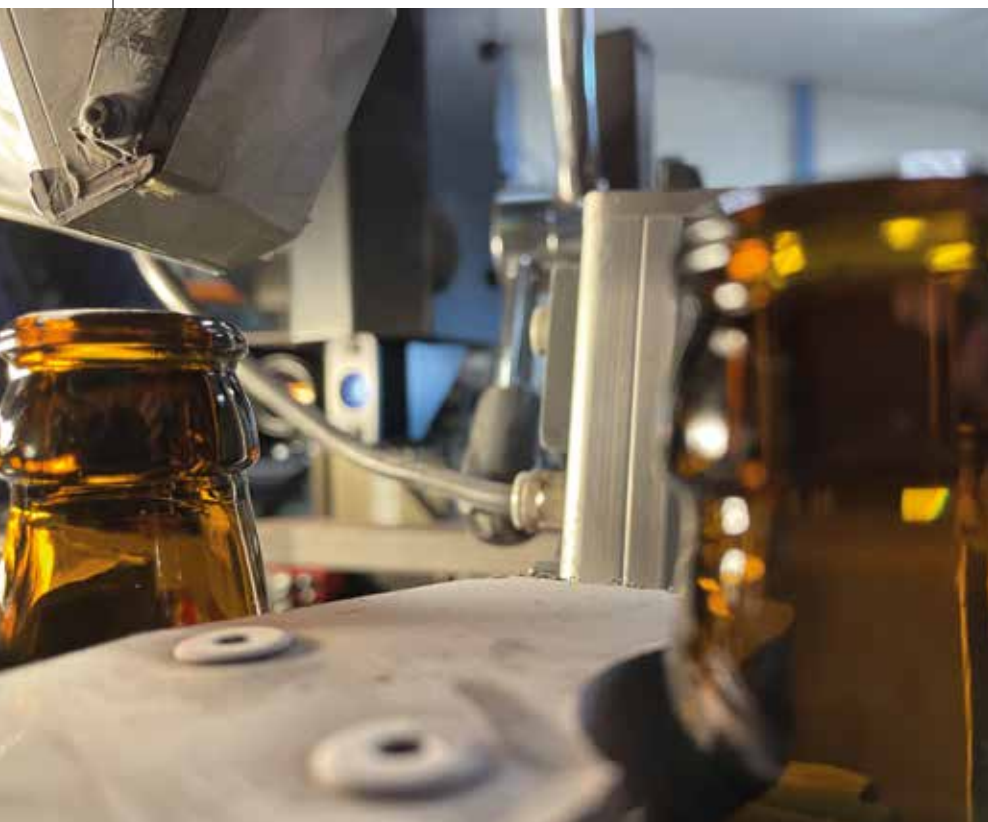


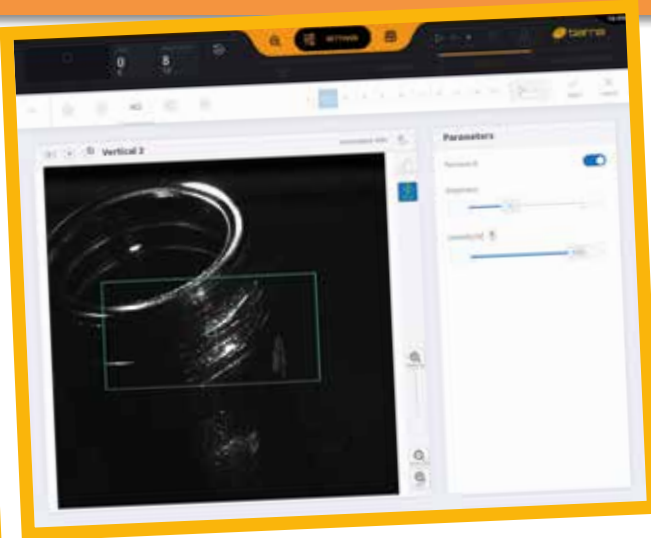
Performance meets **TIAMA** precision in FKO & Saturn detection

Combining cutting-edge technology with a robust ease of use, TIAMA's carrousel detection systems herald a new era in container inspection. In FKO & Saturn, the two form a powerful duo together – securing production, reducing waste and elevating inspection standards across the glass industry.



FKO: AUTOMATIC FLANGE AND KNOCK- OUT INSPECTION

By identifying Flange and Knock-Out defects on thread and crown finishes, Tiama's latest innovation FKO is effectively addressing two of the most critical and harmful finish defects in glass containers. Such defects can be as small as 60 microns - making them nearly impossible to detect with traditional inspection systems. Until now, no technology on the market could reliably reject them in line, on 100 percent of containers with such precision. FKO changes that. It uses a high-resolution camera and highly-focused optics to inspect the ring edge during container rotation with a resolution of 50 pixels/mm. It offers fast setup, no false rejects and a quick return on investment as it can replace manual quality control and costly resorting costs.



Here, indeed, FKO ensures top-tier quality and consumer safety.

SIMPLE SETUP, POWERFUL RESULTS

The system is designed for simplicity and efficiency. Operators only need to configure two parameters, making setup quick and accessible without requiring specific expertise. The realistic image display from the camera helps define the inspection area effortlessly, while the correlation of counters and defects to mold numbers allows seamless integration with hot-end monitoring systems. By identifying the latest critical defects and providing related images, FKO drastically reduces the risk of customer complaints. Available on Tiamo's market-leading carousel machines, FKO can be installed on both new and existing installations.

SATURN: CARROUSEL CHECK INSPECTION REINVENTED

Saturn is Tiamo's new carousel-based camera check detection solution, designed to replace manual inspection with a faster, more efficient and more accurate system. With over 60 years of experience in check detection, Tiamo developed Saturn to meet the evolving needs of glassmakers.

COMPREHENSIVE CHECK DETECTION

Saturn enables inspection of all parts of the container, including the finish, shoulder, base and body, with unmatched precision. Equipped with 6 to 11 wide-angle cameras, it captures up to 792 images per article to detect even the tiniest checks on bottles and jars with much higher coverage than standard check inspection. This ensures the inspection of all regions where defects are likely to appear, maintaining high production quality whilst significant-

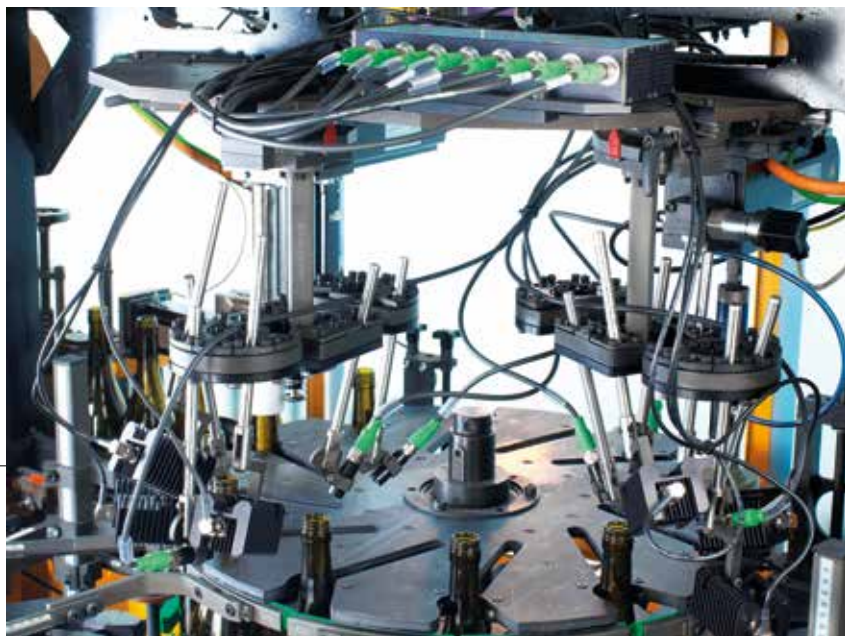
ly reducing false rejects.

EFFICIENCY THROUGH SIMPLICITY

With Saturn, setup is remarkably simple. Once the cameras are oriented toward the article, operators need only define the detection thresholds and surfaces. This process simplification cuts job change time in half as compared to standard systems. The system is integrated into Tiamo's latest user-friendly interface - making configuration intuitive and fast. The realistic image display further supports operators in positioning cameras and defining inspection zones with ease.

A STRATEGIC ASSET FOR GLASSMAKERS

Saturn also delivers substantial operational benefits. By automating manual inspection tasks, it reduces labor costs and can lower resorting due to check defects by up to 90 percent compared to traditional technologies. Its compact and modular design now allows for easy integration of 3 additional cameras as a complement to an Atlas system for inspecting hard-to-reach areas. ■



TIAMA

215, chemin du Grand Revoyet
69230 Saint-Genis
Laval - France
Tel.: +33-4-37201580
service@tiamo.com
www.tiamo.com