# Laser coding method developed for glass containers

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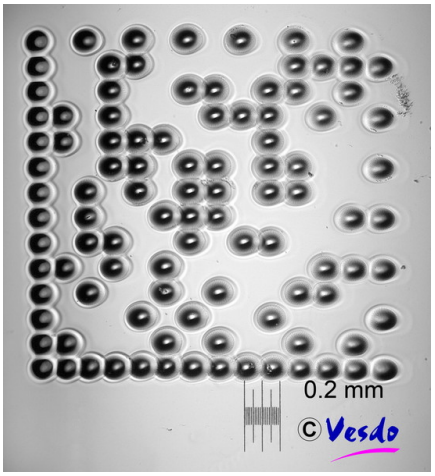
An innovative laser-coding system that allows vials, syringes and other pharmaceutical glass containers to be coded and tracked has been developed by glassware specialist Schott Forma Vitrum and partner companies.

The coding technology makes it feasible for each individual container to be marked - for example with a 2D datamatrix code - that can be read throughout the pharmaceutical supply chain from the pharmaceutical manufacturer to the end-user.

In a statement, Schott said the coding can be used to develop a "reliable track and trace system" that reduces the risk of mix-up of syringes and batches and can be an effective means to counter drug counterfeiters.

"The laser-coded containers meet the demands of clean room standards and no additional chemicals or materials are required for coding," according to Schott. It also maintains that the system can easily be integrated into existing filling systems, providing a stable, highly reproducible and safe process.

The process was developed and tested under production conditions by a partnership of companies, with representatives from Schott, Roche Diagnostics, inspection machinery specialist Seidenader Vision and security engineering company Vesdo.




The laser can create a tiny 2D code - just 2mm by 2mm and barely visible to the naked eye - with the information capacity to include data on drug specification, dosage, production line and batch number, as well as other elements.

That data can be linked to a documentation tool to provide a trail for each container including information such as: place of production, fill date, expiration date or day of use.

"The proof of concept for large-scale production is now available and the process is therefore ready for implementation," said the partners.

Various tests have proven that the laser coding causes no microcracks and has no effect on the mechanical stability of the glass, they add

A key challenge was to ensure 100 per cent readability of the code on the curved glass surface of the syringe, and the team says it has developed dedicated algorithms and test methods that meet this objective.