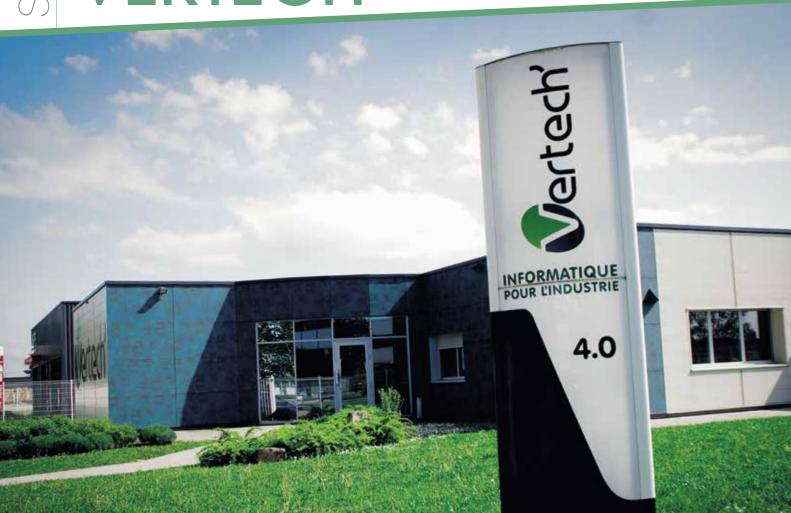
## SIL Manufacturing Execution System especially dedicated and developed for glassmakers from VERTECH'



Vertech' has been the reference provider of software solutions for the glass industry since 1995. With a wide range of products, SIL provides glassmakers with very precise, real time KPIs on the performance of the whole plant. Thanks to all this shared data and the full traceability of products, production rates improve, losses decrease and customer risks are reduced.



ertech' is an international company specialized in the development of software solutions for glassmakers since 1995. The SIL Manufacturing Execution System — or Line Information System — has been especially dedicated and developed for glassmakers. SIL offers five comprehensive modules (SILProd, SIL4.0, SILXQual, SILXMold and SILXManager), as well as over 300 functionalities to meet glassmakers' every need.

SIL is a supervision system (Manufacturing Execution System, M.E.S.) that can be installed at the hot end and cold end, as well as in the mould shop, palletizer and quality labs. SIL has been developed for glass-

makers producing hollowware, tableware and tubes or decorating glass.

## **SPEAKING TO VERTECH'**

A recent video interview with the CEO of Vertech' Ulas Topal, gave us some first-hand information on the process for installing SIL: timeframe, steps, price, support.

glassOnline (GOL): SIL seems to be quite a complex system – does it take a long time to install in a plant?

CEO of Vertech' Ulas Topal (Vertech'): From the time the order is placed, it takes between 2 and 3 months for the system to be fully installed, including 3 weeks of on-site installation with a Vertech' expert. Of course, it also

depends on the size of the plant.

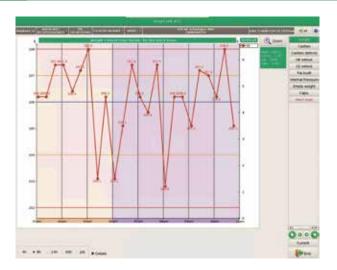
**(GOL):** What are the different steps to installing SIL?

(Vertech'): First, Vertech' conducts a technical survey of the plant to draw up specifications for wiring. After that, the client has the plant wired accordingly while Vertech' prepares the required equipment and arranges for it to be shipped. When the equipment arrives, it can be connected by the plant's personnel. Once everything is set up, a Vertech' expert or team of experts travels on-site to finalize the system installation and train those who will be using it, so everything is operational.

**(GOL):** Can the system be installed 100 per cent remotely?

## **SOFTWARE DEVELOPMENTS**





Without direct presence on-site?

(Vertech'): When a plant already has the system, new lines and connections can be installed remotely. For new customers, however, having a Vertech' expert on-site is indispensable so they can take account of the specific parameters and ensure the effective implementation of the project. Plus, being present at the plant allows us to provide quality face to face training to make sure operators are using the system properly.

**(GOL):** What type of support is provided during the installation process?

(Vertech'): With over 25 years in the sector and 750 production lines in 29 countries around the globe equipped with SIL, we draw on our experience at Vertech' to assist and guide glass plants step by step in their move toward digitization. In addition to that, we share our field expertise via personalized SIL training sessions, and provide post installation follow-up.

**(GOL):** Are the systems you install identical for every plant? Are they standard or do you also carry out customization?

(Vertech'): The installation project itself is designed and customized to the plant's specific needs, which is why the core architecture of the system is identical for all plants around the world. Minor customizations can also be made to the system to suit a plant's quality procedures. Versioning also applies to all plants in order to ensure stability and proper functioning of the SIL system.

(GOL): Is customization carried out exclusively before installation or can it also be carried out when the system is already up and running?

(Vertech'): Our approach with our customers is that of satisfying their needs and requirements. Therefore, during product specifications we ask them if they require more or additional developments to match their needs. Customers can also request new developments while the system is already in use.

**(GOL):** How is cost calculated for a project like this? And how long does it take a glassmaker to see that his money has been well-spent?

(Vertech'): Feedback from our customers show that between 5 and 10 per cent payback is usually seen within one year. Cost depends primarily on the choice of modules and functionalities for the SIL being installed, the number of IS machines and lines to connect, and the amount of

material ordered. There can also be costs relating to additional developments requested by the plant when necessary.

In any case, a glassworks can also see between 2 to 5 per cent earnings from pack to melt.

## CONCLUSIONS

(**GOL**): Anything else you would like to tell us about SIL? Are there any further developments in the pipeline for the future?

(Vertech'): To conclude, I would say that implementing a supervision system is within the reach of all plants seeking to increase their productivity and efficiency. Projects are closely monitored by our teams both during and after installation, and invested costs are quickly amortized by the benefits and advantages a supervision system offers. We know from experience that the return on investment is under one year.

