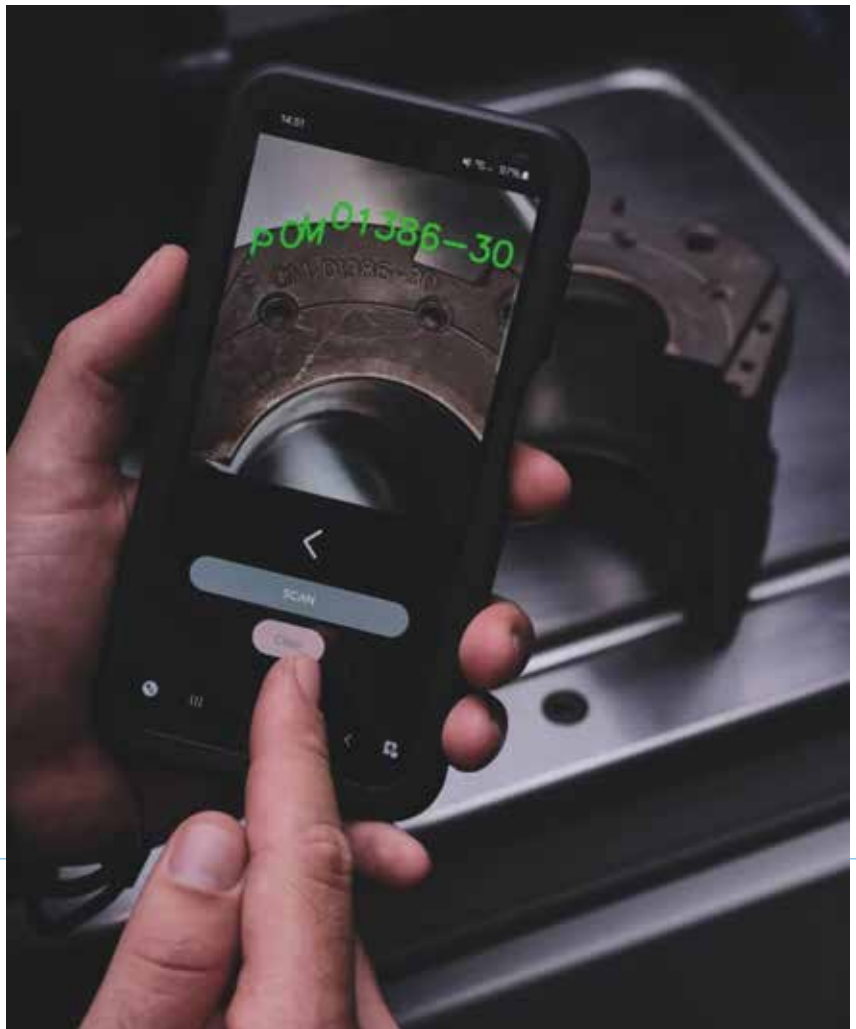
Reducing production inefficiencies with HSTEC through smarter scanning

It would suffice to spend time on any glass manufacturing floor for one reality to sink in: small details can carry significant weight. A worn mould marking, a dirty tool surface or a partially faded serial number may seem minor, yet each can introduce hesitation, repeated checks and manual corrections. These inefficiencies rarely appear in a single report, but they accumulate into measurable lost time across operations.



CLOSING THE INFORMATION GAP

Digital scanning is gaining traction not as a pursuit of innovation for its own sake, but as a response to a persistent operational weakness: tool control remains heavily dependent on manual reading, data entry and human memory. Even highly skilled operators should not be required to interpret damaged engravings or repeatedly input data that could be captured automatically. By enabling systems to read tool information directly and link it to digital records, scanning technology reduces identification time, minimises input errors and strengthens traceability. In an environment where every mould, blank or tool plays a role in production flow and quality assurance, accurate identification is critical. Misidentified tools or incomplete records can lead to delays, confusion and flawed decision-making. The issue is often less about the tool itself and more about the reliability of the information surrounding it.

Digital scanning is reshaping tool control in glass manufacturing by improving identification speed, data accuracy and traceability. By reducing reliance on manual processes, systems like HSTEC enable better decision-making and streamline workflows - all while allowing skilled teams to focus upon higher-value tasks across production and maintenance environments.

READING REALITY ON THE SHOP FLOOR

A key enabler of this shift is Optical Character Recognition (OCR), which converts real-world text into usable digital data. In the glass industry, where engraved markings are frequently worn, dirty, or shallow, OCR systems must operate effectively under imperfect conditions. The value of such technology lies in its ability to function reliably in real production environments rather than idealised settings. Speed is equally important. When processes are slow or cumbersome, they tend to be bypassed or delayed. On a busy shop floor, friction leads to workarounds, not compliance. Fast and accurate scanning removes this friction, making proper tool identification a seamless part of daily workflow rather than an additional burden.

FROM IDENTIFICATION TO INSIGHT

The impact of digital scanning extends beyond faster data capture. Reliable identification enables better decision-making across teams. Maintenance personnel can trace tool histories more efficiently, quality teams gain clearer insight into recurring issues and production teams spend less time verifying records. Crucially, digital scanning does not replace human expertise. Instead, it allows skilled operators and technicians to focus on tasks that require judgment and experience, rather than repetitive identification processes. Systems such as OSCAR illustrate this approach by targeting specific operational challenges, scanning moulds and tooling, interpreting degraded engravings and integrating captured data into broader plant systems. This integration is essential. A scanning solution delivers value only when the data it captures flows seamlessly into existing operational frameworks. Otherwise, it risks becoming another disconnected tool. Ultimately, digital scanning represents a shift in how tool control is managed. It transforms a process that has long been manual and fragmented into one that is connected, consistent and scalable. By reducing guesswork, eliminating redundant data entry and improving clarity, it enhances stability and accuracy across daily operations - an outcome that holds far greater value than the adoption of technology alone. ■

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