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nSpec Version 0.24.1.2

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Overview

This patch update includes multiple bug fixes, changes to the Bare Wafer Alignment wizard and a new program option.

Upgrading to v0.24.1.2

 Library Update Not Required

If upgrading from a version more than 1 release prior, please reference all intermediate release notes for upgrade steps *for each version*.

New Features

Highlights

NSPEC-8480: Add New Parameters to Bare Wafer Alignment UI

New fields **Origin Guess** and **Edge Search Begin** in **Bare Wafer Alignment** allow users greater control over the alignment's search parameters. Origin Guess is the expected sample center, and Edge Search Begin is where nSpec will begin to search for the edge of the wafer to begin alignment.

Wafer Trace Settings

Edge Samples: 10

Edge Trace Correction: 10

Edge Trace Speed (um/s): 14000

Exclude near Fiducial (um): 1500

Origin Offset

X: 0.00 Y: 0.00

Origin Guess

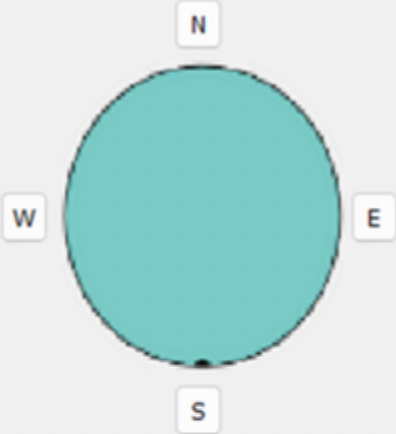

X: 67878 Y: 121209 ☐ Use Center Stage

Edge Search Begin

X: 26563 Y: 63068 ☐ Use Current Location

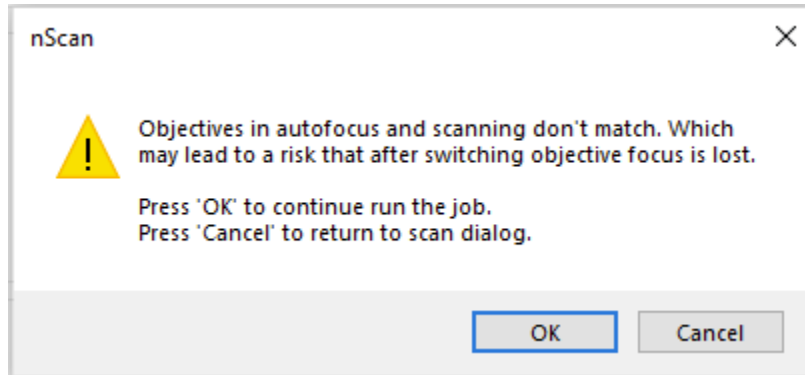
Align: Center X: 77365.68 Center Y: 122436.30

20246 points found

NSPEC-8570: Disable Scan Warning If Using Different Objectives for Autofocus and Scanning

Previously, if a user used different objectives from autofocus and scanning, a warning message popped up that required user input before continuing. This is not ideal for production environments. In order to manage this warning message, a new program option under **Scanning** called **Display warning dialog about differing objectives** can now be enabled or disabled to toggle this warning. By default, this warning message is enabled. Disabling this program option prevents the warning message from appearing and instead, then the message is only logged via the ex-log.



New Features Changelog

T	Key	Release Notes Summary
	NSPEC-8479	Add Search Start Point and Expected Sample Center Parameters to the Bare Wafer Alignment Config
	NSPEC-8480	Add New Parameters to Bare Wafer Alignment UI
	NSPEC-8570	Disable Scan Warning If Using Different Objectives for Autofocus and Scanning

[3 issues](#)

Bug Fixes

Highlights

NSPEC-8126: Bare wafer alignment scan is offset when sample is not in center of stage

Performing a bare wafer alignment scan when the sample is anywhere but the center of the stage caused alignment to fail.

Fixing this bug involves the addition of the Origin Guess and Edge Search Begin fields in bare wafer alignment detailed in [NSPEC-8480](#).

Wafer Trace Settings

Edge Samples: 10

Edge Trace Correction: 10

Edge Trace Speed (um/s): 14000

Exclude near Fiducial (um): 1500

Origin Offset

X: 0.00 Y: 0.00

Origin Guess

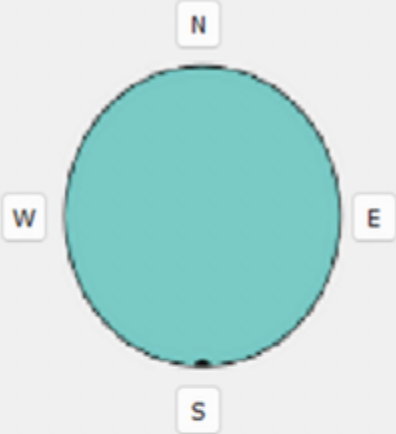

X: 67878 Y: 121209 ☐ Use Center Stage

Edge Search Begin

X: 26563 Y: 63068 ☐ Use Current Location

Align: Center X: 77365.68 Center Y: 122436.30

20246 points found

NSPEC-8407: Autofocus OpenCV error

Autofocus often fails due to issues with GPU allocation. Due to this bug, systems with GT cameras should not receive nSpec v0.24.1.0.

NSPEC-8456: Top light turns on during scan that should be using bottom light only








On tools where there are two illumination sources, e.g. when top light is used for alignment and bottom light is used for scanning, the top light turns on at inappropriate times. For example, on a scan setup with the bottom illuminator only, the top light turns on during the scan.

NSPEC- 8535: Show edge detection is greyed out after Bare Wafer Alignment fails or is cancelled

The **Show Edge Detection** box in the bare wafer alignment dialog becomes greyed out after alignment fails or is cancelled.

Changelog

T	Key	Release Notes Summary	Affected Releases
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	NSPEC-8126	Bare wafer alignment scan is offset when sample is not in center of stage	0.23.1.1
	NSPEC-8407	Autofocus OpenCV error	0.23.1.0, 0.24.0.0, 0.23.1.1, 0.24.1.0, 0.24.1.1
	NSPEC-8456	Top light turns on during scan that should be using bottom light only	0.24.0.3
	NSPEC-8535	Show edge detection is greyed out after Bare Wafer Alignment fails or is cancelled	0.24.1.0
	NSPEC-8537	Occasional missing points in Bare Wafer Alignment Wizard	0.24.1.0
	NSPEC-8560	AutoloaderGUI Isn't Parsing Older Files Properly	0.24.1.1
	NSPEC-8566	Bare Wafer Alignment uses wrong ISG for Autofocus	0.23.0.1, 0.24.0.0, 0.24.1.0

7 issues