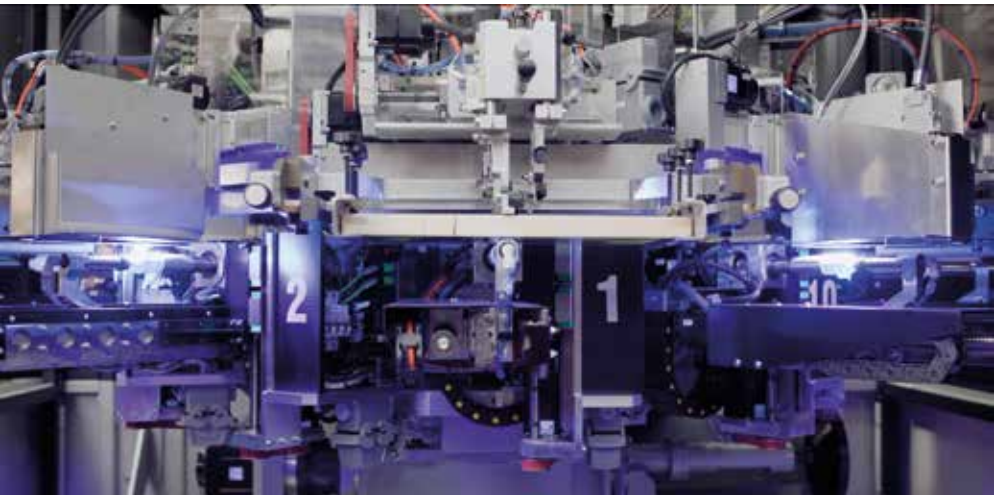
Modern container printing capabilities expanded through OMSO's SB021.25

Designed to meet evolving production requirements, the SB021.25 introduces enhanced flexibility, quality control and operational efficiency to glass decoration lines. Developed by OMSO, the system combines servo-driven screen printing, integrated vision inspection and energy-efficient UV LED curing to support high-quality container decoration.

OMSO has been focusing on the development of technologies for direct decoration and printing on primary packaging for over seven decades now. Today its systems serve a wide range of sectors including cosmetics, pharmaceuticals, food and beverages. Headquartered in Italy and with installations in over 85 countries worldwide, the company has built an international reputation for dependable machinery and high-quality decoration processes applied to glass, plastic and aluminium containers. To support customers across major global markets, the company also maintains a direct presence in the United States through OMSO North America, located in Erlanger,



Kentucky. The facility serves as a hub for commercial operations, technical support and application assistance throughout the North American market.

PLATFORM EVOLUTION

Against this backdrop, the SB021.25 screen printing machine represents the latest development within the OMSO screen printing platform. The system has been engineered to respond to the increasing need for flexibility, quality and precise process control in contemporary glass decoration lines. A key design element is the adoption of a single loading and unloading station. This configuration improves the management of the production line, reduces the overall footprint and enhances operator ergonomics. At the same time, it streamlines container flow while making format changes and machine set-up operations easier to perform.

PROCESS PRECISION AND QUALITY CONTROL

The machine can be equipped with up to three screen printing units, enabling multicolour decoration to be applied directly onto glass containers. Fully servo-driven movements ensure a high level of repeatability and printing stability, even when operating at elevated production speeds. To further broaden decorative options, the system can also incorporate a hot stamping module, suited to applications that require metallic finishes or premium visual effects. Particular attention has also been given to in-line quality inspection. The machine may be fitted with a latest-generation linear camera vision system designed to continuously verify print quality and detect potential defects during production. Through automated inspection, non-conforming containers can be identified immediately, supporting consistent quality standards while helping to limit production waste.

DIGITAL OPERATION AND ENERGY EFFICIENCY

In addition to production performance, the SB021.25 has been developed with a strong emphasis on operational control and ease of use. The machine's operating architecture enables accurate and safe management of all motion sequences, while presenting operators with clear and contextualised information via an interface developed by OMSO. The proprietary software, built on a Windows-based platform, has been specifically designed for decoration equipment and features an intuitive touchscreen interface organised according to operating context. Key parameters become visible when required, allowing operators to manage the machine more easily, particularly during set-up. Advanced diagnostic and monitoring functions are also integrated into the system, including event logging and activity history that support troubleshooting and preventive maintenance. These capabilities are complemented by secure remote assistance via a protected connection and, when required, live camera monitoring, enabling rapid technical intervention even without technicians on site. Energy performance has also been carefully considered. The adoption of UV LED lamps for ink polymerisation, combined with high-efficiency motors, substantially lowers energy consumption compared with traditional mercury vapour lamps, while also improving process stability and shortening start-up times. The innovations introduced with the SB021.25 will be presented by OMSO at the next edition of Glasstec 2026, the leading international trade fair for the glass industry, which will take place in Düsseldorf from 20 to 23 October 2026. ■

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