Thanks to recent investments, Deltamax Automazione has improved and extended its range of solutions for flat glass quality control.

Through the “Risolvi” research project, which ended a few months ago, the company has developed a new illuminator that, together with the dedicated software, allows the capture of two pictures, with two different artificial vision technologies, using a single set of cameras. This is another example of Deltamax’s determination to make its systems more efficient, without increasing the investment needed to introduce them into the manufacturing line. In accordance with the company’s tradition, the new inspection system can be installed on older scanners, too, thus allowing all customers to benefit from optimized performances.

**GlassInspector**
The scanner for insulating glass lines has been renovated and is now even more versatile than before, being equipped with new optionals and functions able to satisfy the most demanding customers. As regards the current optionals, GlassInspector offers a device for measuring glass transparency, making it possible to automatically and immediately adapt the quality control process also to darkened glass. The new function presented to the market is shape control combined with glass size measurement, and it is designed to allow interfaceability with the various machines present in the line.

**GlassInspector EVO**
Various improvements have been made to the most complete system in the Deltamax products range, which is meant to equip the most diverse lines. The quality control on lamination lines has been completed with marking systems, allowing quick and safe detection of flawed areas, and therefore rapid (manual or automatic) optimization of the cutting phase.

After the tempering processes, the system has been interfaced with scrap systems, allowing the automatic removal of glass that fails to meet the required quality level.

On float glass lines, the system has been used to detect and mark flaws, but also to automatically scrap dangerously chipped sheets. On manufacturing lines for automobile and appliance glass, this system has been used, albeit with a different level of precision, to guarantee the manufacturing quality, supplementing flaw control with control of the screen printing, the pit and the logo, as well as the size and
COMPANY PROFILE

Active in the artificial vision field since 1989, Deltamax Automazione has kept its prominent role in the glass quality control sector. In the 90s, Deltamax created pioneering systems for the most important multinationals of the sector; in the 2000s, it created the first scanner for flaw control in insulating glass lines. In 2010 Delta Informatica joined Deltamax and the company invested even more in research and development. These investments resulted in the engineering of several new solutions, such as the new illuminator that characterizes the line systems, which is now even more precise and fast, and also of unique systems like FROG and TemperCHECK. The decision to move to the new headquarters in Trento meant more space and more resources for a technical department that is constantly growing, as is the sales network, which now covers the main international markets.

edges. The system has been completed with Production Analyzer, the software developed by Deltamax to analyse the data collected and processed by the inspectors working at the line. Thanks to elaborate filters, it is possible to select the data with extreme precision, and process them in order to obtain charts and graphs. This software can also analyse manufacturing output by batches, providing information, for example, about the distribution of flaws in various areas of the glass sheet, and thus directing maintenance interventions in order to optimize the whole manufacturing process.

GlassInspector OPT
The truly new product of 2016 is GlassInspector OPT, which allows optimization of the cutting program: it interfaces with the most common software programs for cutting tables, greatly reducing the area of scrap glass. In addition to the version designed to detect pre-marked flaws, which is already installed in various manufacturing lines, Deltamax is now unveiling a version for glass flaw detection (bubbles, inclusions, breaks) in unwashed glass sheets. The software can be adapted to any cutting line. The system prototype, installed and working, can be seen at the facilities of one of the company’s Italian customers.

FROG and TemperCHECK
The 2016 versions of Deltamax’s unique systems for the analysis of glass fragmentation make these systems even more complete than the previous ones, thanks to a new function for managing fragments, which makes it possible to adjust the quality control and avoid possible imperfections. Deltamax is also launching TemperCHECK, a version of FROG intended for the USA market, which, in addition to calculation, performs precise size control and fragment weight assessment, with recognition of the heaviest 10, as required by the USA regulations. Unique, simple and reliable solutions that have won over the five continents.