

# Introducing **EMHART**'s Sidewall Smart Filter

Making a splash on the market, EMHART's Smart Filter maximizes inspection performance in its offer of sidewall setup automation, using both static and production learning functions as it establishes optimal greyscale thresholds to fully inspect containers at the very highest levels of sensitivity.



An inspection option for the FleXinspect C Gen III sidewall machine, the “Smart Filter” is designed to minimize setup time with minimal user adjustments – all while maximizing inspection performance by using the latest SCOUT Ai.

## THE CHALLENGES

Inspecting the sidewall on a glass container has its challenges, given that setting the proper inspection coverage and sensitivities is often difficult and time-consuming owing to the characteristics of many glass containers. Here’s why ensuring the inspection coverage achieves a minimum of 360 degrees can be difficult. Indeed, the sensitivity of an inspection zone must often be compromised to compensate for features found in that specific zone which, as production process varies, necessitates frequent adjustments to maintain acceptable reject rates.

## THE SOLUTION

The sidewall “Smart Filter” learns the expected variations from a trained set of container images in order to establish optimal sensitivity for fea-

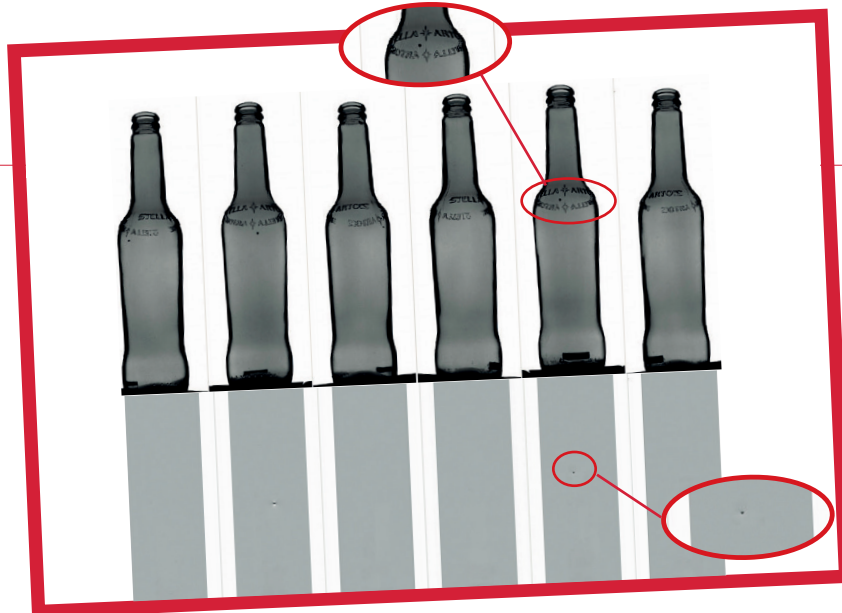
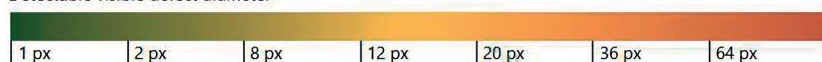
tures common to a specific container. Consequently, inspections are performed at the highest sensitivity levels in areas with shadows, embossed features and uneven glass distribution.

Here it’s trained with an initial, static sample set before continuing to learn and update throughout the production run. Displaying a colour-coded, 360-degree visualization of the container, the machine alerts the operator to expected inspection sensitivities with displayed colours corresponding to the magnitude of detectable defects in each area of the container. As such, zones with individual inspection sensitivities do not need to be established.

Sidewall



Detectable visible defect diameter



## SOME SPECS

The sidewall “Smart Filter” option can be added to any FleXinspect C Gen III inspection machine, which extends to any Chili G1, Chili G2 or eco (Symplex) machine configuration. For field upgrades on older equipment, and concerning installation requirements, the system must be updated to the latest 64-bit processing platform. Features include complete sidewall coverage with zone-less inspection, learned adaptive thresholding, continuous production learning and visualization of sensitivity. As to “Smart Filter” benefits, these include savings on setup time, elimination of blind spots and a guarantee of consistent setups, as well as the possibility of optimal inspection sensitivities in all areas of the container. It also updates the “learned adaptive threshold” automatically in order to compensate for changes within the production process and it will graphically display the expected level of sensitivity in all areas of the container. ■

**BUCHER**  
emhart glass

**BUCHER EMHART  
GLASS**

Hinterbergstrasse 22°  
Ch-6312 Steinhausen - Switzerland  
Tel.: +41-41-7494200  
Fax: +41-41-7494271  
E-mail: [webmaster@emhartglass.com](mailto:webmaster@emhartglass.com)  
[www.emhartglass.com](http://www.emhartglass.com)