The configuration directory and job name were added to the settings dialog title

- Settings window is now showing the corresponding wire colors for the output signal buttons on placement tab
- Inspection window does not show *PharmaMode* option if not licensed
- Rewinder does no longer show manually skipped defect to be placed

Fixes:

- Crash in zone editor when trying to remove all text inspection zones
- Added ROI size check for text inspection zone

## 46 Revision 7.2.16

Improvements:

- Added new parameter *QLinkDefectOffsetRepeats* to placement settings;  
This allows to shift the actual placement location by positive or negative repeats (e.g., -3.5 to prepone the location)

## 47 Revision 7.2.15

Improvements:

- Message when both fine and coarse inspection are off
- Font size auto detection for OCR

Fixes:

- Defect images are shown with horizontal offset when selected on rollmap
- Camera error indication is not updating correctly for multi camera systems

## 48 Revision 7.2.14

Improvements:

- Skip defects in graphical queue

Fixed:

- Locked buffer exception in QLink Rewinder
- QLink signal offset (stop position)
- Exception when scan mode is changed

## 49 Revision 7.2.13

Fixed:

- Exception message appears, when pressing remove button without an existing zone

Improvements:

- Improvements on fine registration, which includes adding SAD and SSD algorithms
- Added Text Inspection zones to improve inspection accuracy and reducing false defects

## 50 Revision 7.2.12

Fixed:

- NYCAMLog Archiver

Improvements:

- Update Apitron XML-Engine and NLog

## 51 Revision 7.2.11

Fixed:

- CalibrationTool crash at start up

Improvements:

- REFLECTIVE\_BRIGHTFIELD scan mode is always available now, for Matrix Vision cameras
- Use of separate camera configuration file for scan mode REFLECTIVE\_BRIGHTFIELD is possible, e.g., for separate flat field correction

## 52 Revision 7.2.10

Fixed:

- Slider in zone editor could be initialized with wrong value, when window was opened

Improvements:

- Allow to adjust digital gain per Matrix Vision camera and scan mode
- Allow to apply stripe offset per line instead of every fourth line for Matrix Vision cameras

## 53 Revision 7.2.9

Fixed:

- QLinkViewer does not show archived rolls
- Crash when stepping through defects (arrow keys) or teaching defects too fast via GraphicalDefectQueue

Improvements:

- Signal output over SlowDown pin when signal queue gets cleared (clear defect queue, deactivate inspection, camera start/stop)

## 54 Revision 7.2.8

Fixed:

- Exception when selecting a QLink defect from defect queue
- Production rolls get not always deleted after starting a new one
- Deadlock when changing rotation or mirroring of camera

## 55 Revision 7.2.7

- Fix not inspected areas for rotated images

## 56 Revision 7.2.6

Fixes:

- Fix resolution field in calibration tool
- Fix duplicated rolls in QLink Editor

Improvements:

- Roll status visible in roll dialog
- Possible to enter unlimited stripe height for sample tests

## 57 Revision 7.2.5

Improvements:

- Show rollmap bookmarks for camera errors
- Disable signal logging by default
- One log file per start
- Show warning when signals in placement dialog are tested with camera enabled

## Fixes:

- Disable experimental asynchronous live view
- Don't log warning when invalid license files are existing beside a valid one
- Fix OutOfMemory Exception when drawing averaging overlay
- Remove wrong connect roll warning from log
- QLinkEditor rollmap does not get automatically updated
- QLink roll information input window does not switch controls for barcode or text input methods
- QLinkRewinder does not invert defects in rolls with just one lane

## Calibration Tool:

- Update Camera resolution on focus change to prevent issue with resolutions starting with 0.

## 58 Revision 7.2.4

When "AdvancedPermissions" from UISettings.xml is 'true' the Operator has to enter a password to be able to change inspection settings. The password is the same as to open the settings dialog (default "N27T").

## 59 Revision 7.2.3

## Fixes:

- Crash when user tries to teach a defect from graphical defect queue window

## 60 Revision 7.2.2

## Fixes:

- handle Matrix Vision DMR\_WAIT\_ABANDONED error
- fix Matrix Vision Buffer Unlocking after Timeout

## Improvements:

- allow stretching in PDF Calibration Validation

## 61 Revision 7.2.1

## Fixes:

- Fix rotation in pdf comparison

## 62 Revision 7.2.0

Initial Version

