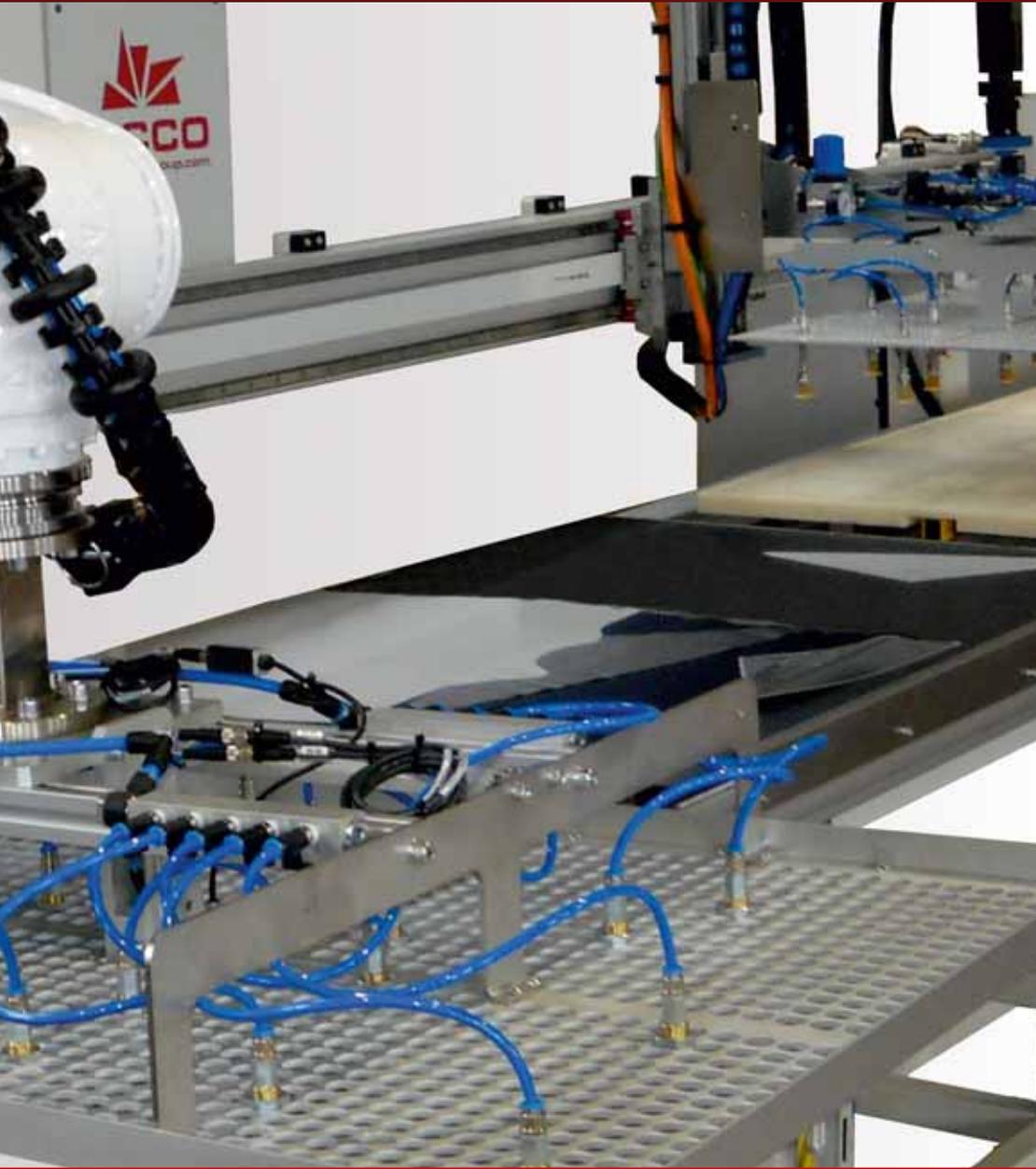




# Iocco

## MOVING WITH THE TIMES – TECHNOLOGY, ROBOTICS AND INDUSTRY 4.0

Two years after our last interview with Iocco, we asked the company a few questions on the technology developments it has been carrying out – of course – but also with regards to the ever more present Industry 4.0 aspects of the glass industry.



In this article we give our readers an update of one of the flat glass sector's main machinery manufacturers – locco – who speaks to us about the results of its work on the development of robotic solutions and its partnership with an important company in this sector, along with what the next few years will have in store for the company.

**Glass-Technology International (GTI):** In our last 'interview' two years ago, we spoke mainly about automotive glass. Have you developed new technological solutions? And how have you developed the other sectors where you work – architectural, appliance and PV?

**locco:** We have reached important results in the robotic of laminated auto glass for sidelites and windscreens, with a plant able to put together the glass and multi-layer PVB. Moreover, during assembly, the colours and thicknesses of the processed PVB are also checked, thus

guaranteeing 100 per cent the correct assembly. This plant, together with our De-Airing Bag Furnace, guarantee excellent results, cycle times and highly competitive production costs. Many other solutions have been developed



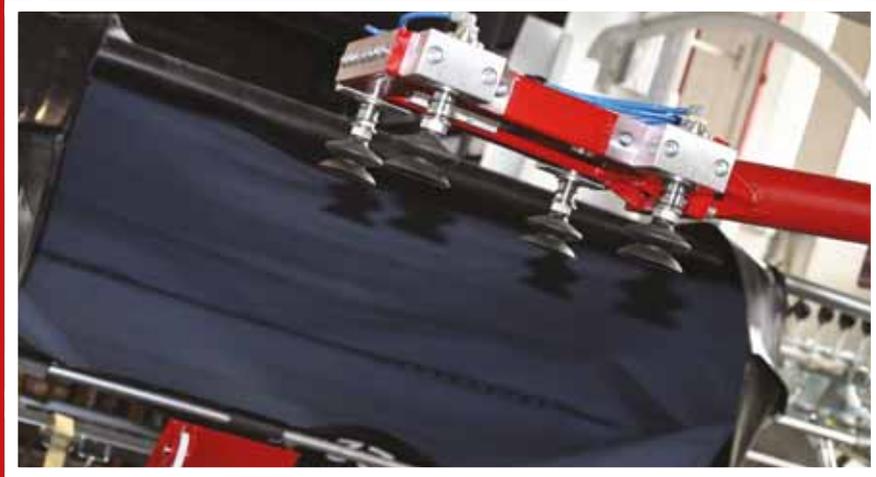
over the past few years, and each time a client comes to us – both from the auto glass sector or another sector, this contact is, in fact a request for the innovation and technological processes that can be obtained thanks to Iocco's team.

**GTI:** At Vitrum last year, Iocco was one of the four companies – each presented by a key woman – working together for Industry 4.0. What can you tell us about this project?

**Iocco:** Last year at Vitrum was an important and wonderful initiative that gave clients the possibility of managing and monitoring production results with Industry 4.0.

**GTI:** In this respect, more recently, IOCCO became official system partner of KUKA robots for 2018. What are the goals of this collaboration and what can we expect to see in the near future and at glasstec?

**Iocco:** In 2018, Iocco was confirmed as Official System Partner of KUKA.



## DE-AIRING BAG FURNACE FOR OEM AUTOMOTIVE GLASS

The De-airing Bag Furnace is able to perform the De-Airing process (before the autoclave) faster than ever with the unique characteristic of processing different asymmetric shapes of glass without the need for production stops for changeovers, while also providing production data regarding the tracking of each piece of glass. These innovations enable automotive glassmakers to be precursors of the glass industry also with regards to quality aspects developed taking into account a number of critical points:

- the glass is subjected to heating only after a sufficient cold vacuum period in order to avoid bubble defects due to premature edge sealing causing extensive air trapping between the laminates;
- the correct heating time in the de-airing phase ensures smooth and uniform heating;
- after the glass has passed the heating section it is cooled down before its removal from the bag;
- once empty, the bags are further cooled down during the return movement to the loading position;
- the automatic loading/unloading systems developed by the company's engineers are able to sustain high-performing cycle times guaranteeing, at the same time, the best quality lamination process;
- after the de-airing process (before the autoclave) the glass is almost transparent.

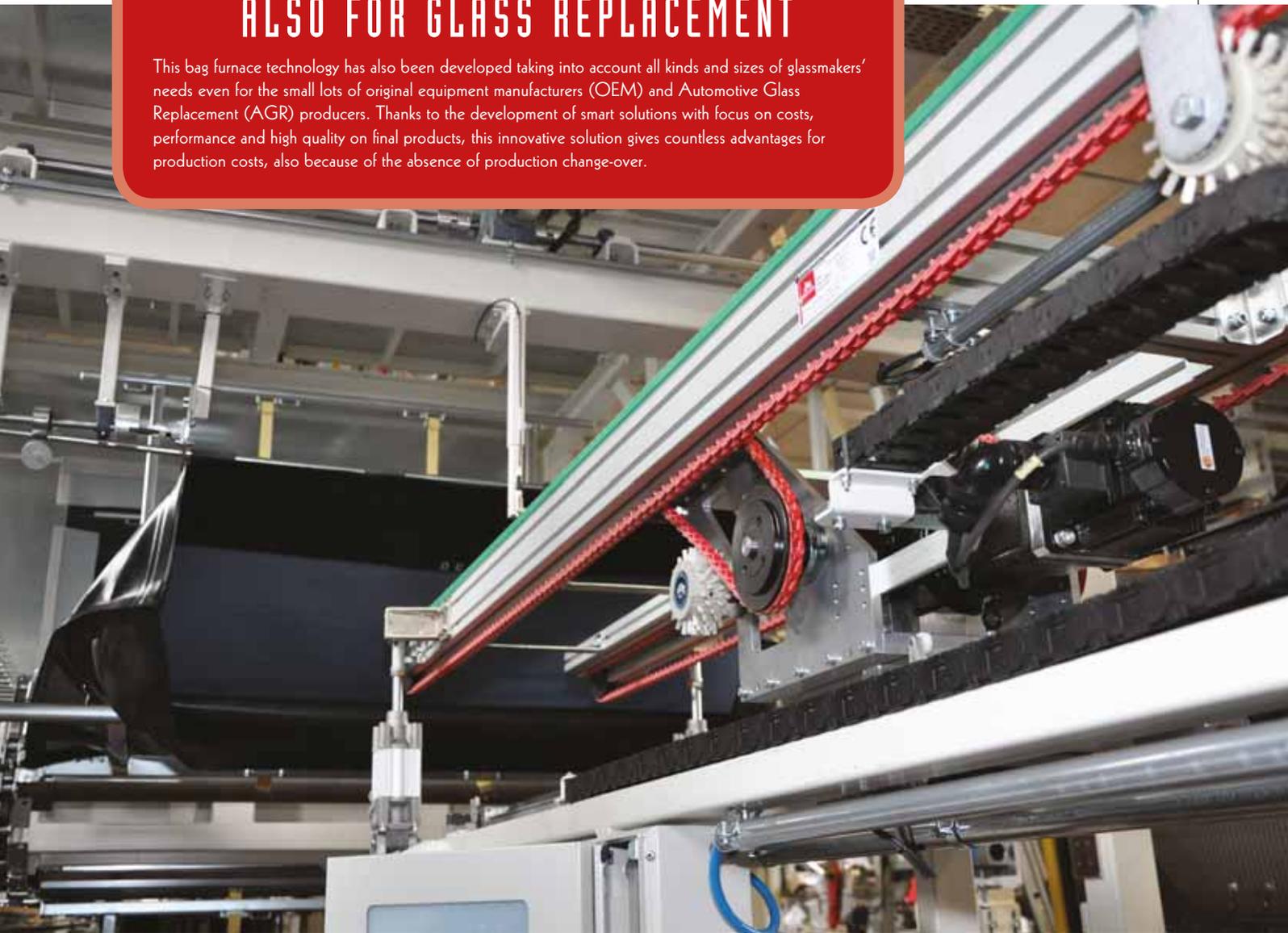
The Modular De-airing Bag Furnace for windshields and sidelites is designed to improve cycle times, also upgrading the furnace during a second step by means of an additional module.





## ALSO FOR GLASS REPLACEMENT

This bag furnace technology has also been developed taking into account all kinds and sizes of glassmakers' needs even for the small lots of original equipment manufacturers (OEM) and Automotive Glass Replacement (AGR) producers. Thanks to the development of smart solutions with focus on costs, performance and high quality on final products, this innovative solution gives countless advantages for production costs, also because of the absence of production change-over.





One of the main goals of this collaboration is to be ready to intervene immediately on the systems supplied to clients, also by means of the 40 KUKA service branches in the main industrial areas of the world.

The setting up of an Italian Competence Center, an important meeting point of comparison among all KUKA System Partners around the world, enables us to confront and acquire considerable cross-knowledge that can then be used as real innovation points in the glass sector thanks to accurate Reverse Engineering. Iocco and KUKA are constantly focused on Energy Saving, and therefore focused on the continuous innovation of design and materials. The sharing of specific skills in our consolidated network enables us to provide high-profile technology. Thanks to this collaboration we can also continue to provide ever more cut-

ting edge solutions now and in the future.

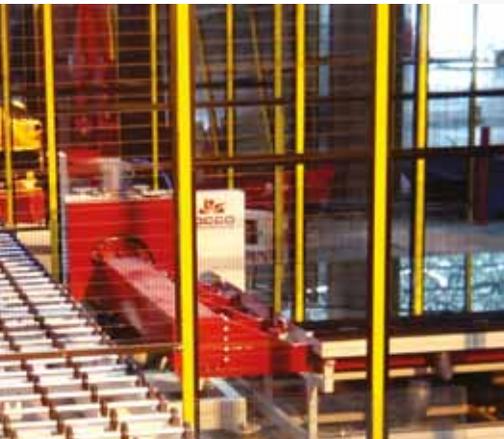
**GTI:** Last but not least, how has the company changed in these last two years – growth in personnel, production and office area, investments, etc.?

**Iocco:** Thanks to the important goals that we have reached, our company is continuing to grow. More and more clients appreciate the quality, reliability and assistance proved by Iocco.

Continuous positive feedback from our market sector has led us to carry out growth also with regards to personnel, which has almost doubled in the past two years, along with the acquisition of another production unit.

We are now discussing the possibility of opening international branches that will ensure the efficiency of our services in the most important areas around the world.





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