

## COLD-END ALLIANCE

# Cooperative dynamics between IRIS and Heye at Carib Glassworks

Leaders at camera and check inspection solutions, IRIS inspection machines and Heye International have collaborated in a unique synergy. The cold end alliance, named WENSPECT, has already proved, working together as one, its ability to overcome even the greatest challenges as for Carib Glassworks, the only glass container plant in the Caribbean.

Located in Port of Spain, Trinidad, Carib Glassworks has a rich history, dating back to 1948. The specialist glassworks is a member of the ANSA McAL Group of Companies, its founding fathers having laid the platform for a highly automated manufacturing facility, employing some of the best regional technical professionals.

The factory produces both standard and custom-made containers in flint, green and amber for customers in the soft drinks, beer, food, alcohol and juice sectors. In 2016, the glassworks dou-



bled production capacity to 70,000 tons/year via the commissioning of a second melting furnace and three production lines.

## MANY YEARS OF WORK TOGETHER

Carib Glassworks started working with Heye International almost 50 years ago equipping one furnace with Heye IS machines and Heye carousel machines for Cold end. In 2015, as they were facing new quality challenges, IRIS Inspection machines delivered non-contact inspection solutions for five production lines.

Driven by customer demands, Carib Glassworks continuously invests in their people, and installs cutting edge technology working towards new milestones in safety, quality and precision. Sharing the same passion for collaboration, IRIS and Heye, now joined in WENSPECT alliance, have supported the glassmaker's business expansion initiatives, in a close working relationship.

## WIRE EDGE CHALLENGE

Having encountered wire edge



**“** This is the kind of cooperative dynamic that we establish with our customers. So we have been delighted to find this level of support and service with IRIS and Heye. *Says Ms Tahira Khan, Project Manager at Carib Glassworks.* **”**

and overpress defects last year, the glassmaker very naturally turned to IRIS to find a solution. Overpressed and wire edge are widely acknowledged as critical defects in glass container production, each representing major

health and safety risks. They are among the bottling industry's worst nightmares, as well as those of major beer, carbonated beverage and other brands, resulting in potential sealing problems and the possibility of finding glass particles within the packaging.

The Overpressed is generally located on the finish inner rim and composed by a glass protuberance laid up-on the sealing surface.

The Overpressed, can either be continuous and perfectly circular, or partially arranged on the internal side of the rim.

The wire edge instead, is also composed by a glass protuberance and mainly located beneath the sealing inner ring. As the wire edge does not extend above the finish, it is mainly difficult differentiating one from the other,

unless throughout the employment of enhanced inspection solutions.

Futhermore, the press and blow process, in particular narrow neck press and blow, allows glassmakers to increase productivity by reducing weight, although this trend has pushed companies to secure overpressed and wire edge detection.

Both faults are process-related and their root causes are the same:

- Excessive gob weight.
- Wrong plunger dimensions.
- Wrong plunger mechanical adjustment or synchronization.
- Dirt or glass particles disturbing the plunger stroke etc.

## A BINARY SOLUTION

Wire Edge/Overpressed defect has become one of the most complex challenge for glassmakers. To meet this new





demand, IRIS has developed a dedicated Wire Edge Module.

The strength of this dedicated solution is that this module enables the precise detection of wire edge even very small, without compromise. This solution benefiting from newest hardware and software technologies makes an accurate inspection of wire edge, yet without false rejections.

The Wire Edge Module is able to differentiate between overpressed/wire edge even on small and saleable ware. In comparison with existing solutions, the recently announced system is easier to set up and goes further. It allows glassmakers to reach an optimal set up with less

compromise and in much quicker time. Therefore, the wire edge station is less dependent on human factor. The Wire Edge Module can be easily integrated within the Evolution 5 NEO machine dedicated to base and finish inspection. Like all the Evolution 5 stations, the module is totally independent so it can be used additionally to all other finish stations. It is also available as a standalone Evolution 2 NEO machine.

#### FULLY VALIDATED SOLUTION

Carib Glassworks has been impressed with the results achieved, so much so that at the beginning of 2020, all the impacted lines



## WENSPECT

Leaders at camera and check inspection solutions, IRIS inspection machines and Heye International, have created a cold end alliance – WENSPECT – which allows the two specialists to overcome challenges for container glass manufacturers.

Since 2002, IRIS has designed, developed and manufactured intelligent inspection solutions for glass containers. The company offers precise and innovative inspection machines with reduced dependence on the human factor for your increased productivity, quality and efficiency. IRIS is a team of passionate engineers, mastering the entire production of machines from ideas and concepts, to the production of CPU boards and on-site installation.

Based at Obernkirchen, Germany, Heye International GmbH is one of the international glass container industry's foremost suppliers of production technology, high performance equipment and production knowhow. Its mechanical engineering has set industry standards for more than five decades. Extensive industry expertise, combined with the positive attitude and enthusiasm of Heye International employees is mirrored by the company motto 'We are Glass People'. Its three sub-brands HiPERFORM, HiSHIELD and HiTRUST form the Heye Smart Plant portfolio, addressing the glass industry's hot end, cold end and service requirements respectively.

were equipped with the dedicated wire edge module. Today the solution has been fully validated by European and American glassmakers on different productions such as Heineken, Desperados, Budweiser, Coca-Cola, Fanta, Sprite, Pepsi, Beck's, Corona, Leffe, ... No matter the glass colour, the Wire edge solution by IRIS brings same inspection results on green, amber or challenging flint. ■

**IRIS** Inspection machines

### IRIS INSPECTION MACHINES

14 rue du 35ème Régiment d'Aviation  
ZI du Chêne - 69500 Bron - France  
Tel.: +33-4-72783527  
Fax: +33-4-72783507  
E-mail: [contact@iris-im.fr](mailto:contact@iris-im.fr)

[www.iris-im.com](http://www.iris-im.com)