

Multiple article inspection... Making the right choice

Mike Rentschler discusses the benefits of SCOUT technology from Bucher Emhart Glass for multiple article production operations.

As the Product Manager for Inspection Systems at Bucher Emhart Glass (BEG), Mike Rentschler has the privilege and opportunity to interface with glass producers from all over the world. In doing so, it is clear that everyone in the industry has the same ambitions and goals: Growth, stability and profit. How they are able to achieve their goals is in many cases different, although common among all of them is the need for greater flexibility.

Everyone agrees that their plants need to be capable of producing a greater variety of articles, while minimising the overall effect on forming machine uptime. Since its introduction in 2008, the Multi Gob System from BEG has provided this functional benefit by allowing glassmakers to control all parameters needed to successfully form different containers on the same IS machine. At the same time, the old cold end inspection layouts and packaging areas continued to be a bottleneck.

As producers consider more multiple article production operations, the decisions they need to make for larger investments in the inspection and packaging areas of the glass plant create new challenges. Most prominent among these challenges is the installation of all new line layouts and machine configurations that allow for different products to be made, inspected and packed at the same time. BEG is doing its part by continuing to add value by making it easier to inspect multiple articles, while simultaneously expanding the inspection capabilities and information generated for each article produced. Today, by harnessing the power of SCOUT technology, glass plants can introduce new containers to the FlexInspect C 'on the fly' with very little user interaction.

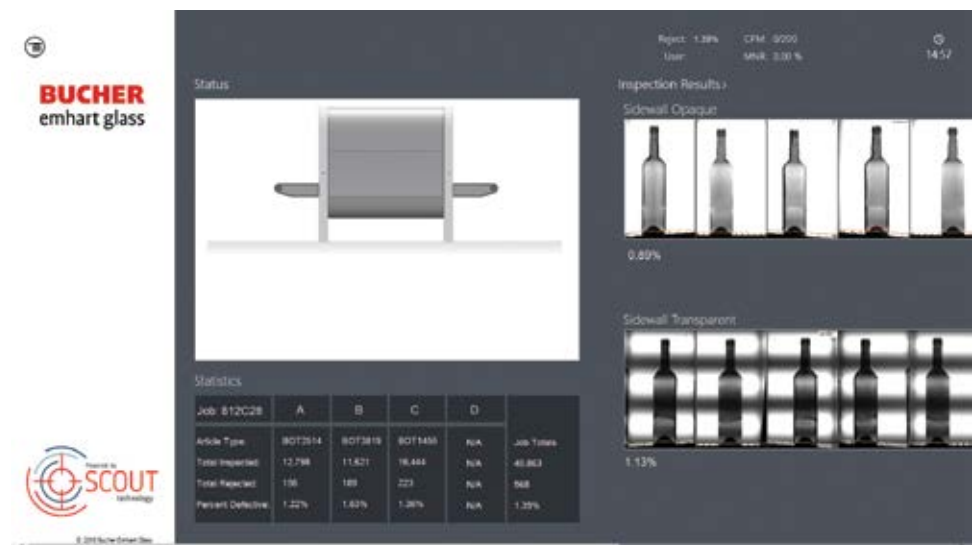
FLEXIBLE APPROACH

Once a container is programmed into the SCOUT's article recognition tool, that container can be individually added and removed from the current

running set with the push of a button. As for the inspection quality, predefined limits in the defect classification tables that are an integral part of the SCOUT software ensure that every container is inspected to the highest quality standards. Inspection setup for each article type can be tailored specifically to its design; no need to compromise with a one size fits all setup. Providing instant feedback about each article's quality levels plays a critical role in being able to maintain the highest pack rates by alerting production about the defects produced in a timely manner.

Multiple gob forming at the hot end, together with multiple article inspection in the cold end allows for shorter production runs and small lot sampling in some factories. However, that level of flexibility comes with some additional complexity. Currently, only non-contact

sidewall machines have the capability to inspect different articles being produced on the same production line. Mechanical indexing and belt handling machines can inspect only articles that have exactly the same physical attributes at any one time, thus preventing them from inspecting different shaped or sized containers. Therefore, producers need to make provisions at the cold end and packing area for each article type that a plant would produce. These provisions include methods to transport different articles to



FlexInspect C inspection overview page.



Multiple article inspection views.

dedicated inspection machines to inspect the finish and base, as well as machines to detect checks and glass thickness measurement. Once inspected, each container then needs to find its way to the appropriate packing area, so it can be boxed or palletised before shipment.

SIMPLIFIED LINE LAYOUTS

Besides using the power of SCOUT technology to make the inspection setup and operation easier, BEG

also offers the major advantage of simplifying line layouts by reducing the required line space and layout needed for multi article inspection. This is accomplished through the advanced designs of the FleXinspect T and FleXinspect M machines. Both of these mechanical indexing machines can be equipped with the inspections typically associated with top and bottom belt handling machines.

By performing the inspections

required to control the quality of the finish and the base in the same machine that inspects for check defects and glass thickness measurement, each dedicated single line needs one less machine to perform required inspections.

To optimise production efficiencies and forming machine uptime, each plant needs to find the delicate balance between operational stability and process flexibility. Investing in multiple gob capabilities at the hot end and/or multiple article inspection at the cold end is something that should be considered. Even if the need to produce more than a single article on an IS machine is never needed, having the capacity and capabilities to run different containers at the cold end may be a wise investment, whether it is to be used as an online reselection device, or a way to transition between job changes at the hot end without shutting down production.

In today's inspection world, BEG is working hard to ensure that glass producers have a way to achieve their goals by providing solutions that are in line with everyone's goals, regardless of what path they take to attain them. ■

The FleXinspect C sidewall inspection machine.



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