

Vision Studio (Image Processing Tools, Algorithm Development & Tuning Platform)

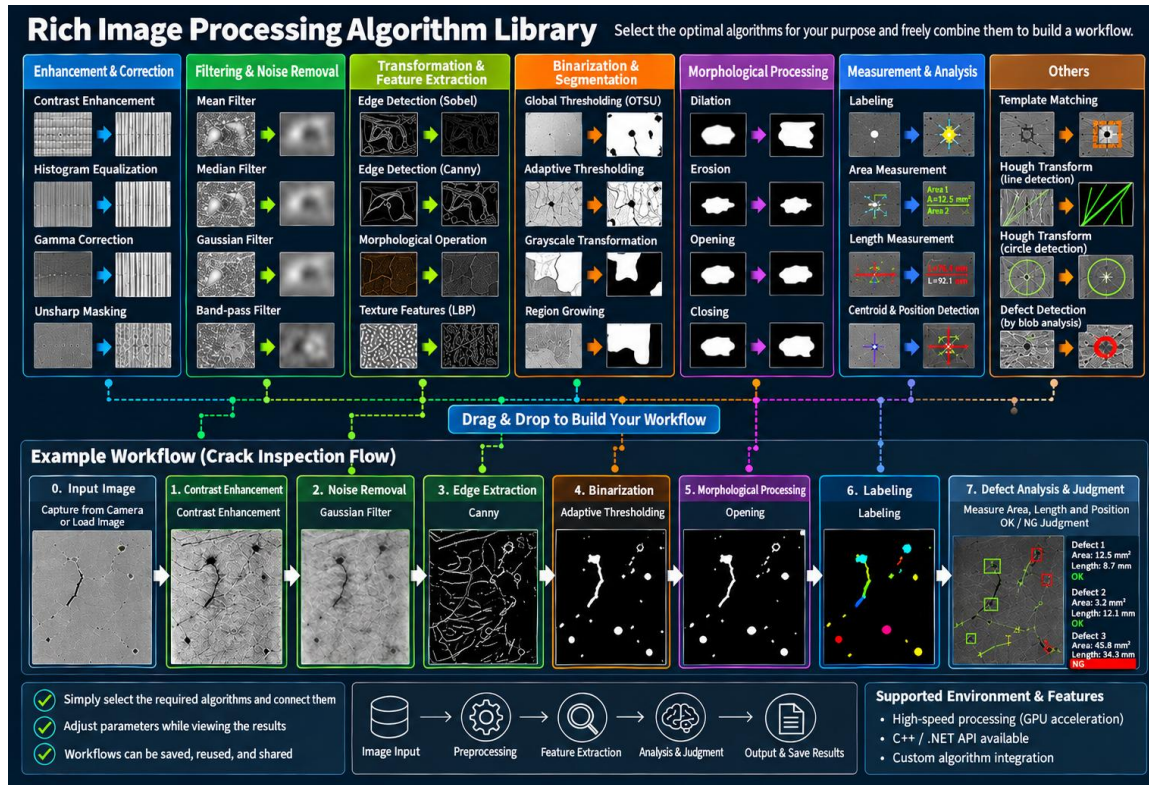
Development

Verification

Adjustment

Develop, Tune & Deploy Inspection Algorithms in a single workflow.

Combine preprocessing, positioning, detection, and measurement, then export finalized inspection recipes directly to AI InspeX or AI ScanX.



Core Functions

① Preprocessing

Normalize, filter, and correct illumination to stabilize images before inspection.

② Positioning

Maintain stable inspection positions even when workpieces shift.

③ Detection & Measurement

Detect defects and patterns, and perform dimensional measurements using configurable rule-based logic.

④ Tuning & Batch Processing

Test multiple parameter settings in batch, review results, and deploy finalized recipes to AI InspeX or AI ScanX.

Contact Us — Free Sample Evaluation & Demo Consultation

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① Algorithm Development

Build, test, and refine image-processing workflows for inspection applications.

A comprehensive library of standard image-processing algorithms is provided for inspection development.

Preprocessing: normalization, filtering, illumination correction

Positioning: edge detection, alignment, tracking

Detection & Measurement: defects, patterns, dimensions

Selection of Image Processing Algorithms

Enhancement & Correction

☒ Contrast Enhancement

☒ Histogram Equalization

☐ Gamma Correction

Filtering & Noise Reduction

☒ Gaussian Filter

☒ Median Filter

☐ Band-pass Filter

Edge Detection & Feature Extraction

☒ Sobel Edge Detection

☐ Canny Edge Detection

☐ Morphological Processing

Binarization & Segmentation

☒ Otsu Binarization

☐ Adaptive Binarization

☐ Region Growing

Morphological Processing

☐ Dilation (Expand)

☐ Erosion (Shrink)

☐ Opening

☐ Closing

Measurement & Analysis

☒ Labeling

☒ Area Measurement

☐ Length Measurement

Execution Settings

Batch Processing: ON

Output Format: PNG

Output Folder: D:\Result\

Run Batch

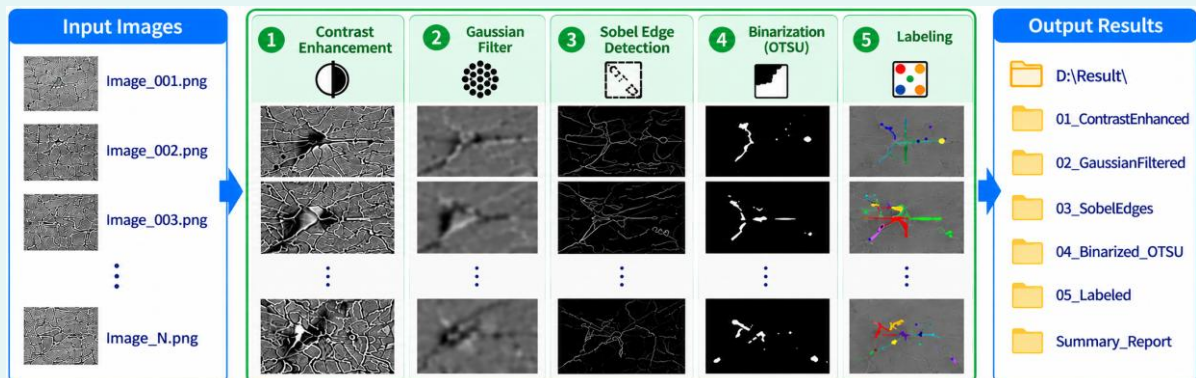
Easily rearrange processing steps and adjust parameters for rapid algorithm optimization and validation.

※ **Rapidly prototype and optimize rule-based inspection algorithms before production deployment.**

② Tuning & Verification

- ✓ Verify and tune parameters before production deployment.
- ✓ Identify and optimize conditions that may cause unstable inspection results.

Run: Single image / Folder batch
 Review: Inspect intermediate results
 Compare: Evaluate parameter settings
 Deploy: Export finalized recipes to AI InspecX / AI ScanX



Visualize intermediate processing results to accelerate development.

Key Features

Product	Vision Studio (Vision Development Excellence)
Application	Image Processing & Inspection Algorithm Development Platform
Preprocessing	Normalization / Filtering / Illumination Correction
Processing	Positioning / Defect Detection / Pattern Inspection / Measurement
Tuning	Single-Image Test / Folder Batch / Parameter Comparison
Output	Recipe Export for AI InspecX / AI ScanX
Languages	Japanese · English · Vietnamese
OS & Mode	Windows 11 / Development Mode

※ Specifications vary depending on the system configuration, cameras, and licenses. Please contact us for details.