New options and features for coating and print inspection systems

Simplify color printing and optimize process speeds

When producing three-part metal packaging, the goal is to achieve visually perfect products in accordance with all hygiene and safety requirements. Flawlessly coated and printed metal sheets are the basis for this. CoatSTAR and DecoSTAR, the renowned 100% inspection systems from ISRA VISION, inspect the quality of the coating and print at process speeds. These systems now offer a range of new features that increase efficiency on the production line, thereby helping system operators optimize their processes.

The new “Auto Detect Color Bars” feature in the DecoSTAR 100% inspection system from ISRA VISION not only shortens the makeready process for new print jobs but also simplifies the color inspection process as a whole. The four to six-color printing process, used increasingly more often in metal printing, is benefiting from this in particular. The DecoSTAR system can automatically detect and evaluate the color measurement ranges in the bleed area of every sheet. A newly developed optional layout for color measurement areas by ISRA VISION also enables the detection of additional color zones, allowing inspection of all images on the sheet. DecoSTAR guarantees 100% inline color measurement and recognizes color differences caused by color applications that are too thick or too thin based on density measurements. These are displayed as deviating ΔE values.
Two additional new features are now also available on both the CoatSTAR and the DecoSTAR systems. The “Machine Speed Reporting” feature enables both systems to collect detailed additional information on the inspected process: The evaluation includes information on the average speed per task or pallet and logs the current machine speed for every error detected. The data for “Machine Speed Reporting” is displayed as part of the inspection log, which is available as a PDF either locally or in a network environment. The correlation between machine speed and error type provides system operators with essential information to help optimize their processes. Speed-based errors such as color fluctuations or splashes, can now be prevented without slowing the process unnecessarily.

The “Maintenance Reporting” feature also ensures smoother processes. To this end, the “Touch & Inspect” graphical interface notifies the user when maintenance is required. This prevents defects that are typically caused by dirty components or initial signs of wear. The operator, therefore, has the opportunity to react at an early stage and prevent more severe problems – whether by cleaning the corresponding components or by requesting a maintenance appointment to avoid unplanned and forced downtime or large amounts of waste through a system failure.

With the CoatSTAR inline inspection system for inspecting coatings and DecoSTAR for inspecting prints, ISRA VISION offers powerful solutions for the 100% inspection of metal sheets. They not only reduce waste to a minimum but also support the user with new functionalities that simplify color inspection, speed reporting to avoid speed-related defects, and maintenance notifications.
The DecoSTAR inspection system for printed metal sheets can automatically detect and evaluate color measurement ranges in the bleed area of every sheet. It guarantees 100% inline color measurement and detects color differences caused by color applications that are too thick or too thin based on density measurements.