



Application Note



Pharmaceutical

Thermal inkjet solutions

for serialisation and global

track and trace



As serialisation requirements in the pharmaceutical industry continue to evolve, data management becomes more complex and critical. Innovative coding and marking solutions enable companies to comply with regulatory requirements while also handling the varied packaging types being utilised. Videojet Thermal Inkjet (TIJ) is designed with these requirements in mind, to help create serialized, human- and machine-readable codes to address pharmaceutical regulations.

For suppliers to the pharmaceutical industry, serialisation requirements are driving innovation across their product lines. Demand is increasing for equipment that can handle more complex data management responsibilities while marking on a wider range of substrates, without compromising product safety or legislative compliance. Optimal coding solutions are part of a holistic approach to pharmaceutical manufacturing, with the printer playing a small but integral role in addressing industry regulations. Key attributes for today's pharmaceutical printers include superior data management and broader application addressability.

Improved data handling for serialisation

One key trend is the heightened need for intelligent data management. Examples include:

Buffer management

Serialisation solutions vary in their requirements for printer memory. Printers must be configurable to print unbuffered, where variable data is received and printed one record at a time, and buffered, where many records are sent to the printer at once but printed only once each. When using a buffer, an unexpected line stoppage can result in unused codes unless an intelligent coding device can communicate which numbers are still available for use. This is especially relevant in countries where manufacturers may have to purchase serial numbers, enabling manufacturers to reclaim unused codes and protect their investment.

Remote communication protocols

Typical serialisation applications require vast amounts of complicated, highly sensitive information and system commands to be passed between printer and host data system. Using a printer that features a tested, validated and secure protocol and command set designed specifically for managing sophisticated communications is critical.

Asynchronous communications

This allows the printer to send unsolicited information to the line control system. This functionality provides the dual benefits of active notification of a printer event and reduced network traffic, which translates to faster notifications and higher potential throughput.

