

# Optima: passionate about defects!

*The first integrated system "Made in Italy" for the online recognition and optimization of defects in glass is now a reality, and Optima is already leader in this sector too.*



## ADVANTAGES

- Extremely low level of waste product
- Quality control on products from different suppliers
- Increased reliability regarding shipping of products to clients
- Historical records of defects in a central database
- Detailed production statistics
- Significant reduction of costs thanks to early diagnosis of defects
- Improved production flow by means of important reduction of set-ups
- Possibility of avoiding processing of defected glass

Optima S.r.l. and Deltamax S.r.l. are really pleased to announce the first totally automatic Italian system for the recognition of defects and glass cutting optimization as per the positions of the same defects. The inspection of glass on a double-glazing line, and therefore during assembly phases, is now well-known and widely used, and has led to considerable savings in time as well as increased productivity, with consequent reduction in production costs (and transport) for the glass.

But considering that defects are often present on the glass sheet right from the start, why not identify them before cutting, and take them into account during optimization?

“And this is what we asked ourselves while we were creating Defect-OPT, the first optimization system that enables to exclude in advance the areas of the glass sheet with defects from the areas without defects for the correct positioning of the glass during processing.”

## NOT ONLY SOFTWARE

When we speak about optimization of glass cutting, Optima is right there among the top global players, a position it has achieved thanks to the more than 10,000 installations up and running around the world, as well as direct collaboration with the most important manufacturers of cutting lines. The same can be said, with regards to optical recognition, with Deltamax, which has recently completed its product range dedicated to the glass sector, and which now includes systems for dimensional control and screen printing, used for quality control in the most diverse sectors, from IG production up to glass for home appliances or for the automotive sector.

Taking advantage of the synergies between the two companies and their 20 year's experience means being able to provide the glass sector with an integrated system – both in terms of hardware, as well





as software – that can recognize defects on the glass loaded on the cutting line and to process the glass excluding the areas with defects, without any need for operator intervention.

### HOW IT WORKS

The GlassInspector system created by Deltamax uses camera technology to recognize and catalogue the defects on the glass and send them to Optima's Line Manager supervisor. Once it has the 'map' of the defects, the Line Manager stops cutting and carries out re-optimization thanks to the Defect-OPT module, excluding areas with defects and sending a new cutting layout to the cutting line, which then starts up once again.

The very high level of automation reached guar-

antees a continuous work flow, without any interruptions and down time, since the re-optimization of the cutting layout is almost immediate.

The systems also includes a semi-automatic mode, with the possibility of stopping cutting to carry out a precise check of the defects identified, thus eliminating those that can be removed, such as dirt and dust, etc.).

### WHAT IT DOES

The system also includes an automatic cutting line with loader, cutting and breakout line, which can be both automatic or manual.

Easy to install and set up, it can be used with any type of plant, from any manufacturer.

GlassInspector can be installed between the loading table and the cutting table, so as to identify defects on

large-sized glass sheets too. Equipped with a 'bridge' over the line, GlassInspector does not need any adjustments or special arrangements: it is set up on installation, and is easily and quickly adaptable to the diverse needs. The system works autonomously and clearly, and the operator only has to carry out the regular cleaning of components – illuminator first and foremost.

GlassInspector is interfaced with the supervisor of the Line Manager cutting plant, which uploads previously optimizations carried out by ERP Optima Opty-Way Enterprise, the heart of the system, which must be installed in the office of the glassworks.

Working at the Defect-OPT workstation, the operator can choose among the batches ready, which to process and in which

order. From then on, everything will be done automatically, and Opty-Way Enterprise will record all cutting phases, storing the information regarding the glass sheet that has been cut and who supplied it, purchase date, position of defects (if any), the list of glass sheets processed, time of processing, operator carrying out operations, as well as any other information needed to have a precise record of the processing steps of each glass sheet, where cutting is only one of the phases that Opty-Way Enterprise can chart and record.

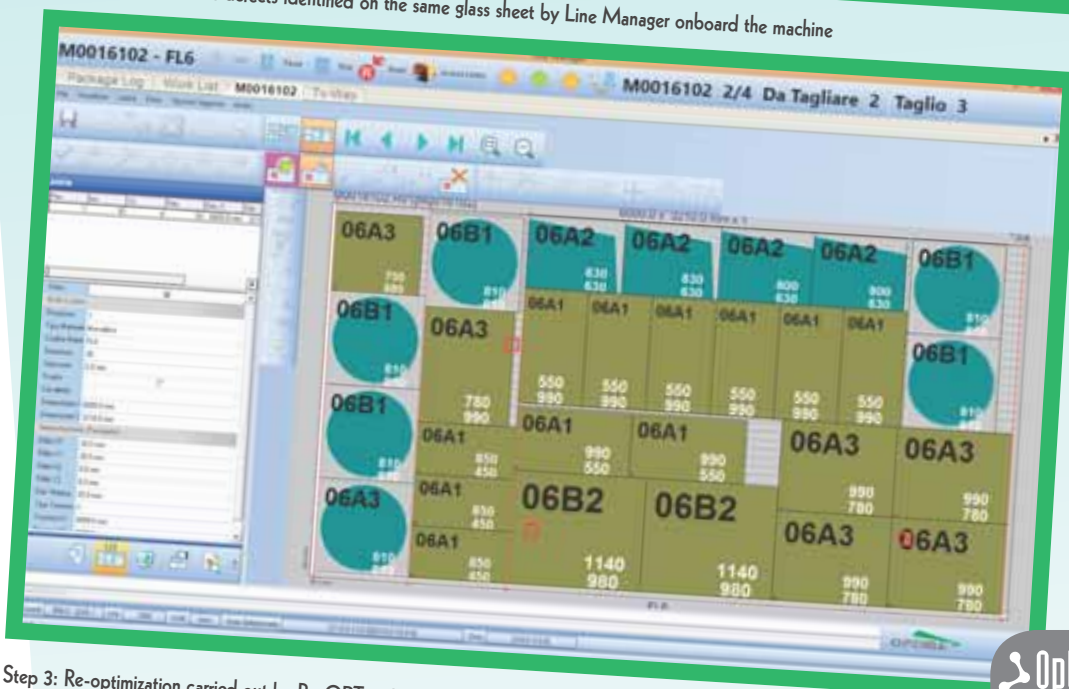
### WHO IT IS AIMED AT

The product is marketed jointly by Optima and Deltamax, and is aimed at end users who already have a cutting line, as well as at plant manufacturers who want to integrate it in their lines.

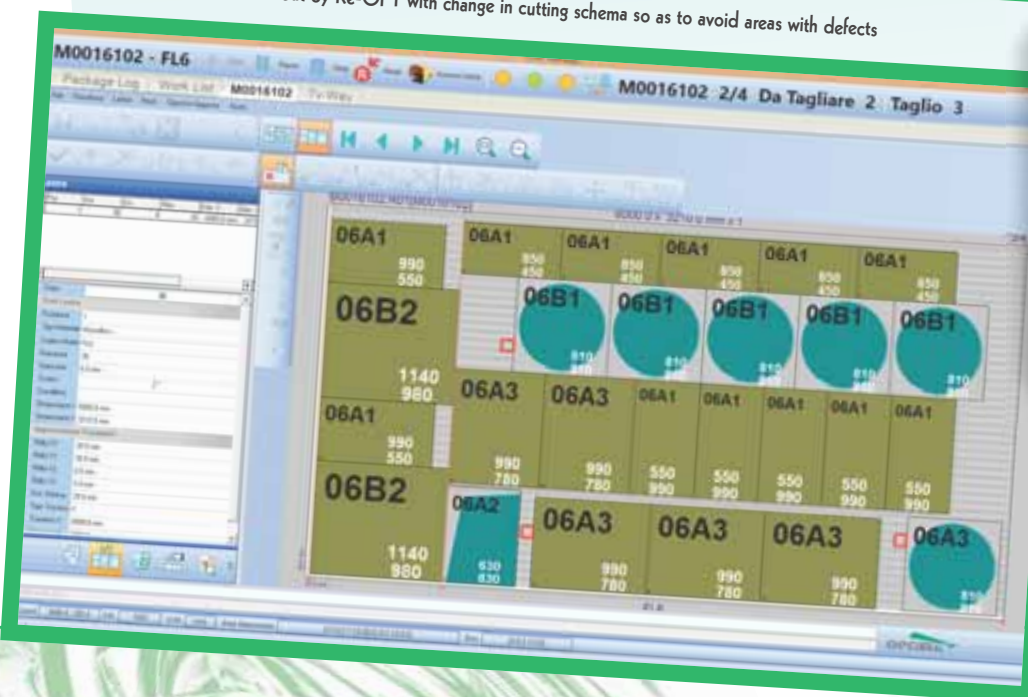
Step 1: Glass sheet optimized by ERP Opty-Way Enterprise system in the office



Step 2: Visualization of defects identified on the same glass sheet by Line Manager onboard the machine



Step 3: Re-optimization carried out by Re-OPT with change in cutting schema so as to avoid areas with defects



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