Global PVC profile manufacturer improves production efficiency, quality and speed with Videojet printers

A world leader in PVC profile manufacturing, The Profine Group, headquartered in Troisdorf, Germany, has a presence in more than twenty countries. Under the brands KBE, KÖMMERLING and TROCAL, the Profine Group produces PVC profiles for windows and doors, shutters and façades as well as PVC sheets.

The Profine Group develops and manufactures efficient enclosure systems that provide acoustic and thermal insulation of buildings, resulting in the achievement of energy efficiency requirements. They have a firm commitment to developing their production processes with a clear focus on quality and sustainability. The Profine Group’s primary goal is to meet the demands of both society and the environment, promoting dialogue and constituting a new framework for connectivity between industry, individuals, and society as a whole.
In total, Profine Iberia manufactures products on 12 extrusion lines, 3 foiling lines and 1 coating line (Kolorten) in their Madrid plant. They operate in three shifts, from Monday to Friday and had reported sales of €30 million in 2013.

Before partnering with Videojet, coding at Profine Iberia was carried out using mechanical wheels that marked directly onto a profile once it left the extruder. The mechanical roller printers in use were of poor quality; the print was not uniform and the definition of print was variable. Data entry of code information was tedious and adjustment of the printers’ mechanical wheels also proved difficult. Operators had to make manual adjustments to the print mechanism based on the profile being produced. They also had to make changes to accommodate the manufacturing process being used. These tasks were time-consuming and led to errors. This resulted in codes being absent on some profiles and illegible on others. The printers also have to be reloaded at the start of every shift.

Applying the code to the product with the mechanical roller could be a real challenge for line operators who had to constantly monitor the roller while also carrying out maintenance on it. Sometimes profiles would come out unmarked and the operator had to spend at least five minutes each time trying to readjust the rollers. This not only distracted the operator from other production tasks, but it also meant that the extrusions being produced were lacking their required codes.

Code quality and missing codes were a real concern for Profine when it comes to perceived product quality and traceability of their products. Every profile that is manufactured by Profine is traced, which is vital in the event of any incidents. For traceability, each profile is marked with the details of the production center, the line, and the batch.

Also marked on the profile is the Asociación Española de Normalización y Certificación (AENOR) certification logo. AENOR is the leading certification organization in Spain with the purpose of standardizing and certifying the quality and environmental management systems of a company. With quality and sustainability being main organizational values at The Profine Group, exhibiting this certification on each product is pivotal for communicating this commitment to their customers.
Given these needs, Profine Iberia, in their quest for continuing improvement, wanted to achieve a sustainable coding solution that would meet both their production needs and the needs of their customers. They understood the importance of transformation in their production lines and wanted to make a noticeable improvement in their code quality. They wanted to speed up, simplify and reduce coding errors; reduce required maintenance; positively promote their brand image, and to implement a highly reliable coding system for traceability of their products.

After a thorough evaluation including companies from various global divisions across The Profine Group, the different options in use throughout the represented factories were evaluated. Site visits took place at the group’s various plants, where different technologies are used, and on-site testing was performed at many of the locations.

At the conclusion of the evaluation process, Videojet was selected and nine 1620 ink jet printers were installed. The change of coding equipment represents a significant technological leap for Profine Iberia; an improvement in terms of both product quality and production processes, as well as increased productivity for their line operators.

What convinced Profine to select Videojet printers was their high reliability during demonstrations as well as ease of integration into their production lines, and their simple operation. There were also other benefits such as minimal maintenance requirements and the high performance of the printers, and therefore low maintenance costs.

“The Videojet solution is very flexible, enabling us to work in environments in which the printer position changes on a regular basis, as is the case with foiling or coating.” Ignacio Mayoral, Operations Manager
Furthermore, with Videojet printers, in the words of Mayoral, “We have ensured that all the profiles are coded and little maintenance is required. Putting our faith in these Videojet printers has saved us three hours per week for each printer in terms of maintenance work on the production line. That time can now be used by our operators for more productive work processes. Videojet printers have resulted in an improvement in our processes and a visible commitment to quality by Profine, and our clients are sensing and benefiting from that.”

By upgrading to Videojet 1620 printers, Profine Iberia has achieved meaningful advancements in their production. These advancements include operational and process efficiencies, reduced maintenance and related costs, as well as significant improvements to their code quality. Most importantly, the technology upgrade has helped them to successfully meet their quality, branding and traceability initiatives.