Nr. SS20 - 028
Success Story

Macsa id
a code you can trust

Laser marking on glass in automotive industry

SAINT-GOBAIN
GLASS

KEY FACTS

CLIENT
SAINT GOBAIN CRISTALERIA
Avilés, SPAIN
www.s.saint-gobain-glass.com

COUNTRY
Spain

INDUSTRY
Automotive

SUBSTRATE
Glass

LASER SOLD
Scriptmark-2 10w

This is the case story of two MACSA Scriptmark-2 laser systems, sold and installed in SAINT GOBAIN CRISTALERIA co., which is placed in Avilés (Asturias), Spain.

This company is divided in two different divisions: glass for automotive sector and plain glass for the

construction sector. And Macsa has there 1 laser system (in order to mark onto glass) installed in each division.

Saint Gobain had one production line in the construction glass division, where they checked the glass standard requirements being produced in the following processes:

- Date and tour
- Material thickness
- Defects observation

These three parameters were marked with ink-jet, the original coding systems installed together with the production line and interconnected to LASOR systems from Germany (thickness detectors) and also to STIL systems from France (detectors of product defects).

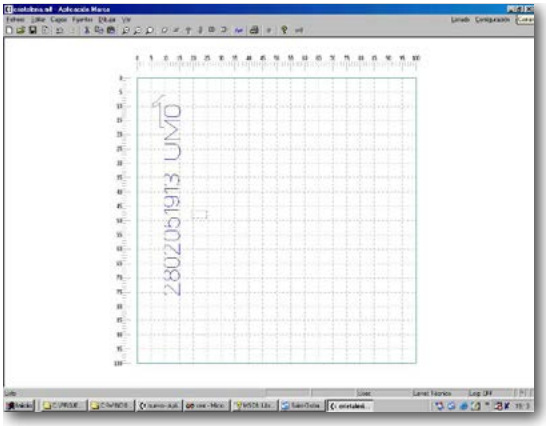
Saint Gobain began to be really interested in laser coding systems for their glass-for-constructionpurposes product line due to the following reasons:

- They had too many problems with the ink-jet systems
- They knew the reliability of Macsa Scriptmark-2 laser system, which was installed 4 years ago into the automation division.
- The quality marking and the result onto the plain glass.

THE MACSA SOLUTION:

Once the final productwas completed (piece of glass), leading to the production line and then checked by the controller thickness (detector) and later with the STIL system. Finally, the piece of glass goes underneath a bridge where our Scriptmark-2 laser 10w system is placed and then, this piece of glass is coded by dynamic marking at a speed of between 1 and 3 mts/min. This speed is controlled by the internal encoder of the laser system.

During this process, MACSA laser system stores the information transferred from LASOR and STIL systems (the detectors of thickness and defects) via PLC (digital inputs), which is going to be marked. The final result is a low power marking (in order not to damage the glass) but perfectly legible.



As you can see in this graphic, the message is composed by the date 280205 (without spaces between the numbers), then the hour 1913 and finally the message that comes from the thickness detector (Stil UM0) which can be an A (piece Accepted) or a R (piece Rejected).

The glass is moving from right to left, and the laser systems are placed as you can see in the following graphic: