

Nikon Launches ECLIPSE LV100AMS, a New One Click Automated Microscope

Nikon Corporation (Nikon) has launched the [ECLIPSE LV100AMS](#), a new one-click automated microscope designed to simplify industrial inspection and quality control. Built on Nikon's established industrial microscope platforms, the LV100AMS combines fully automated inspection with AI-powered image analysis, enabling manufacturers to improve consistency, increase inspection speed, and strengthen confidence in inspection outcomes.



Manufacturers today face growing challenges such as labor shortages and increasing throughput demands, making consistent inspection quality difficult to maintain. To address these issues, Nikon developed the LV100AMS, automating the entire inspection workflow from image acquisition to analysis. As John Moore, Sales Director at Nikon, said: "We enable manufacturers to reduce human error, accelerate inspections, and maintain stable quality across production lines." The LV100AMS is now fully integrated into Nikon's industrial microscopy portfolio, offering a complete and reliable automated inspection solution.

Key Features and Business Impact:

- **One-Click Automated Inspection:**

Why it matters: Manual inspection is highly dependent on operator skill and consistency, making it

difficult to maintain stable quality at scale.

Business impact: With one-click execution, even complex inspection routines and advanced image analysis run automatically, eliminating operator-to-operator variation and reducing human error. This enables repeatable, standardized inspections across shifts and sites, improving yield, lowering rework rates, and reducing training time.

- **Integrated Motorization, Automated Imaging, and AI-Driven Analysis:**

Why it matters: Disconnected inspection steps and manual interpretation slow down workflows and introduce variability.

Business impact: By seamlessly integrating motorized control, automated image acquisition, and AI-powered analysis into a single system, the LV100AMS delivers consistent, objective results with minimal operator influence. This increases throughput, supports scalable inspection strategies, and provides higher confidence in quality decisions.

- **Customizable Automated Workflows:**

Why it matters: No two production lines or inspection requirements are the same, and rigid systems limit process optimization.

Business impact: The LV100AMS allows manufacturers to design customer-specific inspection workflows tailored to their products, processes, and inspection conditions. This flexibility enables inspection approaches that are not achievable with conventional microscopy, helping manufacturers adapt quickly to new products, design changes, and evolving quality standards. Learn how the ECLIPSE LV100AMS can transform your inspection workflows - contact Nikon today to request a demo or speak with an expert.

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