

TubeScan 7.4 Release Report

1 7.4.59 (9.1.2024)

- Fixed removing of AutoMatrix Zone from Zone Editor
- Support for Balluf 3.02 camera driver
- Sure Dot OCR
- SSD health data checks

2 7.4.58 (12.12.2023)

- Fixed unclean shutdown (deadlock during shutdown)
- Fixed exception when creating vdp zone
- Fixed exception when changing ScanMode
- Fixed cropping issues in PDF Validation
- Fixed loading of AutoMatrix to ZoneEditor
- Fixed Updating of Zones after ZoneEditor was closed
- Improved reverse detection in pharma mode
- Fixed crash during rollmap rendering

3 7.4.57 (23.10.2023)

- Extended log of the DigitalIO module: Each time a signal is captured, it is written to the log file
- Fix exception when showing difference images
- Fix exception in lane rendering in rollmap
- Fix name of automatically created PDF report after roll reset
- Fix 10 Lanes Defect Output initialization
- Register TubeScan in Windows to create dump files on (Requires admin rights at startup once)

4 7.4.56 (10.10.2023)

- Fix exception when opening zone editor with disabled lanes
- Fix exception when calling automatrix in zone editor
- Handle NullReference exception in Apitron PDF library

- Handle exception related to StripeHeight<=0
- Fixed Deadlock when switching off coarse X and Y registration

5 7.4.55 (25.08.2023)

- Send Crash Reports to GitLab instead of to standard support email address
- Allow upload of diagnostic data to SharePoint
- Don't shutdown PC in simulation mode

6 7.4.54 (22.08.2023)

- Fix placement after repeat height change
- Fix exception during job load in ArchivingSettings
- Fix exception in UpdateInfos

7 7.4.53 (16.08.2023)

- Removed ScanMode and GlobalStripeOffset from EagleView settings
- Fixed shutdown issues with UPS
- Fix Updater: wrong settings after update from previous version. Encoder directions and rotations
- Handle AutoMatrix after Update
- Archiver can handle multiple source locations

8 7.4.52 (02.08.2023)

- Fix Matrix Vision logs are running full with flat field error messages

9 7.4.51 (25.07.2023)

- Fix slow drawing in zone editor

10 7.4.50 (20.07.2023)

- Fix for unstable registration of live images.
- Fix for Defect Found in 8 Lanes Inspection

11 7.4.49 (03.07.2023)

- Fix for misregistration after splice
- New requirements for surface inspection
- Fix for CE Version of Advantech USB IO Module

12 7.4.48 (09.06.2023)

- Support for M2051dC camera
- Support for CP Camera with Vx03 Controller
- Fix for generation of min-max images for the right side of the text zones.
- Fix padding not changeable pixel by pixel if white balance is enabled

13 7.4.47 (11.05.2023)

- zones are no longer cut off and reset to the original position even though they have been moved
- QLinkEditor/Viewer does not crash anymore, if the config path does not exist
- Clear Label Inspection: introduced label gap parameter to limit erosion/dilation values.
- Fix registration zoom tool window for simulator

14 7.4.46(09.05.2023)

- Fixed that defects sometimes disappear after being accepted in QLinkRewinder/QLinkEditor
- Fixed that QLinkEditor does not recognize start argument “/configpath”
- Don't log first I2C transfer error in a row
- Clear Label Inspection: when enabled, no edges will be generated in Edge Image.

15 7.4.45 (04.05.2023)

- Fix Auto Zoom
- Fix StripeOffset changing for Camera M2051dC

16 7.4.44 (29.03.2023)

- Changes to Barcode, Number Recognition and DeltaE zones are saved now

17 7.4.43 (21.03.2023)

- Fixed that a loaded roll map (*QLinkRewinder*, *QLinkPress*) is displayed as not inspected (red overlay)
- Removed "MirrorLaneNumbers" from RollMapSettings.
If the lanes are to be displayed mirrored/inverted, use "*MeasureFromFront*" in "*DistortionOffsetSettings.xml*"

18 7.4.42 (17.03.2023)

- Fixed, that the value of averaging repeat count and max averaging repeat count higher than the default number of 20 are not stored.
- Fixed obsolete setting handling for new setting introduced with 7.4.41 ("*NewStopSignalOnlyAfterMachineStop*", ...). Also, the checkbox on the defect queue settings window was not working correctly.

19 7.4.41 (16.03.2023)

- Fixed alias renaming in customizable variable data
- Fixed, that the defect rate of a roll cannot become 0 even though no errors were detected. Introduced with 7.4.38
- Fixed, that the start argument "*/configPath*" is not applied
- Reworked defect queue settings user interface and settings:
 - Changed setting name "*ConfirmEachDefect*" to "*NewStopSignalOnlyAfterMachineStop*" and the corresponding distance to "*NewStopSignalOnlyAfterMachineStopDistanceLimit_mm*"

20 7.4.40 (24.2.2023)

- Fix AccessViolation when reading monitor infos
- Debug Logs for AccessViolation when DrawingMask (ColorToColor)
- Remove duplicated pdf separation processing and fixed finalization of pdf document which might have an effect for sporadic exceptions in apitron library

- Fix exception in strobe view for very large repeats
- One more I2C retry with additional sleep
- Fix mm display with Ir mirroring enabled

21 7.4.39 (22.2.2023)

- Fix PDF Calibration from 7.4.37

22 7.4.38 (15.02.2023)

- Fixed rounding issue, where defect rate could become 0, although defects have been detected
- TotalCountWindow can now be brought to the foreground again
- Fix crash when loading job with disabled automatrix
- Fix loading jobs with different resolution in simulator
- Fix sporadic deadlock
- Remove bitmaps from automatic settings backups
- Fix Exception in Zone Editor

23 7.4.37 (27.01.2023)

- Fix race condition in inspection (defect extraction)
- Fix AccessViolation in ClonelfCircular
- Fix AccessViolation in ColorToColor and GrayToColor
- Fix IOExceptions in index file and settings logger
- Fix OutOfRangeException in autowaste rendering
- Change in PDF Calibration

24 7.4.36 (16.01.2023)

- Fix exception when reading monitor device information
- Adaptions for initialization of Cougar-X104iC-2911

25 7.4.35 (13.12.2022)

- Save RollMap.DefectSize settings in file InspectionSettings in job

- User input now is calculated correctly even if the unit is set to inches (Imperial).
- Minor improvements to QLink net counter user interface

26 7.4.34 (2.12.2022)

- Fix inspection with averaging after shifting reference image
- Fix jumping reference zone after shifting reference image to the very top
- Fix that teaching was not effective for full width of reference image when Subsampling was not set to 1.
- Change columns of custom variable data csv files
- Fix startup problem with Cougar cameras
- Removed gallery

27 7.4.33 (23.11.2022)

- Fix exception when the number of lanes changes after previously disabling the DynamicRollmap
- Fix windows in background
- Fix misplacement of qlink defects with previously reset roll (000)
- Introduced new option "ForceShutdown" in "QLinkEditorSettings.xml" to force closing the editor software even if TubeScan is running in the background. Only available through the xml file
- Improved appearance of warning in QlinkRewinder, so that other elements are no longer hidden under it
- Support flashing of controller via Cougar cameras

28 7.4.32 (8.11.2022)

- New PDF report creation window
- The PDF report is now formatted correctly if the number of lanes > 16
- PDF report options "ask to create" and "auto create" work correctly now if set via Total Count Window
- QLinkEditor now shows correct defect size colors (yellow, orange, red)
- QLinkEditor now shows correct live reel information (length, defect rate)
- Fix EagleView Registration

29 7.4.31 (25.10.2022)

- Fix exception when reading rollmap for very large repeats.
- Fix ScanMode switching in Calibration Tool.

30 7.4.30 (18.10.2022)

- Fix layers in pdf comparison
- Fix automatrix/reference image drawing issue
- Fix exception in LaneObjectsRenderer
- Preventing rare crashes: added boundary checking for averaging deltaE areas.
- Fix machine speed display
- Disable some diagnosis logs

31 7.4.29 (28.09.2022)

- Checkbox for switching on/off overlay image
- Fix saving rolls in rewinder single lane mode

32 7.4.28 (16.09.2022)

- LoadInverted (QlinkRewinder) is now stored correctly.
- Support for new Controller Rev 11

33 7.4.27 (01.09.2022)

- Fix overwriting data set headers in roll map files
- Fix zone shift in Zone Editor
- Fix hanging tubescan shutdown (introduced by 7.4.26)

34 7.4.26 (11.08.2022)

- Manual archiver now handles exceptions, disables the corresponding button and starts/stops the background archiver during the manual archiving process
- Manual archiving does not block the main thread and thus the user interface anymore

- Fixed: ZoneEditor shows a yellow overlay even if no zone was defined

35 7.4.25 (29.07.2022)

- Removed “Not enough space” dialog when the AllowOverwriteArchivedRolls Settings is active at startup
- Added new setting to QLinkConfiguration
“OverwriteArchivedRollsMinimumSpaceMB” to provide additional space buffer when deleting archived rolls
- Additional report creation option in Total Count Window

36 7.4.24 (25.07.2022)

- Tube Recorder always visible in settings dialog

37 7.4.23 (21.07.2022)

- Enhancements for factory tool
- Handle also rolls in state „Archived“ during cleanup in archiver
- TubeScan can be started in simulation mode with recorded films

38 7.4.22 (15.07.2022)

- Fixed loading old licenses in 7.4
- Fix usability issues when moving of reference image and/or registration zone
- Fix zoom to inspected area
- Hardware trigger and measurement in Calibration tool fixed

39 7.4.21 (11.07.2022)

- Fixed that QLinkRewinder disables the wrong lane when loading just a single lane (daughter reel). Only happened when the reel was previously loaded in the QLinkEditor.

40 7.4.20 (8.7.2022)

- Archiver now can clean full destination directories
- Fix exception when changing from „Barcode Scanner“ to „Text Input“ in QLink settings
- Fix PDF comparison for devices with distortion at the outer edges
- Fix frame rate in CalibrationTool + possibility to keep controller alive on shutdown
- Keep license history
- Save settings before backup

41 7.4.19 (01.07.22)

- Fix „Rewind Handling“ ComboBox in settings dialog
- Fix disabling inspection during pharma mode rewinding
- Fix for saving Tracking offset in EagleView
- Fix master camera selection for EagleView
- Removed ScanMode setting from Traversing Camera Settings 2
- Improvement: Click on visual zoom freezes live view
- Fix crash when rendering RollMap Track Events in overload situations
- Fix crash in distance measuring
- Fix IO clearing on camera stop
- Maximum registration y move can now be limited
- Fix automatrix handling in reference image (reference image always gets masked, even if automatrix was disabled)
- Fix zone editor always masking even if automatrix is disabled

42 7.4.18 (23.06.22)

- QLink Editor does not override settings when closed by TubeScan anymore

Slitter/Doctoring mode (parameter “SingleLaneProcessing” must be enabled):

- Lane/daughter rolls can now be renamed (barcode or text input) via QLink Net Counter
- Lane/daughter rolls can now be loaded with a previously set name via Roll Management Window in QLink Rewinder

43 7.4.17 (17.06.22)

- Fixed QLink roll barcode/text input. Changing the roll id was not possible.
- Fixed SoftwareTrigger CheckBox in settings dialog
- Fixed entering repeat length in inch
- Handle AccessViolation during stripe copy
- Fix dead lock after ScanMode change and/or stripe copy error
- Fix “shaking” live image

44 7.4.16 (02.06.2022)

- Fix lane order in QLink slitler/rewinder
- Crop defect view to selected lane in QLink rewinder/slitler
- Fix CSV file creation exception on activation of inspection
- Fixed that feature map was not properly applied for blurring of live images.
- Fixed error handling for MatrixVision cameras
- Calibration tool supports software trigger of controller firmware V3

45 7.4.15 (19.05.22)

- Fixed incorrect result from icon based measurement after loading a job
- Fix deadlock when creating csv file for features
- New input signal features: Inspection On/Off, Shutdown
- Lane evaluation for measuring defects and the according output signals
- Ready for Inspection output signal
- Fix index out of bounds exception in roll counter

46 7.4.14 (06.05.22)

- Introduced the parameter EdgeExtensionRadius to EdgeDetectionSettings(.xml).
- Improved calculation of Sobel edge detection for the ‘fastest’ method in EdgeDetection (aka featureMap) module.
- Fix dead lock in text/texture inspection
- Fix shifted defect pixels from rollmap
- Fix loading 7.2. rollmap files (defect pixels were shown wrong)

47 7.4.13 (14.04.22)

- EdgeDetectionSettings(.xml) are now system settings and no longer dependent on the currently loaded job
- Fixed crash due to a *ArgumentOutOfRangeException* in *RollNetCounter.UpdateInspectionCounters*

48 7.4.12 (05.04.22)

- Fix height compensation factor for coarse inspection
- Save settings of editor or viewer if completely shut down or when settings window was closed, but only with a valid license
- Auto roll protocol sources for different editor modes (*Editor, Viewer, Unlicensed*)
- Fixed that the QLink rewinder does not find the defect on current position when machine stops in defect found mode
- Introduced option to disable the auto start of QLinkEditor
„**EditorAutoStart**“ in *QLinkConfiguration.xml*, by default set to „**true**“
- Introduced option to allow the user to kill the QLinkEditor process by a right click on the QLink button.
„**AllowUserToKillEditorProcess**“ in *QLinkConfiguration.xml*, by default set to „**false**“
- Fixed that QLink Editor loads rolls, even if „**AutoRollLoad**“ in *QLinkConfiguration.xml* is disabled.
- Fixed that QLink Editor automatically loads online rolls, even if „**AutoSwitchToNextOnlineRoll**“ is disabled.

49 7.4.11 (4.4.22)

- Fix exception in settings logger
- Fixed rotation for text / texture overlays
- Fix for not decoding barcodes during job creation

50 7.4.10 (30.03.22)

- Do not remove defects from graphical defect queue after camera has been stopped
- Fixed placement of qlink defects when rewinder sync offset and workflow to waste offset is set
- Fix PDF comparison/validation for rotated view

QLink:

- Also switch arrow buttons on DynamicRollMapWindow, QLinkEditor and QlinkRewinder when roll direction of embedded rollmap is set to *“RightToLeft”*
- Fixed deadlock: when feature zones are defined (DeltaE, Barcode, Distance...) and production is active, TubeScan hangs after enabling inspection.
- Load reels via barcode from any available queue (Pending/Sealed/...) and source
- Load specific lane/daughter reel via barcode
TubeScan looks
Parameter *“SingleLaneProcessing”* in *“RollMapSettings.xml”* must be enabled
- Show lane/daughter reel numbers starting with 1 instead of 0

51 7.4.9 (23.03.22)

- Fix blocking issue on automatic roll reset
- Lane/Top detection can be enabled without auto matrix enabled
- Add zone multiplication in zone editor
- Fix handling for empty codes in customized variable data zones
- Possibility to flush csv file after each repeat for feature zones
- Do not remove defects from defect queue when stopping camera
- Simulator:
 - Fix film reloading
 - Fix velocity handling
 - Fix license handling
- Fix manual zoom when padding changes
- Prevent error message when neither fine nor coarse inspection is enabled
- Fix alarm duration setting when placement is not licensed
- Fix issue with pdf calibration

52 7.4.8 (28.02.22)

- Fix missed frame handling for camera
- Fix blocking issue when taking reference image
- TS Factory Settings tool added

53 7.4.7 (23.02.22)

- Fix NullPointerException in during Inspection (WriteDefectsToMemoryStream)
- Fixed, that too small OBR / OCR zones were not entirely removed from zone editor
- QLinkEditor/Viewer now displays correct defect size colors (yellow, orange, red) in offline mode
- Coarse Inspection now counts defects and outputs signals correctly
- Fix hanging roll reset in qlink
- Up to 10 repeats in live view

54 7.4.6 (14.02.22)

- GraphicalDefectQueue scales the target position correctly now
- QLinkEditor/Viewer now displays correct roll information
- Fixed, that overflow status was triggered too early, which causes inspection to be stopped accidentally (introduced in v7.4.5)

55 7.4.5 (11.02.22)

- Allow to load normal or reflective bright camera settings in calibration tool
- Fix exceptions in PDF comparison and placement of newly loaded pdf file
- Support for new human readable license format
- Additional defect found strategy for forcing minimal signal length (Extended Settings: IOControlSettings.ForceSignalLength)
- Adaptions for Cougar Camera: See document "Cougar TubeScan Configuration"
- Fixed zoom in Visual Settings Window
- Handling for missed frames

56 7.4.4 (28.01.22)

- Fixed that reference image in zone editor was not visible (introduced with v7.4.3)
- Fix for difference image when subsampling is enabled.

57 7.4.3 (25.01.22)

- Added new parameter AllowRestartAfterScanModeChange in EnvironmentSettings.xml (default value is *false*)
- Disabled Averaging during Clear Label Inspection
- QLink Webservice
- Fixed missing I2C exception for Bluefox camera (TubeScan and TubeCalibration)
- Fix zones with subsampling enabled
- Fix Averaging overlay with subsampling
- Log command line arguments
- Improved automatic defect selection of QLinkRewinder when the machine has stopped for a defect and "DefectControl" is used
- Introduced parameter *"SingleLaneProcessing"* in *"RollMapSettings.xml"*
Together with a QLinkPress licenses this option enables QLinkSlitter mode with extended reel/order statistics and state management for lanes/daughter reels via roll map control. Column visibility can be changed in the also newly added settings tab "Net Counter Settings".
In combination with a QLinkRewinder license the operator can choose which lane should be loaded from a QLink protocol
- Predict next roll number before entering production mode
Only works when the order already exists
- Introduced an option to disable automatic reel loading in QLinkEditor/Viewer
AutoRollLoad (default = true) in QLinkEditorSettings.xml
- Fix Exception when opening job window
- Fix location of defect queue window
- Fixed registration issue on icon-based measurement, due to alpha channel mismatch between live and reference image

58 7.4.2 (16.12.21)

- Padding dependent on ScanMode
- Fix exception ing settings archiver
- Fix teamviewer id logging
- Do not discard pdf when reopening PDF Comparison (bug dependent on calibration)
- Fix reading old rollmap files
- Fix signal handling for qlink

- Fix crash and deadlock in QLinkEditor
- Show used output signals in settings dialog for selected defect mode
- Cougar camera support
- Fix wrong assignment in PlacementSettings when updating from older versions
- fix handling for height compensation factor when changing ScanMode

59 7.4.1 (17.11.21)

- Fix coarse inspection with subsampling
- Clear feature zones when not licensed anymore
- fixed a potential stride usage problem.
- fixed incorrect stride value for using featuremap in blob module.
- fixed unhandled exception in QLink settings archiver

60 Revision 7.4.0

Initial Version