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IoTex™

Digitalising the Textile Value Chain

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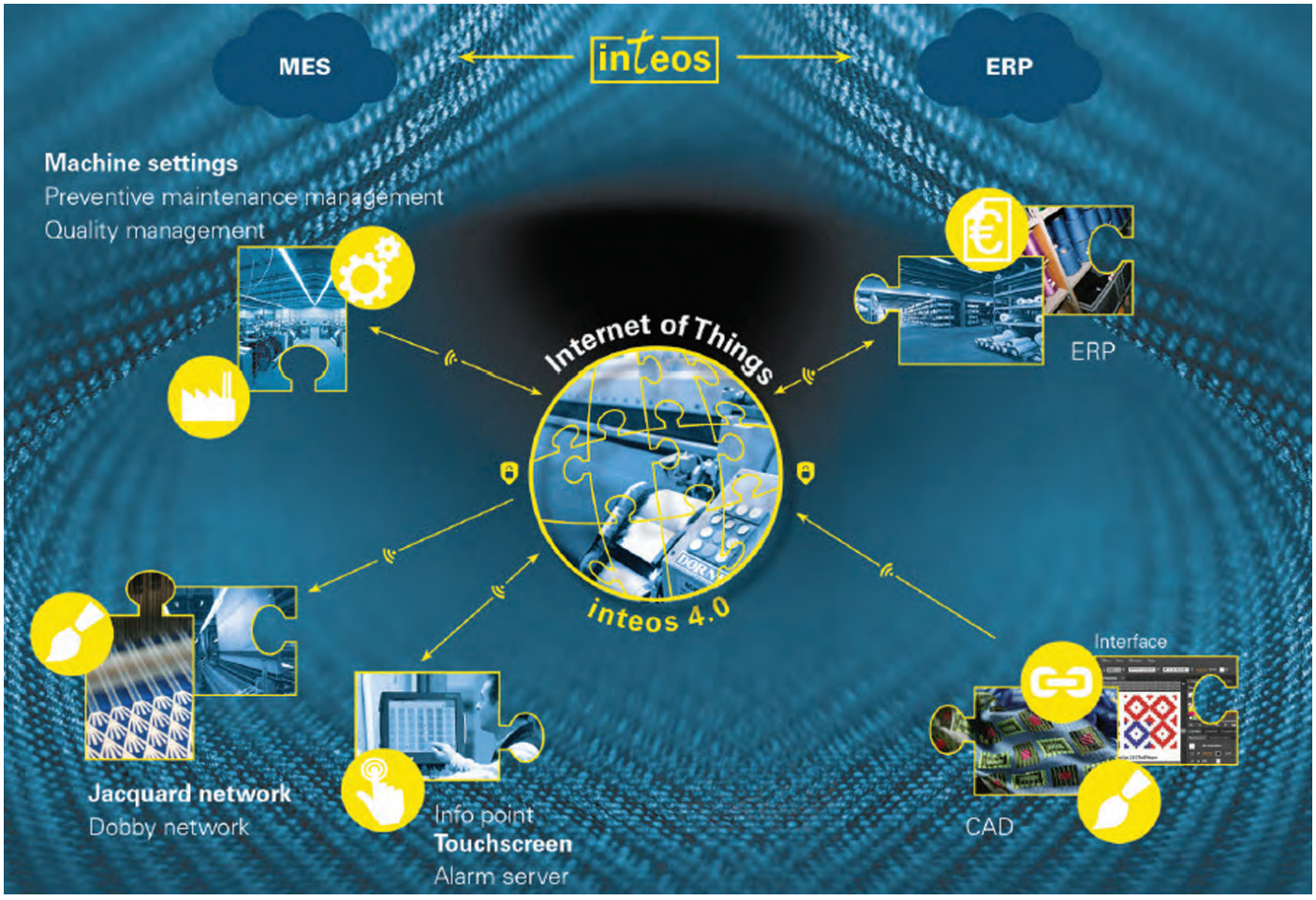
Customise your solution

Halo's Inteos 4.0 IoT software suite, complete with ERP modules, looks to integrate systems and better connect the supply chain. **Tansy Fall** reports

The key goal of Enterprise Resource Planning (ERP) is to integrate a business' operational IT systems, ensuring a flow of information through the company and therefore enabling it to be more dynamic and efficient. Despite the aim to link systems, connectivity within ERP and between it and Manufacturing Execution Systems (MES) is often lacking. Enterprise software is habitually layered, built up over a significant period of time, and this can lead to inflexibility and complication.

A recent survey, carried out by IFS, entitled "Enterprise software usability and digital transformation," which involved 200 manufacturers, found that 88% of executives use spreadsheets as a work-around for inflexible software. The use of separate spreadsheets is largely attributed to usability issues with Enterprise software, and developments in this area are therefore focused on data visualisation and data sharing.

Textile ERP provider Halo is looking to change the perception of ERP systems and is dedicated to enabling Internet of Things (IoT) empowered ERP – connected to MES – across the supply chain with its Inteos software platform. The company's Halo ERP solution is based on a "modular concept that makes it possible to realise a flexible, specific solution," says the company, aiming to provide textile businesses with "a completely integrated system,



which undergoes continuous developments, representing a long-term investment."

Modules in the Halo ERP software include: offer and order management and tracking; deadline supervision and contract management; material management for all production areas; stock management and reporting; delivery slip and packing lists; invoice and credit note tracking; pre-calculation and post-calculation of material and production costs; stock valuation; master data styles; and more.

Halo ERP users are found operating in many areas of the textile and apparel supply chain, from printhouse KBC (now part of the Imprima Group) to knitted fabrics specialist Willy Hermann, and legwear and beachwear provider Calzedonia. Whether the user is tracking resources from yarn to fabric, or fabric to finished item, the company says Halo ERP can be customised to meet the user's needs.

Bernd Drechsel, managing director, TVD – Textilveredlung Drechsel, says: "As a medium-sized service provider, we are in need of an ERP vendor that thinks just like we do and is just as flexible. We're happy to say we found our match with Halo."

Inteos 4.0

While Halo ERP is designed for flexibility, the business' owner Marcus Ott says the company has also enabled its MES system for integration with other ERP systems – such as those from SAP and Oracle – via its Inteos 4.0 platform. Ott says his aim is for the cloud-based software to be "flexible and connected, meeting the customers' needs" for a personalised system.

For example, dependent on the application, software modules can sit within the ERP or the MES. This means that if a business is using an existing ERP system, but it wants to aggregate and share data with the MES system, it can configure the system in such a way that it will fulfil the business' needs and objectives.

With this in mind, the Inteos 4.0 platform can be tailored for total integration of processes in the weaving sector, the finishing and printing sector, and the apparel sector. This incorporates supplier data, logistics, product data, employee information and machinery data. Optional modules include: CAD; colour matching; scheduling; and Jacquard networking. A predictive and preventative maintenance module is a core module in each software set-up and all data can be accessed through mobile devices.

For the weaving and knitting sector, the company says: "Inteos integrates all the specific applications of a modern production from the plant view/production overview to the planning/scheduling to the Jacquard network, Dobby network, machine settings, maintenance management, quality management and warp length measurement."

All sectors are able to make use of Halo's networking and integration of a variety of machine generations. The company says: "The latest generation of machines with ethernet interfaces can be linked directly, while all other machines can be integrated via standardised Inteos interfaces in the ethernet network. This allows for the complete compilation of all relevant production data down to the last detail. [For example] prewinder number and the degrees indicating the position where the weft stop occurred."

Inteos also provides hardware with its software technology. Customised for individual production areas, the Inteos monitoring hardware aims to meet the respective requirements of each sector. Depending on the prerequisites and process, an appropriate solution is applied, the company says. Solutions include: the Inteos interface IF NET; the Inteos DT W terminal; and the Inteos DT M touchscreen terminal.

Halo's tLink handheld device is its latest addition to this range of hardware. The tLink has been toughened for use in factory conditions, connects to the iLink IoT technology that the company also provides (in-line with Inteos 4.0), which allows for data collection, production control and alarm monitoring. Ott says that "as a result, interfaces are no longer a problem. Processes are optimised, costs are reduced, and quality is assured." As the data is hosted in the cloud, the mobile device can access it anywhere at any time, 'connecting man with machine.'

Christoph Seiger, operation manager, LECO-Werke Lechtreck, which focuses on technical textiles, textiles for wall coverings and the garden and leisure sector, says: "By now, Inteos has become indispensable for the production management, production planning and tracing at LECO. Thanks to Inteos, we can plan our operating procedures in an optimised, goal-oriented and transparent manner. Change requests for the programme – required due to special operational features at LECO, eg presentation and data input – were implemented nearly perfectly by Halo.

"Particularly for the monitoring and scheduling of the weaving preparation BDE preproduction planning, Inteos has catered to our wishes and suggestions extremely well," adds Seiger. "Thus, we have high transparency and a very good overview of our six weaving preparation machines thanks to the terrific monitoring and scheduling solution, and we can easily carry out an ideal machine utilisation."