



Deltamax Automazione: SHOWCASES NEW SCANNER INNOVATIONS

The company's recent research initiative, dubbed Clever, has led to the development of technologies like Q+ and Follow Me



Right from the start, Clever was a project meant to develop innovative solutions that set new standards in the field of quality control instruments, a must for modern manufacturing companies facing an increasingly fierce and global market. Innovation and reliability are a combination that often requires some compromises, however this is not the case for the systems that Deltamax Automazione will be showcasing at Glasstec. These new products are the result of months of work in the lab, but also of on-site testing at the premises of customers, ensuring they are ready for use on production lines.

Q+

Q+ is a revolutionary scanner which sets a new standard in quality control pro-

cesses on flat glass. Thanks to a new technology developed in the laboratory at the company's headquarters in Trento, this flagship product in the range of control systems for flat glass aims to increase accuracy in the recognition of defects, in particular those on the glass surface. Technically, Q+ performs with a single unit the same control operations previously carried out by two separate systems while keeping the same processing speed in order to meet demands for increasingly shorter production cycle times. The modular design of the previous versions has been included, allowing adaptation to different production lines and simplifying future upgrades as well as ease of installation thanks to the physical separation from the production line. From a

perspective of quality, Q+ is a solution destined to satisfy the most demanding customers, ensuring greater accuracy in the detection of defects such as scratches and marks, and even identifying defects such as the infamous halos so frequently seen in glazings. The system interface remains intuitive and rational, combining technological complexity with an incredible ease of use and univocal and fast interpretation of result.

FOLLOW ME

The scanner has become an indispensable ally of production and quality managers, combining quality control results that are objective and configurable for different quality levels with a reduction in the time necessary or controlling the glass panel. This is a detail of no small importance, given the significant increase in the average size of single glazings. The next step in further optimising process times without sacrificing quality is to support the operator in identifying defects detected by the scanner. Taking into account the configuration of modern production lines and the user's needs, Deltamax partnered with GlassUp, an Italian start-up specializing in augmented reality, to develop an innovative solution called Follow Me (patent pending) that complements the work of their

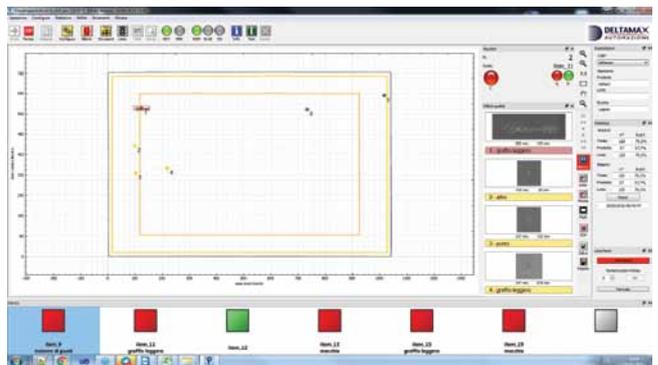
scanners. By connecting with GlassUp's F4 goggles, the scanner can now guide the operator exactly to the defect on the glass with simple, intuitive controls. F4 goggles are certified as personal protective equipment, ensuring the strictest compliance with the current safety standards and guaranteeing maximum freedom of movement for the operator.

GLASSINSPECTOR EVO

The GlassInspector family continues to grow with new powerful solutions for defect detection that incorporates Q+ technology and more precise printing control thanks to new hardware and software both developed by our R&D team, now it is possible to use EVO to perform geometrical control. In this case the scanner can compare the shape of each glass with one or more models (an ad hoc database is included in the standard product), to detect breakages, to check the completeness and precision of the processing, to identify each plate to route it and much more.

The new structure, more compact than previous units, simplifies installation and allows for faster deliveries thanks to high standardization while still maintaining the modularity of the system to easily fit every line.

The latest software release ensures a better classifica-





tion of detected defects, increasing the possibility to customize the inspection acting on the parameters of each defect class while at the same time keeping user friendliness a priority, which is a hallmark of Deltamax Automazione's products.



GLASSINSPECTOR OPT

The new system detects bubbles and inclusions on float non-washed plate, creating a “map” of the entire glass sheet with indications of their position. Interfaced with the cutting table software - such as Defect RE-OPT from Optima – this permits the cutting optimization of large-sized glass sheets resulting in a more efficient production process.

The re-optimization of the cutting program reduces waste product caused by non-repairable defects to only the area around the detected defects. A further positive aspect can be found in the rejection of glass destined to be wasted due to the presence of structural defects, with consequent time saving and reduction of the wear of machines involved in the process.

PRODUCTION ANALYZER

In line with the Industry 4.0 principles, Deltamax has renewed its Produc-

tion Analyzer software, which is now even more packed with features to ensure complete and thorough data analysis. This software can be connected to one or more inspection systems manufactured by Deltamax, allowing the operator to save data and images acquired in-line and processed by the software on a special device, creating a complete archive of paramount importance to understand performance of production processes and improve their quality. Understanding what are the most frequent defects, their positions in the glass and whether they are repetitive or associated with

a particular type of glass or process are just some of the activities that can be carried out automatically by Production Analyzer. It is a tool that if used correctly can become a valuable ally for all production and/or quality managers. The ability to generate tailored reports is an element that allows users to document the manufacturing process up to the end customer, through certificates that demonstrate the quality level measured in-line.

Deltamax Automazione



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COMPANY PROFILE

Deltamax Automazione was established in 1989 as a manufacturer of industrial automation and machine vision systems, gradually increasing its customer base and international coverage over time. This growth made monumental progress in 2017, when Deltamax Automazione became part of the Delta Informatica group, finding qualified professional figures for the quantum leap required to face new challenges in the field. Early in 2018 the company began a new research project called Clever, whose goal is the development of high-tech solutions such as the new scanner Q+ and Follow Me, capable of satisfying the needs of the most demanding customers in terms of quality and automation.