

## VELOX IDS 250

Direct-to-shape digital decoration for mass production of cylindrical containers





Unprecedented decoration quality



Total operational agility



Low total cost of ownership



## Digital Decorator for Mass Production

Introducing the world's only industrial-grade digital decoration solution—the Velox IDS 250 direct-to-shape digital printer together with uniquely formulated Velox inks.

Designed for mass production, Velox's solution targets the decoration of tubes, aerosols, bottles and other cylindrical containers. It fully addresses the packaging industry's growing demand for high-quality decoration, flexible batch sizes, supply-on-demand, improved cost efficiency and enhanced sustainability. With the Velox decoration solution, converters can immediately reduce operational costs and gain a competitive edge in their current business, create differentiating offerings, and expand their applications and business opportunities.

## FEATURES AND BENEFITS



- Prints any decoration profile Photorealistic image quality, with an ultra-wide color gamut, accurate color matching, and super-fine text:
  - Up to 14 simultaneous colors and features
  - Up to 1200 dpi
  - · Micron-level color registration
- Replaces analog decorators Matches and exceeds the capabilities and benefits of analog direct-to-shape and analog/digital label-based solutions
- Unique decoration enhancements Increases brand value and differentiation:
  - · Auto-adjusted 360° decoration with no slit or overlap
  - · Highly opaque white for selective or full coverage
  - · Selective digital gloss & matte
  - · Selective tactile embossing
  - · On-cap, seam, and shoulder printing
- Prints on any container base color or coating –
   Enables use of any color or type of substrate, with no impact on the decoration image quality or properties, such as adhesion, scratch- and heat-resistance, and others









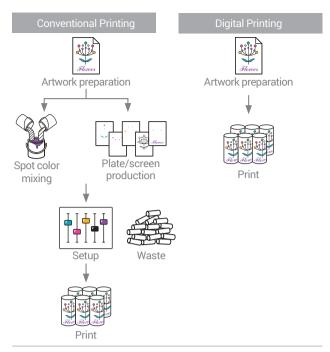


### Total operational agility

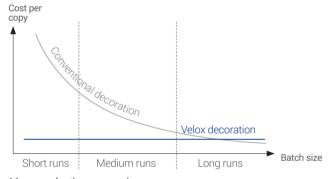
- Near-zero setup time No need for calibration for new artwork
- Ultra-high decoration speed Matches and exceeds the speed of the production line
- Mixed-job runs Enables immediate hard-proofing, aggregation of short runs, customization, versioning, and personalization
- Comprehensive process simplification No need for pre-treatment or base coating, or for decorative or protective over-varnishing
- Operator-agnostic Output quality is not dependent on operator expertise
- Improved sustainability Low waste and consumption of natural resources, with improved recyclability
- Full repeatability Delivers the same excellent quality throughout a job, across repeat jobs, and across multiple Velox decorators in one or multiple locations

## Low total cost of ownership (TCO)

- Zero make-ready costs Eliminates lab costs (plates, screens, blankets), calibration waste, and operator setup time
- Capacity increase Improves overall line efficiency with print speeds that match or exceed those of the production line, and virtually zero setup time
- 24/7 productivity Enables smooth, non-stop operation with inherent high-reliability, boosted by built-in prevention and self-healing mechanisms
- Process cost reduction Eliminates most pre- and post-treatment
- Low cost-per-copy Highly efficient ink coverage reduces ink consumption



Conventional Vs. digital printing process



Mass production economics

# Game-changing value applies to all production batches, not just short runs

## THE VELOX DIFFERENCE

Disruptive, industrial-grade, direct-to-shape (DTS) digital printing technology

Velox's proprietary DTS-Inkjet technology introduces an entirely new approach to digital printing. It comprises two core elements – the ink and the system architecture, both developed specifically for direct-to-shape digital printing.

This end-to-end approach is essential to achieving a meaningful performance leap, reaching far beyond any other direct-to-shape digital printing technology, and thus transforming inkjet into a truly industrial-strength technology. In addition to providing superior decoration quality and capabilities at high-volume production, Velox's DTS-Inkjet technology enables a highly efficient and flexible production process and a significantly lower total cost-of-ownership (TCO) than any other direct-to-shape digital printing technology.



## Adaptive Deposition Architecture™ (ADA) Technology

An innovative approach designed for high-speed, robust efficiency, and exceptionally accurate delivery of ink to container surfaces.

- Inherent scalability Enables any speed and any number of simultaneous features, with extremely efficient hardware utilization
- Dependency-free process, allowing:
  - Container substrate versatility Optimizes process parameters per substrate
  - High utilization of the print engine Maximizes overall system efficiency
- Ultra-accurate ink drop deposition registration Improves image sharpness and color matching



Dependency-free process



## Variable Viscosity Ink™ (VVI) Technology

A specially formulated digital UV ink family developed and manufactured by Velox. It delivers high-quality printing and versatility through several unique properties.

- Per-pixel drop shape control Minimizes the trade-off between print quality and ink coverage efficiency
- Wet-on-wet structured deposition Enables single-cure architecture that delivers:
  - High reliability Significantly reduced nozzle clogging
  - Ultra-wide color gamut Exceptionally vivid and intense process colors
  - Superb adhesion and other functional properties High adhesion, robust scratch and heat resistance, and low migration
- Substrate and surface-agnostic Superb printing performance on any container material or coating



Per-pixel drop shape control



## VELOX IDS 250 SYSTEM

#### The new general-purpose decoration technology for cylindrical containers

The Velox IDS 250 digital decorator is a robust solution that fully integrates Velox's innovative, proprietary, end-to-end DTS-Inkjet technology, enabling full replacement of current decoration technologies while introducing a major value-leap.

The system offers unprecedented performance levels, printing up to 250 containers per minute, with 14 simultaneous colors and embellishments, at high quality. With decoration speed that matches and even exceeds that of the production line, and the elimination of setup periods, the system enables converters to increase the capacity of their existing lines.

Designed for 24/7 operation, Velox IDS 250 features inherent high reliability and full repeatability, boosted by built-in prevention, self-healing, and impact minimization mechanisms. It can be installed either inline or offline, to support multiple lines

As a complete decoration solution, Velox IDS 250 combines the Velox workflow-optimized software suite and incorporated automated mechanisms, with unprecedented ease-of-use, a quick learning curve, and rapid utilization ramp-up.

This positions Velox IDS 250 to become converters' system of choice for high-volume cylindrical container decoration, enabling them to completely meet the growing pressures for supply on-demand, SKUs proliferation, and shorter production batches.

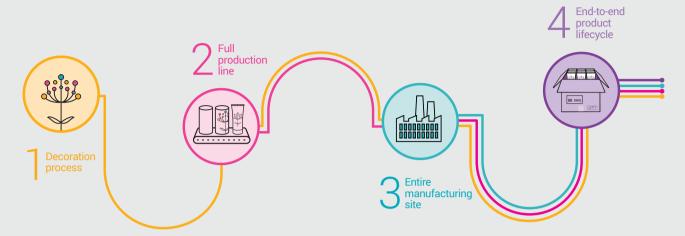


Workflow optimized software suite



## SIGNIFICANTLY IMPROVED SUSTAINABILITY

The Velox IDS mass production digital decoration technology delivers major sustainability enhancements and reduces environmental footprint across every aspect of production, and beyond:





#### 1. Decoration process

- Eliminates almost all print setup, including plates, screens, blankets, chemicals, and spot inks kitchen
- Reduces substrate waste
- Replaces multiple decoration technologies with one, saving on space, energy, overhead, and more



## 2. Full production line

All the benefits related to the decoration process, plus:

- Increases the capacity and the efficiency of existing lines By significantly reducing downtime
- Decreases the number of systems and modules needed for varnishing, coating and embellishment units, ovens, and drying systems
- Reduces consumption of energy, storage, chemical handling units, and other resources



### 3. Entire manufacturing site

All the benefits related to the production line, plus:

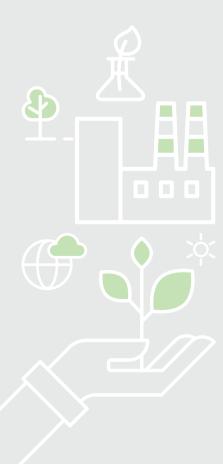
- Reduces inventory and eliminates overproduction On-demand production eliminates the need to keep stock in order to meet short delivery times
- Minimizes production constraints and simplifies logistics By simplifying production planning



## 4. End-to-end product lifecycle

All the benefits related to the manufacturing site, plus:

- Significantly simplifies the supply chain With reduced transportation and logistical stock requirements, and improved planning and time-to-market
- Replaces labels and sleeves with direct decoration Saving on label substrates, glues, and logistics
- Eliminates the need for secondary labels Saving materials, contaminants, and inventories





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